Meeting minutes: NR 146 & NR 812 Rule Revision Advisory Committee

Date/Location: 02/19/2024 / Schmeeckle Reserve Visitor's Center Conference Room

MINUTES:

1. Purpose:
    1. Review proposed scope statement objectives
    2. Carry out analysis of objectives and proposed policies
    3. Gather ideas and recommendations from committee members
2. Members Attending:
    1. Virtual by Zoom:
        i. Ezra Pett – Headwater Wholesale / Waukesha County SE
        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. David Beecroft PIP/WDP/HEDI – DMB Drilling / Washburn County NO
        vi. Kevin Olson PIP/WDP - Olson Plumbing and Well Service LLC / Green County SC
        vii. Sam Wettach – DNR Operator Certification Coordinator
    2. 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. Tim Harnois PIP/WDP – T&T Well Drilling / Oconto County NE
        x. Bernie Friedenfels Master Plumber/PIP – Door County NE
        xi. Stacy Steinke – DNR Private Water Field Supervisor
        xii. Bob Gundrum – DNR Private Water Licensing Coordinator
        xiii. Marty Nessman – DNR Private Water Private Water Supply Section Chief
3. Review of NR 146 Advisory Committee Ideas provided at previous meeting
    1. Accept continuing education credit for training in business practice
        i. Update provided – Skilled Trade School seeking DWD approval as an accredited vocational school. Through WWWA and Geothermal Association, training approved for DNR credit will be provided. DWD is requiring information on the platform to be used when providing content (break-out sessions) that is attended by drillers or pump installers for continuing education credit. DWD is requesting a breakdown of what is to be presented for continuing education credit. Assistance is needed from the DNR and the associations to provide this breakdown and develop content that is acceptable for credit approval. MK
    2. Revise requirement for training specific to the credential

3. Curtail unlicensed activity
4. Maintain robust drilling license eligibility requirements
5. Earlier continuing education completion to improve renewals processing
6. Experience requirement for the pump installer license
    i. Prerequisite experience requirements for pump installer license exam eligibility would require a change to statute. All are in agreement that this is needed, but who would initiate the process of revising statute to include this requirement? BW
    ii. It could be initiated by the DNR or WWWA. The DNR could initiate the change to statute, but it would go farther if it was done by the Water Well Association. MN
    iii. Anything that would increase requirements and make it more difficult to obtain a license would have a difficult time passing in the republican legislature. It would need to come from people within the industry who can provide sound reasoning as to why it is needed. If it is presented as part of the budget, it will need to have a fiscal note attached to it. It would probably be a free-standing piece of legislation. If presented now, it might be passed by December of next year if everything went well. If it looks like an expansion of a license, it will be difficult. It would be easier to pass if it was a contraction of license. JB
    iv. It would improve the optics of the request if it was presented as an initiative to safeguard public health by preventing unqualified individuals from doing work that may adversely affect water quality. BW
    v. It would be best to wait to see what else might come up that would require a statutory change and be presented as a request by an advisory committee with endorsement by the association and industry members. It could be one of three or four things requested. JB
    vi. Requirements for property transfer well inspectors should be included in the discussion. Experience requirements for inspectors needs to be included. TM
    vii. The requirement doesn't have to be punitive or make it impossible for someone to get a license, but it should be more than a $25 application fee and passing a written exam. BW
    viii. Before going on site to address an issue called out by an inspector, the report is reviewed to determine the legitimacy of the inspection. There are a lot of inspectors whose reports contain inaccuracies. TM
    ix. There are similarities in the septic trades where there are people doing POWTS inspections who pass anything because they have been hired by the people who are trying to sell the house. The association there had to create its own POWTS evaluative program. The program was created with the intent of getting legislature to pass for POWTS inspection, but it has been 18 years and it has not passed… there is no license. But it comes down to the fact that not everything can be determined with a visual inspection. That is a different industry and there is an argument to be made here. JB
    x. There are also similarities in well abandonment where contractors will have one operator licensed so when they come across a well, they can quickly fill it in. So, well abandonment should also be included in the discussion. BE

