New Jersey Department of Environmental Protection
NJ State Well Drillers and Pump Installers Examining and Advisory Board
Meeting Minutes for May 16, 2019

Approved by the Board on July 18, 2019

Board Member Attendance:

<table>
<thead>
<tr>
<th>Present</th>
<th>Absent</th>
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<tr>
<td>Art Becker (Chairman)</td>
<td>Joe Yost</td>
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<tr>
<td>Gary Poppe (Vice-Chairman)</td>
<td>Carol Graff</td>
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<td>Gordon Craig</td>
<td>Jeff Hoffman</td>
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<td>Joe Pepe</td>
<td>Richard Dalton</td>
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<td>Steve Domber</td>
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Board Legal Representative Present: Deputy Attorney General (DAG) Robert Guzek, NJ Division of Law

NJDEP Bureau of Water Allocation & Well Permitting Staff Present: Julia Altieri, Steve Reya, Mark Ortega, and Sabrina Hill

Members of the Public Present: Dermot Dillon, New Jersey Groundwater Association (NJGWA) Secretary/Summit Drilling Co.; Denis Crayon, New Jersey Groundwater Association (NJGWA) President/Summit Drilling Co.; Mark Sussman, EarthTech Energy Solutions, LLC; Jeff Urlaub, MEP Associates; Karen Jezierny, Princeton University; Tom Nyquist, Princeton University; Ted Borer, Princeton University; Lane Lawless, Rygan Corporation (present via conference call for the Princeton University discussion)

1. Call to Order and Opening Statement-
The meeting was called to order by Chairman Art Becker at 9:37 am with a quorum present.

The Board members introduced themselves to Sabrina Hill. She is a new hourly employee in the Well Permitting section who will be assisting with the review of well records, well decommissioning reports and completion of well searches.
2. **Review and Certification of March 21, 2019 Draft Meeting Minutes**
   A motion to approve the draft minutes from March 21, 2019 without change was made by G. Poppe, seconded by J. Pepe and approved unanimously except for S. Domber and G. Craig who abstained as they were not present at the March meeting.

3. **Review and Certification of April 18, 2019 Draft Conference Call Minutes**
   A motion to approve the draft conference call minutes from April 18, 2019 without change was made by G. Craig, seconded by J. Hoffman and approved unanimously except for G. Poppe who abstained because he did not participate in the conference call.

4. **Review and Certification of March 21, 2019 Draft Executive Session Meeting Minutes**
   A motion to approve the draft executive session minutes from March 21, 2019 without change was made by G. Poppe, seconded by J. Pepe and approved unanimously except for S. Domber and G. Craig who abstained as they were not present at the March meeting.

5. **Board Business and Correspondence**
   S. Reya informed Board members that they are currently appointed in their roles as Board members until March of 2020 at which time all terms expire. He discussed that the term limits of Board members were intended to be staggered so that all Board members terms do not expire at the same time but explained that everyone needs to reapply. This issue was previously raised by DAG, R. Guzek who noted that the Department should make all reasonable attempts to again stagger the terms to be consistent with the Board requirements prescribed in the Subsurface & Percolating Waters Act (N.J.S.A. 58:4A). S. Reya will send an email to Board members with instructions to reapply to be on the Board for all those who wish to seek reappointment. This will include the submittal of current resumes. Existing resumes on file will be emailed to members for them to update, as necessary.

   As discussed, at previous meeting, Board members were reminded that it was necessary to vote for Chairman and Vice-Chairman. A. Becker expressed his interest in remaining as the Board’s Chairman and invited other Board members to put their names forward if they wanted the position. No other Board member expressed interest in serving as Chairman or Vice-Chairman and unanimously agreed that the individuals in those roles are performing admirably.

   **A motion was made by G. Poppe to reappoint A. Becker as the Board’s Chairman, seconded by G. Craig and approved by all except for A. Becker who abstained.**

   **A motion was made by G. Craig to reappoint G. Poppe as the Board’s Vice-Chairman, seconded by A. Becker and approved by all except for G. Poppe who abstained.**

   Remaining meetings and conference calls for 2019:

   The Board will physically meet at NJDEP Headquarters (401 E. State St. in Trenton) on the following dates beginning at 9:30 am:

   **July 18, September 19, November 21**

   Board telephone conference calls will be held during the intervening months to review continuing education course applications and candidates for NJ driller or pump installer licenses. The calls will be held at 10:00 am on the following schedule:
June 20, August 15, October 17, December 19

6. **Continuing Education Update**

S. Reya began by reviewing an item that was brought up on the April conference call by J. Pepe. The Board was asked to consider whether the course provider, if a licensee, should receive continuing education points (CEPs) for the course that they administer. A. Becker stated that other states allow this. G. Craig asked the Board if it mattered whether the licensee who was providing the course was being compensated for the work. J. Pepe said that he did not think that mattered. A. Becker said that he believed that going down that road would be challenging and recommended against considering whether they licensee teaching the course is paid or is volunteering their time.

