



State of New Jersey

DEPARTMENT OF ENVIRONMENTAL PROTECTION

PHILIP D. MURPHY
Governor

SHAWN M. LaTOURETTE
Commissioner

TAHESHA WAY, Esq.
Lt. Governor

DIVISION OF WATER SUPPLY AND GEOSCIENCE
NEW JERSEY GEOLOGICAL AND WATER SURVEY ELEMENT
BUREAU OF WATER ALLOCATION AND WELL PERMITTING
401 E. STATE STREET – P.O. BOX 420
MAIL CODE 401-04Q
TRENTON, NEW JERSEY 08625-0420
TELEPHONE: (609) 984-6831
FAX: (609) 633-1231
www.nj.gov/dep/watersupply

New Jersey Department of Environmental Protection State Well Drillers and Pump Installers Examining and Advisory Board Meeting Minutes for November 21, 2024

Approved by the Board on December 19, 2024

Board Members Participating Via Telephone/Microsoft Teams: Art Becker (Chairman), Gary Poppe (Vice-Chairman), Joe Yost, Gordon Craig (present from the start of the meeting until 9:58 am and again from 11:10-11:38 am), Dave Lyman, Eric Hoffmann, Steve Domber, and Richard Dalton

Board Members Absent: N/A

Board Legal Representative Present: Deputy Attorney General (DAG) Jill Denyes, NJ Division of Law

NJDEP Water Supply (Bureau of Water Allocation and Well Permitting) Staff Present: Kat Burkhard, Steve Reya, Mark Miller, Michael Schumacher, Mark Ortega, Steve Vargo, and Jillian Walker

Other NJDEP Staff Present: Don Hirsch, Northern Water Compliance and Enforcement; Alexandra Carone, Geological Mapping and Coastal Geology Section

Members of the Public: John Wason, JW Water Well Service

1. Call to Order and Introductions-

The meeting was called to order at 9:35 am with a quorum present via Microsoft Teams and telephone. Notice of the meeting and instructions on how to participate by video or phone were listed on the Board's website. A. Becker thanked everyone for attending.

2. Review and Certification of October 17, 2024, Meeting Minutes-

A. Becker asked if anyone had any comments on the draft minutes from the October 17, 2024, Board meeting. A. Becker thanked M. Ortega for including the licensing charts in the minutes and thanked him again for his work. No further comments were made.

A motion to approve the draft minutes from October 17, 2024, as written, was made by R. Dalton, seconded by G. Craig, and approved by all except for D. Lyman, G. Poppe, and S. Domber who abstained.

3. Review and Certification of Well Driller and Pump Installer License Applications-

A. Becker listed the names of the four license applicants who were deemed administratively complete by the Department. There was one Environmental Resource and Geotechnical (ERG) well driller license applicant and three pump installer license applicants. A. Becker asked if there were any comments on the four license applicants. No comments were made.

A motion to approve the four license applicants deemed acceptable by the Department was made by G. Craig, seconded by S. Domber, and approved unanimously.

Below is a list of license applicants approved for licensure:

License Type	Applicant Name	Employer
Pump Installer	Timothy Gondek	Accurate Well & Pump
Pump Installer	Thomas Achilles	South Jersey Water Conditioning Service Inc.
Pump Installer	John W. Wason	JW Water Well Service
ERG	Wesley J. Rivett	Redox Tech, LLC

4. Review of Continuing Education Course Offerings-

A. Becker said that there were a lot of courses to go over between the two conventions. A. Becker pointed out a mistake on the table provided to the Board. He noted that the date for the Maryland Delaware Water Well Association (MDWWA) 2025 Annual Convention should be February 2025 instead of 2024. M. Ortega thanked A. Becker for pointing out the typo and said that he would make the correction on his end.

National Ground Water Association (NGWA)

A. Becker opened the discussion. He said that after reviewing the list of 47 courses, he felt that there were four that he found questionable. A. Becker listed the four courses to the Board. The Board also made note of four courses that they believed should be in the safety continuing education point (CEP) category: Managing Fatigue: Strategies for Workplace Safety and Health, Power of Written Procedures, Electrical Protection and Safety Disconnect for Your Field Equipment, and Site & Project Safety.