xi. They at least have someone who is licensed. There are also contractors who will quickly break off the well head and bury it before anyone sees it. The excavator typically does not care. TH
xii. The discussion here is regarding whether someone has the integrity to do the work required to meet the code. These people are only interested in getting the work done quickly without having someone else come on site. How is a revision that requires experience of changing 20 pumps going to change that situation? RP
xiii. The amount of experience acquired before taking the license exam will not matter if the integrity of the applicant is lacking. BW
xiv. Well inspection shouldn't have anything to do with obtaining pump installer license. There should be a separate license for property transfer will inspection. The original intent was to get pump installers to do this work. But it seems that it really should be a separate license. SB
xv. Breaking well inspections away and creating a new license will meet with resistance in legislature. It would require another license and addressing the question of what if any experience is required. (group)
xvi. An option might be to add restrictions to the license. Have the pump installer license with restrictions to only engage in certain pump installing activities. That would also require a statutory change. MN

7. Include language for third party administration of licensing exams
    i. Update provided – request was submitted to the legislative reference bureau in 2022. The change should be passed by legislature this spring. Language will be changed to say "exam will be administered by the department or their representative." This item has already been addressed. MN
8. Field experience in specific code related activities with supervisor signature verifying completion
9. Elevate the industry through trade school attendance and development of an apprenticeship program
10. Require minimum pump work experience (20 pumps changed) for well inspectors
11. Water well and heat exchange drilling licenses combined to one credential
12. Require compliance related continuing ed attendance that includes review of code updates

4. Beiriger request for review of authority provided by Stat 280 (*full document posted to web page*)
    1. Extend continuing education attendance outside of the current calendar year. Waivers and extensions made available for extenuating circumstances.
        i. Statute requires continuing education attendance for a driller or pump installer to renew their credential. It does not specify a time frame in which attendance must be completed. It does require annual renewal with completion by January 1.
            1. Operator Certification / Public Water has 3-year certification period. Continuing education attendance can happen beyond the expiration date. 18 credits are required for renewal. They are allowed a one-year grace period to complete attendance requirements. They then pay renewal fee plus a late fee of $25 on top of the $45 renewal fee. With Private Water, the license period is one year, so consideration would need to be given to the length of the grace period. The DNR database could still process the renewal if a one-year grace period was provided for Private Water

folks. That is an example of how it could work for Private Water. SW

2. *Online renewal reduces DNR processing and staff time. There are also benefits to license holders who choose to renew online. There is some negative feed-back regarding the 2% processing fee for renewing online. However, renewing online eliminates missing signature and continuing education attendance issues as it provides real time feedback as to why the renewal cannot be processed at this time. The alternative with the mail-in process is to have the application mailed back to you which requires time and additional postage. If renewal is sent by mail in December, this usually results in a late fee being applied as well. SW*

2. Mandatory online renewal processing with "opt-out" provision.
   i. *Statute requires renewal and payment of fees annually before January 1. Nothing that would limit the processing of renewals to only applications submitted by mail.*
      1. *Fees are set in statute. MN*
      2. *Fees for rig operator registration are provided here, but no fees are shown for drilling and pump installing. The original intent in setting fee requirements by statute was to curtail fee increases. TM*
      3. *If fees were set by rule, then a reduced renewal fee could be used to provide as an incentive to renew online. JB*
      4. *Fees have not changed since the 1980s. MN*
      5. *If fees are raised, then where does the money go? Does it stay within this program? JB*
      6. *Renewal fees stay within DNR budget. MN*
3. Revise prerequisite (pump installer and well driller) license exam eligibility requirements:
   i. *For a pump installer license, the department may not issue a license unless the applicant demonstrates competency in pump installing by passing an examination administered by the department. Requiring pump installer experience would require a change to statute.*
   ii. *For rig operators, training is required for renewal eligibility and only indirectly required for license exam eligibility. Current rule language is not consistent with 280.15(3g)(b).*
      1. *The training referred to here is rig operator training, not continuing education. This is inconsistent with rule language and current renewal processes being employed. BG*
   iii. *Required training is to be approved by the department. No specifics as to what training is required or how much is required.*
4. Establish one driller credential license that authorizes engagement in water well drilling and heat exchange drilling activity.
   i. *Statute seems to leave the door open for the department to require either separate license credentials for water well drilling and heat exchange drilling licenses or to combine to one license credential for both. This could be extended to "drilling" rig operator registrations (item #5) and business registrations (item #6) as well.*
      1. *There are horizontal drillers who would be interested in pursuing a heat exchange license. This might exclude them from obtaining the heat exchange license. MN*

