

Private Water Advisory Council Meeting Minutes

January 17, 2024 / Ebony Room, Kalahari Resort

1. Members Attending:

- a. Virtual by Zoom:
 - i. Bob Aune – Aune Well Inc / St. Croix County WC
 - ii. Kevin Olson PIP/WDP - Olson Plumbing and Well Service LLC / Green County SC
 - iii. Tim Butterfield PIP/WDP – Tim Butterfield Drilling Inc / St Croix County WC
- b. In-person
 - i. Matt Kouba WDP – WWA Board member, Kouba Drilling LLC / Sauk County SC
 - ii. Rick Peterson PIP – President Wisconsin Water Well Association, Clean Water Testing / Outagamie County NE,
 - iii. Jeff Beiriger – Government License Advisor for Wisconsin Water Well Association, advisor to Wisconsin Pump & Well, advisor to Wisconsin Geothermal
 - iv. Dennis Crow PIP – Pure Water Labs / Columbia County SC
 - v. Bruce Walker PIP/WDP/HEDI – Wisconsin Well & Water Systems & Wisconsin Geothermal Association / Adams County WC
 - vi. Tim Jenks PIP/WDP – Jenks Well Drilling Inc / Waushara County NE
 - vii. Terry Farago PIP/WDP – Farago Well Drilling / Waushara County NE
 - viii. Pete Chase – WGNHS Geologist
 - ix. Ezra Pett – Headwater Wholesale / Waukesha County SE
 - x. Sara Fry – DNR Reporting and Enforcement Coordinator
 - xi. Brian Broga – Product Manager, Pentair / Delavan
 - xii. Troy Van De Yacht PIP/WDP/HEDI – Van De Yacht Well Drilling / Brown County NE
 - xiii. Aaron Kent – DNR Hydrogeologist / Eau Claire
 - xiv. Bob Gundrum – DNR Private Water Licensing Coordinator
 - xv. Stacy Steinke – DNR Private Water Field Supervisor
 - xvi. Marty Nessman – DNR Private Water Private Water Supply Section Manager
 - xvii. Frank Fetter – DNR Policy and Enforcement Coordinator for Private Drinking Water Program

2. PWAC Board Membership

- a. Outgoing members: Troy Van De Yacht – representing WWA Well Drillers
- b. New members: Brian Broga – representing Wisconsin Well and Pump Suppliers

3. WGNHS Updates (Pete Chase)

- a. Airborne aero magnetics project – working in conjunction with USGS doing studies on depth to bedrock and extent of Maquoketa shale.
- b. Same studies in SW Wisconsin with a focus on nitrates.
- c. Bayfield County considering restrictions on artesian well use, inventory and sampling of artesian wells.
- d. Central Sands studies - nitrate transport, neonicotinoids harmful to bumble bees, mapping travel times to discharge points in streams.
- e. Water table maps by county being developed statewide - making maps more accessible.

- f. Groundwater level monitoring – well improvement project to replace old wells.
 - g. Manure spreading and NR 151 rule changes in NE Wisconsin
 - h. Bedrock study and hydraulic conductivity in Jefferson County.
 - i. Bend copper deposit in Taylor County – baseline water chemistry data for potential mining development.
 - j. Groundwater level monitoring in Nicolet National Forest.
 - k. Pigeon Lake in southern Bayfield County – historic water levels, groundwater flooding of seepage lakes.
4. **My Skilled Trades, LLC (Matt Kouba)**, Reedsburg, WI.
www.myskilledtrades.com
- a. Opportunity for Spring of 2024 for training in the Well Drilling industry
 - b. WWSA and Kouba Well Drilling objectives set 2 years ago to bring education to the industry that goes above and beyond continuing education.
 - c. Pump Installing, Water Well Drilling and Geothermal academies to be offered.
 - d. No trade school within the U.S. is offering an apprenticeship program for drillers and pump installers.
 - e. Consulted with other state associations
 - f. Pilot program was conducted with 12 public schools in the Reedsburg area.
 - g. Oklahoma State University course content has been provided to the trade school.
 - h. Intend to increase awareness of drilling and pump installing trades.
 - i. Seeking DNR involvement and support in the development of a 2-year apprenticeship program.
 - j. DWD has been included in discussions on development of the 2-yr apprenticeship program.
 - k. Six instructors available to teach the courses.
 - l. Looking for DNR input on training that needs to be made available.
 - m. Break-out training will be available on different drilling methods.
 - n. Tuition set at \$3500/semester. Class “A” CDL training set to current market price.
 - o. Target number of attendees is 12 enrolled in the apprenticeship program at one time.

