



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 October 19, 2023

Approved by the Board on November 16, 2023

Board Members Participating Via Telephone/Microsoft Teams: Art Becker (Chairman), Gary Poppe (Vice-Chairman), Joe Yost, Gordon Craig, Eric Hoffmann, and Richard Dalton

Board Members Absent: Dave Lyman, Jeff Hoffman, and Steve Domber

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: Jennifer Myers, Steve Reya, and Mark Ortega

Other NJDEP Staff Present: Don Hirsch, Northern Water Compliance and Enforcement

Members of the Public: Brian McGuire, MB Drilling; Dermot Dillon, Summit Drilling/New Jersey Ground Water Association (NJGWA)

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.

2. Review and Certification of the September 21, 2023, Meeting Minutes-

S. Reya brought up a mistake on the second page of the draft minutes, which was pointed out by A. Becker before the meeting. While writing the draft minutes, the Department had not included the motion made to approve the Environmental Resource and Geotechnical (ERG) license for Mr. Patrick Morris. S. Reya and M. Ortega confirmed that the Board did make this motion, but it was an oversight not adding it to the draft minutes. S. Reya read to the Board the two sentences that they propose adding to the minutes. A. Becker thanked him for the explanation and asked if anyone else had any comments on the September 21st draft minutes. No one had any further comments.

A motion to approve the draft minutes from September 21, 2023, with the noted corrections, was made by G. Poppe, seconded by J. Yost, and approved unanimously.

3. Review and Certification of License Applications-

A. Becker said that there are five license applications for review: two Pump Installers, and one ERG well driller, one Journeyman well driller, and one Master well driller. A Becker asked if anyone had any comments on the license applicants. R. Dalton pointed out that many of the well driller and pump installer license applicants that have recently been approved would not have been approved for licensure under the old testing procedures. He added that the minimum passing score used to be 80 but is now 70 for most tests.

A motion to approve the five license applicants for licensure was made by R. Dalton. This motion was seconded by G. Craig and approved unanimously.

License Type	Applicant Name	Employer
ERG	Matthew A. Ullrich	Parratt Wolff Inc.
Pump Installer	Bryan Engerbretson	A.C. Schultes
Pump Installer	Matthew G. Cruz	King George Enterprises
Journeyman	Zachary M. Nesbitt	A.C. Schultes
Master	Thomas R. Starner II	A.C. Schultes

4. License Inquiry Regarding On-Site Supervision of Multiple Rigs for Specialty Drilling-

S. Reya introduced the topic by discussing the New Jersey Wind Port project in Salem County, near the Salem Nuclear Power Plant. This project, which is on an artificial island, will serve as an assembly site for turbines for an offshore wind turbine project. To support the construction of the turbines, a permit was obtained to install wick drains on this site.

S. Reya said that the contractor’s plan is to install 30,967 wick drains, each wick drain will be set approximately 57 feet below ground surface. Due to the large number of wells being installed on this site, the contractor asked if they could have a deviation from the licensing requirements. Specifically, the contractor asked if the Department would allow one New Jersey licensed well driller to oversee multiple drill rigs which are spaced about a couple hundred feet apart. S. Reya read the language in the well rule to the Board. The rule specifies that one New Jersey licensed well driller of the proper class is needed for each drill rig on the site. S. Reya also noted that the reasoning for this request appears to be financial.

A. Becker asked how many drill rigs the contractor plans on utilizing at one time. S. Reya said that he believes that there will be three or four rigs running at the same time. S. Reya showed the Board a tentative plot plan for the well field to demonstrate how close together these wells would be installed. G. Craig pointed out that Princeton University needed one New Jersey licensed well driller per drill rig when they drilled thousands of geothermal wells on the campus. G. Craig added that it would set a bad precedent if a waiver from the licensing requirements were granted. G. Poppe, R. Dalton, and J. Yost all agreed.

A. Becker said that he is familiar with how wick drains are installed and explained the process to the Board members. He explained that a mandrel will be used to drive the tools into the ground. He said that in good conditions, about a dozen wick drains can be installed per hour.