2. *Michigan has a driller license with categories that you can operate in within that license. BW*
3. *When looking at the statute language, keep in mind that there is a reason for why the heat exchange driller license was created. To say that the intention was never to have two separate licenses would not be 100% correct. Use caution when interpreting the statute to say that there could be a single license for both water well and heat exchange drilling. Someone passed the bill because they thought there was a need to have separate licenses. The language is often written to avoid giving the impression that intent is to prevent certain people from obtaining the license. Reciprocity may be an example. What if someone only wants to do heat exchange drillholes (such as horizontal boring) where drilling remains above the depth that requires licensure? JB*
4. *The two processes are similar. If you had a well driller license, you would have competency in heat exchange drilling as well. You would have the qualifications. JB*
5. *Heat exchange requires cement grouting. There are people who drill water wells every day that would not qualify for heat exchange drilling because they didn't have the cement grout experience. Some drillers never have to use cement grout because of depth to bedrock. They would not qualify for the heat exchange license because they don't cement grout. SB*
6. *How many pump installers have a grout pump that can be used for well abandonment? If a pump gets stuck in a 4" casing, then it needs to be entombed. How does a pump installer do that without a grout pump? What gives a pump installer the qualifications to fill and seal a well? MK*
7. *When geothermal first came to this state, there were drillers coming in and doing things that were not compliant. TM*
8. *There was a period when the heat exchange license was not available because my name was not on the well construction reports, and I did not have enough cement grouted wells to qualify for the exam. SB*
9. *There was a period of time when the heat exchange license went into effect that a driller could be grandfathered into to the license requirements and qualify for the exam. JB*
10. *There is interest on the geothermal side to have more qualified drillers available to do geothermal verticals. Opening up well drillers to the geothermal license would increase the number from around 30 to 300. JB*
11. *If a driller is able to grout a water well, they should be able to grout a geothermal well.*
12. *If we are sure that being a water well driller provides all the qualifications needed for geothermal drilling, then we can move in that direction. There will be geothermal drillers who have enough heat exchange work that are not interested in water well drilling. JB*
13. *The avenue for a well driller to do heat exchange drilling already exists in rule. A well driller can find a licensed heat exchange driller who will act as their supervisor. BW*

14. *That is true, but in most cases a driller would be seeking a more direct route. JB*
15. *There is knowledge required in heat exchange drilling that is not required for water well drilling. BW*
16. *A newly hired plumbing apprentice has a minimum of nine years before they are qualified to be a master plumber. There is a 5-year apprenticeship then 3 years as a journeyman before you take the master's test. There was talk among plumbers that requirements for master plumber license should be broken down because it is a barrier to people becoming a master plumber. You can't start your own shop without the master plumber's license. So, there were arguments on both sides. With well drilling, you need to be careful not to have too many different licenses that are required for you to do your job. If there were one license that allowed you to do them all, some would argue that they can't wait that long to become a master driller. Others would argue that they are an elite group and that they can do anything. Within the plumbing industry, there are master restricted licenses. A lot of discussion here is on different licenses within the water well industry. What if this was all put into a single drilling license? Would it be something that drillers strive to attain? BF*
17. *At one time I held a pump installer and driller license and was able to do heat exchange. The heat exchange portion was lost when the new requirement went into effect for the heat exchange license. TH*
18. *Every side of the license requirement issue has valid points. Another issue is the decline in the number of licensed drillers and pump installers. The fact is that this is an aging industry. We should try to avoid having situation 10 years down the road where people have to wait for long periods of time for drilling and pump installing service because there are not enough licensed people to do the work. BW*
19. *Is the same rig required to drill a water well and geothermal well? BF*
20. *In most cases, the same rig can be used to drill a heat exchange bore hole and water wells. Some larger companies may have rigs dedicated to one or the other. TH*
21. *The upfront cost of entry (acquiring a drilling rig) is a significant barrier to startup for a new driller. SS*
22. *In 2004, the cost of a new rig was $500,000. Now the cost has doubled to $1,000,000. That is a contributing factor to the reduction in well drillers.*
23. *Are taxes applied when a drill rig is purchased? JB*
24. *Yes. 5% on $500,000 resulted in an additional cost of $80,000 in fines that resulted when my tax accountant made the mistake of itemizing the value of the truck and the rig in depreciation. The rig is equipment. You don't to pay taxes on the rig, just the truck.*
25. *In our bill of sale, we bought the rig and truck separately. SB*
26. *The logistics for Operator Certification subclass exams for wastewater treatment is that there is a general exam if operator*