Discussion:

- i. Will there be a waiting period for specific training to become available to new entries? (JB)
 - No waiting period. Every semester will be open with all training available.
- ii. How will tuition payments be handled? (JB)
 - 4 tuition payments of \$3500.
- iii. How will the 1 day in-person training be handled if someone from out-of-state enrolls? (SS)
 - The school is set up for virtual attendance.
- iv. When working with other state associations, was there consideration given to reciprocity for licensing in those states? (BG)
 - Other state associations will provide input on what is required by license applicants in their state.
- v. What did Oklahoma State University provide? (BG)
 - OSU provided their curriculum for use by the trade school.
- vi. Did you reach out to Fleming College for input? Their teachers provide instruction at GEFCO. Fleming is a school in Canada that offers a degree

in well drilling. GEFCO training was in Oklahoma but moved to Texas following acquisition by Bauer. (SS)

- They were not contacted.
- vii. Has DWD provided details on what is needed to establish an apprenticeship program? (BG)
 - DWD provided what was required for vocational status.
- viii. This program is something that can be discussed during NR 146 revision conversations. Current NR 146 training requirements (33 hours for exam eligibility) should make up the core requirements of the apprenticeship program. (JB)
- ix. There were specifics required by DWD before they would discuss development of an apprenticeship program. (BG)
- x. Does the training include how to read and understand code and how to prepare for the license exam? This would be recommended if not already included in the curriculum. (FF)
 - – Current curriculum includes code requirements.
- xi. Capstone review training is a good example (JB).
- xii. Outreach and awareness is key for the health of the industry going forward. (MN)
- xiii. In November of 2021, DWD (Owen Smith) requested the DNR and North Central College to consider the following with regard to an apprenticeship program:
 - Have 1 to 5 driller employers work with DWD to complete an electronic survey.
 - “At least one year of on-the-job learning amounting to 2000 hours”

5. DNR Updates

- a. Darcy Heat Exchange Wells (Marty Nessman)
 - i. New geothermal technology being introduced in Wisconsin
 - ii. Methods used with this technology are not covered under current water well or heat exchange code requirements and a variance is needed for projects in Wisconsin.
 - iii. The department requires regulation as a heat exchange drill hole.
 - iv. Requires a smaller footprint with fewer holes.

Discussion:

- i. Are variances provided project by project or is there one variance to cover all projects in the state? (JB)
 - Variances need to be applied for on a project-by-project basis.
- ii. Efficiencies claimed by the supplier are questionable. Wells are 14” and 16” in diameter. (BW)
 - Flow through the bore hole may be a factor. Geology and hydrogeology are taken into consideration with location of the borehole.
- iii. The variances given by the department limit what the company can do in Wisconsin. The department does not allow the well to be used as a source of drinking water nor does it allow screening of the well at two different aquifers. The efficiencies stated at their website likely are not going to be achieved given the restrictions placed on the well by the department. (SS)

- iv. Darcy is presenting at the Minnesota Geo Conference in March. A one-hour presentation will be given at a location north of the twin cities. Arrangements can be made for regulators to attend. (JB)
- v. Future revisions to code language will cover systems of this type. (MN).
- vi. There are a lot of unknowns and not a lot of systems currently in use. It is not clear how well these systems will operate over time and whether things like biofilm issues might occur. (SS)
- vii. On the licensing side, is a license water well driller authorized to install this type of geothermal system? (BG)
 - Currently the department requires a water well driller license under the variance for this type of system.
- viii. For clarification, the DNR is not confirming accuracy of claims made by the system, only that it is installed in a code compliant manner? (JB)
 - That is correct.
- b. Staffing Updates (Marty Nessman/Stacy Steinke)
 - i. Frank Fetter retires 2/2/2024.
- c. Compliance and Enforcement activities (Stacy Steinke/Sara Fry/Frank Fetter)
 - i. Sara Fry report on mailings to well owners.
 - 320 (replacement well) letters sent
 - 13,000 (paper) well label letters sent mid-October
 - a. Some confusion from recipients who expected stickers.
 - b. Some comments and concerns regarding durability and expected life of the paper well label.
 - c. Mailings will be moved to spring and fall each year.
 - Annual report letters
 - a. To be sent Feb/March each year
 - b. NON to those with 65% late or missing
 - E-reporting of WCRs
 - a. 10 licensees stopped reporting in 2023
 - PVC casing in bedrock
 - a. 21 wells constructed in 2023
 - b. 20 of those were constructed by one well driller
 - ii. Stacy Steinke – Compliance Inspection Data
 - Maintained 10% core inspection of total notifications
 - Currently near (normal) full staffing for field inspection. One position that needs to be filled that will bring the number to 10.
 - Field specialist assignments have affected core inspections.
 - ARPA well grants and closeouts also affects core inspections.
 - The real need is for more support from IT and mapping support which would allow for better service to the regulated community.
 - The department has maintained the 10% core inspection level for the past 10 years.
 - Landfill variance numbers continued to be high at 190 for 2023. Other variances totaled 133.
 - Primary enforcement up 8% from previous year. Field staff enforcement dropped 55%. Reporting enforcement increased by 245% due to Sara Fry processing of well abandonment backlog. Many are being found by review of reports coming in to the department.