A. Becker asked the Department staff what was being done to prevent duplicate course from being approved for licensees. Department staff informed him that with this was being tracked with the course number that is issued to the course provider. They explained that if a licensee’s license number appears under a course more than once then it will trigger an error.

G. Craig asked if the Department would retroactively give a course provider credit if they administered a course that was not already approved. S. Reya explained the Department’s stance on retroactively accepting courses and the process for a licensee to apply for the credit.

**A motion was made to allow a licensee to receive credit for a course that they instruct or administer. This motion was made by G. Craig, seconded by G. Poppe and approved unanimously.**

Regarding the overall status of the continuing education program, Bureau staff noted that as of this Board meeting, there are 18 approved courses for licensees. These courses are all listed on Well Permitting’s Licensing and Exams website.

Of these courses, the OSHA 8, 24, and 40 HAZWOPER courses are all approved. A. Becker asked if the Department had considered the OSHA 10 and 30 Construction courses. G. Craig said that he believed that those should be courses that are accepted as they are clearly safety courses that relate to the drilling industry.

The Board asked about courses offered by the National Ground Water Association (NGWA). M. Ortega informed the Board that during a recent conference call he had with their staff, he discussed the course approval process with them. M. Ortega told NGWA staff that the Department would work with them to get some courses approved and sent NGWA the course provider application.

**A motion was made by G. Poppe to recognize all OSHA courses as recommended courses, seconded by G. Craig and approved unanimously.**

S. Reya expanded on the topic of retroactively approving courses taken by licensees. He stated that the Department’s stance was that the well rule does not set a hard date for beginning to accept courses so the Department believes that courses taken prior to April of this year should be eligible for credit provided they meet the regulatory/Board criteria for approval and were taken after the latest version of the rule was implemented. Previously, there has been some confusion regarding the required timeframe for a course to be accepted for credit due to the fact the Department and Board did not have a mechanism in place for course approvals. R. Guzek, DAG, stated that if the course was taken
after the well rule became operative on March 1, 2018 then the course could be accepted if the content was relevant.

S. Domber departed at 10:27 am. There ceased to be a quorum present at this time.

7. **Closed Loop Geothermal Well Design – Princeton University**

The Board members introduced themselves to the representatives from Princeton University. A. Becker opened the conversation by stating that he had a prior working relationship with EarthTech Energy Solutions, LLC (EarthTech) about four (4) or five (5) years ago. In their prior conversations, A. Becker assisted EarthTech with Well Permitting’s deviation process. He added that he has not since worked or for EarthTech in any capacity.

Princeton University representatives explained the purpose of the geothermal project that they were planning. Princeton University does a lot of climate change research and wanted to install this geothermal well field to reduce their carbon footprint.

To efficiently complete this project, it was proposed that the geothermal wells be installed using a Rygan geothermal system. It was explained to the Board that this system was successfully used in Wisconsin to a depth of 500 feet and that there were two (2) projects in Massachusetts which have target depths of 1500 feet. G. Poppe asked the Princeton University representatives how many wells were going to be installed at the university. The Princeton University representative said that there would be approximately 1000 wells for the whole campus if they were granted permission to use the High-Performance Geo Xchange (HPGX) pipe; more wells would be needed if they had to use the standard pipe. Bureau staff had previously advised interested parties that the system did not meet the current well rule requirements due to the proposed grout, which is believed to exceed the maximum allowable permeability specified in the rule and fiberglass casing. Board members asked a number of questions regarding the type of epoxy to join the separate sections of casing, possible alternative conforming grout mixes that could be used, and the pressure/strength ratings of the fiberglass casing and how these values compare to currently approved HDPE piping for closed loop geothermal wells.

A. Becker asked the Department staff what kind of deviations or information would be needed for this project. S. Reya stated that a revised schematic would need to be submitted, which reflects the appropriate dimensions of the well and the appropriate grout interval/materials. The Department and Board also requested that a sample of the Rygan HPGX pipe and the safety data sheet for the adhesive used on the well be sent to the Department. Should the Bureau have any concerns upon review of the additional information they will consult with the Board prior to issuing any permits. Finally, G. Craig asked if Board representatives would be permitted onsite during the installation should the project proceed as he felt that such new technology/installation methods should be observed first hand to assess the ability to install the system pursuant to the rules. Princeton representatives stated that Board members and/or Department staff are welcome to visit the site.

