



State of New Jersey

DEPARTMENT OF ENVIRONMENTAL PROTECTION

CHRIS CHRISTIE
Governor

BOB MARTIN
Commissioner

KIM GUADAGNO
Lt. Governor

MAIL CODE 401-0Q
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
TRENTON, NEW JERSEY 08625-0420
TELEPHONE: (609) 984-6831
FAX: (609) 633-1231
www.nj.gov/dep/watersupply

New Jersey Department of Environmental Protection NJ State Well Drillers and Pump Installers Examining and Advisory Board Meeting Minutes for May 25, 2017

Approved by the Board on July 20, 2017

Board Member Attendance:

Present	Absent
Art Becker (Chairman) Gary Poppe (Vice-Chairman) Gordon Craig Joe Yost Joe Pepe Richard Dalton Carol Graff Steve Domber Jeff Hoffman	None

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

NJDEP Bureau of Water Allocation & Well Permitting Staff Present: Terry Pilawski, Pat Bono, Julia Altieri, Steve Reya, Michael Schumacher, Mark Ortega, Jeremy Wick, Stephen Kelly Mark Miller and Melia Stoop

NJDEP, Water Compliance & Enforcement: Bryan Barrett

1. Call to Order-

The meeting was called to order by Vice-Chairman Gary Poppe at 9:52 am with a quorum present.

2. Introductions-

Mark Miller was introduced as a new member Bureau of the Water Allocation and Well Permitting. He has worked for the Department for many years in various capacities and will be working in the Water Allocation permitting groups.

- 3. Review and Certification of the Minutes for the March 16, 2017 Meeting –**A motion to approve the March 16, 2017 meeting minutes with this change was made by R. Dalton, seconded by J. Yost and approved by all, except for G. Craig and J. Pepe, who abstained. Later in the meeting, Robert Guzek, the legal advisor to the Board, suggested that the open session minutes be revised to note the specific reason(s) for which the Board entered closed session at the March meeting. The minutes will be revised accordingly for Board members to review at the July meeting.

- 4. Review and Certification of the Minutes for the April 27, 2017 Conference Call-** A motion to approve the April 27, 2017 minutes for the conference where the April 4th exam scores was certified by the Board was made by C. Graff, seconded by G. Craig, and approved by all, except for J. Pepe, who abstained.

- 5. Review and Certification of the Closed Session Executive Minutes for the March 16, 2017 Meeting -** Consistent with Item 3 above, R. Guzek, DAG, requested that the closed (executive) session minutes be changed to reflect the rationale as to why the Board moved to enter closed session. J. Yost motioned to approve the minutes with this revision. The motion was seconded by C. Graff and approved by all, except for G. Craig and J. Pepe, who abstained.

- 6. Review and Certification of Well Driller and Exam Applicants for the June 7, 2017 Master, Journeyman, Journeyman B, Monitoring Well Driller, Soil Borer and Pump Installer License Categories –**

Master– There were no applicants for the June 7, 2017 Master Well Driller Exam.

Journeyman- A motion to approve three (3) listed license exam applicants was made by G. Craig, seconded by J. Hoffman and approved unanimously.

Journeyman B- A motion to approve two (2) listed license exam applicants was made by J. Yost, seconded by R. Dalton and approved by all, except for G. Craig, who abstained.

Monitoring– A motion to approve fourteen (14) listed license exam applicants was made by Gary Poppe, seconded by Gordon Craig and approved unanimously.

Soil Borer– A motion to approve two (2) listed license exam applicants was made by Gary Poppe, seconded by Steve Domber and approved unanimously.

Pump Installer – One of the listed applicants was homeschooled and was thus not in possession of a traditional High School Diploma or GED, a requirement prescribed by well rules in N.J.A.C. 7:9D. Instead, the applicant provided a diploma that was

generated by the homeschooling parent. Staff had checked with the NJ Department of Education website for clarification on the validity of the home-generated diploma but found none. The applicant does meet the experience requirement to sit for the exam. Suggestions were made as to how to proceed with determining the qualifications for home schooled students in general. Additional time will be necessary for Department staff and the Board DAG to determine whether or not the applicant's diploma is found to be equivalent to possessing "a high school diploma or G.E.D." as stipulated in the regulations.

A motion to approve two of the three (3) listed license exam applicants was made by G. Poppe, seconded by J. Yost, and approved unanimously. The Board will be updated on additional findings related to the third applicant at the next regularly scheduled meeting.