A. Becker did agree that the licensing requirements should not be waived, noting that it is not in the best interest of the State or the Board to waive those requirements. J. Yost asked if these wells will be decommissioned in the future. A. Becker said that these wells dry and stabilize the soil and do not get decommissioned.

The Board discussed the potential hazards with approving a waiver for this site. The Board discussed other large upcoming projects which this may impact, including the proposed geothermal project at Bader Field in Atlantic City. E. Hoffmann suggested potentially approving the licensing waiver for this site only, noting that these wells are not grouted in place and, therefore, the construction differs from most other types of wells. J. Myers brought up safety and liability concerns for not having one licensed driller per drill rig. A. Becker asked for a motion on this topic.

A motion to not allow one New Jersey licensed well driller to oversee multiple drill rigs was made by G. Poppe. This motion was seconded by J. Yost and approved by all except for E. Hoffmann who was opposed.

5. Continuing Education Course Review-

A. Becker said that there were a lot of courses for the Board to review. He asked if the Board wanted to start with the shorter ones first, which they agreed to do.

Goulds Water Service/Parkhurst Distributing

A. Becker said that Mr. Tom Stephan is requesting seven technical continuing education points (CEPs) for his course, Fundamentals of Pumps and Improving Pumping Performance of Variable Frequency Drives. He asked if any discussion was needed for this course. No discussion was needed.

A motion to approve Fundamentals of Pumps and Improving Pumping Performance of Variable Frequency Drives for seven technical CEPs was made by G. Craig. This motion was seconded by G. Poppe and approved unanimously.

New Jersey Ground Water Association (NJGWA)

A. Becker said that NJGWA is hosting their November membership meeting with a presentation by Mr. Denis Crayon. NJGWA is requesting two CEPs for this course: one technical CEP for the meeting and one safety CEP for the Material Handling Safety presentation. M. Ortega noted in the course application spreadsheet that Material Handling Safety has been previously approved by the Board. A. Becker asked if any further discussion was needed. R. Dalton said that he disagrees with awarding the meeting one full CEP.

A motion to approve NJGWA's November 2023 Membership Meeting with Material Handling Safety for one technical CEP and one safety CEP was made by J. Yost. This motion was seconded by G. Poppe and approved by all except for R. Dalton, who was opposed.

WorldWide Drilling Resource, Inc. (WorldWide)

A. Becker said that WorldWide is offering eight courses, each one hour long. A. Becker asked if there was any discussion needed for any of their courses. R. Dalton said that he had questions about five of the eight courses. A. Becker recommended reviewing each course individually.

Below is a list of courses that the Board approved and denied, followed by their motions and discussions.

Course Name	CEPs
Water Well Development & Rehabilitation	1 Technical
Air Drilling	1 Technical
The Good, The Bad, The Ugly, and The Outcome of Communicating in the Workplace	1 Technical
What You do Before You Roll a Tire	1 Safety
Casing Advancement 101	1 Technical
Tips for Handling Hammer & Bit Warranties	1 Technical
Water Well Visuals: Integrating Art, Photography, Video, and Social Media for Marketing and Success	0 CEPs – Denied
Successful Business Management Requires: Effort, Determination, Passion, Courage, and Compassion	0 CEPs - Denied

A motion to approve Water Well Development & Rehabilitation for one technical CEP was made by G. Poppe, seconded by G. Craig, and approved unanimously.

A motion to approve Air Drilling for one technical CEP was made by R. Dalton, seconded by J. Yost, and approved unanimously.

A motion to approve The Good, The Bad, The Ugly, and The Outcome of Communicating in the Workplace for one technical CEP was made by J. Yost. This motion was seconded by G. Poppe and approved by all except for R. Dalton, who was opposed.

The Board discussed the course, What You do Before You Roll a Tire. R. Dalton explained that this course should not be approved because it is something needed to obtain your driver’s license, not your drilling license. G. Craig disagreed, noting that driving safety is important to the drilling industry. A. Becker explained that driving is hazardous and thought that this course would be important.