D. Lyman asked about the potential of adding a Business CEP category in the future. M. Ortega explained that the Board discussed this during the first licensing cycle but noted that it would be very challenging for the Department to track a third category. He added that a member of the Board of Licensed Site Remediation Professionals attended a Board meeting during the first cycle and told the Board that they sometimes have issues with their ethics category, which does not frequently have available courses and poses problems to those seeking to meet renewal requirements. It was advised that the CEP categories not become too specific to avoid such problems.

S. Domber suggested that the Board review the rules to see what the Board is specifically able to approve. R. Dalton noted that there are several courses that are strictly business-related. S. Domber suggested tabling the discussion and asked M. Ortega to revisit some of the Board's older motions.

The Board discussed some of the business-related courses and the importance of them to the well drilling and pump installation industry. Several motions followed this discussion.

A motion to deny Meeting, Monitoring, and Managing Groundwater and Wells Through Interactive Technologies was made by R. Dalton. There was no second to the motion, so the motion did not move forward.

A motion to approve State of the Art for High-Rate Groundwater Sand Control: Design, Fabrication, Installation, and Field for a half of a CEP was made by R. Dalton. There was no second to the motion, so the motion did not move forward.

A motion to deny Roundtable: Ask the Master Groundwater Contractor was made by R. Dalton. There was no second to the motion, so the motion did not move forward.

A. Becker noted that he is one of the presenters for this course and said that there would be a lot of interesting topics up for discussion.

A motion to deny Nitrate-impacted Groundwater - How Did This Happen? It's Not Always What You Think was made by R. Dalton. There was no second to this motion, so the motion did not move forward.

A motion to deny Don't Kill Your Golden Goose - Protect & Perpetuate Your Business was made by E. Hoffmann and seconded by S. Domber. R. Dalton and J. Yost were in favor while for A. Becker, G. Poppe, G. Craig, and D. Lyman opposed. The motion did not pass and was a tie. J. Yost subsequently changed his vote from in favor to opposed resulting in the motion to deny the course not passing.

A motion to deny How are You Selling You? Because With or Without Effort Your Name is Out There was made by S. Domber and seconded by E. Hoffmann. All were in favor except for A. Becker, G. Poppe, G. Craig, D. Lyman, and J. Yost. The motion did not pass.

A motion to deny Roundtable: Women in the Groundwater Industry was made by S. Domber and seconded by E. Hoffmann. This motion was approved by all except for A. Becker, G. Poppe, G. Craig, D. Lyman, and J. Yost. The motion did not pass.

A motion to approve One Year Later - Navigating the Build America, Buy America Act was made by J. Yost and seconded by D. Lyman. This motion was approved by all except S. Domber. The motion passed.

A motion to approve all 47 courses was made by S. Domber, seconded by J. Yost, and approved by all except for R. Dalton who abstained.

Below is a list of courses approved by the Board for NGWA's 2025 Groundwater Week:

Course Name	CEPs
Alphabet Soup of Geothermal Heat Pumps	1 Technical
Don't Kill Your Golden Goose - Protect & Perpetuate Your Business	1 Technical
Replacements - Replacement of Avondale Replacement Well 25	1 Technical
Toilet Talk - Lessons from Looking in the Back of the Toilet	1 Technical
Advanced VFD Topics - PID, Ramps, EMI, Harmonics	1 Technical
Boreholes vs. Wells	1 Technical