7. 2017 Board Meetings and Conference Call Dates-

Board members were reminded that 2017 meetings are scheduled for the following dates:

- July 20, September 21 and November 21
- A conference call will be held on October 26, 2017 to review/approve the October Exam scores.

8. Discussion on the USGS Private Well Consortium-

A. Becker provided an update on the second USGS Private Well Consortium meeting, which was held on April 20, 2017. (A. Becker was not able to attend the Department's initial meeting for the Private Well Consortium held on May 10, 2016.) He said that representatives from the NJ Geologic and Water Survey as well as the Bureau of Safe Drinking Water made informative presentations on drinking water quality issues. He noted that 46 individuals were in attendance, representing approximately 30 different organizations. Those present included well drillers, plumbers and regulatory officials. One of the issues of concern is the need to have knowledgeable professionals evaluate and determine what types of water treatment equipment is effective in removing contaminants from potable water systems. The Department is working to put together a task force to evaluate the feasibility of licensing individuals who install water treatment equipment for residential water systems. As has been discussed at previous meetings, this issue also touches upon the licensing jurisdiction issue of NJ Department of Community Affairs (NJDCA) licensed master plumbers and NJDEP licensed well drillers/pump installers. A. Becker has volunteered to participate on the task force and will keep the Board and Department apprised of any updates regarding any proposed new licenses as the task force has progresses on this issue.

9. Update on the Board Request to Witness a Field Pilot Demonstration for Re-Commissioning of Unpermitted Geothermal Wells-

On May 19, 2017 the Department entered into an Administrative Consent Order (ACO) with the party responsible for installing 80 geothermal wells in violation of N.J.A.C. 7:9D. The ACO requires the responsible party to pay penalties for the violations of these rules as well as develop

and implement a compliance plan, which is acceptable to the Department, to recommission or decommission the wells. As a result of a discussion on this case at the March 16, 2017, Board members strongly recommended that the Department hire an independent NJ licensed driller of the proper class with expertise in the drilling and installation of closed loop geothermal wells to be present on site for the pilot demonstration (for the recommissioning/decommissioning of the wells). Further, the motion stated that if the Department is not able to hire such an expert, that one licensed Board member with specific experience in geothermal drilling be present on site for the pilot demonstration to assist the Department with interpreting and evaluating the effectiveness of the rehabilitation and re-installation of the wells. T. Pilawski discussed how language in the signed ACO may potentially allow for Board members to be present onsite to assist the Department in evaluating the attempts to recommission the wells. Several Board members requested a copy of the pilot plan proposal once submitted to the Department for review. T. Pilawski will check with the Department's legal counsel and see if it is permissible to share the document at this stage, as there is not yet an agreed upon pilot plan.

10. Multi-Level Monitoring Well Systems-

Board members reviewed an April 14, 2017 letter from Carl Keller of Flexible Liner Underground Technologies, LLC (FLUTE), in which Mr. Keller questions the effectiveness of using certain other types of multi-level well systems to delineate and monitor contamination in groundwater. FLUTE technology allows a single borehole (well) to function as a multiport vertical sampling system and he maintains that his system provides a better seal vertical and, consequently, prevents vertical migration of contamination. Mr. Keller asserts that one system in particular does not properly seal off and isolate the different sampling zones, allowing contaminants to vertically migrate throughout the borehole. He noted that isolating sampling areas to discrete intervals is the intent of the regulatory requirement and that no monitoring well may contain more than 25 ft. of open borehole. After thorough review of Mr. Keller's letter, the Board found that he did raise some valid points and there might be instances in which the use of certain products would not be appropriate. Board members, however, also determined that none of the manufacturer designs, for any of the multi-level systems, of which there are several in addition to FLUTE, are appropriate for installation at all sites. Specifically, geologic formation, static water level, and contaminant type(s) among other things present in any given environment may favor one design over another. Members felt that no one specific manufactured system is appropriate for all sites. Similarly, they did not believe the Department should effectively ban any one particular manufactured product based on the fact it

would not work in all instances. These systems are currently installed on a case-by-case basis via a deviation request that is submitted along with the well permit application and reviewed by Department staff prior to issuing a well permit. P. Bono will draft a letter to this effect.

