



State of New Jersey

DEPARTMENT OF ENVIRONMENTAL PROTECTION

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New Jersey Department of Environmental Protection NJ State Well Drillers and Pump Installers Examining and Advisory Board Meeting Minutes for March 8, 2018

Approved by the Board on May 24, 2018

Board Member Attendance:

Present	Absent
Art Becker (Chairman) Gary Poppe (Vice-Chairman) Jeff Hoffman Gordon Craig Richard Dalton	Joe Pepe Joe Yost Carol Graff Steve Domber

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

NJDEP Bureau of Water Allocation & Well Permitting Staff Present: Terry Pilawski, Julia Altieri, Steve Reya, Mike Schumacher, Mark Ortega and Yvens Dessalines (present for part of meeting) and Bennett Moss

Other DEP Staff: Sheryl Tembe, PhD, Bureau of Energy & Sustainability (present for part of meeting), Bart Cerami, New Jersey Geologic & Water Survey

1. Call to Order-

The meeting was called to order by Chairman Art Becker at 12:15 pm. The meeting began later than originally scheduled due to a delayed opening of DEP offices for inclement weather and snow removal operations. A quorum was achieved at 12:18 pm.

2. Review and Certification of January 22, 2018 Open Session Draft Minutes-

It was noted that the first bullet under Item 15 stated "...a motion to call to call the open session meeting back to order.." This should be corrected to state "...a motion to call the open session meeting back to order..." A motion to approve the minutes pending this correction was made by G. Craig, seconded by G. Poppe and approved unanimously.

3. Review and Certification of January 22, 2018 Closed Session Draft Minutes-

A motion to approve the minutes without change was made by R. Dalton, seconded by G. Craig and approved unanimously.

4. Review and Certification of February 15, 2018 Conference Call Draft Minutes-

A motion to approve the minutes without change was made by G. Poppe, seconded by G. Craig and approved unanimously.

5. Introductions and Bureau Staffing Update-

Bart Cerami, Yvens Dessalines and Bennett Moss were introduced to the Board. T. Pilawski noted that Bart Cerami, who is currently a Section Chief at the Geologic & Water Survey, has been kind enough to assist the Well Permitting Section by filling in temporarily as Section Chief since a permanent replacement to backfill the vacancy created by Pat Bono's retirement has not yet been selected. In other staffing updates, she stated that Yvens Dessalines has been hired to perform information technology tasks to assist Water Allocation staff in implementing their program. Bennett Moss, also recently hired, will work in the Well Permitting Section and assist with review of well record and well decommissioning reviews, along with completing well search requests.

6. Status of Program Development and Agreement with the Examination Manager-

S. Reya said the development of the agreement to be entered into between the Department and a third-party testing vendor is progressing close to the schedule reported at the Board's January meeting and February conference call. To have the exams up and running by approximately May 1, 2018, the Department was to provide all NJ exam modules, which have been developed by the Board, to the National Ground Water Association (NGWA), by February 12, 2018 to allow the vendor to have the exams available by the target date. S. Reya noted that the exams were provided to NGWA on the agreed upon date followed by the sending of additional clarification on February 22, 2018 in response to some questions raised by NGWA staff.

M. Ortega indicated that the agreement between the Department and NGWA, which covers setup and administration of the exams and testing phase of the licensing program, was signed by both parties. The second phase, he indicated, will include another agreement that will supersede this original agreement, and will cover both testing administration and the tracking of continuing education unit points. This is a necessary step in the Department's implementation of the continuing education program prior to the June 2020 license renewal (note: credits must be obtained by April 2020).

7. Bureau Correspondence-

At the January meeting, Pat Bono presented a draft document to the Board to obtain members' input on a mass mailing the Bureau intended to send all current license holders and recent exam applicants. The document contained approximately 10-12 bullet points that are the highlighted changes and additions to the rules of which all in the industry should be aware. Input from Board members was

valuable helping P. Bono update the document, which was mailed out following the meeting. Staff reported that a number of questions have been received by phone and email following receipt of the mailing by industry members. Overall it was believed to have been helpful in summarizing the important regulatory changes that became operative on March 1, 2018 as many were overwhelmed when attempting to read through the entire rule and determine what has been changed.

8. Geothermal Incentives and Heat Pump Contractor Survey – Dr. Sheryl Tembe, Bureau of Energy & Sustainability –

S. Tembe discussed the compiled results she recently received in response to a recent survey she sent out that targeted New Jersey's licensed professionals involved with the installation or design of geothermal heat pumps. Specifically, the survey was sent to architects, HVACR contractors, professional planners, NJ Clean Energy Program Contractors and GeoExchange Contractors. From the time the survey was initiated to the time the responses were compiled for an update (February 1 through February 26, 2018), 330 responses were received. The survey was designed to allow the Bureau of Energy & Sustainability to better understand the role of different licensed professionals, the qualifications and certifications held, the market size of geothermal, the approximate percentage of different system types installed and how to increase market penetration and improve product awareness and build customer confidence. Additionally, both she and Denis Crayon, New Jersey Ground Water Association (NJGWA) President, discussed the recent reinstatement of a federal tax credit that applies to the installation of geothermal systems, both new and retroactively for some systems already installed. D. Crayon also mentioned recently meeting with legislators in Washington, DC so he and other NJGWA members could relay the importance of financial incentives to the geothermal drilling industry. S. Tembe intends to send a similar survey to licensed well drillers to further their mission of promoting geothermal technologies and hopes to work with both trade organizations and other regulatory programs such as the NJ Board of Public Utilities (NJBPU). Finally, she noted that her office intends to develop technical guidance regarding the installation of geothermal systems to assist potential customers, designers and installers in determining the feasibility assessments for installing such systems.

