



State of New Jersey

DEPARTMENT OF ENVIRONMENTAL PROTECTION

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STATE WELL DRILLERS AND PUMP INSTALLERS
EXAMINING AND ADVISORY BOARD

BOB MARTIN
Acting Commissioner

State Well Drillers and Pump Installers Examining and Advisory Board Meeting Minutes for January 14, 2010

Board Members Present: Art Becker (Chairperson), Richard Dalton, Karl Muessig, Gary Poppe, Joe Pepe, Carol Graff, Joe Yost

Board Members Absent: Fred Sickels, Anthony Tirro

NJDEP Staff Present: Julia Altieri, Tracy Omrod, John Fields, Steve Reya

Member(s) of the Public: none

- 1. Call to Order** - The meeting was called to order by A. Becker at 9:45 am with a quorum present.
- 2. Review of Minutes from Nov. 19, 2009 Meeting** - The final sentence of the first paragraph within the "Pump Installer" section within item number 3 will be omitted. C. Graff also noted a few minor typos that require correction. A motion to approve the minutes with these changes was made by G. Poppe, seconded by C. Graff and approved unanimously.
- 3. Review and Certification of the Dec. 10, 2009 Master, Journeyman, Journeyman B, Monitoring, Soil Borer and Pump Installers Exam Scores**

Master - A motion to accept the scores was made by G. Poppe, seconded by J. Yost and approved unanimously.

Journeyman - A motion to accept the scores was made by K. Muessig, seconded by D. Dalton and approved unanimously.

Journeyman B - A motion to accept the scores was made by G. Poppe, seconded by C. Graff and approved unanimously.

Monitoring - A motion to accept the scores was made by J. Yost, seconded by C. Graff and approved unanimously.

Soil Borer - A motion to accept the scores was made by D. Dalton, seconded by G. Poppe and approved unanimously.

Pump Installer - A motion to accept the scores was made by J. Yost, seconded by J. Pepe and approved unanimously.

A. Becker discussed the fact that the National Ground Water Association's (NGWA) exam passing rate is not much higher than those on New Jersey's exams are. He offered to obtain some exam materials to review as the Board continues to look into utilizing NGWA's exams for New Jersey's licensing program (while potentially including a New Jersey-specific regulatory section).

Challenge to grading Master Well Driller Exam by Mr. J. Hall – The Board members reviewed a January 7, 2010 letter from James Hall regarding the scoring of one question on the technical section of his October 2009 Master Well Driller exam. A motion to move into executive session to discuss the wording of the question was made by G. Poppe, seconded by C. Graff and approved unanimously.

After reviewing the Mr. Hall's letter and supporting documentation, the Board members agreed that the question was vague and incorrectly worded. Therefore, Mr. Hall will receive credit for his answer. S. Reya noted, however, that Mr. Hall's score on the second portion of the exam due to the fact that there are 136 available on the technical portion of the Master's exam would not be over 80 percent even after this change. In receiving credit, Mr. Hall's score would be 79.41 percent, which would remain a 79, thus remaining a failing score.

4. **Licensing Topics (Jurisdiction issues between Drillers/Pump Installers and Master Plumbers)**– G. Poppe, following-up on a licensing issue raised at the November meeting by Mr. Cicalese, presented older documentation regarding the limits of jurisdiction between Master Plumbers and Well Drillers/Pump Installers. Recent proposed changes to the NJ Department of Community Affairs (DCA) plumbing codes could potentially re-define the jurisdiction limits between these two licenses. According to all the documentation he compiled, the placement of the discharge valve is the primary determining factor in determining which regulations prevail. This essentially allows Well Drillers and Pump Installers to legally install and service all water system components installed prior to (on the "well side") of the discharge valve. The Board members also discussed how the key word utilized in some of the documentation is "potable" well. This would also allow NJ licensed drillers and pump installers to install water treatment to ensure that the water passing through the valve is potable prior to the licensed Master Plumber's jurisdiction. Of concern would be that the new DCA code revisions would grant Master Plumbers the ability to install and maintain closed loop geothermal pumping systems. Several Board members suggested contacting officials within DCA to try to work with them on the proposed code changes. J. Pepe also suggested reaching out to the plumbing subcode official within DCA to attend the next scheduled Board meeting. He will work on obtaining a DCA contact and will forward the information along to A. Becker.
5. **Enforcement** – A. Becker requested that the Bureau prepare a list of the outstanding violations against well drillers and pump installers for the next Board meeting. He added that he had recently spoken with H. Chudzik, current legal advisor to the Board, who suggested that he meet with James Hamilton from the Department's enforcement program to coordinate the Board taking an increased role in enforcement matters. To start, A. Becker would like a list of the top ten violators with the most egregious violations on file so he can discuss the matter with Mr. Hamilton. H. Chudzik also informed A. Becker that the citations in the law (noted at the previous meeting) gave the Board significant authority to suspend licenses and fine offenders, however, he should work with F. Sickels and the DEP enforcement program on how best to implement a plan. C. Graff indicated that the Board used to call people before the Board to suspend and revoke licenses. She believed that the Board should contact the Department to determine the procedures that must be followed in order to hold hearings. A. Becker also noted that the Department's failure to adequately enforce their regulations is not fair to those drillers and pump installers who do adhere to the regulations. He also stated that the Department is essentially aiding and abetting those who break the regulations by not following up on enforcement activities.

6. **DEP Program Updates** – S. Reya updated the Board on several Well Permitting program items on behalf of P. Bono, who was unable to attend the meeting.

E permitting – In December, fifty percent (50%) of all permit applications were submitted submitted online via the ePermitting program. Processing these submittals are a priority within the section, therefore, less staff resources are available to process those submitted on paper.

Well Searches – In response to complaints filed at the last Board meeting, the internal process has been changed. The average processing time is two weeks. In some instances wait time could be shorter. The Bureau believes that the new process has shortened wait times and eliminated inefficient work, such as multiple people performing the same searches that had been submitted multiple times.

Continuing Education/Licensing – F. Sickels has identified arranging for outsourcing the testing program as a priority for the well permitting program this year. The Bureau is planning to mesh this program with the establishment of a continuing education program for licensed drillers and pump installers. P. Bono has spoken to Brew Pasquale of Clearwater Drilling and is aware of NJGWA's efforts to get a continuing program organized in New Jersey. Over the next two months, the Bureau intends to identify what would be needed to set up a program so that testing is more convenient for applicants in terms of reviewing their qualifications, arranging for testing and grading the test results. Additionally, the method for reporting grades and tracking the applicants needs to be compatible with both the Department's NJEMS data system and the billing computer system for Treasury. Once this is known, a request for a proposal can be put together and we can put it out for bidding. P. Bono is hoping to have more of this put together for the March Board meeting so that members can have input and comment on the design of these programs.

Elevator Drilling- A. Becker noted that the minutes for the November 2009 Board meeting indicated that the permitting and licensing issues associated with casing installations for hydraulic cylinders used for elevator installations are still not resolved. He added that the minutes noted that DCA would be sending a letter to the Department so that both agencies could work together to rectify the problem. P. Bono informed him that she and the Well Permitting staff would get in touch with DCA to try to resolve the issue.

7. **Kelix Heat Transfer System Update** – S. Reya said that he responded to the drilling contractor, Able Environmental, which wanted to install this system. He added that he relayed the Board's concerns in a December 3, 2009 email. Specifically, he requested further information on the outer (fiberglass/carbon) casing strength and material composition and indicated that it would have to meet or exceed the polyethylene requirements stipulated in the regulations. An engineer from Kelix did respond to this issue with information regarding casing that is essentially the same as the Kelix casing, but without the inclusion of Carbon. The drilling contractor had recently informed S. Reya by phone that he did not wish to install casing for which he did not have full data sheets so he would propose installing the casing without the carbon additive. Additionally, the driller informed S. Reya that the circulating fluid would be water, without the use of any anti-freeze additives. The question regarding the chemical composition of the epoxy used to attach the casing lengths was left unanswered as was the question regarding which geothermal grout mix would be used (the one referenced in the Kelix literature or a DEP-approved mix). S. Reya indicated that further information from the contractor and/or Kelix Heat Transfer Systems will be forthcoming.
8. **Review of Baroid Grout Materials Submission** – The Board reviewed a request for the approval of two Baroid grout materials. The letter from Dr. Charles R. Landis, Technical Director of Halliburton

Industrial Drilling Products, requested approval of Barotherm Gold, which is a two-step Wyoming-based sodium bentonite thermal grout entitled. Additionally, approval of Barad 381, "a safe cement retarder designed to control the rheology and heat of hydration of a cementitious blend in a range of applications where compressive strengths are required" was also requested. The Board members noted that the letter does not note the sand content of the Barotherm Gold mixture for which they are seeking approval. The data sheet submitted (IDP 108, Rev. 6/2009) lists sand volumes up to 400 lbs. per 50 lb. bag of bentonite for seven total mixes. The requestor would have to specify the exact mix(es) for which they are seeking approval and submit permeability values for each. Permeability values for the 400lb. mix, conducted by an independent lab via the Hydraulic Conductivity Test (in accordance with ASTM D 5084) meet the Department's maximum permeability value. If the permeability values prove acceptable, a field pumpability demonstration would then have to be performed utilizing the mix containing the maximum amount of sand. A "field mix" would again have to be tested for permeability and if acceptable the mix(es) could be approved.

The Barad 381 documentation does not contain permeability for a cement material containing this additive. Therefore, the Board advised that permeability values would have to be obtained before approval could be granted. A. Becker stated that he would also like Baroid to make reference to any states where the product is currently approved and/or in use. S. Reya is to send a response letter to Dr. Landis, which relays the Board's concerns.

9. **Adjournment** - A motion to adjourn the meeting was made by G. Poppe, seconded by J. Yost and unanimously approved at 12:20 PM.