A motion to approve What You do Before You Roll a Tire for one safety CEP was made by E. Hoffmann. This motion was seconded by G. Craig and approved by all except for R. Dalton, who abstained.

A motion to approve Casing Advancement 101 for one technical CEP was made by R. Dalton, seconded by J. Yost, and approved unanimously.

The Board discussed Tips for Handling Hammer and Bit Warranties. A. Becker said that he has taken some courses from this instructor and has found the topics to be very informative, and not just focused on the business aspects of drilling.

A motion to approve Tips for Handling Hammer and Bit Warranties for one technical CEP was made by G. Craig, seconded by J. Yost, and approved unanimously.

A motion to deny Water Well Visuals: Integrating Art, Photography, Video, and Social Media for Marketing and Success was made by G. Craig. This motion was seconded by R. Dalton and approved unanimously.

A motion to deny Successful Business Management Requires: Effort, Determination, Passion, Courage, and Compassion was made by J. Yost. This motion was seconded by R. Dalton and approved unanimously.

National Ground Water Association (NGWA)

A. Becker said that NGWA is offering 48 courses for their upcoming Groundwater Week, which will be held from December 5th through December 7th. Every course on the list is one hour in duration, except for Determination of Slot Size from Sieve Analysis Data, which is two hours in duration. Courses which are approved for Groundwater Week will also have online versions available at a later date.

A. Becker asked if the Board should vote on these courses in blocks. R. Dalton said that he had questions on five of the courses and believed one course was a sales pitch. He also noted that he believed that the last nine courses on the list, provided by the Department, applied more to environmental consultants and less to well drillers and pump installers.

Below is a list of courses that the Board approved and denied, followed by their motions and discussions.

Course Name	CEPs
Ultraviolet 101 - UV for Domestic Water Wells	1 Technical
Casing Advancement 101	1 Technical
Respirators and the Hazards of Silica	1 Safety
Select the Right Submersible Motor to Power Your Pumping System: How Different Designs Impact Operations	1 Technical
Unleashing Efficiency: Exploring the Potential of Permanent Magnet Motors in the Water Well Industry	1 Technical
Navigating the Build America, Buy America Act	1 Technical
Drilling Basics - Break Down of Basics and All the Questions You Want Answered	1 Technical
The Institutional Market and the Value It Presents to the Geothermal & Drilling Industry	1 Technical
Motors - Understanding How and Why They Fail, Testing, and Solutions	1 Technical
Motor Protection	1 Technical
Groundwater Equipment Financing	1 Technical
Loss Circulation - Facts, Treatment and Proper Development	1 Technical
Case Studies in Designing and Installing Geothermal Systems: Treasure Island Commercial Electrification and NGWA HQ	1 Technical
Understanding Meters and Meggers When Testing Submersible Motors	1 Technical
Emerging Contaminants in Drinking Water and Effective Treatment Technology Tools	1 Technical
Sonic Drilling - The Future Is Now	1 Technical
Building Blocks of Training a New Driller	1 Technical
Renewable Energy Pumping	1 Technical
Uses of Chemicals for Restoring & Maintaining Performance of Water Wells	1 Technical
Mud Testing - How Important Is It?	1 Technical
Dual Rotary Drilling in Water Wells and Geothermal Boreholes	1 Technical