11. GeoPro Power TEX Geothermal Grout-

S. Reya presented a summary of a recent approval request by GeoPro for their Power TEC geothermal grout product which included independent lab permeability testing. Review of the supplied documentation by Board members raised some questions about the testing procedure that was used by the independent certified laboratory. G. Craig volunteered to look into this issue and will notify R. Dalton and S. Reya of his findings. If the questions are answered to the satisfaction of the Board, GeoPro staff will be notified that they may proceed with the required field demonstration to show that the product can be mixed in accordance with the manufacturer-provided specifications and placed in a geothermal borehole with conventional grouting equipment.

Note: J. Pepe left the meeting at this point (12:12 pm) for another engagement.

12. Drought Update by Steve Domber-

An update on hydrologic conditions across the state that utilized multiple graphs to visualize precipitation trends between January 2015 and March, 2017 was presented by S. Domber. He noted that Hunterdon and Somerset counties have not lifted the Drought Watch. Further, two extremely important reservoirs, Spruce Run and Round Valley, are currently only up to approximately 80% capacity.

13. Installing Liners in Public Community Supply Wells-

M. Schumacher sought guidance from Board members regarding the pros and cons of installing liners in public community supply wells. He has recently reviewed several proposed liner installations that he believes will complicate proper well decommissioning when the well is ultimately taken out of service. J. Yost, who has installed, a number of these over the years said that in many instances they are very effective and are a timely way to repair a well that saves a municipality from significant downtime. This is particularly important for shore communities where there is little time to address the problem during the summer season when demand is high. The fact that the installation of the liner is essentially a “Band Aid” or temporary fix was also discussed. Liners installations are a way for water systems to temporarily repair a well at a much lower cost, but it does not fix the initial problem and it may only work for a relatively short time. The added costs associated with decommissioning the well must still be addressed when the well is taken out of service. J. Yost pointed out that it is important to know the reason for the liner as there are major differences in installing a liner to rectify a well that is pumping sand due to a screen failure vs. one being installed due to a failed casing. In instances of a

failed casing, being able to grout the liner in place would be of crucial importance. Essentially no broad policy recommendations could be made; liners are believed to be appropriate in some instances and not in others. Therefore, each request will need to be reviewed on a case by case basis.

14. Update on Well Rules-

T. Pilawski noted that the draft revisions to the well rules, N.J.A.C. 7:9D, are currently under review in the Governor's office. A. Becker said that he attended a meeting at the Governor's Office on Wednesday, March 22, 2017 along with Denis Crayon and John Robbins, who will all be representing the New Jersey Ground Water Association (NJGWA). They will be inquiring as to the status of the rule proposal review.

15. Summary of Well Permitting Program's enforcement and field activities over the past seven weeks presented by J. Altieri

A) Field Inspections- Well Permitting Section staff performed fifteen field inspections during the past seven weeks, which over twice as many as usual in the same time period. Most of the field inspections are a response to complaints regarding improper well construction and failures to obtain a well permit prior to starting a well. Staff supervised the drilling out of one domestic well that was constructed before the well driller acquired an approved permit from the Bureau. In two cases, the local health department notified the DEP as a result of receiving water tests for unpermitted well.

B) Partial settlement of well drilling violations- As part of resolving a recent Administrative Order and Notice of Civil Administrative Penalty Assessment (AONOCAPA), Bureau staff witnessed the total removal (drilling out) of an improperly grouted 65 ft. deep irrigation well in Ocean County that was ordered sealed by the Department. Full payment of the penalties owed as part of the penalty to the Department are to be concluded by October of 2017. The driller and company have been fully cooperative in resolving this issue.

C) Additional Field Inspections and Training Activities- Staff spot checked several new properly permitted and constructed test, public, irrigation and monitor well construction around the State and had arranged for field demonstrations for new Bureau and Division staff the opportunity to observe well drilling activities conducted by a New Jersey Master well driller. Staff conducted field inspections to determine the presence of illegally constructed wells and to confirm proper construction.

16. Well Permitting Program Updates-

On May 19th Robbins Water Service performed a training event for the Department's Water Supply and Compliance & Enforcement staff, along with multiple county health departments. At this field event attendees were able to see the drilling of a borehole, setting of the casing/screen, gravel packing and grouting as well as the installation of the submersible well pump and pressure tank installation. P. Bono

noted that this was extremely beneficial in training regulators and the Department appreciates Robbins Water Service's assistance in volunteering to put on this training day.

17. Adjournment -At 1:06 pm, a motion to adjourn was made by G. Poppe, seconded by Carol Graff and approved unanimously.