- Secondary enforcement – total NOV's increased by 400% from 2022.
- Questions:
 - a. Can you elaborate on cases of well inspections being done without a license? (DC) – It was an individual who did home inspections who worked previously for a pump installing company. Quite a few inspections were done by this individual without being licensed. Cooperation was requested with providing a client list that was denied by the inspector.
- d. Rule Revisions (Frank Fetter/ Bob Gundrum)
 - i. Board Order DG-03-23 (NR 812 Subchapter III, etc.) & DG-04-23 (NR 146 – Licensing)
 - First advisory committee meeting was held 12/19/2023
 - 2nd meeting that was set for 1/19/2024 is being rescheduled
 - A list of committee member suggestions will be made available for the next Advisory Committee meeting and posted to the Advisory Committee web page.
 - Request was made by Jeff Beiriger to have Ezra Pett represent the Wisconsin Pump and Well Suppliers on the Advisory Committee for NR 812 pump installing related discussions.
 - Advisory Committee website was reviewed.
 - Brainstorming results for NR 146 revision included:
 - a. License requirements should not be made “easier” or watered down in any way.
 - b. Accept training in business practice for continuing education credit.
 - c. Require prerequisite (experience) requirements for pump installer applicants.
 - d. Curtail unlicensed drilling and pump installing activity.
 - e. Combine water well and heat exchange credentials into one driller credential.
 - f. Require attendance at code update & compliance related training each year.

6. Licensing & Continuing Education (Bob Gundrum)

- a. New licenses: 20 new Water Well Drilling Rig Operator registrations with an additional 10 registration reinstatements. A total of 30 new registrations for the year.
- b. Expirations: 50 pump installer license expirations for 2023 which compares to 28 that were seen at the close of 2022.
 - i. Plumbing industry contractors have been busy with more than enough work. They are letting their pump installing license lapse because they don't need the work. Those working in rural areas will maintain the license, but others do not see the value attending CE and paying the fees if they are busy enough with the plumbing side and do not need to do the pump install work. (JB)
 - ii. From pump installer field notifications, there are often replies that they likely will not call because they are not doing pump work. (SS)

- iii. Some pump installers feel it is not worth the time and money required for completing continuing education when they anticipate that they will do a limited amount of work in pump installing. (TJ)
- c. Continuing Education Provider and Attendance Status Updates
 - i. Private Water continuing education processes continue to be transitioned to Operator Certification processes.
 - In-person continuing education for the calendar year will move from the online spreadsheet layout to an interactive calendar that provides search by date and location.
 - Online / On-demand training will continue to be posted in the same spreadsheet layout.
 - The current continuing education status portal will be discontinued in 2024 and replaced by a Driller/Pump Installer Lookup Portal which provides a link to a current calendar year PDF attendance report.

7. Old Business

- a. Late Samples Discussion (Sara Fry)
 - i. Variance available for sample submission passed 30 days.
 - Reason must be provided.
 - In 2022, 85% of samples were submitted within 0-30 days.
 - ii. Variance also available for WCR submittals
 - iii. Discussion on why the well driller needs to sample when the pump installer will take a sample shortly after the driller leaves. Driller needs to return and sample if there is an unsafe. Sampling off the rig is not ideal.
- b. Daycare wells discussion carryover from April 2023 meeting
 - i. May return to this at a future meeting.
 - ii. Problem if work is done a system without knowing it is a daycare. (BW)
 - iii. Well does not have to be brought into compliance unless there is something that needs to be repaired. In that case the well owner would have to bring the well up to the new standard. They are allowed to use the well until the point where another issue occurs that requires the well to be serviced. (MN)

8. New Business

- a. PVC LDH centering solution (Bruce Walker)
 - i. Has there been any issues with any of the 20 PVC wells that were drilled? A device has been designed to allow centering of the drill rod for the lower drill hole.
 - ii. When grouting, using bentonite chips would prevent neat cement migration around the casing and into the drill hole. A code provision should be made for use of bentonite chips above the shale trap to prevent migration of neat cement past the casing.
 - iii. Why not drill through the casing? (TV)
 - It is not allowed by code.
 - iv. Nothing to prevent drilling through a PVC liner.

9. October 2023 Meeting Minutes

- a. No comments on, or revisions to the meeting minutes from October.

10. Future Meetings

- a. April 2024 – Stevens Point, Wausau or Plover... somewhere in that area.
- b. October 2024 – WGNHS Site, Mt. Horeb?