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BOB MARTIN
Commissioner

NEW JERSEY WELL DRILLER AND PUMP INSTALLER EXAMINING AND ADVISORY BOARD MEETING MINUTES FOR MARCH 16, 2010

Board Members Present: Art Becker (Chairperson), Anthony Tirro (Vice-chairperson), Richard Dalton, Gary Poppe, Joe Peppe, Carol Graff, and Fred Sickels

Board Members Absent: Joe Yost, Karl Muessig

NJDEP Staff Present: Steve Reya, Tracy Omrod, Pat Bono, John Fields, Brian Buttari, Michael Schumacher, Julia Altieri

Others Present: Thomas Pitcherello (Department of Community Affairs), DAG -- Mark Collier (Office of Legal Affairs)

1. **Call to Order:** - The meeting was called to order by A. Becker at 9:37 am with a quorum present
2. **Review of Minutes from January 14, 2010:** A motion to approve the minutes was made by G. Poppe, seconded by J. Peppe and approved unanimously.
3. **Review of Executive Session Minutes from January 14, 2010** – A motion to approve the minutes was made by C. Graff, seconded by G. Poppe and approved unanimously.
4. **Review and Certification of Applicants for the April 13, 2010 Exam** –
Master – A motion to approve the applicant roster was made by R. Dalton, seconded by C. Graff and approved unanimously.
Journeyman – A motion to approve was made by C. Graff, seconded by G. Poppe and approved unanimously.
Journeyman B – A motion to approve was made by A. Tirro, seconded by F. Sickels and approved unanimously.
Monitoring Well – A motion to approve was made by G. Poppe, seconded by C. Graff and approved unanimously.
Soil Borer – A motion to approve was made by F. Sickels, seconded by A. Tirro and approved unanimously.

Pump Installer – A motion to approve was made by G. Poppe, seconded by F. Sickels and approved unanimously.

5. **Licensing Topics (Elevator Driller Update)**– A. Becker discussed how he had recently spoken with a well driller involved in elevator installation drilling. This well driller informed him that recent technological advances in the elevator industry have led to the drilling of fewer boreholes and casing installations than in the past. The reason being that the new type of telescopic hydraulic pistons being used can be installed to much shallower depths, often in the pit of the shaft in which the elevator car rides. As a result, drilled boreholes are eliminated completely or reduced considerably in depth. This may be pertinent as the Department continues to work with the Department of Community Affairs (DCA) to come up with permitting, licensing and construction requirements for casings installed for the purpose of elevators.
6. **Licensing Topics (Jurisdiction Issues Between Licensed Well Drillers/Pump Installers and Master Plumbers)**– Thomas Pitcherello, from DCA's Division of Codes and Standards, attended the meeting to provide clarification to the Board members and Department staff regarding the overlap in jurisdictions between Well Driller/Pump Installer Licenses and Master Plumber Licenses over installation of water treatment systems. The demarcation of jurisdiction for the installation and maintenance of home and commercial water treatment systems. This issue, along with the documentation provided by G. Poppe, was discussed at the January meeting. T. Pitcherello noted that the scope of work published by the Master Plumbers Board in 2005 authorizes licensed plumbers to install and connect water treatment systems. Mr. Pitcherello explained that the discharge valve is considered to be the starting point where "plumbing" begins within a home or building. In other words, it begins on the "house side" of the valve following the compression tank. Connections made on the "well side" of the valve do not fall under the jurisdiction of plumbers and plumbing inspectors. Well drillers and pump installers, DEP and local health departments have jurisdiction on the well side of the valve. Mr. Pitcherello acknowledged that a legal determination must be made to settle conflicts between the set of regulations because the plumbing regulations state that plumbers are the only licensed professionals authorized to perform water treatment. The plumbing regulations do not make reference to the valve location.

The Board also discussed instances in which a facility is served solely by public community water systems. These situations would clearly be under the sole jurisdiction of Master Plumbers, not well drillers. A number of Board members raised concerns regarding the installation of water treatment systems by individuals who are neither licensed as a driller, pump installer or plumber. Currently, neither DCA nor DEP have a licensing program for the installation of water treatment systems. Since drillers are required to provide potable water, some feel that the driller's authority to install water treatment systems is inherent. T. Pitcherello believed that DEP and the State Board of Master Plumbers need to coordinate to obtain a better interpretation of such issues and to clarify sections of the Uniform Construction Code governing the Master Plumbers. He also thought that both sets of regulations might need better definitions and that some wording containing exemptions for those licensed through other state agencies. Note: the plumbing regulations are N.J.A.C. 13:32; the law is N.J.S.A. 45:14.

DAG, Mark Collier, stated that the Board needs to obtain a determination on which rule needs to be changed. He suggested that both Boards work together to come up with a position beforehand. T. Pitcherello noted that DCA does not sponsor the regulations for the Master Plumber Board (Uniform Construction Code is 5:23). F. Sickels believed that DEP would support such clarification but a mechanism for changing the laws and/or regulations would be need to be worked out by the two Departments. M. Collier suggested that the Board submit in writing the issue to the Office of Legal Affairs requesting a legal interpretation/clarification. T. Pitcherello emphasized the need to obtain clarification on where potable water begins. He said that they would have to clarify the fact that potable water wouldn't start until the second valve, which would be the valve on the house side of the pressure tank (not the discharge valve at/on the tank). F. Sickels mentioned that there are a number of health concerns with water that may meet the driller's definition of potable but fails the state's drinking water standards.

7. **Discussion of Enforcement Violations** – A. Becker discussed a meeting the he, F. Sickels, P. Bono and J. Altieri had with James Hamilton, Administrator of the Department's Water Compliance and Enforcement Division, on February 25, 2010. The result of the meeting was that the Bureau of Water Systems & Well Permitting agreed to start using the same formats as other DEP programs for documenting violations. Compliance and Enforcement with work more closely with the well permitting program to follow-upon these actions. The Board members discussed the fact that the Bureau seems to send out Notices of Non Compliance, which are not being followed up on for those individuals and companies. Mr. Hamilton mentioned that the Board has the authority it needs to call-in repeat offenders for formal administrative hearings as a method for dealing with outstanding violations. Should these not produce a desirable outcome, the Compliance and Enforcement staff could then follow-up on the recommended actions of the Board, such as license suspension.

What is needed to start this process is to develop criteria for identifying the worst offenders. J. Altieri presented a list of the ten individuals with the most egregious/highest number of outstanding violations based on a process used in the past. Members asked a number of questions as to how the list was developed. Also discussed is the perennial lack of enforcement field presence to prevent or discourage wrongdoing, the ineffectiveness of some types of past enforcement actions and the need to hold drillers accountable by suspending licenses when warranted.

Board members discussed the conditions, criteria and procedures that would be needed in order to commence enforcement actions. Board members were cautioned by F. Sickels that such enforcement actions could require a considerable time investment in addition to the regular Board meetings. Also considered were: developing a consistent and appropriate method for identifying the most egregious violators, the amount of notice that needs to be provided to a driller to appear before the Board, what type of documentation would be needed from the Department and the ability of the DEP's Compliance and Enforcement staff to implement the recommendations of the Board. Pertaining to the last item, F. Sickels agreed to have the well permitting staff check with Enforcement to make sure that the criteria is fair and enforceable.

Action Items identified for the May meeting:

Develop criteria for identifying the worst offenders;

Identify those individuals who meet that criteria; and

Approval of Enforcement and the DAG regarding the two items listed above

At the next meeting (May), the Board will determine who to call in so that these people will appear before the Board at the July or September meeting. Additional enforcement issues and updates will now be a standard item on Board agendas.

Local Issue- G. Poppe noted that he had recently discovered a problem with the Middlesex County, Monroe Township website's laws and regulations. There is apparently reference made to the fact that a twenty-foot deep potable well is legal. G. Poppe has informed the head of the Middlesex County Health Department of the outdated and incorrect material. P. Bono stated that if the problem is not rectified, the Bureau could reach out to the county and/or municipality to advise them of the error.

8. Technical Topics –

Baroid, Barotherm Grout and Barad 381 Cement Additive Update- S. Reya recently spoken to Dr. Charles Landis, Technical Director for Halliburton Industrial Drilling products, about the Board's comments at the last meeting, which were in response to his letter requesting Departmental approval of both of the above referenced products. S. Reya also consulted with R. Dalton of NJGS, recently for clarification on some of the permeability testing that would be required. Dr. Landis stated that Baroid is willing to perform and submit the permeability and field pumpability tests that the Bureau and Board would require. S. Reya will be sending the requirements to Dr. Landis in writing shortly.

Kelix Geothermal System- S. Reya noted that he has not received any recent submittals regarding the casing material for this system. The drilling contractor who is interested in installing this system at their shop in the presence of Board/Bureau representatives has not yet compiled the required information from the system manufacturer and/or engineer. A. Becker added that while attending recent National Ground Water Association (NGWA) meetings, he noticed an increased number of new geothermal systems being presented. It is his opinion that new advances in technology will ultimately lead to increased submittals for approval of systems that do not entirely comply with the current closed loop geothermal requirements stipulated in the current well regulations.

9. DEP Program Updates (Potential Use of NGWA Exam/Certification Program)–

A. Becker, P. Bono and S. Reya had a meeting on March 11, 2010 to review the current licensing structure and how it could be improved upon. A. Becker stated that they reviewed the testing program that is administered by NGWA. Seventeen states currently use the NGWA exam certification process. They discussed how to use the NGWA exams in combination with an added New Jersey regulatory portion for each license type. Additionally, they tried to correlate current New Jersey license categories with existing NGWA categories and determine which NGWA exams would be required in order to obtain a New Jersey license. Two areas that presented the largest problem were:

- a. NGWA does have a Master Well Driller License (although passing 12-14 certification tests along with the master contractor exam would result in a Master Contractor's license). However there is large difference between the requirements of the two licensing programs, with the NGWA Master license being much more comprehensive in areas not required by NJ's program.
- b. There is also no real Soil Boring exam or it's equivalent. The closest category is known as Monitoring and Augering but there are not two separate categories of monitoring and soil boring, as New Jersey's program currently allows.

