

Meeting minutes - NR 146 & NR 812 rule revision kickoff

Date/Location: 12/19/2023 / Schmeekle Reserve Visitor's Center Conference Room

MINUTES:

1. Meeting Purpose:
 - a. Review scope statements with committee members.
 - b. Solicit recommendations and ideas on where code is in need of revision.
 - c. Assemble a list of viable rule revision proposals
2. Members Attending:
 - a. Virtual by Zoom:
 - i. Tim Harnois PIP/WDP – T&T Well Drilling / Oconto County NE
 - ii. Jim Vander Galien WDP/HEDI – Sam's Well Drilling / Columbia County SC
 - iii. Phil Doffing PIP/WDP – DC Well Drilling/ Welch, Minnesota
 - iv. Matt Kouba WDP – Kouba Drilling / Sauk County SC
 - v. Sam Wettach – DNR Operator Certification Coordinator
 - b. In-person
 - i. Jeff Beiriger – Government License Advisor for Wisconsin Water Well Association also advisor to Wisconsin Pump & Well
 - ii. Bruce Walker PIP/WDP/HEDI – Wisconsin Well & Water Systems, Kouba Drilling & Wisconsin Geothermal Association / Adams County WC
 - iii. Rick Peterson PIP – Clean Water Testing / Outagamie County NE, President Wisconsin Water Well Association
 - iv. Michael Berkholtz PIP/WDP – Water Well Inc / Dane County SC
 - v. Terry Marshall PIP/WDP/HEDI – Marshall Well Drilling / Adams County WC
 - vi. Butch Eucker PIP – Richmond Well & Pump / Walworth County SE
 - vii. Steve Binz PIP/WDP – Binz Brothers Well Drilling / Iron County NO
 - viii. Bob Aune – Aune Well Inc / St. Croix County WC
 - ix. Bernie Friedenfels Master Plumber/PIP – Door County NE
 - x. Stacy Steinke – DNR Private Water Field Supervisor
 - xi. Bob Gundrum – DNR Private Water Licensing Coordinator
 - xii. Marty Nessman – DNR Private Water Private Water Supply Section Chief
 - xiii. Frank Fetter – DNR Policy and Enforcement Coordinator for Private Drinking Water Program
3. NR 146 Scope Statement
 - a. A request was made to the department for an overview of the specific requirements in statute 280 & 281 that limit what can and cannot be revised in existing code language. This is more of a concern with NR 146 and not so much with NR 812. Of specific interest is where statute allows current rules that will reduce the time required for obtaining a driller license. (JB)
 - b. Why has the number of licensed individuals been decreasing for more than ten years and has a drop of 23% in licensed pump installers in the last ten years caused an issue? (BF)
 - i. It was noted that this trend is occurring in all skilled trades, not just in drilling and pump installing.(MN)
 - ii. The decrease can be attributed to an aging workforce and loss of interest in this type of work by the younger generation. (RP)
 - iii. A deterrent to new entries is equipment costs required to get started. (TH)

- iv. Better pay available from other trades. Plumbers make \$30-\$40 an hour, but experience is required for the license. (TH)
- v. Another consideration with the pump installer graph is that code allows pump installing work to be done by someone who is not licensed. As long as they are employed by a licensed pump installer or registered pump installing business, they can do pump installing. You can work for a pump installer without being a licensed pump installer. There may be more unlicensed individuals doing the pump installing work. The number of registered businesses has remained about the same. Businesses may hire seasonal workers, or they may have someone who works for a while and then moves to another employer. Those numbers are currently not captured because their work is not regulated. (SS)
- vi. In Door County there has been no problem with people finding someone to do their pump installing work. There is no shortage of pump installers.
- vii. Is the industry aware of more work being done by unlicensed pump installers who work for a licensed individual or registered business. Is there any indication that this is happening? (FF)
- viii. The problem is finding people to do the work. If you find someone and they like the job, then it becomes a matter of keeping them. Right now, anyone can write the test and by a pipe wrench and they are a pump installer. Some type of experience requirement for the pump installer license would be better. (TM)
- ix. This may be a case where plumbers who held a pump installing license were so busy doing plumbing contract work that they didn't pursue the pump installing work and they surrendered the license because it was not needed. The same holds true for heat exchange. If a driller is busy water well drilling, why attend continuing education and support a heat exchange driller license. (JB)
- x. It is difficult to find new employees who are interested in a career in this industry and will stay with the company for a while. (TH)
- xi. A new school is opening in spring that will offer training in skilled trades and open the door to development of an apprenticeship program within the industry. A driller/pump installer apprenticeship program would improve the image the well drilling industry to our customer base and lead to higher compensation for the work that is done. Drillers and pump installers would follow a path similar to a plumber who obtains training and experience required for a journeyman's or master plumber license where pay is \$40 or more an hour. There is an opportunity for everyone to get involved here to develop an apprenticeship program that is made possible through training offered at this new trade school. (MK)
- xii. There is a lot of undercutting within the industry. How can that be controlled? How do we establish a standard for everyone involved in the industry? When someone undercuts the set rate for a job, it hurts the entire industry. Plumbers have a set rate that is used from job-to-job and everyone sticks to it. Why is that not the case in this industry? We work against each other which lowers the standards. (RP)
- xiii. It has been noted in this meeting that it is difficult to find competent and capable help that is interested in getting into this profession. The problem exists in other trades and other states as well. This is a family-oriented industry handed down from one generation to the next. What is missing with this scenario (do things the way they have always been done) is an