Optimize Irrigation Jobs: Tips & Expert Insights for Selecting the Best Pumping Solution for the Application	1 Technical
A Bits a Bit, but Is It?	1 Technical
Safety & New Hires - Injuries That Can Impact a Business Legacy	1 Safety
Pump Panel Electrical Installation and Maintenance, Soft Starting and Stopping	1 Technical
Electrical Basics and Tips for Water Systems	1 Technical
Water Well Disinfection and Rehabilitation	1 Technical
Ever Changing and Essential Saga of Well Development in the Field	1 Technical
Best Practices for a Submersible Pump Install	1 Technical
Keep It Simple Well Rehab	1 Technical
Health & Safety Around the Well Drilling Site	1 Safety
VFD's - Did You Know?	1 Technical
Aqua-Scopic Well Rehabilitation	1 Technical
Sieve Analysis, Slot Size, and Gravel Pack Selection	1 Technical
Laboratory Evaluations of Well Fouling for Corrective Action	1 Technical
Preparing to Sell or Hand Over Your Business	1 Technical
Determination of Slot Size from Sieve Analysis Data	2 Technical
Grouting and Well Abandonment-Methods and Materials	1 Technical
Improving the Efficiency of Irrigation Pumping Systems through Pump System Optimization	1 Technical
Passing on Knowledge to the Next Generation Roundtable	1 Technical
Evaluating Aquifer Recharge for Generation Opportunities	1 Technical
PFAS in Groundwater: What's Now and What's Next	1 Technical
Introduction to Using Resistivity for Securing and Maintaining Sustainable Water Resources	1 Technical
What Geophysical Method and Why? The Right Tool for the Right Answer: Applied Geophysics for Groundwater Projects	1 Technical
Decentralized Systems and Managed Aquifer Recharge (MAR)	1 Technical
Winning Your Brand's Key Moments of Truth to Grow Your Business	0 CEPs – Denied
2023 State of the U.S. Water Well Industry Report	0 CEPs – Denied
Nuclear Magnetic Resonance (NMR) Technology for Groundwater Investigations	0 CEPs - Denied

A motion to approve Ultraviolet 101 - UV for Domestic Water Wells, Casing Advancement 101, Select the Right Submersible Motor to Power Your Pumping System: How Different Designs Impact Operations, and Unleashing Efficiency: Exploring the Potential of Permanent Magnet Motors in the Water Well Industry for one technical CEP and Respirators and the Hazards of Silica for one safety CEP was made by G. Craig. This motion was seconded by J. Yost and approved unanimously.

The Board discussed the course, Navigating the Build America, Buy America Act. R. Dalton said that he was unsure if this course should count for credit. J. Yost said that the Build America, Buy America Act is very important when bidding public community supply wells. R. Dalton suggested that this would only be relevant to company owners and not well drillers in the field. A. Becker said that

employees should be aware of the Act to make their contractors aware of any materials on their sites which are not made in the United States. No further discussion was needed.

A motion to approve Navigating the Build America, Buy America Act for one technical CEP was made by J. Yost. This motion was seconded by G. Poppe and approved unanimously.

A motion to approve Drilling Basics - Break Down of Basics and All the Questions You Want Answered, The Institutional Market and the Value It Presents to the Geothermal & Drilling Industry, Motors - Understanding How and Why They Fail, Testing, and Solutions, Motor Protection, Groundwater Equipment Financing, and Loss Circulation - Facts, Treatment and Proper Development for one technical CEP was made by R. Dalton. This motion was seconded by G. Poppe and approved unanimously.

The Board discussed the course, Case Studies in Designing and Installing Geothermal Systems: Treasure Island Commercial Electrification and NGWA HQ. G. Craig said that this course would be beneficial to licensees because it will expose them to geothermal wells. No further discussion was needed.

A motion to approve Case Studies in Designing and Installing Geothermal Systems: Treasure Island Commercial Electrification and NGWA HQ for one technical CEP was made by G. Craig. This motion was seconded by G. Poppe and approved by all except for R. Dalton, who abstained.

A. Becker asked the Board if they focus on the remaining courses which require additional discussion and then circle back to approve the remaining courses. R. Dalton listed the courses that he had questions about.

A motion to deny Winning Your Brand's Key Moments of Truth to Grow Your Business was made by J. Yost, seconded by G. Craig, and approved unanimously.

The Board discussed the course, Aqua-Scopic Well Rehabilitation. R. Dalton said that he thought that this course appeared to be a sales pitch which is geared toward the company's equipment. A. Becker noted that NGWA has similar standards and requirements to the Board and Department regarding sales pitches in courses. J. Yost said that he would be interested in taking this course.

