



State of New Jersey

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New Jersey Department of Environmental Protection State Well Drillers and Pump Installers Examining and Advisory Board Conference Call Minutes for May 20, 2021

Approved by the Board on June 17, 2021

Board Members Present at NJDEP Headquarters Building: N/A

Board Members Participating Via Telephone: Art Becker (Chairman), Joe Yost, Gordon Craig, Dave Lyman, Steve Domber, and Richard Dalton

Board Members Absent: Gary Poppe, Jeff Hoffman, and Eric Hoffmann

Board Legal Representative Present: Deputy Attorney General (DAG) Jill Denyes, NJ Division of Law (*joined the call at 10:01 am*)

NJDEP Water Supply (Bureau of Water Allocation and Well Permitting) Staff Present: Terry Pilawski, Joe Mattle, Julia Altieri, Steve Reya, Michael Schumacher, Mark Ortega, and Steve Vargo

Members of the Public: Dermot Dillon, Summit Drilling/New Jersey Ground Water Association (NJGWA) (*joined the call at 10:00 am*)

1. Call to Order-

The meeting was called to order at 9:33 am with a quorum present via telephone. This in-person meeting was held via conference call due to the COVID-19 pandemic. Notice of the meeting and instructions on how to participate by phone were listed on the Department's website.

Steve Vargo was introduced to the Board. S. Vargo is the Well Permitting Section's newest hire and will be working in the Technical Unit alongside J. Altieri, S. Reya, M. Schumacher, M. Ortega, and J. Wick. A. Becker and the rest of the Board welcomed S. Vargo.

2. Review and Certification of the April 15, 2021 Conference Call Minutes-

A motion to approve the draft minutes as written was made by D. Lyman, seconded by G. Craig, and approved by everyone except for J. Yost who abstained.

3. Chair/Vice-Chair Selection-

Per the Board’s bylaws, annual elections for Chairman and Vice-Chairman are to be held during the May meeting. A. Becker said that he has served as the Board’s Chairman for a while and would not mind continuing to serve as the Chairman. He said that if anyone else would like to assume the duties as the Chairman or Vice-Chairman, to let him know so it could be put to a vote. No discussion was needed.

A motion to keep A. Becker as the Chairman and G. Poppe as the Vice-Chairman was made by J. Yost, seconded by G. Craig, and approved unanimously.

4. Licensing-

Review of License Applicants

The Board members reviewed the applicant information for three pump installer licenses, one journeyman, and one environmental resource and geotechnical (ERG) well driller license. A. Becker asked if there was any discussion needed for the license candidates. No further discussion was needed.

A motion to approve the three license applicants was made by J. Yost, seconded by S. Domber, and approved unanimously.

License Type	Applicant Name	Employer
Pump Installer	Brandon Ottinger	A.C. Schultes, Inc.
Pump Installer	Luke Dvorak	A.C. Schultes, Inc.
Pump Installer	Seth Washburn	Self-Employed
ERG	Geovany Ramos	AWT Environmental Services, Inc.
Journeyman	Theodore Zaremba III	Ted’s Well Service

5. Continuing Education-

Two courses were presented to the Board for approval. Both courses were deemed to be administratively complete by the Department.

WorldWide Drilling Resource, Inc.

S. Reya began the discussion for the 2021 WorldWide DownHome DrillFest course, which is being offered by WorldWide Drilling Resource, Inc. He noted that the provider is requesting a maximum of eight continuing education points (CEPs). The course provider indicated that participants could pick the courses that they wanted to attend rather than being forced to sit for all the courses if they did not wish to sit through all sessions. S. Reya asked if the Board wanted to vote on the seminar as a block or if they wished to approve the individual courses.

S. Domber asked if any of the courses were going to be considered for safety CEPs. He identified two potential safety courses for the seminar: *The Importance of Proper Equipment Maintenance and Safety as a Result of Not Doing So* and *Safety and Experience: Are We Properly Preparing the Next Generation?* A. Becker said that he agreed that the Safety and Experience course should be counted for a safety credit, however, the Importance of Proper Equipment Maintenance course should be counted as a technical CEP based on the course’s description.