certification and subclass exams for various methods in wastewater treatment. SW

27. *The best course of action may be for the department to set direction on driller licensing and come back to the committee for comment. MN*

5. Clarification of "pump installing" definition.
    i. *NR 146 definition of "pump installing" does not provide clear understanding of what is and is not authorized when engaging in the business of "pump installing".*
        1. *The need for clarification on the definition of pump installing will be addressed in this revision. BG*
        2. *This definition and what is included resulted in a rather heated discussion in continuing education. RP*
        3. *Was there anything recorded from the discussion as to what should or should not be included? SS*
        4. *Nothing recorded, just a number of participants expressing their opinion.*
6. Designate pump installer classifications for property transfer well inspectors, welders who install pitless adapters and for employees of licensed pump installers or registered pump installer businesses. Require thorough demonstration of competencies to ensure alignment with activities authorized by the classification.
    i. *The statute does not make a provision for separate pump installer credentials for engaging in the activities of well inspection, welding, or pump installer employees. A pump installing license is needed. Pump installer classifications would require a change to statute.*
7. Codify assignment of responsibility for parties who enter into contractual agreements for the purpose of engaging in drilling and pump installing activities.
    i. *The department shall, after a public hearing, prescribe, publish and enforce minimum reasonable standards and rules and regulations for methods to be pursued in the obtaining of pure drinking water for human consumption*
    ii. *The department may exercise such powers, and may promulgate such rules, as are reasonably necessary to carry out and enforce the provisions of this chapter.*
        1. *The revision would make clearer by rule who is responsible for what in contractual agreements. This is more a task for the department to specify who is responsible. MN*
        2. *It seems the responsibility falls on the licensed individual who the DNR is able to reach. TH*
        3. *You could have two separate businesses involved in a contract that are both licensed such as the driller and pump installer who need to grab a sample from the well. BW*
8. Make provision for administration of license exams by a third-party provider.
    i. *Statute requires license examination to be <u>administered by the department</u>. Past review by department legal staff and establishment of the contract with PSI would indicate that exams provided by a third party through contract with the department is considered to be "administered by the department" (See prior comments regarding change to statute to allow administration by department representative).*

