



## State of New Jersey

DEPARTMENT OF ENVIRONMENTAL PROTECTION

CHRIS CHRISTIE  
*Governor*

BOB MARTIN  
*Commissioner*

KIN GUADAGNO  
*Lt. Governor*

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*NJ STATE WELL DRILLERS AND PUMP INSTALLERS  
EXAMINING AND ADVISORY BOARD*

### **New Jersey Department of Environmental Protection NJ State Well Drillers and Pump Installers Examining and Advisory Board Meeting Minutes for January 23, 2014**

*Approved by the Board on March 20, 2014*

**Board Members Present:** Art Becker (Chairman), Gary Poppe (Vice Chairman), Steve Doughty, Joe Pepe, Gordon Craig, Richard Dalton, Dr. Karl Muessig, and Carol Graff

**Board Members Absent:** Joe Yost

**Board Legal Advisor Present:** Jill Denyes, Deputy Attorney General (DAG), & Susan Savoca, DAG for DEP, DOL

**NJDEP Bureau of Water Allocation & Well Permitting Staff Present:** Terry Pilawski, Pat Bono, Steve Reya, Julia Altieri, Brian Buttari, Michael Schumacher and Melia Stoop.

**Other NJDEP Staff Present:** Jeffrey Hoffman, NJDEP Central Bureau of Water Compliance and Enforcement

**Others Present:** Sergeant Larry Moss #5082, NJSP

#### **1. Call to Order –**

The meeting was called to order by Chairman A. Becker at 10:06 am, with a quorum present.

#### **2. Review of the Drafted Minutes for the November 21, 2013 Meeting**

K. Muessig noted that item 11 mistakenly reports the collection of 33,000 cores whereas the actual number is 3,300 cores. A motion to approve the meeting minutes with this sole change was made by G. Craig, seconded by G. Poppe and approved unanimously.

#### **3. Review and Certification of Exam Results for the December 11, 2013 Master, Journeyman, Journeyman B, Monitoring, Soil Borer and Pump Installers Exams –**

**Master** – A motion to approve all listed exam scores was made by K. Muessig, seconded by C. Graff and approved unanimously.

**Journeyman** - A motion to approve all listed exam scores was made by G. Poppe seconded by G. Craig and approved unanimously.

**Journeyman B** – A motion to approve all listed exam scores was made by S. Doughty, seconded by G. Poppe and approved unanimously.

**Monitoring** – A motion to approve all listed exam scores was made by G. Poppe, seconded by G. Craig and approved unanimously.

**Soil Borer** – A motion to approve all listed exam applicants was made by G. Poppe, seconded by S. Doughty and approved unanimously.

**Pump Installer** – A motion to approve all listed exam applicants was made by G. Poppe, seconded by J. Pepe and approved unanimously.

#### **4. Board Meetings and Conference Calls Schedule for 2014 –**

The dates, times and locations have been published and are listed on the Board's webpage.

- a.) All regular meetings are scheduled to start at 9:30 AM and to take place at the NJ DEP headquarters at 401 E. State Street, Trenton, NJ. The room locations are tentative.

<b>January 23</b>	<b>5<sup>th</sup> Floor Large Conference Room</b>
<b>March 20</b>	<b>4<sup>th</sup> Floor Large Conference Room</b>
<b>May 15</b>	<b>4<sup>th</sup> Floor Large Conference Room</b>
<b>July 17</b>	<b>4<sup>th</sup> Floor Large Conference Room</b>
<b>September 11</b>	<b>4<sup>th</sup> Floor Large Conference Room</b>
<b>November 20</b>	<b>4<sup>th</sup> Floor Large Conference Room</b>

- b.) The conference calls to certify exam scores are also scheduled to take place at the NJ DEP headquarters at 401 E. State Street, Trenton, NJ as follows:

**May 1, 2014 at 10:30 am for certification of the April exam results**  
**October 30, 2014 at 10:30 am for certification of the October exam results**

- c.) Dates for the Well Driller and Pump Installer Exam Dates exams are listed below. All exams will be administered at the NJ Rutgers EcoComplex in Burlington, NJ.

<b>April 3</b>	<b>Application Deadline is March 1</b>
<b>June 11</b>	<b>Application Deadline is May 15</b>
<b>October 1</b>	<b>Application Deadline is September 1</b>
<b>December 10</b>	<b>Application Deadline is November 15</b>

#### **5. Continue Work on the Master Well Driller Exam Module for Administration by the National Ground Water Association (NGWA)-**

P. Bono reminded Board members that the new module for future administration by the NGWA for the NJ master driller exam is not completely developed. A. Becker, G. Poppe, R. Dalton and C. Graff all indicated that they would be available to work on the exam after the next meeting on March 20<sup>th</sup>. Additionally, it was mentioned that the Bureau should contact J. Yost to see if he is available at this time, as he is experienced in the drilling, maintenance and decommissioning of Public Community Supply wells which is the major focus within the scope of the Master License.