A. Becker said that he personally has seen all but two of the speakers who were listed and that all of them were excellent. He noted that he has taken some of the listed courses in the past as well and that they were very good.

A motion to approve all the listed courses for the 2021 WorldWide DownHome DrillFest was made by J. Yost. The presentation titled, “Safety and Experience: Are We Properly Preparing the Next Generation?” will be counted for one safety CEP. The rest of the courses will be counted for technical CEPs. A licensee can obtain up to eight CEPs by taking this course. This motion was seconded by S. Domber and approved unanimously.

Course Name	Points
An In-Depth Look at the Use of Chemicals for Restoring and Maintaining Performance of Water Wells (Part 1)	1 Technical CEP
An In-Depth Look at the Use of Chemicals for Restoring and Maintaining Performance of Water Wells (Part 2)	1 Technical CEP
Better Performance for the Drilling Unit	1 Technical CEP
All About Drilling! Q&A	1 Technical CEP
The Necessity of Proper Planning and Follow Through with Clear Goals and Expectations	1 Technical CEP
Hammer Monitoring, Maintenance, Service Schedules, Inspection, Assembly and Disassembly	1 Technical CEP
The Importance of Proper Equipment Maintenance and Safety as a Result of Not Doing So	1 Technical CEP
Safety and Experience: Are We Properly Preparing the Next Generation?	1 Safety CEP
Promoting the Groundwater Industry – Why We Do It – How We Do It	1 Technical CEP
Orthoscopic Well Rehabilitation (Part 1)	1 Technical CEP
Orthoscopic Well Rehabilitation (Part 2)	1 Technical CEP

Rutgers University

S. Reya introduced the Rutgers course, *Septic System Inspections in New Jersey*, to the Board. He noted that this course was originally on the April 2021 agenda, but the Department had identified the course as administratively incomplete, and Rutgers did not provide the required information in time for the Board to review. Rutgers provided the necessary documentation shortly after the April 2021 meeting.

S. Reya spoke about the link between septic systems and potable wells, noting that the well rule has setback distance requirements for septic systems. R. Dalton said that the topics listed in the agenda have nothing to do with drilling and that the course should not be approved for well drillers and pump installers. D. Lyman and A. Becker agreed with R. Dalton’s assessment of the course.

A motion to not recommend Septic System Inspections in New Jersey for credit was made by R. Dalton. This motion was seconded by D. Lyman and approved by all except for J. Yost who abstained.

All Star Training

S. Reya provided a brief update about the status of the All Star Training course. He noted that the Board approved All Star Training’s revised course for 2.5 technical CEPs during the April 2021 meeting. The Department sent a letter to All Star Training on April 27, 2021 and requested that they remove all references to the original seven credit course from their website. On April 29, 2021, All

Star Training complied and replaced the original course with the revised course, entitled, *Common Causes of Well Failure*.

S. Reya said that the Department still has the original course listed on the course list on Well Permitting's Licensing and Exams webpage. There is a note next to the original course which states that the seven CEP course will be accepted until April 29, 2021 and that the course was replaced by *Common Causes of Well Failure*.

6. Ocean County Department of Consumer Affairs Referral-

S. Reya explained that the Ocean County Department of Consumer Affairs had referred a complaint to the Board, as the complaint received by their office pertained to a New Jersey licensed pump installer. S. Reya noted that the Bureau is aware of this situation and that he was previously subpoenaed for a civil matter related to this case. He explained that the Department does not see anything in the complaint that would allow the Board to take any action.

R. Dalton said that he was not clear about the contents of the letter and found many of the allegations confusing. He pointed out that the licensed pump installer told the property owner that he would fix the well, even though he is not licensed to fix a well with his pump installer license. A. Becker said that some pump installers subcontract a well driller when they cannot complete the work themselves. S. Reya confirmed that the licensed pump installer had hired a licensed well driller to install a new well. However, the homeowner had hired another licensed well driller who was able to pull the stuck pump from the well, which negated the need for a replacement well.