A. Tirro suggested making the Monitoring Well and Soil Borer the same license, as he feels there is such an overlap in the work, that there is no longer a need to have two separate licenses. He also thought this would grant individuals in the geotechnical industry increased flexibility to perform additional types of work if the licenses were combined. P. Bono states that there may be some folks who wouldn't want the full Monitoring Well Driller license and that testing them on additional material may not be fair. A. Becker pointed out that there are study guides that cater to each test category, which has been a major deficiency in the New Jersey licensing program. He pointed out the NGWA program has a required passing score of 70 percent, as opposed to the 80 percent required now. He also added that an independent study performed by Ohio State University confirmed that the 70 percent would be more than adequate for the minimum competency level an applicant should attain before being awarded a license. NGWA utilizes PSI Lasergrade to administer the exams, which would also allow applicants to schedule their own exams.

Also of concern was whether or not the Bureau and Board would have the ability to review and certify the experience and qualifications of applicants prior to allowing them to sit for the NGWA exams for purposes of obtaining a New Jersey license. Some type of Bureau review is anticipated before exam candidates are given an approval to sit for the exams. Costs to administer the program were also discussed: the charge for each test of NGWA certification category is \$75.00. To be awarded a New Jersey Journeyman exam an applicant would have to spend \$375.00 in fees, in addition to the NJ-regulatory section. Applicants would, however, only have to re-test those sections they failed if unsuccessful. The minimum notice requirement to take a test is 48 hours. There is no review of tests and applicants must wait 90 days to retake failed portions of the test.

P. Bono suggested that the Board seriously consider what knowledge and experience Master applicants should possess as there is no equivalent in the NGWA licensing program. This is the last outstanding issue that needs to be resolved prior to adopting the national testing and licensing system. C. Graff believed that the Bureau might have to administer the Master exam, while all others would be handled by NGWA. Additional investigation and dialogue with NGWA will be required to determine what steps must be taken if the Department utilizes this testing program.

- 10. Mandatory E-permitting** – The Department's new commissioner, Bob Martin, recently visited with all Department programs and questioned why the Bureau is not currently receiving 100 percent of all permit applications via e-Permitting. M. Schumacher noted that 77 percent of our permits were submitted electronically last month, but many significant upgrades to the ePermitting program would be required in order to make the system capable

of processing 100 percent of all permit applications. The Bureau will be working to improve the program to allow the industry to submit all permits electronically and phase out paper submittals.

11. Adjournment- The meeting was adjourned by A. Becker at 3:03 pm



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BOB MARTIN
Commissioner

NEW JERSEY WELL DRILLER AND PUMP INSTALLER EXAMINING AND ADVISORY BOARD MEETING MINUTES FOR MAY 20, 2010

Board Members Present: Art Becker (Chairperson), Anthony Tirro (Vice-Chairperson), Richard Dalton, Gary Poppe, Joe Pepe, Joe Yost

Board Members Absent: Carol Graff, Karl Muessig, Fred Sickels

NJDEP Staff Present: Tracy Omrod, Steve Reya, Pat Bono, John Fields, Brian Buttari (pm only), Julia Altieri (pm only)

Others Present: DAG Jill Denyes, Office of Legal Affairs (appointed Board Counsel)

1. **Call to Order-** The meeting was called to order by A. Becker at 9:44 am with a quorum present.
2. **Review of Minutes from March 16, 2010-** A motion to approve the minutes without change was made by G. Poppe, seconded by A. Tirro and approved unanimously.
3. **Review and Certification of the April 13, 2010 Master, Journeyman, Journeyman B, Monitoring, Soil Borer and Pump Installers Exam Scores-**

Master – A motion to accept the scores was made by D. Dalton, seconded by J. Yost and approved unanimously.

Journeyman – A motion to accept the scores was made by G. Poppe, seconded by D. Dalton and approved unanimously.

Journeyman B – A motion to accept the scores was made by T. Tirro, seconded by J. Yost and approved unanimously.

Monitoring – A motion to accept the scores was made by G. Poppe, seconded by J. Yost and approved unanimously

Soil Borer – A motion to accept the scores was made by T. Tirro, seconded by D. Dalton and approved unanimously

Pump Installer - A motion to accept the scores was made by J. Yost, seconded by A. Becker and approved unanimously

4. **Review and Certification of Applicants for the June 9, 2010 Exam-**

Master – There were no Master Well Driller exam applicants.

Journeyman – A motion to approve the applicant roster was made by G. Poppe, seconded by A. Becker and approved unanimously.

Journeyman B – A motion to approve the applicant roster was made by J. Yost, seconded by G. Poppe and approved unanimously.

Monitoring Well – A motion to approve the applicant roster was made by G. Poppe, seconded by A. Becker and approved unanimously.

Soil Borer – A motion to approve the applicant roster was made by A. Tirro, seconded by J. Yost and approved unanimously.

Pump Installer – A motion to approve the applicant roster was made by G. Poppe, seconded by J. Pepe and approved unanimously.

5. **Licensing Topics**– At the March meeting, Board members discussed the potential for using NGWA certifications in lieu of the NJ pump installer and driller exams currently administered by the NJDEP for the various licenses. The discussion included what certifications would be necessary to keep the same NJ license class. The discussion at this meeting centered on what to do about the master license, since the National Ground Water Association (NGWA) does not currently have a certification category that is equivalent to New Jersey's Master Well Driller License. The Statute (N.J.S.A. 58:4) and the current regulations authorize two responsibilities exclusively to NJ Master Well Drillers: 1) the ability to supervise three Journeyman Well Drillers working for one company and, 2) the ability to drill public supply wells. The consensus of the Board members was that the issue of supervision of three or more Journeyman Well Drillers is both difficult to enforce and yields little to no positive impact to the drilling community. It was generally agreed that there is no reason to require that multiple Journeyman work under the supervision of a Master Well Driller. Currently, the statute and regulations require a drilling company employing three or more drillers to have a master driller as supervisor. Regarding the drilling of public community supply wells, however, the Board members felt that it is imperative to maintain the requirement that only a Master Well Driller can drill these. The Board members agreed that the current experience requirements to sit for the master License should be maintained. A. Becker also noted that Master Driller applicants should be required to demonstrate that they have experience with the installation of Category 1 and 2 wells.

Board members also discussed the potential manner in which licenses of New Jersey drillers would be tracked if the initial license were issued through NGWA. A. Becker stated that NGWA tracks certifications in their program by requiring certification holders to obtain and submit proof of Continuing Education Unit (CEU) credits. He added that seminars, safety training, meetings, etc. all count towards CEU credits. If the required credits are not accrued throughout the specified time period, NGWA sends renewal notices and allows a "grace period" for applicants to obtain the required credits and still maintain valid NGWA certification(s).

A. Becker also suggested that Bureau representatives reach out to Cathy Butcher at NGWA to determine what services their association could provide with regard to a licensing and continuing education program. He also noted that seventeen other states currently utilize the NGWA certification process in some capacity when issuing state well driller and pump installer licenses. Therefore, he felt that NJ DEP should be able to set up a system compatible with NJEMS. Additionally, he discussed how he currently holds a well drilling license in nine states, five of which require continuing education credits (CEUs) in order to maintain an active license upon renewal. Board members agreed that if NGWA is able to administer the licensing program, it would be best to have them track the CEUs for both licensees who are licensed through NGWA

exams and those whom have already been licensed through NJDEP's testing program. NGWA will ultimately need additional information from the Bureau in order to provide a proposed program and develop a rough cost estimate.

P. Bono suggested putting together a summary of a proposed licensing/CEU program that would be acceptable to both the Board and the Bureau. She stated that this could be summarized and emailed out to Board members prior to the July meeting. A. Becker volunteered to contact NGWA and determine what information they would need from the Bureau. He made it clear that this letter would simply be a request for further information, but in no way did he wish for it to appear that the Department is attempting to go out to bid or enter into a contract with NGWA at this point in the process. The Board members also noted the need to maintain a review of applicant qualifications and experience prior to issuance of a license, even if the actual testing is administered by NGWA.

6. **Jurisdiction Issues Between Licensed Well Drillers/Pump (Continued from March 16, 2010 meeting)**- A. Becker informed the rest of the Board that he, Benjamin Primost, from the New Jersey Ground Water Association (NJGWA), and their lobbyist, Paul Bent, attended a recent Master Plumbers Board meeting to discuss some of the conflicting current and recently proposed regulations regarding demarcation of jurisdiction in the installation of water treatment equipment. He indicated that the proposed changes will no longer be included in the current rule proposal. Members of the NJ Well Driller and Pump Installer Board and The Board of Master Plumbers both feel that their respective licensees are entitled to install water treatment system according to the regulations that are currently in place. Proposed plumbing regulations would have made this activity solely the jurisdiction of plumbers. A. Becker referenced a NJGWA newsletter article written by Mr. Bent summarizing the issue, which stated "after hearing the testimony the Chairman suggested to the members that there were issues with the current proposal and pushed for the changes to be held for further discussion at a future date. This means that this language will not be included in the adoption of the current rule proposal." However, A. Becker still believes that a letter must be sent to the Department of Community Affairs to clarify this ongoing problem. He will send a letter and have it reviewed by the Office of Legal Affairs. It is unclear whether this letter should first be submitted to NJDEP's Office of Legal Affairs or the New Jersey Office of Legal Affairs. J. Denyes, DAG, will look into this issue. As discussed previously, the intent is for all the stakeholders to meet to resolve this conflict: both of the Boards, NJDEP and the New Jersey Department of Community Affairs. A. Becker also hopes to develop a strategy for enforcing the regulations with regard to those individuals who do not hold any license at all (Well Driller/Pump Installer or Master Plumbers licenses) but continue to install water treatment systems.
7. **Correspondence With DEP Commissioner**- A. Becker mentioned that he submitted a letter, dated February 18, 2010, to NJDEP Commissioner Martin, regarding updating the well construction regulations. On March 25, 2010, Assistant Commissioner Brubaker sent a response. A. Becker indicated that the letter did not specify any immediate plans or procedures through which the regulations could be revised. As he felt that the current regulations prohibit proper enforcement by both the Bureau and Board, he will again send a letter to Commissioner Martin requesting a means by which shortcomings in the regulations can be addressed.
8. **Baroid Geothermal Grout & Cement Additive Update**- S. Reya said that he scheduled a meeting with Dr. Charles Landis, Technical Director of Baroid Industrial Drilling Products, on the results of recent permeability tests that were conducted as a result of the Board's review of his initial submittals. S. Reya invited any interested Board members to attend the meeting, scheduled for May 27, 2010.