A motion to approve Aqua-Scopic Well Rehabilitation for one technical CEP was made by J. Yost. This motion was seconded by G. Poppe and approved by all except for R. Dalton, who was opposed.

A motion to deny 2023 State of the U.S. Water Well Industry Report was made by J. Yost, seconded by G. Poppe, and approved unanimously.

A motion to approve Improving the Efficiency of Irrigation Pumping Systems through Pump System Optimization for one technical CEP was made by E. Hoffmann, seconded by G. Poppe, and approved unanimously.

A motion to approve Passing on Knowledge to the Next Generation Roundtable for one technical CEP was made by J. Yost, seconded by G. Poppe, and approved unanimously.

The Board discussed the course, Evaluating Aquifer Recharge for Generation Opportunities. R. Dalton said that he does not believe that this course is related to drilling.

A motion to approve Evaluating Aquifer Recharge for Generation Opportunities for one technical CEP was made by J. Yost. This motion was seconded by G. Poppe and approved by all except for R. Dalton, who was opposed.

The Board discussed the course, PFAS in Groundwater: What's Now and What's Next. R. Dalton said that he agrees that PFAS is important as a topic, but he thought that this course applied more towards environmental consultants and not well drillers. E. Hoffmann agreed that the course might be a bit more geared towards consultants, but he said that this course might help drillers to collect cleaner samples out in the field.

A motion to approve PFAS in Groundwater: What's Now and What's Next for one technical CEP was made by E. Hoffmann. This motion was seconded by J. Yost and approved by all except for R. Dalton, who abstained.

A motion to approve Introduction to Using Resistivity for Securing and Maintaining Sustainable Water Resources for one technical CEP was made by J. Yost. This motion was seconded by G. Poppe and approved by all except for R. Dalton, who abstained.

The Board discussed the course, Nuclear Magnetic Resonance (NMR) Technology for Groundwater Investigations. R. Dalton said that this type of technology is not widely used in New Jersey. The Board agreed with him.

A motion to deny Nuclear Magnetic Resonance (NMR) Technology for Groundwater Investigations was made by G. Craig, seconded by R. Dalton, and approved unanimously.

The Board discussed the course, What Geophysical Method and Why? The Right Tool for the Right Answer: Applied Geophysics for Groundwater Projects. R. Dalton explained that this course is very technical in nature and that he did not believe it would be beneficial for licensees. E. Hoffmann said that he believed that it would help well drillers learn about more technical topics to improve their knowledge.

A motion to approve What Geophysical Method and Why? The Right Tool for the Right Answer: Applied Geophysics for Groundwater Projects for one technical CEP was made by G. Poppe. This motion was seconded by J. Yost and approved by all except for R. Dalton, who was opposed.

A motion to approve Decentralized Systems and Managed Aquifer Recharge (MAR) for one technical CEP was made by J. Yost. This motion was seconded by G. Poppe and approved by all except for R. Dalton and E. Hoffmann, who were opposed.

The Board went back to review the courses that they believed did not need any further discussion. M. Ortega read the remaining course names to the Board.

A motion to approve the remaining 24 courses was made by E. Hoffmann, seconded by J. Yost, and approved unanimously.

All the courses were approved for one technical CEP except for Safety & New Hires – Injuries That Can Impact a Business Legacy, which was approved for one safety CEP, and Determination of Slot Size from Sieve Analysis Data, which was approved for two technical CEPs.

G. Poppe left the call at 11:00 am.

6. New Business-

A. Becker asked if there was any new business up for discussion. M. Ortega said that the Department will provide the Board with proposed meeting dates for 2024 during the November meeting. He added that the schedule will be the same as this year and that meetings would occur at 9:30 am on the third Thursday of every month.

S. Reya reminded the Board that the next meeting will be held on Thursday, November 16, 2023. R. Dalton added that he will not be present for the November meeting.

7. Adjournment-

A. Becker thanked everyone for attending the meeting. The meeting adjourned at 11:10 am.