T. Pilawski noted that the filed complaint is the assertion of one person and that the Department does not have the story from the licensed pump installer. She said that the Department determined that there were no violations to the well rule in the complaint and is not pursuing enforcement action against the named individual. It was further noted that the Bureau does not have any outstanding violations against the individual. After reviewing the complaint Board members discussed the issue and found that nothing in the complaint is within the purview of the Board or scope of N.J.A.C. 7:9D as consumer fraud is the basis for the complaint. No action was taken by the Board on this topic. A letter will be drafted and signed by A. Becker to be sent to the Ocean County Department of Consumer Affairs.

7. Total Green Direct Exchange (DX) Geothermal-

R. Dalton said that he reviewed the permeability data for both tests and said that both meet the Department's standards. He noted that there was a potential typo with the units that the lab used in the report. R. Dalton followed up by saying that after looking at the Material Safety Data Sheets (MSDS), 2 to 12 percent of the materials in the grout are potentially hazardous proprietary materials. He said that he would want to know what those materials are and if they are toxic in water.

S. Reya said that the Board had Total Green show them the MSDS for the grout with a lower thermal conductivity during their presentation to the Board in 2019. Total Green provided the Board with documentation when approximately .5 to 5 percent of the grout materials used proprietary materials. S. Reya said that the Board and Department should reference the 2019 letter to confirm if the materials are the same.

D. Lyman asked about the history of DX geothermal wells. The Board and Department explained the technology and why there are concerns with installing copper pipe in the ground, specifically in the Coastal Plain. Total Green's current proposal involves installing a copper pipe in a PVC sleeve. Total

Green intends to demonstrate two grouts, with different thermal conductivities, to the Board eventually. A. Becker spoke to this history of DX in New Jersey, stating that the topic has been coming up for over a decade.

A. Becker asked if any action was needed from the Board. After some discussion, the Board advised the Department to reach out to Total Green about the proprietary materials.

A motion was made by R. Dalton for the Department to send a letter to Total Green to provide additional information about the proprietary materials contained in the grout mixture to determine the toxicology in ground water. Once the information is reviewed and found to be acceptable Total Green could proceed with scheduling the required field demonstration at which both thermal grouts would be utilized. This motion was seconded by J. Yost and approved unanimously.

8. Enforcement Update-

J. Altieri provided the Board with an enforcement update as summarized below:

Well Permitting Enforcement Activities–3/25/2021-5/20/2021

New Investigation: One unpermitted monitoring well-Evesham Twp., Burlington Co.

Issue: Bureau received a request from a driller to permit an existing monitoring well which was constructed on March 12, 2019. This well was constructed without a permit by an unnamed individual who is reportedly a licensed well driller. The well was flagged for being constructed without a valid permit and the well was ordered to be decommissioned. The drilling company identified the licensed well driller of record and is requesting to keep the existing well as is without decommissioning and noted that there are access issues that make any corrective actions difficult.

Enforcement Action: The Bureau is requesting detailed well construction data from the licensed well driller and more justification from the company before making a final determination. Further enforcement action is pending with possible decommissioning of the unpermitted monitoring well and/or penalties assessed.

New Investigation: Unlicensed well tank installation-Franklin Twp. Somerset Co.

Issue: A drilling company notified the Bureau via email on April 1, 2021 that staff from a plumbing company located in East Brunswick, Middlesex Co. installed a deep well jet pump, pressure tank, and associated fittings, lines, and valves without a New Jersey pump installer license or the onsite supervision of a licensed pump installer. The complainant submitted itemized bill describing work and photo documentation of the newly installed well tank to the Bureau for review.

Enforcement Action: Notice of Non-Compliance (NONC) and follow-up enforcement for penalties pending.

Resolved: Two Improperly grouted wells - Ocean Twp., Ocean County

Issue: Two recently constructed 4" 120' and 140' ft. PVC irrigation wells located in Ocean Twp. Ocean Co. were investigated after a complainant reportedly observed insufficient grouted boreholes along the outer casing of two wells to ground surface. Photo documentation was submitted to the Bureau which verified the open annular space. Bureau staff conducted initial site visit and determined

that evidence of grout could be verified approx. 11 feet below grade in one well and was undeterminable in the other well, possibly due to recent borehole collapse. NONC's were issued to the driller September 29, 2020 for failure to seal the annular space between the casing and borehole for both wells.