9. Accept training specific to drilling for pump installer continuing education credit and accept training specific pump installing for driller continuing education credit.
    i. *Statute requires continuing education specific to well drilling for a driller license that authorizes well drilling and continuing education specific to heat exchange drilling for a driller license that authorizes heat exchange drilling. The same applies to rig operator registrations. <u>However, statute does not require continuing education specific to pump installing for someone who holds a pump installing license.</u>*
        1. *The statute does not say "only" continuing education specific to well drilling or heat exchange drilling. So, the statute allows attendance at continuing education for well drillers that is specific to water well drilling, but it does not require all the continuing education to be specific to water well drilling for example. BW*
        2. *If the intent is to have pump installers understand how a well works, why restrict their continuing education to just pump installing and not allow attendance at continuing education that is specific to well drilling? They should know the well from the bottom to where water is delivered to the house. So why restrict continuing education to just pump installing? RP*
        3. *The bottom line will be determining what "specific" means in statute. Otherwise, you could take the word "specific" out and just say "related to"'. TM*
        4. *With the statute being broadly interpreted, who is going to say "No" to pump installers attending continuing education specific to well drilling? Who is going raise the question that the department has a legal issue here? It seems there is room for wide discretion with regard to what is and isn't required.*
        5. *It would help if the department defined by rule what is and is not accepted for continuing education credit. MN*
        6. *The department is required to approve the continuing education. The committee should provide a more defined latitude on what should be approved and provide the basis for approval. In the end, is the department regulating the individual or is it regulating the industry? It is in everyone's interest that the well drilling and pump installing industry is healthy. The intent is to provide value added education to the individual to so that they can do what is required in the industry and do it in a proper manner. BW*
        7. *For 3 years as a WWWA board member, one thing that the board has struggled with is to get continuing education credits for the business side of drilling and pump installing. Sessions are offered on accounting, law, and insurance aspects that do not meet the criteria for continuing education credit. However, without assistance provided by office staff, it would be difficult for some to run their business. Time is required to be in the field and on site. The permit process and sampling paperwork requires time in the office as well. Maybe there could be a credential created for office personnel. There may be an opportunity for the DNR to allow continuing education and a credential for office staff who handle the business side of things. MK*
        8. *The WWWA has been working for years to obtain approval for continuing education that focusses on the business side of things.*

The classes provided on business related topics are not approved for credit but are still well attended. RP

9. *What Matt has mentioned is a credential and training for office staff. What Rick is referring to is approval of business-related continuing education for someone who may be a business owner who holds a license. But if a driller or pump installer attended an accounting class for 6 hours, is that OK? JB*
10. *If you can become better able to run the business, then yes. It would be better than attending and hearing the same material year after year (such as iron bacteria for example). There is no value added there. It hasn't changed in 30 years. Some of the best continuing education attended has been in first response. I was able to save someone's life by what was learned in a class that was 1 or 2 hours in length. Most people who have been in the industry for any length of time do not need to hear the same material over and over again. TH*
11. *You would restrict the attendance at business related training to 1 or 2 hours each year. RP*
12. *This dovetails into what was being said about training for office staff. If we are better trained on the business aspects, we can better support the office staff in completing abandonment of well construction reports, in addition to ways to be more efficient and organized in running the business. Agreement is needed on what the statute requires and what rule language provides that will allow the department to approve continuing education for business related offerings rather than only for well drilling or only for heat exchange. BW*
13. *While we are concerned about the downward trend in licensing in the industry, classes in succession planning should be considered as important to the future of the industry. RP*
14. *The role of office staff is important. Helping them to do their job better by attending continuing education related to business would help the industry. TH*
15. *We have some latitude as to what can be approved. Every year a list of approved topics for continuing education is provided. We can write into the rule something that provides more latitude as long as we remain within statute requirements. MN*
16. *Jeff Beiriger has been pointing out that code related continuing education and code updates need to be required within a given time frame to insure that people are aware of, and up to date on requirements. TM*
17. *There are required compliance credits that almost always focused on code in addition to the general credit requirements. The best way to get 1 or 2 hours of compliance credits would require attendance at sessions where agency staff are there to present or answer code review or code update related questions. You could still provide general credits in business or other related topics, but it is important to not lose touch with code requirements. You can also always just go to an accounting class, and it doesn't have to count for continuing education. If it makes business sense, you always have the option to do it. However, you need to stay loyal*

to, your code which means that you have to learn it and keep learning it.