education on how to run a profitable business. Training on PNL, balance sheets, price of materials and fees is needed so that it is possible to make a profit and have a healthy bottom line in order to provide decent compensation to an employee. Including business training as required continuing education would lead to a healthier industry. (BW)

- xiv. There was a time when attendance at continuing education did not require sitting in on a specific session. If you were there, you got the credits. Well drillers sitting in on pump installing training makes a more well-rounded driller and business person. Things changed years back that required driller attendance at training specific to drilling in order to receive the required credits. Now you cannot receive credit for sitting in on a business class because it is considered not related directly to a driller/pump installer license. This is one idea where we can make a change to improve the industry. (TM)
- xv. If everyone has work to do and they are making a reasonable profit and paying competitive wages, there will be less of need for undercutting because there is enough work to do without having to undercut someone else. (BF)
- xvi. One thing that is going on in the way of undercutting is work being done by people who are not licensed. Is there any way to curtail that. (SB)

- 1. If the DNR knows about it, we can act on it. (SS)

- c. Is it the intent of the department to decrease the prerequisite experience requirements in order to make it easier for someone to get licensed for well drilling and pump installing? (TH)
 - i. Earlier comment was just an example of how statute requirements need to be considered with regard to what can be changed in rule language. This was not intended as a recommended course of action to reduce well driller experience requirements. (JB)
 - ii. Reducing experience requirement would have negative results. An example noted was a young newly licensed pump installer telling the customer that they need a new well when the well system only needed a new pressure switch. (TH)

4. NR 812 Scope Statement

5. Rule revision steps and working timeline

6. Brainstorm committee's suggested areas needing revision – NR 146

- a. Introduce/approve continuing education topics for credit that would include business related training. (TH)
- b. Optimize online renewal processing and limit mailed renewal application processing to improve service to the applicant and reduce DNR staff time.(SW)
- c. License exam administration through a third-party contractor – assure that rule language makes provision for exams administered by a party outside of the DNR. (SW)
- d. Do not dilute licensing requirements for pump installers. It requires 9 years and a lot of work to become a master plumber. Once you reach that point, you are proud of your accomplishment. To lower the standard or lessen requirements to allow others to obtain the same credential only reduces the weight that the credential carries. (BF)
- e. A separate license for well inspections and not pump installations. You don't want to make it easy for someone who has never pulled a well pump or doesn't know what a check valve looks do real estate inspections. If we start diluting things, it becomes a slippery slope. If you lower the bar, you will invite hacks into

the industry who will work without a license and will have no regard for code requirements. They will do the work out of compliance and not charge much for it. (BF)