9. **Election Of Board Chairperson/Vice Chairperson-** Votes for these two Board officers were taken by secret ballot.. Art Becker was voted Chairperson and Anthony Tirro was voted Vice-Chairperson.

10. **Enforcement-** J. Altieri discussed the current enforcement laws, regulations and enforcement procedures the Bureau follows when dealing with violations. She also clarified the various enforcement documents that are utilized by the Bureau. A. Becker discussed the Boards authority, as stipulated in both the law and the regulation, and requested assistance from J. Denyes on the proper procedure that must be followed when holding a hearing. A. Becker stressed the importance of following applicable procedures to ensure an effective hearing that has merit and will assist the Bureau's enforcement efforts. He asked that J. Denyes provide him with this process by the July Board meeting. J. Altieri noted that in past years, the Board sent notice to those with outstanding violations and directed them to attend Board meetings; however, these were not formal hearings. The Board members requested that she email any available correspondence regarding these informal proceedings to them prior to the next meeting.

A. Becker also discussed the Bureau's continued inability to adequately enforce the well drilling regulations. He indicated that he might send a letter to the DEP Commissioner's office questioning why frequent violators of these laws are able to continually able to apply for permits with the Bureau and their licenses are never suspended or revoked under the current regulations or enforcement procedures.

J. Denyes will look further into legal issues that may arise should the Board institute hearings and a more active role enforcing violations. She stated that she will further research the potential liability of the Board members and try to determine whether a Board member could be sued individually, and if so, whether the Department would provide legal services and/or monetary compensation for legal fees to Board members.

Prior to the next meeting J. Altieri will compile an anonymous list of the most frequent violators with the most egregious violations over the past five years. This will allow the Board to develop a plan for holding hearings and determine an estimate of the number of individuals involved. The past five years will be focused on to ensure that all violations occurred under the scope of the current regulation (NJAC 7:9D). Board members stressed the fact that the top offenders should be identified based upon the severity and frequency of the violation. They indicated that those with outstanding violations pertaining to improper well construction or decommissioning and those individuals without licenses who continue to drill wells or work on pumping equipment should be targeted first. They indicated that it is not their intent to hold hearings for those individuals who have mistakenly drilled once or twice on an expired permit or failed to submit the occasional well record/well decommissioning report within the required timeframe. The list compiled by J. Altieri will use a code to allow omission of both individual and company names. This will allow the Board to discuss and identify the highest priority offenders without fear of a conflict of interest, as they will be identifying people and companies based on violation history, not who they are or based on the company for which they work.

11. **DEP Program Updates -**

E permitting - P. Bono stated that approximately 80% of permits that the Bureau currently processes are those submitted electronically. She reported that the Department's Commissioner and management are urging the Well Permitting Program to ultimately make e-permitting mandatory and to cease issuance of "paper" submittals. This is not possible until multiple

upgrades are made to the current e-program. The well permitting staff are working with their management and the DEP IT program to resolve the problems which result in the system "going down." Over the preceding months, it was noted the e-permitting system was interrupted approximately 30% of all workdays, causing interruptions in submissions and processing of well permit applications.

Another problem with the current system is the delay that the drilling community encounters when attempting to print the PDF image of a well record. The initial design of the system was such that the user could not print the image until the well record was reviewed and ultimately approved by Bureau staff. With current staff resources and the number of other tasks being performed, however, the system apparently has approximately 800 backlogged well record submittals awaiting review. P. Bono stated that the Bureau is finding new ways to free up additional staff resources to review well records. Additionally, a tool is being developed that will allow the user to print a PDF of the information submitted on the (un-reviewed) well record. This printout will have a disclaimer noting that it is a submittal and may not necessarily be the same as the final/approved copy of the well record. P. Bono anticipates that this tool will be working in the next few weeks. Board members indicated that it is imperative to solve the problem soon because the permitting aspect of e-permitting has been so well received that they would hate to see acceptance of the program fall out of favor because of problems submitting the well records/decommissioning reports.

Well Searches/Online Reports – P. Bono discussed new online reports the Department is currently working on posting on the website. She indicated that users would soon be able to view the well record images, in PDF format, by accessing them via the internet rather than having to submit a well search through the Bureau. She stated that the permits and records submitted electronically would be available first since the software is already available online. Security concerns regarding accessing the Bureau's historic well permits and paper records are still being worked out.

12. **Adjournment** - A motion to adjourn the meeting was made by G. Poppe, seconded by A. Becker and unanimously approved at 2:55 PM.



State of New Jersey

DEPARTMENT OF ENVIRONMENTAL PROTECTION

CHRIS CHRISTIE
Governor

KIM GUADAGNO
Lt. Governor

Mail Code 401-03

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STATE WELL DRILLERS AND PUMP INSTALLERS
EXAMINING AND ADVISORY BOARD

BOB MARTIN
Commissioner

State Well Drillers and Pump Installers Examining and Advisory Board Meeting Minutes for July 15, 2010

Board Members Present: Art Becker (Chairperson), Tony Tirro (Vice-Chairperson), Richard Dalton, Gary Poppe, Joe Yost, Karl Muessig, and Carol Graff. Fred Sickels attended the meeting until 2 PM.

Board Members Absent: Joe Pepe

NJDEP Staff Present: Pat Bono, Julia Altieri (AM only), Tracy Omrod, Steve Reya, Brian Buttari, Michael Schumacher (PM only), Rachel Horowitz (DAG, AM only), John Olko (Compliance & Enforcement- AM only)

Member(s) of the Public: none

- 1. Call to Order** - The meeting was called to order by A. Becker at 9:50 am with a quorum present.
- 2. Review of Minutes from May 20, 2010 Meeting** – A. Becker noted that the last sentence of the second paragraph within item #5, which mentions a National Ground Water Association (NGWA) grace period for certification renewal is incorrect. This sentence will be omitted. A motion to accept the minutes with this change was made by G. Poppe, seconded by T. Tirro and approved unanimously.
- 3. Review and Certification of the June 9, 2010 Master, Journeyman, Journeyman B, Monitoring, Soil Borer and Pump Installers Exam Scores** – The Journeyman applicant roster score listed two “no shows” because both applicants had already passed the exam on the April test cycle. They applied for the June test in the event that they did not pass but still had to pay the non-refundable application fee. S. Reya brought up the possibility of altering the exam schedule and/or Board meeting schedule for 2011 to ensure that the scores for the April exam are available to test candidates prior to the application deadline for June. He also noted that there is a second time in the yearly testing cycle when the same problem is encountered (October/December exam cycles). A. Becker discussed the possibility of certifying both test applicants and exam scores via email to eliminate the requirement to wait

for the next regularly scheduled meeting for their approval. Rachel Horowitz, DAG read through the statute and regulations and found that they state that certification must be done at regularly scheduled meetings so they could not be certified electronically without a statute change.

F. Sickels said that the Department is currently soliciting requests to change outdated laws that slow approvals and processes so an issue such as this may receive consideration. A. Becker requested that Bureau staff email a link to the statute and regulation for review by Board members. He noted that this issue is also significant as the Board continues to pursue utilizing a third party to administer to testing and licensing program for well drillers and pump installers.

Exam Certification:

Journeyman – A motion to approve the scores as presented was made by G. Poppe, seconded by K. Muessig and approved unanimously.

Journeyman B – A motion to approve the scores as presented was made by F. Sickels, seconded by C. Graff and approved unanimously.

Monitoring – A motion to approve the scores as presented was made by T. Tirro, seconded by A. Becker and approved unanimously

Soil Borer – A motion to approve the scores as presented was made by C. Graff, seconded by J. Yost and approved unanimously

Pump Installer - A motion to approve the scores as presented was made by G. Poppe, seconded by K. Muessig and approved unanimously

4. **Licensing Topics – Driller/Plumber jurisdiction for installing water treatment equipment** A. Becker proposed sending a letter to the Department of Community Affairs (DCA) to work to resolve the conflicting differences between the DCA and DEP regulations regarding the installation of water treatment systems. Specifically, he intends to reference the word “appurtenances” as stated in N.J.A.C. 7:9D, which he believes apply to water treatment equipment. He also said that he had recently spoken with Tom Pitcherello from DCA, who had previously attended a Board meeting regarding this issue, about working out this issue through a meeting of the stakeholders. A meeting between DCA, DEP, the NJ Board of Master Plumbers and the NJ State Well Driller and Pump Installer Advisory Board was suggested in lieu of pursuing legal action to interpret the apparent conflicting regulations. A. Becker proposes to resolve the matter such that both license types (Well Driller/Pump Installer and Master Plumber) would be permitted to install water treatment in buildings where the water supply is a well. He added that this might result in local health departments issuing permits to licensed plumbers, well drillers and pump installers for the installation of water treatment systems, but would prohibit unlicensed individuals from performing the work.