18. *Yes… that should be required. With 6 hours required each year, 1 hour should be required on code updates. TH*
19. *With current attendance requirements in the plumbing industry, someone can go 7 years without attending any code related continuing education. So, try to maintain code related attendance requirements in this industry because if it is lost, you may not be able to bring it back. If the plumbing industry could do it again, they would never let go of the code related attendance requirement. JB*
20. *It would be good to have a single source or lead on continuing education availability in the well industry. BE*
21. *Our industry has annual attendance requirements which lends itself well to having the industry exposed to training in code requirements and this is something that should not change. BW*
22. *What started this discussion was the question of whether credit should be approved for business training. The office staff aspect is important as often times, things are lost in translation. Drillers and pump installers attend the continuing education and learn about new technology and forms that the department has available, but the attendees are not the people in the business who are doing that work. Often when they go back and explain what was presented to office staff, things are lost in translation. Time on the phone with office staff is then required by the department to explain what had already been presented at continuing education. SS*
23. *WWWA does not require registration fees for office staff attendance at the training. RP*
24. *Will the department ever return to where DNR staff provides the initial talk and answers questions. In past continuing education sessions, there is much better participation from the group when DNR staff was available to address questions. There was more education provided in that type of setting. Is there any way to bring that back? TM*
25. *Online training is definitely less personal. In-person attendance is definitely better. TH*
26. *The problem is that companies no longer allow their people to travel to the remote locations. WWWA can no longer get live speakers to be present at the satellite sessions. RP*
27. *The department does many Teams meetings with large groups where there are opportunities to answer questions, so there are options available. SS*
28. *We really would like to see this type of training come back where the department presents and is available for questions and answers. TM*

5. *Friedenfels feedback on continuing education attendance on Feb. 6th,2024 – Green Bay. BF*
    1. *Group size 1/3 of pre-covid attendance*
    2. *Jeff Beiriger presentation very good, in-person.*
    3. *Remainder of the sessions were pre-recorded.*

4. *Estimated 100-125 attendees*
5. *From back of the room, noted many attendees were on their phones and not attentive to what was being presented.*
6. *Some attendees were sleeping, others were talking and not focused on what was being presented.*
7. *Presenters were virtual – no availability for questions and answers*
8. *Being a member of the Advisory Committee, attendees were encouraged make contact and to make their industry concerns known*
9. *One individual commented that he brought his employee who paid $220 to attend and missed out on pay for the day. He was not happy that the training was presented on the screen virtually instead of in-person.*
10. *A question was raised as to why pump installer employees would need to attend this training to maintain a pump installer license. There was no perceived value in the training. This was thought to be a contributing factor in the decline in number of licensed pump installers.*
11. *General impression that many pump installer employees see no value in being licensed because their employer has the license, and they (as a pump installer employee) are not required to be licensed.*
12. *Maybe what is needed is to require anyone (including pump installer employees) who engage in pump installing to be licensed. Maybe it should be a (two tiered) restricted license that is required for pump installer employees.*
13. *It appears that online attendance is becoming the new standard. Are we moving away from in-person training and more towards online training? The application form should have a clause stating, "we prefer that you attend online because this training will include 5 hours of training presented virtually". If attendees are going to pay $220, they expect in-person training, not watching TV for 5 hours.*
14. *How do we address unethical business practices and unlicensed activity by those who don't know what they are doing? TH*
15. *You can't legislate morality. You need to turn them in. The employer should lose the license and not be allowed back in. You need to police your own industry. BF*
16. *A license requirement for pump installer employees would require a change to statute. Everyone is in agreement that it is needed, but it can't be required by rule unless there is a change to statute. SS*
17. *The intent of the WWWA is to get everyone to attend the convention at Wisconsin Dells where breakout rooms are provided with in-person presentations. For the satellite sessions at Green Bay, Rothschild, and Madison, it is difficult to get presenters to be there in-person. If the pump installer is licensed, the Dells location is the best by far for attendees to get the most value from the training provided. It comes down to a decision by the pump installer's employer whether CE attendance is worth the cost of attendance. Using rig operator registration as an example, it becomes an employer decision as to whether to send the rig operator (employee) to continuing education or not. If attendance at the satellite locations was not perceived as a good value, go to the conference at Wisconsin Dells. There is a big difference in the way that the training is provided. MK*
18. *At the conference, there are 18 different groups and breakout sessions available, and all are in-person. The people who are presenting there are not allowed by their employers to present at the satellite sessions. RP*
19. *A major pump supplier (Headwater) stated that we have to do better and find people who can do live presentations three times a year. Another factor in the*

offerings at Green Bay and other satellite locations is that the association tries to have training that will provide 6 credits for all license types. The topics covered in these sessions are not always the best option for those with specific interests. A major consideration is getting the full 6 credits that are required. An important consideration is what can be presented that will be of interest and approved for all license types. JB