Metering, Monitoring and Managing Groundwater and Wells Through Interactive Technology	1 Technical
What Warranty?	1 Technical
Managing Fatigue: Strategies for Workplace Safety and Health	1 Safety
Optimizing Geothermal Drilling: Operations, Equipment, and Scalability Insights	1 Technical
Productive Drilling, Solids Control, & Waste Disposal	1 Technical
Understanding Traditional Controls and Submersible Motors	1 Technical
History of HSLA Steel and Other Corrosion Resistant Steel Options for Water Well Applications	1 Technical
Power of Written Procedures	1 Safety
State of the Art for High-Rate Groundwater Sand Control: Design, Fabrication, Installation, and Field Performance	1 Technical
Wire to Water and Smart Installation: Replacement Practices for Improved Efficiency in the 21st Century	1 Technical
Drilling with Air	1 Technical
Electrical Protection and Safety Disconnect for Your Field Equipment	1 Safety
Geothermal Drilling - Lessons Learned	1 Technical
Simple Do and Don't All Specific to Well Rehabilitation - Avoiding Serious Pitfalls	1 Technical
Emerging Contaminants	1 Technical
Hydraulics - The Know-How	1 Technical
Transforming Perspectives on Ground Source Heat Pumps	1 Technical
VFD Control for Ground Water Application	1 Technical
How are You Selling You? Because With or Without Effort Your Name is Out There	1 Technical
Proper Bit Selection	1 Technical
Roundtable: Ask the Master Groundwater Contractor	1 Technical
Your Toolkit for Water Systems	1 Technical
Maximizing Sonic Rig Potential: Infield and Innovative Uses of Sonic Rigs	1 Technical
Remote Monitoring and Control of Water Systems	1 Technical
Roundtable: Passing on Knowledge to the Next Generation	1 Technical
Site & Project Safety	1 Safety
Groundwater Occurrence and Aquifer Types	1 Technical
Integrating UV Water Treatment Systems into Your Existing Product Portfolio	1 Technical
Preventive Maintenance – Extending the Life of Your Water Well	1 Technical
Roundtable: Women in the Groundwater Industry	1 Technical
Leveraging Energy Assessments for Pumping Systems	1 Technical
Nitrate-impacted Groundwater - How Did This Happen? It's Not Always What You Think	1 Technical
Understanding Aquifer Characteristics and Well Performance Through Aquifer Testing	1 Technical
Why Did My Last Rehabilitation Not Meet Expectation	1 Technical
One Year Later - Navigating the Build America, Buy America Act	1 Technical
Slug Tests to Optimize Groundwater Well Design	1 Technical

Sonic Drilling: Pioneers for Progress and Profit	1 Technical
Well Rehabilitation and Construction Techniques Using Inflatable Packers	1 Technical
Benefits of Solar Pumping with Variable Frequency Drives	1 Technical
High Pressure Hydro-Jetting as a Tool in New Well Development	1 Technical
Well Rehabilitation from Start to Finish: Logistics, Planning, Data Collection, Execution, Chemistry, Follow Up	1 Technical

Maryland Delaware Water Well Association (MDWWA)

A. Becker moved on to MDWWA's 2025 Annual Convention. He reminded the Board that their opening Legislative Update course is usually denied by the Board, so the Board did not review that course. The Board went down the list of courses and made individual motions for each class.

A motion to deny State of the US Water Well Industry Report was made by D. Lyman, seconded by R. Dalton, and approved unanimously.

A motion to approve Geothermal in Schools: Great for the Country, the Students, and for the Drilling Industry was made by G. Poppe, seconded by S. Domber, and approved unanimously.

A motion to approve Making the Most of Your Drilling Fluids was made by J. Yost, seconded by D. Lyman, and approved unanimously.

M. Ortega informed the Board that no review of the placeholder jobsite safety course was needed at this time. MDWWA will provide additional information on that course at a later date, which will be forwarded to the Board upon determination that the course application is administratively complete.

A motion to approve Navigating the Unknown: Applying Treatment with Limited Information was made by D. Lyman, seconded by S. Domber, and approved unanimously.

R. Dalton asked about the Classic Series Single Head Pump Workshop course. He asked the Board if anyone was familiar with Stenner pumps, which the course description advertises. A. Becker said that that they are used for chemical treatment. A. Becker did express concern that this course could be primarily a sales pitch.

A motion to deny Classic Series Single Head Pump Workshop was made by R. Dalton, seconded by D. Lyman, and approved unanimously.

A motion to approve Electrical Basics and Tips for Water Systems was made by D. Lyman, seconded by J. Yost, and approved unanimously.

A motion to approve Rising to the Occasion: Workshopping Real-world Corrosion Scenarios was made by G. Poppe, seconded by S. Domber, and approved unanimously.