J. Yost discussed the authority of a Master Well Driller, as specified on page 8 of the regulations (N.J.A.C. 7:9D-1.7(a)1.ii), which states that they are able to “install or replace well pumping equipment and appurtenances, storage tanks and appurtenances and connecting lines between a well and storage tank.” Therefore, he felt that if the treatment were to be installed “after” a well pressure tank, drillers/pump installers would not be able to perform the work under their license. A. Becker believed that the regulation referred to connecting lines between the well and the tank and that they could still work on water treatment equipment, as they would be appurtenances installed directly after the tank. He also brought

up the issue of providing "potable water" to the plumbing supply, which he believed began at the main shutoff supply valve. He again referred to the July 1988 DCA bulletin, number 88-10, in which the judge ruling specified that plumbing begins at the main shutoff supply valve after the tank and that the water is to be potable at this point. A. Becker said that water might require treatment prior to the valve in order to meet potable water standards.

G. Poppe made a motion to move forward with scheduling an informal meeting between all four stakeholders to attempt to resolve the issue. The purpose would be to find an amenable solution that could then be adopted by revising the appropriate regulations (DCA and DEP). The motion was seconded by J. Yost and approved unanimously. C. Graff suggested that A. Becker distribute copies of the Plumbing Code to Board members and any others who would be attending the meeting so it could be reviewed in advance.

5. **Licensing Topics - DEP Correspondence Update** – A. Becker mentioned that he had recently contacted DAG, Jill Denyes, for further information on procedures to which the Board must adhere when conducting administrative hearings. Ms. Denyes sent some info but there is more needed to understand how to proceed properly. He also sent a letter to DEP Commissioner, Bob Martin, in which he discussed the need to revise the current well drilling regulations. A. Becker received one response from Assistant Commissioner Scott Brubaker, but had not received any additional follow up or update within the past few months. He sent a second letter regarding the lack of DEP follow-up for existing violations and failure to adequately address frequent, repeat violators of the regulations. This prompted the Board to discuss the fact that license holders have always been allowed to renew driller and pump installer licenses even with outstanding violations. The current regulations do not allow the Bureau to restrict renewal based upon this, but they do prohibit those with outstanding violations from being approved to sit for a license exam. The Board members discussed how this should be revised when the regulations are updated.

6. **Licensing Topics - Enforcement Procedures Administrative Hearing Process and**
A. Becker asked DAG, Rachel Horowitz, whether individual Board members would have their legal fees and any associated liability covered by the state if any Board members become involved in a lawsuit as the Board becomes more active in enforcement activities, which may mean suspending or revoking licenses. R. Horowitz stated that the state would defend the Board member(s) if the action were directly a result of their official capacity on the Board and that the State Office of Legal Affairs would assist the Board member(s).

DAG Horowitz explained that the formal enforcement procedures would start with the NJDEP staff sending a complaint to the Board with the appropriate documentation. The Board would send the list of charges to the driller/pump installer/person by certified mail. She recommended that DAG Denyes help the DEP develop a charges list format that would be based on the facts and any investigative work that had been done. The Board would set a hearing date and advise the person that they could bring an attorney for legal representation. A transcript must be kept and an independent hearing officer is needed. This process is an alternative to the administrative hearing process when conducted by the NJDEP. The Board members may choose to deliberate the decision in a closed session. As part of the process, the Board needs to lay out the range of recommendations that can be made in this situation to the person beforehand so they know the consequences.

A. Becker requested the Bureau staff work with the DAG to develop a form that is essentially a swearing in of charges. He questioned whether DEP inspectors could sign such a form and submit it to the Board for enforcement recommendation. R. Horowitz said that

those conducting the hearing (the Board) must be entirely separate from those who investigated the case or were involved in the investigation in any way (DEP staff). The Board also discussed how the law states that after a hearing, the Board refers their position to the DEP commissioner who has the power to suspend or revoke licenses.

John Olko, from the Department's Compliance and Enforcement element, explained that the process used by his program involve Bureau staff signing a charges form and sending it to the Board, whose members would set up the administrative hearing and contact the alleged violator. He also said that typically if a recipient fails to pick up or sign for their notification, which would be sent via certified mail, a DEP Enforcement Officer would hand deliver the form. J. Olko believes that the Board has authority regarding suspending or revoking a license, but only the DEP can assess a fine. If existing fines have not been paid by the violator, however, the Board can insist that the fine must be paid in conjunction with other enforcement action that is to be taken against the person.

7. **Enforcement Update-** J. Altieri has compiled a list of the top twelve frequent violators of the regulations. She stated that the criteria for identifying the twelve were based on the criteria the Board identified at the last meeting. As requested by Board members at the May meeting, the list did not contain the individual or company names of the frequent violators, it used a numbering system to list the individuals.

J. Olko He noted that he recently discovered that the fine amounts that the Bureau of Water Systems and Well Permitting has been referring to Compliance and Enforcement have often been Settlement Offer Letters (SOLs) in which the penalty assessments have been based on fine amounts consistent with first-time offenders. He stated that the two programs would now be working closely to ensure that frequent violators and those who commit egregious violations are issued fines that are commensurate with their behavior. This would ensure that those who willfully violate the Department's regulations are not given a chance to resolve their violations at a reduced rate. His office is working to increase compliance with enforcement of the well regulations by sending out penalty assessments to these violators in the form of an Administrative Order and Notice of Civil Administrative Penalty Assessment (AONOCAPA). He stated that if the person does not respond to the document or request a hearing, it becomes a final enforcement document and is enforceable in a court of law. Listing the names of frequent violators in a Department press release was another option he brought up, which he believed may deter some from willfully ignoring the Department's laws and regulations. Finally, J. Olko mentioned that the Department is now utilizing the services of outside collection agencies to pursue individuals who have outstanding fines.

Board members discussed the fact that the Bureau should refer a complaint for which they have documentation of obvious violations. A. Becker requested that the Bureau identify the top two of these cases and draft a Board referral document for review at the next meeting.

8. **NGWA Certification Program** – F. Sickels provided an update of the NGWA testing, licensing and continuing education program that the Department could potentially use. He felt that with current staff resources, a program such as NGWA would enable the Bureau to better use available resources. He said that he would prefer to outsource as much of the licensing, testing, tracking/administrative tasks and continuing education as possible. He believed this would better both the industry (increased frequency of testing, better study guide materials and additional training opportunities) and the well permitting program (realign priorities to

increase field services and technical reviews/support). He also discussed a June 30, 2010 letter from Kevin McCray, NGWA Executive Director, which was sent to the Department following his meeting with multiple Department and Board representatives (A. Tirro, C. Graff, A. Becker). In his letter, Mr. McCray provided a list of thirty questions that the Bureau must answer so NGWA can begin to develop a proposal and cost estimate for the services that will be provided. P. Bono mentioned that the Bureau must determine whether or not NGWA can be considered a "sole source vendor" as the potential provider of all of these services. If the association were not considered one, the program would have to go out to bid. The Bureau will work on obtaining the answers to the questions posed in Mr. McCray's letter and respond accordingly.

8. **Technical Topics** – S. Reya discussed a meeting that he, P. Bono, B. Buttari and A. Tirro had with Halliburton/Baroid Industrial Products Technical Director, Dr. Charles Landis and their regional Account Representative, Dennis Duty, on May 27, 2010. He said that Dr. Landis presented permeability information (Fugro Consultants, Inc. report dated May 19, 2010 (revised June 22, 2010)) regarding BAROTHERM GOLD. The six mixes up to and including the 350-lb sand mix all met the Department requirement of having a permeability value that does not exceed 1×10^{-7} cm/sec. The 400-lb sand sample, however, exhibited a value of 1.8×10^{-7} cm/sec, which is slightly higher than the allowable limit. S. Reya added that in the letter he sent Dr. Landis, he only requested testing on the 0 to 350-lb sand mixtures as the Board had requested. This was because the initial permeability testing provided for the 400-lb mix proved acceptable, but no data was provided for the six other mixes. R. Dalton discussed how a different permeant (San Francisco Bay Water) had been used in the initial, lower permeability test than the second, higher permeability test, in which tap water was used. He also discussed speaking with the Fugro Consultants Assistant Manager of the Geotechnical Laboratory, Maurice Morvant. R. Dalton felt that the permeability was extremely close to the required value and that some variability among samples would occur. It was also possible that given a longer testing period, the value may have proved acceptable. For these reasons, he sent a memo to the Bureau recommending that Baroid proceed with setting up the on-site pumpability test. The permeabilities at the mixer and at borehole return would then be submitted for lab permeability testing. R. Dalton recommended that if the permeability on the return sample proves acceptable, the Department should then approve the mix. All Board members agreed. S. Reya mentioned that the BARAD 381 cement additive had not yet been tested for permeability and he would be hearing back from Dr. Landis upon completion. The Board hopes to accomplish onsite testing of both products on the same day for scheduling purposes. S. Reya will send a letter to Dr. Landis requesting an update on the BARAD 381 testing and will work with him to schedule a demo with Board members.
9. **NGWA Geothermal Town Hall Meeting July 7, 2010** – A. Becker discussed this online meeting in which he was a presenter. He said that NGWA is currently publishing new guidelines for the installation of geothermal wells, which will be sent to regulatory government agencies. NGWA has just begun a new geothermal well driller license certification entitled the Certified Vertical Closed Loop Driller (CVCLD). The Geothermal Certification previously offered by NGWA will now be replaced by the new CVCLD certification.
10. **DEP Program Updates** –
E permitting – P. Bono noted that one positive update to the ePermitting program has been the fact that users are now able to print a PDF of their well record submittal. This copy of the well record is the same as the final/DEP-approved well record except that it states that it is a draft and contains a disclaimer stating that the information is what was submitted to the

Department but may not have been reviewed or approved. This has helped some drilling contractors by allowing them to provide clients, health departments and other DEP programs like Site Remediation with a draft copy containing the submitted information. P. Bono also discussed some technical problems with the processing of payments for ePermit submittals. The Bureau is looking into resolving these software glitches.