6. *Eucker - required use of form 3300-221 for well inspections*
    1. *Request DNR to speak to the realtor's association to reemphasize requirements for use of form 3300-221. BE*
        i. *Greg Roanhouse has met with many realtors in that part of the state. SS*
        ii. *Regular meetings are held with realtors regarding these requirements. RP*
        iii. *In the southeast region there are many realtors and difficult to reach all of them. MN*
        iv. *This isn't just happening in the southeast region of the state. TH*
        v. *There is a Chicago influence in the southeast region with people from Chicago coming up to buy residential real estate. They have no regard for code requirements. BE*
7. *Eucker – request for review of fact sheet being developed for well chlorination procedures and flushing. Example of problem pitless adapter (badly corroded due to chlorination) was presented to the committee. BE*

8. Recap – NR 812 Advisory Committee ideas (from 12/19/2023)
    1. Casing depth requirement in areas with high nitrate concentrations
    2. Allow use of bentonite chips in the annular space – minimum drill hole diameter of 10" when using 6" casing
    3. Leave language as is with respect to the use of bentonite chips to fill and seal the annular space, especially with deeper wells
    4. Restrict the practice of grabbing water samples off the rig
    5. Remove requirement for nitrate sample when the well cap has been removed
    6. Remove sampling requirement following pressure tank replacement
    7. Remove requirement to sample test for bacteria following well construction as this test is done when the pump is installed
    8. Return to the 10-tube bacteria test
    9. Revise water sample form 3300-265 to remove reference to "previous unsafe" as this can cause biased lab screening
    10. Set requirement to limit flow rate when a sample is being drawn
    11. Further discussion:
        i. Berkholtz – NR 812.36 well pits and pit abandonment
            1. *Suggest leaving valve pit open after welding on adapter as long as well is in service and good water is being provided. There is no such thing as a water tight pit. MB*
            2. *Even if the pit is filled in, the pitless will still be under water in some cases. SB*
            3. *We need to keep that in mind and take into consideration when looking at pit requirements and abandonments. There are cycles of wet and dry. MN*

        ii. Eucker
            1. *Can the 10-tube bacteria test requirement be brought back? BE*

2. *The department doesn't have the authority to direct labs to do a certain type of test. That would be DATCP's area. MN*

iii. Sample tap location and sampling required with replaced pressure tank
   1. *Passed DNR staff wanted the sample tap located ahead of the pressure tank to provide an accurate sample from the well. BE*
   2. *Plumbers can change the pressure tank without a license, but a license is required for pump installers. BE TH*

iv. Minimum 3-foot sand screen for sand and gravel wells

v. Eliminate samples taken from the rig
   1. *There should be one test on the completed system once the pump is in. Responsibility for a bad sample is not the driller or pump installer's fault. If the water quality is bad coming from the aquifer, that is nobody's fault. In Michigan, it is up to the home owner to take the sample. SB*
   2. *Taking a sample off the rig is a pain. Many times, a well is drilled and a lot of time passes before the pump is installed. TH*
   3. *This will all be taken into consideration. Having code requirements cover every possible situation is difficult, but this will be worked on. There are arguments to be made for both scenarios where the sample is taken or not taken after the well is drilled and before the pump is installed. MN*
   4. *There are ambient/environmental conditions at times that are responsible for a sample that comes back unsafe. It is not the driller or pump installer who are at fault. BW*