A motion to approve Contaminants of Concern: Impacts of Groundwater and Remediation was made by D. Lyman, seconded by G. Poppe, and approved unanimously.

A motion to deny Maryland's Board of Well Drillers Function Overview was made by R. Dalton, seconded by S. Domber, and approved unanimously.

5. Bureau of Water Allocation and Well Permitting Enforcement & Field Work Update-

S. Vargo discussed three field inspections that have occurred since the last update. Most notably, he discussed a site visit that he and another staff member performed on October 24, 2024. The inspection, which was for a proposed well in an area of known contamination, had requirements to notify the Department at least three days prior to drilling and to construct the well with an outer casing. The driller contacted the Department on Monday, October 21st, notifying the Department that they would begin construction the following day. S. Vargo contacted the well driller and notified them that they needed to provide three business days in accordance with the permit conditions. The driller rescheduled for another day with enough notice so Department staff could visit the site.

When Department staff arrived on site at the agreed upon start time, the driller informed the inspectors that the outer casing was installed and grouted already. S. Vargo discussed the suspected fraudulent activities that occurred during the inspection. Ultimately, this well was decommissioned by the driller prior to completion, as he could not confirm the depth of the outer casing of the well which was to be installed in a confining unit beneath the contaminated aquifer. A. Becker asked if any fines would come from his inspection. S. Vargo said that the Department will send a Notice of Non-Compliance to the driller and will follow up with a referral to Water Compliance and Enforcement.

A. Becker asked if there was another way for the Department to notify a well driller when there is a three-day notification requirement added to a well permit. M. Schumacher said that the certifying well driller on the permit and the facility administrator will receive emails with permit conditions that are added to a permit upon issuance, beyond those that are standard on all permit applications.

A. Becker thanked S. Vargo for the update.

6. Disinfection/Shock Chlorination of Potable Wells-

S. Reya reintroduced this topic, which was originally brought up in late 2021 by D. Lyman. At the time, the Board contented that only New Jersey licensed well drillers of the proper class and pump installers could remove a well cap to disinfect a well. The Department's contention was that while licensees are permitted to perform this work, the general provisions at N.J.A.C. 7:9D-1.6 do not prohibit unlicensed individuals from performing this work. Therefore, there would be nothing to cite someone on for performing this work without a license. S. Reya reminded the Board that former Board member Jeff Hoffman requested legal interpretation from DAG J. Denyes and her office. The Department had drafted a letter to be sent to an individual who was suspected of improperly disinfecting a well to notify them of the proper requirements.

S. Reya informed the Board that Well Permitting recently had met with J. Denyes and her group to discuss this situation further. Neither N.J.A.C. 7:9D or N.J.A.C. 7:10 speak to requirements for disinfecting private wells. S. Reya explained that the Department sees the importance of this and recommended changes to N.J.A.C. 7:9D. Well Permitting plans on beginning the rule writing process to begin in January 2025 to begin making changes to the rule. J. Denyes apologized for the delayed review and informed the Board that her office is prioritizing this issue.

S. Reya showed the Board a photo of a well pit that was flooded, which he received by a licensed driller. The driller who sent it was advised that the photo depicts well that was recently opened up and disinfected, but was not put together in a sanitary state and the well pit continued to flood and directly drain surface water straight into the well. It was also believed that an unlicensed individual performed the work, and it was noted that customers are potentially unknowingly paying unlicensed individuals to open wells, disinfect them, and then leave them in an unsanitary state. This results in any bacteriological issue that existed not being addressed, despite the customer hiring someone to perform

corrective action. S. Reya noted that this was another example of the potential issues resulting from unlicensed work and the need to send correspondence and potentially update existing rules, if needed. D. Lyman thanked S. Reya for the update.

7. Bureau Implementation of N.J.A.C. 7:10-12.4(c) of the New Jersey Safe Drinking Water Act Rules-

D. Lyman discussed two recent cases where a property owner was authorized by a water system or town to separate from public water, but due to the New Jersey Safe Drinking Water Act rules, N.J.A.C. 7:10, the owner is forced to hook up to public water. A. Becker reminded the Board that Mr. Tom Stover, a New Jersey licensed Journey well driller, had brought this topic up to the Board in the past.