Princeton staff were thanked for their time and departed.

S. Domber returned at 11:40 am. A quorum was restored at this time.

8. **Testing and Licensing**

M. Ortega explained that the Department is continuing to receive monthly updates from NGWA for potential license applicants who have taken their exams. The report is generated based on individuals
who take one of the regulatory exams. If someone takes a New Jersey regulatory exam then they send data regarding other exams that the potential applicant has taken to the Bureau.

M. Ortega told the Board that based on the current information there was still not enough data to draw any real conclusions. He told the Board that NGWA recommends a sample size of 150 for the rest of the results to try to interpret the data. M. Ortega continued by saying that he is compiling the old test data to look for similar trends. He said that his goal was to have this information ready for the Board by the July meeting.

9. **Soil Borer/Journeyman (Class B) Upgrade Course-**
Department staff informed the Board that they have reserved rooms for the course but needed to confirm with A. Becker before officially announcing dates. The course would be three (3) to four (4) hours total. Department staff will go over the well rule and ePermitting for 1.5 to two (2) hours. A. Becker would use the other 2 hours to conduct a technical presentation.

The Board members asked if the Department gave any consideration to administering this course on a Saturday. Department staff said that they have reserved enough time slots over the course of a 4-month period to give the 100 licensees ample time to attend the class. A. Becker said that he could turn his presentation into a webinar if he was unable to physically be able to attend the class.

Department staff will write a course provider application for this presentation so that those who attend can receive CEPs for attending.

10. **Update and Discussion on Possible License Sanctions Against a Licensed Pump Installer-**
S. Reya updated the Board regarding their decision to move forward with licensing sanctions against a licensed pump installer. He stated that while the Board had decided to hold the hearing in July, the Compliance and Enforcement Deputy Attorney General (DAG) would be unable to make it to that meeting. Therefore, the hearing will be scheduled for September, when the appropriate DAG will be present. R. Guzek asked if the Department could send out the appropriate information to the Board before the June conference call.

11. **Continuing Education Course Applications-**
A summary of all courses that have been found administratively complete by the Bureau was provided as follows:

**Approved Courses from Course Providers:**
- **Construction Dewatering and Groundwater Control – ASCE – 14 Technical CEPs**
  
  A motion to approve this course was made by G. Poppe and seconded by G. Craig and approved unanimously.

- **Water Treatment and Pump Seminar – Duff Co. – 6 Technical CEPs**
  
  A motion to approve this course was made by G. Poppe, seconded by G. Craig and approved unanimously.

- **Water System Fundamentals – Goulds Water Technology – 7 Technical CEPs**
  
  A motion to approve this course was made by G. Poppe, seconded by G. Craig and approved unanimously.
Approved Courses from Licensees for previously attended events:
Jeffrey Segreaves – Maryland Delaware Water Well Association Convention – Demonstrated 10 hours of training and is requesting 10 CEPs
A motion was made to recommend accepting this course for 9 Technical CEPs, disallowing the Opening Remarks of the convention. This motion was made by G. Craig and seconded by G. Poppe. All were in favor except for A. Becker, who was opposed.

Christopher Jaworski – Maryland Delaware Water Well Association Convention – Demonstrated 10 hours of training and is requesting 10 CEPs
A motion was made to recommend accepting this course for 9 Technical CEPs, disallowing the Opening Remarks of the convention. This motion was made by G. Craig and seconded by G. Poppe. All were in favor except for A. Becker, who was opposed.

Jeffrey Jaworski – Maryland Delaware Water Well Association Convention – Demonstrated 10 hours of training and is requesting 10 CEPs
A motion was made to recommend accepting this course for 9 Technical CEPs, disallowing the Opening Remarks of the convention. This motion was made by G. Craig and seconded by G. Poppe. All were in favor except for A. Becker, who was opposed.

Joseph Deithorn – Maryland Delaware Water Well Association Convention – Demonstrated 10 hours of training and is requesting 10 CEPs
A motion was made to recommend accepting this course for 9 Technical CEPs, disallowing the Opening Remarks of the convention. This motion was made by G. Craig and seconded by G. Poppe. All were in favor except for A. Becker, who was opposed.

Not Recommended for Approval for Licensees for previously attended events:
Anthony Favorito – Ethics: Laws and Regulations for Public Works Managers and New Jersey State-Licensed Water and Wastewater Operators
A motion was made to not recommend this course because it is not technically relevant. This motion was made by G. Craig, seconded by S. Domber and approved unanimously.