9. Horizontal Directional Drilling -

R. Dalton presented an updated document that summarizes Horizontal Directional Drilling (HDD) projects that have been completed in the state thus far and provides recommendations for how the Department should oversee and regulate future projects. The focus of the document, as has been discussed at previous Board meetings, is to assess the potential for such drilling projects to adversely impact ground water resources due to the depths, diameters and distances such projects entail. Historically, the well rules were not applied toward regulating HDD activities as the scope of these projects were often viewed as not meeting the definition of a well, as specified in N.J.A.C. 7:9D-1.5. R. Dalton and J. Hoffman discussed how activities that were viewed as a method of installing relatively shallow utilities under roadways and other surface features that cannot be excavated have expanded over the years. Recent projects have entailed drilling to depths much deeper than the depth many other environmental monitoring wells are drilled. R. Dalton's paper spelled out the rationale and justification for his recommendation that the Department regulate HDD in the same manner as water supply wells, environmental assessment/remediation wells and geotechnical borings as they have the same, if not greater, potential to impact groundwater resources of the state. If not performed or decommissioned properly, HDD installations have the potential to adversely impact aquifers in the same manner as traditional vertical well installations. Board members unanimously agreed and will read through the document and provide further feedback at the May meeting. Board members thanked R. Dalton for his thorough research and recommendations on what they believe to be a very important environmental concern. The final version of the document aims to set forth criteria at

which HDD installations are subject to Department requirements for permitting, licensing, grouting and decommissioning of failed boreholes.

10. Draft Exam Applications, Test Instructions and Recommended Study Material-

S. Reya disseminated and discussed the new draft license applications that will be utilized by license applicants to apply for a driller/pump installer license once he or she has passed all the required certification exam modules specified in the rule for the desired license. M. Ortega drafted new applications, which also describe the new exam scheduling and licensing process, and recommended study material. It was requested that Board members review both documents and provide feedback to S. Reya in the upcoming weeks as the Bureau wishes to update the website as soon as possible to allow access to downloadable copies of these documents as soon as possible. Because it is anticipated that the exams will be able to be scheduled and taken on or shortly after May 1, it is important that the Division's website be updated shortly to reflect the current process and required applications that will soon be submitted to the Board for review of license applicant qualifications.

11. Two (2) 2-year Certification Exam Time Limit Specified for Exam Applicants in New Rule-

A potential problem identified in the revised well rule is the requirement specified in N.J.A.C. 7:9D-1.8(a)3, which states that a license applicant must "Demonstrate that he or she has met the experience requirements by conducting activities in compliance with this chapter within the State of New Jersey, except as provided at (a)4 below, and has obtained a passing grade on the certification exams administered by an examination and CEP manager selected by the Department and required for the proper license class pursuant to Table 1 below, including New Jersey modules, **which shall have been taken within two years prior to submitting an application.**"

This issue was initially identified during the February 15, 2018 conference call as potentially negatively impacting two (2) groups of people: 1) those who currently are licensed in other states that utilize existing National Ground Water Association (NGWA) NGWA exams, which were taken more than two (2) years ago and 2) those who obtain a Journeyman license through the "new" process and must essentially start all over and re-take exams that were already passed. This creates an apparent disparity between those licensed as a Journeyman under the "old" Department-run testing program and the "new" process. The two (2) methods of obtaining a Journeyman license are differentiated in the new rules in the first column of table 1 by referencing those who received their license before 1/2/18 vs. those who received it on or after that date. Those who received the license prior to that date are essentially "given credit" for the previously passed exams because the NJ test they passed was equivalent to certain NGWA certification exams and are not required to take them again. Those licensed after 1/2/18, however, are required to pass the full list of certification exams. With the 2-year window requirement for exams to count towards NJ licensure, those taken to obtain the Journeyman license would not be able to be applied toward the Master license so these individuals would essentially be starting from scratch. This testing requirement inequality may be brought to the Board by those who seek to upgrade their licenses. It is believed that the intent of adding this provision to the rule was to prevent license holders from intentionally not complying with continuing education requirements and utilizing their past exams to simply reapply for a new license.

Several interpretations of the rule language, and potential ramifications of each interpretation were discussed. One such interpretation of the wording was that the timeframe may only apply to the "New Jersey" module, but not all the drilling/pump technical exam certifications. Not enforcing the two (2) year timeframe universally was also discussed, which would likely then need to be followed by a rule change if the Department truly felt that the rule, as written, contained erroneous language. Further interpretation of this issue will be provided by R. Guzek. Bureau staff noted that the draft

applications contain a notation that is consistent with the statement in the rule, so the statement may need to be re-worded.