Well Searches- P Bono stated that the individual well searches are primarily caught up. There has been a surge in well search requests, but changes to the Bureau's processing of the searches has resulted in increased efficiency. She also added that the Bureau is working on software upgrades that will enable well drillers and the public to view well records on line. There are security issues with releasing this information, which must be resolved before the program could be used by those outside the Department.

- 11. Lowering of Water Levels in Wells in Monmouth County-** G. Poppe mentioned observing a significant drop in the water level for domestic wells in Colts Neck. He expressed concern with the effects that the recent heat wave has had on the aquifers within this area based on his experience with lowering pump settings in a number of wells in Colts Neck Twp. Most of these wells were screened in the Englishtown Formation, which is a confined aquifer in that area. F. Sickels noted that this formation is designated as a Critical Area 1, and is strictly regulated by the Bureau of Water Allocation. Therefore, no new withdrawals (for wells equipped to pump 70 gallons per minute (GPM) or more) would have been granted anytime recently. DEP reports have not indicated a significant water level lowering in this aquifer. G. Poppe noted that many of the homes in this area have large lawns and often have 5 horsepower, 50 GPM well pumps and that some homes have multiple wells so there may be a number of single family homes with a combined pump capacity of greater than 70 GPM. This capacity would require a Water Use Registrations with the Bureau of Water Allocation. Freehold and Marlboro Townships were other areas where G. Poppe noted similar situations..

- 12. Adjournment -** A motion to adjourn the meeting was made by G. Poppe, seconded by R. Dalton and unanimously approved at 2:55 PM.



State of New Jersey

DEPARTMENT OF ENVIRONMENTAL PROTECTION

CHRIS CHRISTIE
Governor

KIM GUADAGNO
Lt. Governor

Mail Code 401-03

Division of Water Supply - Water Supply Permitting Element
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STATE WELL DRILLERS AND PUMP INSTALLERS
EXAMINING AND ADVISORY BOARD

BOB MARTIN
Commissioner

State Well Drillers and Pump Installers Examining and Advisory Board Meeting Minutes for September 16, 2010

Board Members Present: Tony Tirro (Vice-Chairperson), Richard Dalton, Gary Poppe, Joe Yost, Joe Pepe, Karl Muessig (am only), Fred Sickels (late part of am session and partial pm only) and Carol Graff.

Board Members Absent: Art Becker (Chairperson)

NJDEP Staff Present: Pat Bono, Julia Altieri (am only), Tracy Omrod, Steve Reya, Brian Buttari (pm only), John Olko (Compliance & Enforcement- am only), John Fields (pm only), David Pasicznyk, New Jersey Geologic Survey (NJGS), (pm only)

Others Present: Jill Denyes, DAG

Member(s) of the Public: Robert Jensen of Agreenability LLC and Hugh Streep of Next Gen Technologies

1. **Call to Order** - The meeting was called to order by A. Tirro at 9:50 am with a quorum present.
2. **Review of Minutes from July 15, 2010 Meeting** – R. Dalton noticed that the numbering of the listed topics is erroneous because the minutes list two items as number eight. “Technical topics” will now be correctly listed as number 9 and the subsequent items will be re-numbered accordingly. A motion to accept the minutes with these changes was made by C. Graff, seconded by G. Poppe and approved unanimously.
3. **Certification of Applicants for October 7, 2010 Master, Journeyman, Journeyman B, Monitoring, Soil Borer and Pump Installers Exams–**
Applicant Certification:

Master – A motion to approve the list of applicants without changes as presented was made by J. Yost, seconded by C. Graff and approved unanimously.

Journeyman – A motion to approve the list of applicants without changes as presented was made by G. Poppe, seconded by C. Graff and approved unanimously.

Journeyman B – S. Reya noted that two applicants, Joseph Fichner, Jr. and Shawn Ricigliano, were listed as “pending” as these applicants required Board review. Mr. Fichner listed Benjamin Primost, Master Well Driller from Pickwick Well Drilling, as verification of his drilling experience. S. Reya stated that Mr. Fichner’s application specifies that he works for his father’s pump service company, A-1 well Drilling and Pump Service Company. Mr. Primost did verify via phone that the applicant had assisted on approximately 20-30 well installations over the time the two companies had worked together (August 2002 to August 2010). Mr. Fichner did not work for Mr. Primost directly as a full time employee but rather for his father, who is a licensed Pump Installer. Since the regulations do not specify that the applicant must be employed by the same company as the individual certifying the experience. Additionally, there is no exact requirement of hours required as experience to constitute the three full years, other than proof of assisting with the drilling of five wells over a three-year span, which the applicant satisfied. The Board members unanimously approved Mr. Fichner to sit for the exam.

Shawn Ricigliano’s application was listed as “pending” because his application only contained one reference; two are required. Upon notification of this deficiency, Mr. Ricigliano submitted a letter that stated that he has “only been employed by The Well Doctor/ John Ricigliano. The Well Doctor is a family owned business with only one licensed driller and that there is no ability to have a second driller certify to his experience. Mr. Ricigliano had previously applied to sit for an exam but was rejected as his experience would have been while he was under the age of 18. Minors are not allowed by law to engage in hazardous occupations. J. Yost noted that the wording is vague on the application/reference questionnaire because it asks “how many years/months have you supervised the applicant in well drilling activities?” This wording implies that the reference must supervise the applicant, while the purpose is merely to attest that the listed experience is accurate. It was suggested that the Bureau revise this wording to make it more consistent with the actual purpose of the questionnaire. G. Poppe made a motion to deny the application. This motion was not seconded. C. Graff made a motion to approve application, which was seconded by R. Dalton. All members who were present were in favor of the motion, with the exception of G. Poppe who opposed the motion. The motion carried so the status of both applicants will be noted as approved for the upcoming exam. J. Yost motioned to accept list with this change. J. Pepe seconded and all were in favor.

Monitoring – A motion to approve the list as presented was made by C. Graff, seconded by K. Muessig and approved unanimously

Soil Borer – A motion to approve the list as presented was made by G. Poppe, seconded by J. Yost and approved unanimously

Pump Installer - A motion to approve the list as presented was made by G. Poppe, seconded by J. Pepe and approved unanimously

4. **Licensing Topics** – The Journeyman applicant roster score listed two “no shows” because both applicants had already passed the exam on the April test cycle. They applied for the June test in the event that they did not pass but still had to pay the non-refundable application fee. S. Reya brought up the possibility of altering the exam schedule and/or Board meeting schedule for 2011 to ensure that the scores for the April exam are available to test candidates prior to the application deadline for June. He also noted that there is a second time in the yearly testing cycle when the same problem is encountered (October/December exam cycles). At the July Board meeting, Chairman Becker discussed the possibility of certifying both test applicants and exam scores via email to eliminate the requirement to wait for the next regularly scheduled meeting for their approval. At that meeting, however, DAG Rachel Horowitz read through the statute and regulations and found that they state that certification must be done at regularly scheduled meetings so the scores could not be certified electronically without a statute change.

One possible solution that was previously discussed would be to have conference calls for approval of applicants and scores. Public notice of these additional conference calls would have to be made since a Board quorum would be necessary, but the postings would note that the meeting would only be held as a conference call and that the only Board business. The Board members agreed to have two additional dates annually to solve this problem. The only Board business to be conducted through these two conference calls will be the review and certification of applicants or exam scores.

5. **Driller, Pump Installer/Plumber Jurisdiction** – P. Bono noted that she had recently spoken with A. Becker, who had been in contact with Tom Pitcherello from the Department of Community Affairs (DCA) about setting up a meeting between the four stakeholders - the Plumbers Board, the Well driller Board, NJ DCA and NJDEP. A. Becker requested that a couple of Board members volunteer to participate in this meeting, if it can be arranged. G. Poppe, J. Pepe volunteered to attend (A. Tirro will be available to fill in for J. Pepe if necessary). A. Becker will be trying to set up the meeting within the next few weeks.

6. **Enforcement Update-
Administrative Hearing Process-**

D.A.G. J. Denyes stated that before the Department can suspend or revoke a well driller or pump installer license a full trial must be held and any appeals, if made, must be complete. She also noted that she researched the Uniform Enforcement Act which gives many boards the authority to hold hearings and enforce violations of licensees. However, the Act lists the Boards by name and the New Jersey Well Drillers and Pump Installers Examining and Advisory Board is not identified in that list. This Act sets forth procedures for conducting hearings to consider suspension of licenses. The well regulations, which are codified in NJAC 7:9D, do not specifically include procedures for license suspension. She believed that the lack of a mechanism to conduct hearings is problematic because the Board has the authority to revoke licenses but there is no administrative mechanism ~~to~~ established mechanism to do so. In addition, she noted that the Board does not have the authority to issue fines to drillers or drilling companies. Those actions are in the domain of the Department. In order to revoke the license a Board hearing would have to be conducted, which could take place at regularly scheduled meetings or a part of a special meeting that is properly noticed. She also stressed that all DEP investigations would have to be concluded prior to the Board's initiation of hearings. Board hearings would be entirely separate from DEP administrative hearings. They could be of a formal or informal nature. An informal process, which could yield a more timely resolution to licensee violations vs the Department's procedures for conducting administrative hearings, which often takes a couple of years to complete.

There was no final decision on the part of the Board members as to what direction to take this issue. Fred offered to look into how to acquire the services of a court stenographer and DAG Denyes offered to write up a charges form.