Anthony Favorito – Disinfection Equipment Maintenance and Repair
A motion was made to not recommend this course because it is not related to the drilling and pump installing industry. This motion was made by G. Craig, seconded by J. Pepe and approved unanimously.

12. Geothermal Recommissioning Pilot Plan Update-
A status update on the progress of the pilot plan to recommission for improperly installed geothermal wells at a site in Woodbury, NJ was given by S. Reya. He explained that Summit Drilling was contracted by the property owners to conduct the pilot plan, which was intended to determine the feasibility of recommissioning the closed loop geothermal wells to be in compliance with the well rule, N.J.A.C. 7:9D. S. Reya told the Board that M. Schumacher and himself had been on site while Summit Drilling used a sonic drill rig to core around the first loop to the total installed depth, completely remove the original loop from the ground, and replace the loop and grout it in accordance with N.J.A.C. 7:9D-2. Only two (2) wells are currently permitted for the pilot plan. The second well was being drilled out while the Board meeting was taking place.

S. Reya told the Board that once the pilot plan is completed a compliance plan needs to be submitted to the Department. The compliance plan will address either the recommissioning or decommissioning of the entire well field based on the findings of the pilot plan.
13. Enforcement Update-

**Field Inspections – March 21, 2019 to May 16, 2019**

- **Issue:** Bureau staff spot checked the new construction of two (2) future public supply wells in Monmouth County as per the requirements for witnessing construction contained in their approved well drilling permit. No issue of non-compliance noted for well construction, licensing or permitting were found.
  
  - **Enforcement Action:** No action by Well Permitting needed.

**New Investigation-Lost and/or Destroyed Wells-Settlement Agreement**

- **Issue:** Two (2) shallow improperly decommissioned monitor wells that were destroyed by excavation located in Jersey City, Hudson County. Notice of destroyed wells was submitted by the Licensed Site Remediation Professional company representative notifying the Department of improper well decommissioning because of redevelopment and construction activities, a violation of N.J.A.C. 7:9D-3.1.
  
  - **Enforcement Action:** Bureau staff reviewed and determined that a violation occurred, and penalties should be assessed to settle the matter with the State in accordance with the regulations. Referral to Northern Region Water Compliance and Enforcement was sent and payment is pending by the violator for the two (2) wells that were improperly decommissioned.

**Status update- Ongoing Investigations and Enforcement Activity**

- **Issue:** Investigation of Suspected unlicensed individuals performing well pump installation and repair in Millstone Twp., Monmouth County. Letters received on February 13, 2019 and March 3, 2019 from the licensed pump installer of record and an unlicensed individual verified an instance of unlicensed pump installation work.
  
  - **Enforcement Action:** Bureau staff assessed penalty and referral to Central Region Water Compliance and Enforcement for further processing of civil administration penalties. Letter to be sent advising unlicensed individual of the requirements for obtaining a pump installers license with the Department.

**Administrative Hearings - Requested**

- **Issue:** Formal Administrative hearing requests were filed by well drillers and their companies in accordance with the required deadline specified in the civil administration penalties and orders to decommission improperly constructed wells documents. These documents were issued by the Department’s Southern Region Water Compliance and Enforcement for various confirmed construction and permitting violations of N.J.A.C. 7:9D. Five (5) cases total with violations including improper grouting and constructing of domestic and irrigations wells, well started prior to approved permits and unlicensed well construction and pump installation activities.
  
  - **Enforcement Action:** Pending negotiations to follow with the Department as per SOP’s for hearing requests.

G. Craig brought up an issue regarding some recent Department enforcement practices that he believes were handled improperly. A. Becker asked G. Craig to write his complaint and specific concern so that it could be added to the agenda and addressed by the Board at the July meeting.
14. **Horizontal Directional Drilling (HDD) Update**
   An update was given to the Board regarding HDD projects in the state. New Land Use permits will reference the well rule, specifically the need to comply with grouting requirements for abandoned boreholes, for public health and safety purposes.

15. **Other Topics**
   G. Poppe asked S. Reya to investigate the new water testing requirements. Certain items which need to be tested for cannot be when high turbidity is present. S. Reya said that he would reach out to the Bureau of Safe Drinking Water for more information.

   A. Becker announced that R. Guzek would no longer be the Board’s DAG after this meeting. R. Guzek will be moving to the Department’s Office of Legal Affairs. Jill Denyes will be returning to be the Board’s DAG.

16. **Adjournment**
   At 1:30 pm a motion to adjourn the meeting was made by G. Poppe, seconded by G. Craig and approved unanimously.