- f. Move the deadline for completion of continuing education to the end of the third quarter (for example) to create more of a window for license renewal processing as the end of the calendar year approaches. People don't receive an application until continuing education is complete. (BF)
- g. (57:21) Pump Installer license requirements need to be made more stringent. More should be required for the license than passing an exam with 100 questions. (BA)
- h. There should be a requirement for a supervisor signature in order for a pump installer to obtain a license. Similar to what is required for rig operators to obtain a license. (SB)
- i. There should be an experience time frame required for pump installers before they are able to obtain a license. Realtors will seek out inspectors who will provide a passing inspection to avoid losing the sale. They will look for an inspector who will pass anything. Similar to water well drillers, pump installers should be required to do 30 pumps installs before obtaining a license. (BE)
- j. Some PIP/inspectors who are not using the 3300-221 form for well inspection.
- k. For a plumber apprenticeship, you are required to complete specific code related work and have the supervisor sign off that the work was completed. This should be applied to the pump installer license requirements as well. (BF)
- l. The quality of the well inspection is dependent on the integrity of the inspector. I have never pulled a pump but have been doing inspections since 1991. I follow the code and do the inspection to the best of my ability. The person who has no regard for the code will not provide a good inspection once they are unsupervised and on their own. There is no integrity or pride in the work being done. A separate license for well inspector may be something that needs to be looked at, but what needs to be done is to elevate the industry. Nonconforming needs to be reported and enforcement needs carried out or the industry will not improve. Licensed professionals need to take pride in the credential that they hold. If license requirements are watered down, there will be less pride in and respect for the credential. It's a matter of integrity and personal pride in the work that we are doing. We need to remember that people cannot live without water and that this is the most precious resource that we have. That needs to be conveyed to the public as well as the importance of our industry and the work that we are doing. The code comes into play here. An example is that a well inspection can be done without removing the cap. How can a quality well inspection be done without removing the cap? There are many wells with a 4" casing that have 6" casing installed over the top of it. Without taking the cap off, that sort of thing goes undetected. There are things to be done in code to improve the standard and the work that is done. (RP)
- m. Current statute requirements for obtaining a pump installer license are very lean. This limits what requirements can be set by code. It is basically a matter of taking the test and paying the fee. (JB)
- n. A question was posed to Jeff Beiriger regarding how difficult it would be to revise the statute to allow additional license requirements in rule language. (FF)
- o. If you can make the case on how this is going to affect the quality of people's water. Most people do not want to be on the wrong side of that issue. What people don't want in legislature is more licensing. But modifying an existing

- license to make it better for the public would have a better chance of making it through the legislative process. (JB)
- p. The code requires the well system to be inspected to the requirements that were in place at the time of construction. (RP)
 - q. A question was posed: If you were inspecting a well for a young couple who are considering buying a home and you know that the well is complying, but has underlying issues, what would you do? Put something in the report comment section regarding the condition of the well and what may be required in the future. (BF)
 - r. Being sued for a well inspection is not fun. If you include comments regarding the condition of the system, you are covering yourself down the road. However, realtors will always follow the path of least resistance and will not use inspectors who tend to include comments regarding actual condition of a well and potential issues. (BE)
 - s. Continuing education requirements need to change. Pump installers should be able to sit in on well driller training and obtain credit for it. This will provide a more well-rounded holder of the pump installer credential. It shouldn't matter what room an individual is sitting in. They should receive credit for attending that session. Credit should be given for attendance at training related to business practice. (TM)
 - t. Regarding license exam prerequisites, we should be careful what we ask for. This is similar to what happened with drilling rig operators which we are now trying to correct. With regard to experience requirements, we should consider a combination of both hourly and yearly requirements. A required supervisor signature for pump installer license is an idea that should be explored. If an employee is not ready or diligent in adhering to code requirements, then they should not be eligible for the license. Going back to legislature and changing statute is also something that should be considered in order for experience requirements to be added to pump installer license requirements. (TM)
 - u. The supervisor signature for pump installer license should be tied to a required completion of a set number of pump installations (ex. Supervise employee for 20 pump installations before signature is provided) and the signature should only be required once to allow the employee to take the exam and become licensed. (BE)
 - v. It may require more than 2 years for some pump installer employees to accrue that many installations because they may be with a smaller company and involved in drilling related tasks. (SB)
 - w. A well inspector experience requirement that involves pump installation work is something I am not opposed to. It may require going back to legislature to revise the statute. (TM)
 - x. Including the heat exchange license in the water well driller license and having one credential is also something that should be explored further. This will lessen required continuing education attendance for drillers who currently hold both credentials. If you hold the driller credential, you should not have to attend separate heat exchange driller classes. The activities employed in water well drilling and heat exchange drilling are similar. (TM)
 - y. The statute may not allow eliminating the heat exchange driller license. (JB)
 - z. Continuing education should be approved for both licenses (water well driller or heat exchange driller). (MB)
 - aa. Reference was made to statute requirement 280.15(2m)(b): (BG)
 1. [Section 280.15\(2m\)\(b\), Wis. Stats.](#), "The department shall require continuing education specific to well drilling for individuals seeking

to retain a driller license that authorizes well drilling and shall require continuing education specific to heat exchange drilling for individuals seeking to retain a driller license that authorizes heat exchange drilling.”