Recent Enforcement Activity-

J. Olko, from the Department's Compliance and Enforcement Division provided an enforcement activity update, stating that additional Settlement Offer Letters (SOLs) had recently been issued to repeat offenders. He also discussed a new policy and process that Water Enforcement Division, along with the Bureau of Water Systems and Well Permitting, will be jointly instituting. This will include the issuance of formal Administrative Orders (AO) and penalties for frequent, repeat violators. He has been working on a document that will allow J. Altieri to use the AO format when appropriate. J. Olko explained that in his experience, once a number of the AOs are issued and eventually resolved, the drilling community at large will begin to understand the significance of these actions. He felt that all of these actions should be posted on the DEP website in a compliance advisory section. Adding

general language to the website indicating that enforcement against violators of well drilling and pump installation laws are being ramped up was another suggestion. J. Pepe questioned whether the AOs, which reportedly become a "final" document after twenty days, affect the status of an individual's license. J. Olko stated that the documents carry penalties but are independent of the license. P. Bono added that the Bureau does not have the authority to stop issuing permits no matter how many violations are outstanding with one individual. If a person still possesses a valid license the Bureau is unable to deny a drilling permit application for that reason. F. Sickels stressed the need to bring issues against licenses for frequent violators and involve the Board. J. Denyes noted that if a perceived violator fails to respond to the Department's enforcement letters, it demonstrates a lack of resolution of outstanding issues, which would be helpful as the Board attempts to prove patterns of behavior for frequent violators. She stated that a stenographer, hearing officer and attorney would all be required in order to conduct the hearing. All of these would be required, whether the Department chooses to bring someone in for an Administrative Hearing or if the Board conducts their own hearing after investigation and referral by the Department.

7. Technical Topics –

Agreenability Geothermal System- Robert Jensen,, President of Agreenability, addressed the Board regarding approval of a new geothermal well system that he is developing. Mr. Jensen also submitted a letter detailing the system installation, which consists of a bundle of four (4) ¾" polyethylene u-bend loops in one borehole, which is expected to be six (6) inches in diameter. His letter stated that "what differentiates this pipe from the norm, and thus requires me to respectfully seek the approval of the Board, is that it uses a "Bundle" of conforming pipes placed together in a specific geometric fashion that allows for very unique flow characteristics that will allow for enhanced performance." The four loops (8 pipes) are comprised of polyethylene pipe that meets the specifications required by N.J.A.C. 7:9D-2.5. Additionally, a 1 ¼" polyethylene pipe of the same material will be utilized as a centralizer pipe for arrangement of the other eight pipes in a circular pattern. This central pipe will be fusion welded on the top and bottom. The tremie pipe would be inserted along with the other nine (9) pipes and the grouts utilized would be those approved in N.J.A.C. 7:9D. His letter also states that the circulating fluid has not yet been specified but will be selected from the list of approved materials in N.J.A.C. 7:9D. He discussed a small model of the "bundle" that he said was not exactly to scale, but showed the orientation of the nine (9) pipes.

Several Board members raised concern with the ability to get grout in-between the pipes, since the eight (8) surrounding pipes spiral around the central one without any form of separator. Therefore, the spaces between all of the pipes are of concern because if the central pipe is not used as a tremie, installation of a grout seal in these small annular spaces is perceived to be problematic. Mr. Jensen noted that the current design will not allow him to pump thick geothermal grouts, but requested approval to install the system at his home in order to perform the thermal conductivity testing that would be required prior to the final design and development of the system. He stated that his system is theoretically up to 60% more efficient than geothermal systems that are currently in use. He added that by performing a test installation in Montvale, NJ (in a consolidated formation), he would be able to determine the actual efficiency, which is likely considerably less than the theoretical. As he is a small company, however, he added that he did not have the resources to redesign the system for Board approval prior to running any thermal tests, because depending on the results of the test, the system may ultimately require a redesign. D. Pasiczyk, from NJGS, noted that the rock formation near Mr. Jensen's residence is extremely impermeable and stated that NJGS staff would be interested in performing a geophysical logging of the borehole drilled for this installation. He indicated that there are minimal environmental risks to the groundwater, should 100% effective grouting not occur, due to the location of the site. The Board, therefore, allowed approval to proceed with one test installation at Mr. Jensen's home. Upon issuance, permits will be issued with conditions: one

regarding the fact that the permits are approved solely for test purposes for one installation and that further information/proof of adequate grouting will be required prior to approval for installation throughout the state, and a second condition that requires that NJGS is contacted prior to drilling.

Hardin Geothermal System- Hugh Streep, President of Next Gen Technologies, presented information on the newest pipe from Hardin Geotechnologies, Inc., which will be 4.5" in diameter. Mr. Streep stated that the pipe that he had previously submitted for Board review was 3.2" in diameter and was cast polyethylene. The new pipe, he stated, is extruded and exceeds the requirements specified in N.J.A.C. 7:9D. He also said that the engineers worked on enlarging the grout ports of this pipe, which was in response to the Board's comments in the past. The larger grout ports can now be machined out of the extruded pipe to be .5" x 6" slots, which he proposed spacing every foot. Also, the center hole in which the tremie is inserted, would now be able to accommodate a 1 1/4" tremie, which would facilitate the pumping of thick geothermal grouts, such as cementitious thermally enhanced grout (Mix 111). The pipe contains two different sized inlet/outlet tubes and the individual lengths would be heat fused in accordance with the International Ground Source Heat Pump Association (IGSHPA) standards. He felt that the Bureau and Board concerns raised in past meetings and correspondence had now been addressed; the extruded pipe exceeds those required and would be marked with the schedule and pressure ratings and the grout ports had now been enlarged to a size more than adequate to allow pumping all of New Jersey's approved geothermal grouts. Additionally, after Mr. Streep left the meeting, B. Bono questioned the Board members on the minimum requirements for grout port separation. She felt that the manufacturers should not have to re-submit documentation for Board and Bureau approval every time they wish to alter the length of the grout ports (which Mr. Streep indicated could easily be accomplished with the current manufacturing process.). The Board members recommended that the 1/2" x 6" slots be located a maximum of five (5) feet apart.

Post meeting Activity: Mr. Streep contacted the Bureau staff after he learned from the manufacturer that it would not be possible to create ports larger than 4/8 inch in size (round). The ports would still be spaced 12 inches apart on opposite sides of the pipe to act as a centralizer as well as to insure grouting on both sides of the pipe. He has requested Board member approval for this size port.

8. DEP Program Updates -

Licensing - S. Reya has been working on the response to the National Ground Water Association (NGWA) regarding administration of New Jersey testing, licensing and continuing education program. This response will allow NGWA to better develop a proposed program and cost estimate. S.Reya expects to have the response finalized soon and is also working with other programs within the Department to determine what steps must be taken to set up a contract with NGWA.

9. Adjournment - A motion to adjourn the meeting was made by G. Poppe, seconded by R. Dalton and unanimously approved at 2:55 PM.



State of New Jersey

DEPARTMENT OF ENVIRONMENTAL PROTECTION

CHRIS CHRISTIE
Governor

KIM GUADAGNO
Lt. Governor

Mail Code 401-03

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STATE WELL DRILLERS AND PUMP INSTALLERS
EXAMINING AND ADVISORY BOARD

BOB MARTIN
Commissioner

State Well Drillers and Pump Installers Examining and Advisory Board Meeting Minutes for November 18, 2010

Board Members Present: Art Becker (Chairperson), Anthony Tirro (Vice-Chairperson), Richard Dalton, Gary Poppe, Joe Yost, Joe Pepe, Karl Muessig, Fred Sickels and Carol Graff.

Board Members Absent: none

NJDEP Staff Present: Pat Bono, John Fields, Julia Altieri (am only), Tracy Omrod, Steve Reya, Brian Buttari (pm only), Michael Schumacher (pm only), John Olko (am only).

Member(s) of the Public: Raymond Smith, licensed well driller, Environmental Probing Investigations

1. **Call to Order** - The meeting was called to order by A. Becker at 9:42 am with a quorum present.
2. **Review of draft Minutes from September 16, 2010 Meeting** – A Becker noted that the fifth sentence of item 6, which begins with “She believed that” contained a “typo.” The portion of the sentence containing the phrase “but there is no administrative mechanism **to** established mechanism to do so.” should be corrected to read “but there is no administrative mechanism **or** established mechanism to do so.” A motion to approve the minutes upon correction of this sentence was made by A. Tirro, seconded by C. Graff and approved unanimously.
3. **Certification of Scores for October 7, 2010 Master, Journeyman, Journeyman B, Monitoring, Soil Borer and Pump Installers Exams–**

Master – A motion to approve the exam scores was made by J. Yost, seconded by R. Dalton and approved unanimously.

Journeyman – A motion to approve the exam scores was made by A. Tirro, seconded by A. Becker and approved unanimously.

Journeyman B – A motion to approve the exam scores was made by R. Dalton, seconded by A. Tirro and approved unanimously.

Monitoring – A motion to approve the exam scores was made by F. Sickels, seconded by A. Becker and approved unanimously.

Soil Borer – A motion to approve the exam scores was made by Karl Muessig, seconded by J. Yost and approved unanimously.

Pump Installer – The Board members discussed the amount of experience required of a Pump Installer applicant (one year) and how it may affect the pass rate of the exam. One idea of soliciting feedback was to send out a small survey to applicants that questions what the applicant is doing to study/prepare for the exam. The Board members felt that such a survey might allow them to compare the preparation work undertaken by both passing and failing applicants and see what could be done to assist applicants and potentially increase scores and the exam pass rate. J. Pepe, G. Poppe and A. Becker volunteered to form a task force and set up a conference call to discuss how their subcommittee could develop this survey, which could be sent out by the Bureau (potentially with scheduling or score letters). A motion to approve the exam scores was made by G. Poppe, seconded by C. Graff and approved unanimously.

4. Certification of Applicants for December 9, 2010 Master, Journeyman, Journeyman B, Monitoring, Soil Borer and Pump Installers Exams–

Master – A motion to approve the exam scores was made by G. Poppe, seconded by F. Sickels and approved unanimously.

Journeyman – There were no applicants for this category.

Journeyman B – A motion to approve the exam scores was made by G. Poppe, seconded by A. Becker and approved unanimously.

Monitoring – A motion to approve the exam scores was made by K. Muessig, seconded by J. Yost and approved unanimously.