M. Schumacher discussed Well Permitting's perspective. He said in the past, some considerations used to be made regarding the cost of the well versus the cost to hook up to public water. He explained that there is no guidance on what constitutes something being cost prohibitive. M. Schumacher explained Well Permitting's review process for well permits located in a water company's franchise area. He explained that at N.J.A.C. 7:10-12.4(c), the New Jersey Safe Drinking Water Act rules specify that if a water line is 200 feet to the property line, not the distance to the structure, then the owner will be required to hook up to public water.

A. Becker asked how the properties that D. Lyman brought up are currently getting their water if they cannot receive new wells. M. Schumacher explained that the well permits were denied so the owner would need to connect to public water. D. Lyman said that he has reviewed design documents for extending water mains that are over 100 pages long. He explained that this is very difficult for most homeowners. D. Lyman explained that he could see these permits being denied if the well was planned to be drilled in a wellhead protection area or in an area with contamination.

S. Reya said that Well Permitting is currently working to refine their current policy on this issue, and coordinate with the Bureau of Safe Drinking Water to potentially revise this provision of the New Jersey Safe Drinking Water Act rule.

8. Drought Status Update-

S. Domber provided the Board with a brief update on the status of the ongoing drought in New Jersey. He informed the Board that the State of New Jersey entered a drought watch on October 10th and then a drought warning on November 13th. He explained that conditions are still very dry and unseasonably warm.

S. Domber explained that there are no mandatory restrictions under the drought warning. The Department is urging water conservation and is encouraging people to fix leaks. He further explained that the Department does not have a good handle on private wells currently, since permits are not required to lower a well pump. M. Ortega created some charts to show replacement, deepening, and decommissionings of Category 1 wells over a 10-year period of time. These charts showed that the majority of work occurred between 2016 and 2017, which coincided with the last drought warning declared by the State of New Jersey.

M. Ortega shared his charts with the Board, explaining that the data is still a work in progress. He explained that so far, the data has not shown that this drought has had a significant impact on private wells. He attributed this to a lot of shallow wells being decommissioned and replaced during the last drought.

M. Ortega asked G. Poppe and D. Lyman if they had any evidence of specific areas being affected by the drought. D. Lyman said that his company has been receiving a lot of calls to address older wells that are shallow, but they have not done a lot of domestic deepenings. His company has been advising homeowners to do their best to conserve water. D. Lyman expressed concern about this drought continuing into the growing season in the spring.

G. Poppe said that he has had a few issues during the last couple of months. He referred to some hand dug wells and another well that was screened in a shallow aquifer. He singled out the Englishtown formation being an area of concern, between 40 and 100 feet deep in the Colts Neck area. He also said that Lakewood is another area of concern since they have recently added three new community supply wells. He noted that most of these wells are screened in the Cohansey. S. Domber thanked D. Lyman and G. Poppe for their perspective and noted that this is indicative of the data that M. Ortega has collected so far.

S. Domber asked if it would be beneficial if the Department sent out an email to licensed well drillers and pump installers to solicit additional information. A. Becker said that it would be a good idea, but to keep the survey short. He recommended contacting Mr. Brian McGuire to see if the New Jersey Ground Water Association could send it to their mailing list.

9. Program Updates/New Business-

S. Reya discussed a geothermal webinar that he attended the day before the Board meeting. He said that they discussed true geothermal systems instead of the typical geo-exchange systems seen in New Jersey. In the presentation, they discussed wells as deep as six kilometers where super-heated rock is used as an energy source. The presenters were investigating the feasibility of these deep wells on the east coast of the United States.

A. Becker discussed the most recent New Jersey Ground Water Association meeting with the Board. He said that one of the Board members usually gives a briefing about what is discussed during the Board meetings. A. Becker said that he discussed M. Ortega's licensing report from the October meeting and the members were fascinated by the findings.

10. Adjournment-

A. Becker thanked everyone for attending the meeting. The next meeting will be held on Thursday, December 19, 2024.

A motion to adjourn the meeting at 11:38 am was made by S. Domber, seconded by G. Poppe, and approved unanimously.