- ii. The statute refers to “driller license” and does not differentiate between water well drilling or heat exchange drilling. (BG)
- iii. This appears to allow for change in rule language to accept continuing education in “industry related” training that could improve the health of the industry such as training in business practices. It may however be difficult to legislate training in morality, integrity or workmanship. (BW)
- iv. What is key here is the department today vs the department of yesterday. What is done going forward will depend on how the department interprets the statute. It is difficult for the WWWW association to put together continuing education that will cover requirements for all license types. Its not watering down the requirements if the credit approvals apply to all license types (pump installer and driller). (TM)
- v. We may be going outside of what is allowed by statute in doing this and that will be determined. There may be more that can be done in the rule language to specify what continuing education will be approved for a specific license. (MN)
- vi. Reference is made to statute 280.15(2m)(am): (JB)
 - 1. [280.15\(2m\)\(am\)](#): “*Activities authorized under driller license.* In issuing a driller license under this subsection, the department may specify that the license is limited to the authority to engage only in well drilling or to the authority to engage only in heat exchange drilling.”
- vii. It appears that this may allow the department to split the license types or combine them to one credential (“the department may”). It says “may” not “shall”. The statute authority may already be there to allow for what is currently being discussed. It would require an interpretation of the language by the department to confirm this. Having an interpretation of the statute would be a better approach than going to legislature with a request to change the existing language. (JB)
- viii. Licensing is important and we should not minimize or reduce these requirements. We should enhance what is already in place. Plumbers have always had the vocational basis to do things that we don’t do in this industry. Plumbers have vocational schools to fall back on for all of there training needs. The **Skilled Trade School** has been set up for that purpose: [My Skilled Trades - Well Drilling Academy Continuing Education Classes](#). Would the department rather rely on a trade school to provide the required classroom and hands-on training for the industry rather than address these industry needs through continuing education rule requirements? This would free up DNR resources to focus on other things and have the school administer the training that is required for the new entries in the industry. (MK)
- ix. Under the current rule, would this school provide what is required for someone to meet driller license exam eligibility requirements? That is the beauty of a plumbing apprenticeship. The apprenticeship is one of few ways available to become a Journeyman Plumber. If this is not a currently available approach to driller installer license exam eligibility, then the code needs to be revised to allow for this. Can an individual

currently enter the trade school knowing that they will be fully qualified and have fulfilled license eligibility requirements when they have completed to training? (JB)

- x. Training is currently available through GEFCO and Wyo-Ben to meet many of the current requirements. Current rule language does allow for meeting some of the training requirements. (MN)
- xi. A new entry into the trade school will want to know that training provided there will meet the current requirements. Use of the word “apprenticeship has a specific meaning in the statutes. What the department requires may or may not need to be an apprenticeship program. It depends on the level of training the department wants an individual to get to. But it needs to be made clear that this is an approved path to meeting the license eligibility requirements. There may be work experience that is required outside of the training to fulfill license exam eligibility requirements. If the training could provide experience in drilling different geologies around the state, that would be great. If the training instructor is a licensed driller, some of the holes drilled might be applied towards the total (30 wells) required for the license. (JB)
- xii. The holes drilled for training purposes will be filled and sealed. The wells will not be put into service. So, there should also be experience required in the field outside of the holes drilled at the trade school for training purposes. The school training might allow the driller to be a rig operator, but it should not be enough to meet all exam eligibility requirements. (TM)
- xiii. The medical field is a similar situation with a shortage of nurses with hospitals starting their own nursing schools. But it isn’t all book learning that is required. Experience is also needed. Maybe there needs to be a formal apprenticeship program for drillers and pump installers that is done while they are doing the work in the field. (BF)
- xiv. Another area that should be addressed is wages paid. This is something that needs to be addressed by the industry, not the department. We need to look at what we charge for services and what we can pay for someone who is a professional in this trade? (BF)
- xv. Going back to the trade school, is the intent to provide the means for someone to become qualified to work in the industry? In addition to working for a contractor, it would provide the training that is needed for the license? (JB)
- xvi. The curriculum was given to the staff at the trade school by Oklahoma State University. They have been working with NGWA and WWSA and other state associations as well. There have been weekly meetings with DWD. This is the furthest a school has gotten in the drilling/pump installing industry. There is no other accredited school like this in the nation. There is no other trade school in the nation that has available what is being made available at this trade school. This is an opportunity for the DNR and other state associations to get onboard with these efforts. There has been a significant amount of time and resources that have been invested by many to get this done. Two applicants have enrolled for the spring semester. A pilot run was done with 12 local school districts. Guidance counselors want to see the trade school represented at their career days. (MK)