Update: The Bureau agreed to resolve the issue by allowing the driller to attempt to re-grout any areas of the borehole where the grout had visibly subsided. The driller returned to the site on April 28, 2021 with S. Reya and M. Ortega present. The driller jetted a tremie pipe down two sides of the borehole to regrout the upper portions of the boreholes with approved grout. The procedure was repeated as needed to assure an adequate seal to ground surface. No further action needed at this time.

A. Becker thanked J. Altieri for her summary of the Bureau's enforcement activities.

J. Altieri announced to the Board that she would be retiring on June 30, 2021. J. Altieri has worked with the Department for 33 years, 25 of which were with the Well Permitting Section. She expressed her gratitude to the Board and said that working with the Board during the years has been a pleasure to her. J. Yost and the rest of the Board congratulated J. Altieri and wished her a safe and happy retirement.

9. Geothermal Projects Update-

Princeton

S. Reya said that the first phase of the Princeton geothermal project is about 80 percent complete. Citing that he receives monthly reports from the construction project management firm, in addition to weekly updates from the certified geothermal inspector who is always on-site. There is only one drilling contractor on the site currently.

S. Reya noted that there are some issues with the thermal monitoring wells, which the Department had requested be installed to observe the water temperature in the area. The contractor is trying to figure out how to best protect the well while the fiberoptic cable is being delivered and will be proposing alternative well locations due to access issues associated with the locations initially proposed.

G. Craig estimated that this phase of the project will be wrapping up in about 11 weeks.

Woodbury

S. Reya provided a brief update with the Woodbury geothermal wellfield re-commissioning project. He said that there are three wells remaining which need to be sealed. The contractor and property owner are currently trying to resolve access issues to reach these wells.

10. Program Updates-

T. Pilawski said that the Department is in the final stages of seeing the rule amendments being adopted and published in the New Jersey Register. T. Pilawski asked S. Vargo, to say a few words to the Board. S. Vargo expressed that he is happy to be a part of this process and is looking forward to working with the Board.

11. Setting of Submersible Pumps within Screened Interval-

M. Schumacher asked the Board if they foresaw any issues of pumps being set inside of a well screen. Specifically, he wanted to know if there would be any issues with adversely impacting the water quality or if it would cause the well to pre-maturely fail.

J. Yost said that he had touched upon this in past Board meetings. He said that if a pump is installed in the screened area of the well then this aerates the screen. This promotes iron bacteria growth, which would shorten the lifespan of the well.

R. Dalton said that over the years he has seen a few examples of wells failing when the pump was installed in the screened interval. He added that when the pump turns on, silt and sand get pulled through the screen. R. Dalton mentioned a book he has, which advises contractors not to install a pump in a well screen for the reason that J. Yost mentioned.

M. Schumacher provided some additional information for the Board. He said that while reviewing well records, Department staff noticed that pumps are being installed in the well screen for some agricultural wells. He wanted to know if it would be an issue if the pumps are installed in the screened interval for non-potable wells. J. Yost said that he does not know if any harmful bacteria would form as a result of this practice. J. Yost was thanked for his input as it helps the Department evaluate compliance and regulatory requirements that are designed to prevent the water table from being drawn below the top of the well screen.

12. New Items/Comments from the Public-

S. Reya added that the CETCO grout demo will be held on Friday, June 25 provided Board member representatives are available that day. He said that he will reach out to the Board members who expressed interest in attending with more details. He noted that G. Craig, A. Becker, R. Dalton, and D. Lyman had previously expressed interest in potentially attending.

13. Adjournment-

A. Becker thanked the Board members for their attendance and participation. The next meeting will be held on Thursday, June 17, 2021, at 9:30 am.

At 11:49 am, a motion to adjourn the meeting was made by D. Lyman, seconded by G. Craig, and approved unanimously.