12. GeoPro CG Plus Geothermal Grout: Request for Product Approval-

S. Reya updated the Board on the status of the request for product approval. As noted during previous Board meetings the onsite samples collected during a field demonstration of the product in the presence of Board representatives did not meet the permeability requirement specified in N.J.A.C. 7:9D, when tested by an independent laboratory in accordance with ASTM D5084. GeoPro Inc. representative, Tyler Harbeck had since submitted a letter and supporting documentation via email on January 25, 2018 in which he asserted that the Type of cement used onsite (Type I), which was believed to be acceptable, does not result in a satisfactory product as the permeability value was found to exceed the Department's standard. He noted that testing the product, when mixed with Type II cement has demonstrated that the product will meet the permeability standard and noted that their product sheets have since been modified to state that only Type II cement may be used in the mixture. Based on the supplied documentation, the manufacturer requested that their product be approved for use in NJ. Prior to the meeting, R. Dalton reviewed the letter and supporting documentation. Following his summary of the issue and discussion by the Board, the consensus among members was that CG Plus, like all other grouts for which NJ state approval is requested, must undergo the field demonstration and permeability testing of the actual mix/product proposed for use. Allowing field testing to be conducted on samples of one mix and drawing conclusions about how the samples would have tested with a substituted material in the mix sets a precedent that would affect the review and approval process that is to be implemented the same for all products and manufacturers.

Therefore, should GeoPro wish to pursue approval of CG Plus in NJ, a field demonstration must again be performed and samples of the product obtained for independent permeability testing by a certified laboratory, in accordance with ASTM D5084. It was noted at the Board meeting, however, that it may be possible for GeoPro representatives to coordinate the sample collection at a site in NJ without necessarily being onsite to oversee the sample collection. Provided a protocol is set up with a NJ licensed driller of the proper class, it may be possible for the drilling contractor to obtain the samples necessary for testing, provided the product is mixed and pumped in accordance with GeoPro's specifications, in the presence of Board/Department representatives. S. Reya will respond to Mr. Harbeck to notify him of the Board's comments and remaining steps for approval of their geothermal grout product.

13. Water Allocation & Well Permitting Enforcement and Field Work Activities – A summary of Well Permitting Program's enforcement and field activities over the past seven (7) weeks was presented by Julia Altieri.

A) **Field Inspections-** Well Permitting Section staff performed three (3) field inspections during the past seven (7) weeks. One of which was a follow-up inspection to verify reinstallation of illegal well pump installation that was reported to the Bureau by a Master well driller while he was in the field. The property owner claimed that they did not know they needed a license to work on and reinstall their own submersible pump.

B) **On-going issues of well drilling violations** – The Bureau successfully resolved another issue of non-compliance involving a licensed driller who constructed an unpermitted irrigation well in Ocean County. This well removal and reconstruction is the third (3rd) of five (5) wells that were ordered sealed by the Department as part of the resolution of a long standing Administrative Order and Notice of Civil Administrative Penalties Assessment (AONOCAPA).

C) Additional partial settlement of well drilling violations Settlement agreement documents were sent out by DEP's Central Compliance and Enforcement to parties involved regarding settlement penalties due because of the Alternative Dispute Resolution (ADR) meeting that was held on December 22, 2017. The driller and his company will each pay a penalty of \$3,000 in monthly installment payments to the Department. The ADR involves settlement of the penalty portion of the enforcement action against the well driller and his company for improperly grouting 2 closed loop geothermal wells located at a property in Mercer County. The result of the ADR meeting was a reduction in penalty owed by the driller and his company from \$9,000 to \$3000.

D) Enforcement Coordination Meetings- DEP's Northern Compliance and Enforcement is pursuing a case involving a repeated violator of unlicensed and improper hydrofracking practices. The individual has agreed to settle the issue with the Department now. This case has the potential to progress to licensing sanctions under the new regulations for a chronic violator of the well rule.

14. Program Updates-

Geothermal Wellfield Recommissioning Pilot Plan Status-

T. Pilawski said the Department continues to work on the review of a pilot plan for the recommissioning of a geothermal wellfield. To recommission the wellfield, the geothermal loops that were previously installed in violation of the well rule (N.J.A.C. 7:9D) must be removed and reinstalled in accordance with the rule. If this cannot be accomplished, the Department will enforce the Administrative Consent Order (ACO).

Well Permitting Outreach Initiative-

Michael Schumacher traveled to Assunpink Cabin on February 21, to conduct cross – training with the Department Coastal land use folks as part of their Quarterly staff meeting. The training was well received as part of well permitting educational outreach initiative. Mr. Schumacher had already performed training sessions for the three (3) Water Compliance and Enforcement Regions within DEP.

15. Adjournment-

At 2:52 pm a motion to adjourn the meeting was made by G. Craig, seconded by G. Poppe and approved unanimously.