9. DNR suggested NR 812 revision list
   1. Subchapter III
      1. Definitions
         a. *Pump installing (may need to match NR 146)*
         b. *If there are other ideas on what should be addressed by this definition, let the DNR know. MN*
      2. Pump work on new non-complying wells
         1. *There is a loophole in NR 812 where a new pump can be installed in a new well that is noncompliant as long as the DNR is notified of the noncompliance. This was not the original intent of the rule language and this needs to be addressed. MN*
         2. *How does the well get drilled in the first place with this situation?*
         3. *This can happen when the well is drilled before the house is built or something changes following drilling of the well. MN*
      3. Non-pressurized storage tank requirements
         a. *Elevated tanks*
         b. *Ground storage*
         c. *Nonelectric installations by plain folk come under consideration here.*
      4. Non-electric pump standards
         a. *The code is not easily interpreted in these situations.*
         b. *Setbacks apply to reservoirs*
      5. Pump installer requirements for following up on bacteria positive wells
      6. Pump equipment and supply pipe
         1. *Current rule language requires "approved" equipment and supply pipe. MN*
      7. Pitless unit installation standards

1. *Might include requirements for when a welder is contracted to do the work. What experience might be required. MN*
2. *Some welders are using new wire welders thar are expensive but provide a good quality weld. BE*

8. Pitless adaptor installation standards
9. Electrical conduits
   a. Material
   b. Uniform electrical standard
   c. *Encasing and closing the end of the conduit during installation are examples. Is there anything that can be done to improve current requirements? MN*
   d. *Any double insulated (jacketed) – whether pump cable of UF wire should be used. TH*
   e. *NR 812.30 addressed some of these requirements. BW*
10. Hand pump standards
    a. Emergency hand pump
11. Pump installation requirements for flowing wells
12. Lineshaft turbine pump requirements
    1. *Usually for irrigation or larger wells – any ideas for improvement? MN*
13. Sampling requirements for pump work on existing wells
14. Water line separation to sewers
    1. *Not in the same trench obviously, but what suggestions would there be for improving this requirement? MN*
    2. *There are occasions where water lines need to run along the same route as electric and sewer. There is no other place for it. TH*
15. New well pits
    1. *Must be approved before built. Hasn't been updated for some time. MN*
    2. *Pits should be eliminated when possible. BA*
    3. *Well pits are not water tight… even new well pits. MB*
    4. *Hot humid weather causes condensation and dampness. TH*
16. Yard hydrant requirement – likely needs to match plumbing code
    1. *Last revision added requirement for hydrant to be approved. MN*
    2. *Beyond the pressure tank is outside of DNR area of control. TM*
    3. *There must be a separate water line going out. SB*
    4. *Should be tapped into after the main valve. Hard to determine at times what is the main valve. TM*
    5. *Could be required after the control valve. That may be what ends up in the requirement. BF*
    6. *What difference does it make where it leaves the system? With respect to bacteria, what difference does it make where the "T" is located? TM*
    7. *As long as it is after the control valve, what does it matter?*

2. Outside of Subchapter III

8. Standards for the use of bentonite chips as an annular space sealing material (separate meeting may be needed)
9. Existing well standards – Separate meeting may be needed
   a. Steel casing extension requirements
   b. Standards for existing well pits

c. Casing diameter requirements for existing wells
    i. *Will match things to meet new installation requirements for pumps. MN*
    ii. *Realtors will not call you back if you do it one time. BE*
    iii. *Just because we have been doing it this way for a long time, doesn't mean that we should look at doing it differently. MN*

10. Other clarifications and corrections

10. Other discussion
    a. On the well inspection form, should list the borehole and casing as complying or noncomplying, but it has nonconforming features. Does check mark mean that the whole system is noncomplying or that the feature is noncomplying? BF
    b. The whole system is noncomplying. RP
    c. So, then you have to provide a letter that explains the noncomplying features. BF
    d. Many times, I will just address the noncomplying feature while I am there. TH
    e. A second form can be included with the DNR form that explains the noncomplying features. BW
    f. The well must provide "adequate water". Define "adequate". BE
    g. This is more of a form issue than it is a code issue. Maybe another field can be added to make provision for noting when something has or has not been repaired. SS
11. Meetings going forward
    a. Agendas will be set to address either NR 146 or NR 812 revisions.
    b. Committee members will discern attendance based on meeting agendas.
12. Next meeting:
    a. Next meeting date: March 25th, 9:30 start time.