- xvii. The department should revisit enhancements to the inspection form. In-person continuing education is preferred over online training. (MB)
- xviii. The importance of allowing business classes in continuing education needs to be considered with this rule revision. This has been requested every year and has not been allowed by the department. It is related to the industry and people need to be trained in how to run this type of a business. That is extremely important. (RP)
- xix. Looking at one driller credential for heat exchange and water well driller is extremely important. The heat exchange portion of continuing education is the most difficult aspect of providing continuing education for the industry. (RP)
- xx. We do not want to dilute license requirements. That is important. Also, training in business practice is important to the health of the industry and should be approved by the department for continuing education. It appears that statute does provide the department the ability to do this, and this should be confirmed. Note that it does not mention continuing education specific to pump installing in this part of the statute so that leaves continuing education approved for pump installing open. Rule language should be written so that it is clear today and a decade from now. (BW)
- xxi. We may need to consider in a rule revision having a mix of continuing education attendance required. There should be a portion required on code updates and something to prevent attendance at all business practice type training. If there is a code revision, there should be required attendance at a code update class that follows. People need to know what has been revised. If online training is available to fulfill all attendance requirements, many will not opt to attend a code update class. Apprenticeships do a good job of teaching the code and keeping people up to date on revisions to the code. Information is passed from newly apprenticed people to those who are more seasoned in the industry. There should be a certain number of required credits that are compliance related and general credits from other areas (as is required for septage certifications). (JB)
- xxii. This is partially being addressed with the DNR updates that are provided at the conference. (TM).

7. Brainstorm committee's suggested areas needing revision – NR 812

- a. We see a lot of 4" liners dropped in wells in our area. I have no problem with the 6" diameter requirement, but when dealing with nitrates for a well in a rock formation, many times a customer or builder will look at the bottom line and you will lose jobs when casing to areas in the rock that will produce a low nitrate level. We get beet on bids in a lot of cases because I refuse to complete a high nitrate well. So, not sure if anything with the revision will address casing requirements in these situations, but something needs to change there eventually. (PD)
- b. Bentonite chips in the annular space would work just as well as the granular. It might not travel down as far but does do a good job at sealing. The number of bags required in the starter hole should be reduced to 2 or 3 bags.
- c. The requirement is that the hole must be full. It does not mention the number of bags. (TM)
- d. Sampling off the rig is something that should be addressed if that falls under subchapter III. (JB)

- e. We use bentonite chips in problem areas with caverns and openings, not so much as a day-to-day seal. Also, in the upper enlarged drillhole where it is easy to get down. 10" drillhole would be the minimum diameter used with 6" casing and bentonite chips. (MB)
 - f. What is the department looking to revise? Elaborate on where feedback is needed with regard to bentonite chips? (TM)
 - g. How far are you willing to go in the use of bentonite chips as an annular space seal in a dry hole or a deep hole? If bentonite chips are used to fill a void, would you complete filling the annular space with bentonite chips? (FF)
 - h. The current requirement is good. Not sure changing to allow bentonite chips to fill the entire annular space is a good idea, especially with a deeper well. (TM)
 - i. Sampling criteria and the removal of a well cap should be considered for revision. Why is another nitrate sample required of the customer when the cap is removed? (TM)
 - j. If you replace the pressure tank, you are required to take a water sample. (MB)
 - k. Replacing the pressure tank is part of pump installing which is why it is required. (MN)
 - l. The first bacteria sample following well construction should be eliminated because it is done when the pump is installed. (BE)
 - m. State should go back to the 10-2 test. (Count test) (BE)
 - n. Top category of water sample form referring to "previous unsafe" should be removed from the form to prevent biased lab screening. (BE)
 - o. Can we control the flow on a pipe sample test? (TM)
8. Next meeting set for January 19th ,2024 at the WWWA conference will be rescheduled.