Soil Borer – A motion to approve the exam scores was made by A. Tirro, seconded by Karl Muessig and approved unanimously.

Pump Installer – A motion to approve the exam scores was made by J. Pepe, seconded by A. Becker and approved unanimously.

- 5. Board Meeting Dates for 2011** – The Board set the following meeting dates: January 20, March 17, May 26, July 21, September 15 and November 29. Additionally, two conference calls will be held to review and certify exam scores. These calls will be held on May 3 and November 8. The Bureau will post public notice of these meetings.

Note: The 2011 meeting and conference call dates have been formally published as required on Dec 22nd in the following newspapers: *The Star Ledger*, *Press of Atlantic City* and *The Times*.

- 6. NJDEP Transformation Initiatives-** F. Sickels discussed some of the Department's recent transformation initiatives and how the Bureau will be affected by such changes. As part of the restructuring and personnel changes, Michele Putnam has been moved to another Division and F. Sickels is now Acting Director of the Division of Water Supply. His priorities are focused on devoting more staff resources to field work and utilizing local agencies to assist in monitoring well drilling activities. He feels that county and municipal inspectors could be better utilized to assist in being the Department's eyes and ears out in the field. He also mentioned meeting with J. Fields (Bureau Chief, Bureau of Water Systems & Well Permitting) and P. Bono (Section Chief, Well Permitting Section) to re-assign some of the Bureau's engineering staff to work on Well Permitting issues, such as management of backlogged well records. Data entry of historic well record data by staff from sections other than the well permitting section continues to be an ongoing high priority task. He stated that utilization of the National Ground Water Association (NGWA) for administration of the driller/pump installer testing, licensing and continuing education program has the Department's full support. Finally, Mr. Sickels asked the Board members for their support as the Well Permitting staff develop rule revisions and for assistance with involving stakeholders early in the rule writing.

schedule to keep the process more transparent and better resolve problems. One area of recent success mentioned by F. Sickels is the inclusion of a requirement to the Licensed Site Remediation Professionals (LSRPs) will verify that licensed well drillers are installing wells at these sites and that well permits are onsite when the wells are drilled.

7. **Update of Recent Meeting With Former Division of Water Resources Director Michele Putnam (Art Becker)**- A. Becker discussed meeting with Michele Putnam, who was then Director of the Department's Division of Water Resources. (Fred Sickels is now the Acting Director of this Division, as noted earlier). Several topics were covered at this meeting, which A. Becker summarized as follows:

Enforcement- Recent changes to enforcement procedures have begun working and must continue. Additional efforts must be taken to step up the program.

Rule and Regulation Revisions (March 2012)- M. Putnam confirmed her support in working to fully revise the regulations, rather than a simple fee/"patchwork" change. A. Becker also volunteered to assist the Department's stakeholder meetings by enlisting the help of the New Jersey Ground Water Association (NJGWA).

Licensing- A Becker felt that the idea of having third party oversight of the licensing program was well thought of within the Department. He added that the Bureau and Board would still have some control over the application aspect of the program to check and verify the qualifications of applicants before a test is administered and/or a license is issued.

Continuing Education- He stated that the Bureau needs to outsource an entire comprehensive continuing education program. He felt that the program needed to be both beneficial to the industry and manageable with current Department resources, which would be aided through the use of outsourcing this program to the same agency contracted to administer the exam and licensing components of the program.

F. Sickels noted that he expects to support these activities.

8. **Recent Enforcement Activity-**

J. Olko, from the Department's Water Compliance and Enforcement Division provided an enforcement activity update, stating that the Department's transformation initiative, as discussed previously in the meeting, has significantly changed the structure of the division in which he works. He discussed how he plans to work with the new director of his program and stated that well drilling violations will remain a priority. Additionally, he and J. Altieri discussed how they had recently worked on ten Administrative Orders (AOs) and penalties for frequent violators, which they hope will be reviewed and sent out shortly by the new administration that is in place. A Becker expressed satisfaction that due process is taking place and that enforcement actions are progressing.

F. Sickels brought up a component of the enforcement program that he believes needs to be rectified moving forward: the issue that New Jersey does not currently have a company registration for drilling/pump installation contractors. He thought that as the Department investigates the potential of contracting with NGWA for the licensing process, everyone should keep in mind whether that association could track a company registration or if the Department would have to track the company registration. Lack of company registration requirements has historically hampered the Department's enforcement activities.

8. **Well Driller/Pump Installer and Master Plumber Jurisdiction Update-** A. Becker stated that he hopes that all stakeholders can come to an agreement that will all both the drilling/pump installing community and the plumbing community to engage in installing and servicing water treatment equipment for facilities served by well water. Based on the current laws and regulations that are in

place, he feels that both parties are legally granted the right to perform the work. He feels, however, that the majority of the work currently being done is actually by individuals who do not possess either type of license. A Becker is still working to set up a meeting with all four stakeholders: the NJ Department of Consumer Affairs (DCA), the Board of Master Plumbers, NJ Department of Environmental Protection (NJDEP) and the State Well Driller and Pump Installer Board. J. Fields volunteered to attend this meeting as a representative of NJDEP. A. Becker will work with the three volunteers from the previous Board meeting (G. Poppe, J. Pepe and A. Tirro) to set up this meeting. Additionally, he indicated that he will reach out to Tom Pitcherello from DCA.

9. Response to NGWA (Testing, Licensing and Continuing Education Program Administration)-

S. Reya discussed a November 3, 2010 letter he sent to NGWA Executive Director, Kevin McCray, which was in response to a list of questions asked in a June 30, 2010 letter from Mr. McCray. Upon review of S. Reya's responses, NGWA staff will be able to develop a proposal and cost estimate for the proposed program that they would implement by contracting with the Department. S. Reya also noted that a request to proceed with a waiver of public advertising, for the purpose of contracting with a sole-source vendor, had also been submitted to the purchasing element of the Department. He hopes to further refine exactly how the proposed program will look once a response is received from NGWA. He did not specify an exact date for the proposed implementation of this program.

10. Hardin Geothermal Pipe- P. Bono recapped the Board's approval for the 4.5-inch Hardin geothermal well casing, which utilizes grout ports to grout the annular space around the casing. Since the last meeting, Hugh Streep, President of Next Gen Technologies, contacted the Bureau and indicated that manufacturing of the pipe had begun, and unfortunately the slots and port hole sizes that were originally designed could not actually be manufactured. He indicated that the thicker than required wall thickness and cooling issues have resulted in an area along the center that will not allow for the drilling of a grout port any larger than ½" in diameter. This revised proposal was ultimately approved by the Bureau after speaking with Board members. The pipe will contain one grout port on each side every foot. The proposed installation, which is a veterinary hospital in Robbinsville, calls for approximately twenty-seven wells to a depth of about 400 feet. Several Board members expressed concern with the grouting procedure due to the high sand content of the bentonite-based geothermal grouts proposed for use as well combined with the size of the smaller ½" grout ports. A. Becker requested that Bureau staff perform unannounced site inspections to verify that the port design allows for proper grouting of the annulus. He also noted that Bureau staff should verify that licensed individuals are onsite to supervise the drilling and grouting the wells. S. Reya offered to send out the permit to Board members so that several can visit the drilling site to observe the drilling and grouting operation.

11. CETCO High TC Geothermal Grout- S. Reya detailed a November 15, 2010 from Todd Tannehill, Regional manager of CETCO Drilling Products, in which Mr. Tannehill requested that CETCO High TC Geothermal Grout be approved for use in New Jersey without a field test (pumpability demo and "field mix" permeability test. He requested a waiver from the Bureau and Board from this field test process because he states that "CETCO High TC has a formulation much like CETCO Geothermal Grout, already approved by [the] state. The base sodium bentonite (that affects permeability) is the same as CETCO Geothermal Grout and only the proprietary additives (for thermal conductivity) have been altered." Additionally, he provided permeability data for four different mixes (samples containing 100-lbs, 200-lbs, 300-lbs and 400-lbs of silica sand). The lab permeability measurements, which were all conducted by an independent lab in accordance with ASTM D5084, were below the Department's maximum permeability value of 1×10^{-7} cm/sec (meaning these levels are acceptable). He also noted that the product is certified to NSF/ANSI Standard 60, Drinking Water treatment Chemicals-Health Effects and provided a Technical Data Sheet (TDS) and Material Safety Data Sheet (MSDS).

The Board members suggested that a separate MSDS sheet be obtained, which pertains only to the proprietary additives. They said that the names of the actual chemical makeup of the proprietary additives could be omitted from the form but information on the health effects of the additives should be provided, not simply the grout product itself. They also requested that CETCO provide documentation of the fact that their product is certified to NSF/ANSI Standard 60. If possible, the members noted that they would also like some further information on the standard itself and what exactly the certification verifies and to what extent the health effects have been studied. Finally, members suggested securing a copy of the standard to facilitate their review. S. Reya will follow up with Mr. Tannehill.

12. DEP Program Updates –

ePermitting- Over 90% of the Bureau's well permits are currently being submitted through the ePermitting system according to P. Bono.

Historic Well Records- P. Bono said that additional Bureau staff is now being utilized to enter historic well record information into the Department's database for better retrieval of this crucial information in the future. She stated that this work is currently being performed on overtime and, to a lesser extent on regular time.

Regulation revision- P. Bono indicated that she will be looking for assistance from the Board members as the Bureau begins to revise the well construction regulations. There are a number of broad categories that must be revised so she would like to set up sub-committees to tackle the following tasks: licensing/testing, technical issues and "hairy issues" such as jurisdictional issues that must be resolved with other Boards or state agencies. She also envisions a significant level of input from stakeholder meetings, which will begin early in the process. Additionally, P. Bono hopes that NJGWA may be another valuable source of input and assistance.

13. Adjournment - A motion to adjourn the meeting was made by G. Poppe, seconded by J. Pepe and unanimously approved at 2:28 pm.