## **6. Correction to the Board Minutes for the May 23, 2013 Meeting-**

It appears that the version of the May 23<sup>rd</sup> minutes presented to and approved by the Board members at the July 18, 2013 meeting was revised in such a way as to confuse the order of events regarding the discussion of an important item under discussion. P. Bono presented three sets of minutes for the May meeting to illustrate the error and proposed correction. The first was the draft minutes sent to the Board members in advance of the meeting for their review. This account accurately portrayed the sequence of events for the discussion of potential license sanctions against Journeyman Driller Brian K. Funkhouser (Item 12, under "Enforcement Activities Update"). This item was initially discussed in the open meeting until the Board went into a closed session for deliberative discussion. After the closed session ended and the regular meeting was opened again, a motion was made and approved by members to pursue the issue further.

Unfortunately, the version presented to the Board members for approval at the July 18<sup>th</sup> meeting contained an unintended revision which is less clear in depicting the sequence of events. This version, which became the approved version, listed the time that the Board returned to open session after recording the motion and vote to proceed with honoring the Department's request for a hearing against Mr. Funkhouser. Although the discussion and activities of a closed session are never reported in the open meeting minutes, there is a concern that the currently approved minutes could imply such an action. To correct this misimpression along with some misspelling errors, P. Bono presented a corrected (third) version to the Board members for their review and comment. P. Bono mentioned that since the minutes are posted on the Board's website, it was important that the record be made clear. After some discussion and comparison of the various versions, Board members agreed it was necessary to correct the minutes.

**A motion to certify the corrected set of minutes for May 23, 2013 was made by G. Craig, seconded by G. Poppe and approved unanimously.**

## **7. License Sanction Hearing: Journeyman driller Brian Funkhouser (#JD1450)**

Note: In advance of the hearing, each Board member received a copy of the letter dated December 11, 2013 from Board Chairman Art Becker to journeyman driller Brian K. Funkhouser advising him of the hearing date, time and location as well as all the documentation presented to the Board by the department in support of said hearing request. Board members and relevant DEP staff had copies of all the supporting documentation and the December 11<sup>th</sup> letter presented to them for reference at the hearing.

Chairman A. Becker opened the hearing by reminding the members of the statutory authority granted to the Board in the Subsurface and Percolating Waters Act (N.J.S.A. 58:4A) and requested that DAG, J. Denyes explain the procedure to ensure that the Board would conduct the hearing in full compliance with the Act. It was mentioned that notice of the Board's intent to conduct a hearing for potential license sanctions against Mr. Funkhouser had been made to him via certified mail and hand delivery. A. Becker asked if anyone present at the meeting was representing Mr. Funkhouser at the hearing to which no one replied. He asked DEP staff if anyone had contacted them regarding Mr. Funkhouser's defense. Learning there had not been any reply, A. Becker called for the hearing to proceed. S. Doughty said that the letters to Mr. Funkhouser clearly provided the date of the hearing and stressed the importance of attending the hearing in person or through the representation of legal counsel. **Therefore, S. Doughty made a motion to proceed with the hearing and move forward to debate and consider the facts in the matter of license sanctions against Brian K. Funkhouser**

**notwithstanding the lack of representation. The motion was seconded by G. Craig and approved unanimously.**

DAG Jill Denyes read aloud provision NJSA 58:A-12 to the Board members so they would understand the range of options available to the Board regarding licensing sanctions. She confirmed that there is a wide range of actions which the Board could consider regarding potential sanctions, if they deemed such an action appropriate.

#### **Summary of NJDEP Enforcement Actions–**

A summary of the charges and background information were presented by two DEP staff members: J. Hoffman, Supervising Environmental Specialist from the NJDEP Central Bureau Water Compliance and Enforcement and Julia Altieri, Supervising Environmental Specialist from the NJDEP Bureau of Water Allocation and Well Permitting.

J. Hoffman provided a detailed description of how his program ensures regulatory compliance through enforcement and provided a history of enforcement actions conducted by his Bureau regarding this case. He reminded those present that he originally presented the charges against Mr. Funkhouser via a memorandum to the Board at the May 23, 2013 meeting. J. Hoffman summarized three separate Administrative Orders and Notices of Civil Administrative Penalty Assessment (“orders”) that his office sent to Mr. Funkhouser on January 25, 2011. Each order was sent in response to a referral from the Bureau of Water Allocation and Well Permitting (Bureau). The history of each order is summarized below:

- 1.) Pecoraro Property (Berkeley Twp., Ocean Co.)- initiated as a result of a consumer complaint about an irrigation well drilled by Mr. Funkhouser. A site inspection from the Bureau followed. Failure to submit a well record and improper well construction were cited. Penalty assessments and corrective actions ordered include: A fine of \$4,950.00; to submit a Well Record and to decommission the improperly constructed well in accordance with the well regulations (N.J.A.C. 7:9D).
- 2.) Cary Property (Little Silver Boro, Monmouth Co.)- also initiated by a consumer complaint about an irrigation well drilled by Mr. Funkhouser. No Bureau site inspection was performed because the drilled borehole had been covered over and a site inspection would not yield additional information without bringing excavation equipment to the residence and excavating the property. A Notice of Non-Compliance (NONC) was sent on October 10, 2009 via certified mail, which was signed for by Mr. Funkhouser. No response to this NONC was ever received. Improper well construction, failure to obtain a well permit and failure to decommission a drilled borehole were all cited in the Order. Penalty assessments and corrective actions ordered include: A fine of \$5,050.00; to decommission the borehole that was never properly decommissioned; to submit a well record and a well decommissioning report for the well for which a well permit was obtained.
- 3.) Hackos Property (Jackson Twp., Ocean Co.)- The order cited the failure to submit a Well Record for a domestic replacement well as a violation. Penalty assessments and corrective actions ordered include: A fine of \$450.00 and to submit a Well Record for the well that was installed.

In reference to all three (3) orders, multiple addresses in the Bureau’s files were utilized. All regular and certified mail was sent to all three addresses known to the Bureau. Delivery of the three orders was attempted via multiple methods. Certified mail was “unclaimed” and regular mail was returned. Hand delivery by NJDEP Central Water Compliance and Enforcement staff was signed for by Mr. Brian Funkhouser on March 14, 2011. All three orders noted that the recipient, Mr. Funkhouser, may request a hearing regarding the Department’s allegations. Additionally, each order contains a form for completion and submission should the recipient choose to request a hearing. A hearing request

was ever submitted. No phone calls or letter responses from Mr. Funkhouser were received, nor did he ever remit payment for any of the three outstanding fine assessments. As stated in the orders, “if no request for a hearing is received within twenty (20) calendar days from receipt of this Administrative Order and Notice of Civil Administrative Penalty Assessment by the Respondents, this document shall become a final order upon the twenty-first (21<sup>st</sup>) calendar day following its receipt by the Respondents and the penalty shall be due and payable.” Following this presentation on May 23, 2013, certified letters were sent to Mr. Funkhouser in October 2013 notifying him of the Board’s intention to proceed with license sanctions.

Finally, J. Hoffman noted that Mr. Funkhouser was located in a nursing home in Toms River. The board issued an updated letter of the Board hearing being held to discuss license sanctions (to rescheduling the hearing from the November Board meeting date to January 23, 2014). This notification was signed on by the receptionist at the nursing home facility on December 16, 2013.

Following J. Hoffman’s overview of his Bureau’s case, J. Altieri, Environmental Specialist 4, with the Bureau of Water Allocation and Well Permitting summarized and described the specific regulations of NJAC 7:9D-1 thru 4 that have been violated by Mr. Funkhouser and the seriousness of penalties assessed for them in the three orders referenced by J. Hoffman earlier.

The violations against Mr. Funkhouser concern the construction of both irrigation and domestic wells. The cases came to the Department’s attention directly from consumer complaints, referrals from the Ocean County Health Department, and the Ocean County Department of consumer Affairs. Three separate property owners were negatively affected by Mr. Funkhouser’s failure to properly construct their wells in accordance with the Regulations.

J. Altieri from the Bureau of Water Allocation and Well Permitting provided further background on the violations and described the environmental significance of these violations.

Brian Funkhouser has held his Journeyman well driller license from February 2, 1988 to present. Mr. Funkhouser was issued administrative penalties for the following:

1. Drilling without a valid permit to drill well – major seriousness - non-construction violation
  2. Failure to submit a well record within 90 days after the well is drilled – minor seriousness non construction violation.
  3. Failure to submit a well decommissioning report within 90 days after a well is decommissioned - minor seriousness non-construction violation.
  4. Failure to grout a the space between the casing and the oversized borehole in accordance with NJAC 7:9D-2.9 and 2.10 – major seriousness construction violation
  5. Failure to properly decommission a borehole – moderate seriousness construction violation
- The specific penalty amounts listed in the January 25, 2011 orders for these violations are calculated based on the penalty matrix located in N.J.A.C. 7:9D-4.4(d)1.

J. Altieri provided background information on the subject of each violation:

Failure to grout wells is a significant major construction violation in that a grout seal around well prevents surface contamination from migrating down side of well to pollute drinking water aquifers and other groundwater sources. Most wells are grouting by the pressure method where the grout is pumped through a tremie pipe inserted into the annular space of the well in one continuous operation, or in lifts, from the bottom to top.

Well Records are submitted by well drillers and they describe the wells as built final construction, geologic record and location for the well, submitted within 90 days of construction. These are important because once a well is drilled, the construction of it becomes inaccessible and cannot be

verified or their details of construction recreated by another driller in the future. Records are also needed for proper future decommissioning of the well.

Decommissioning reports are submitted by well drillers and they describe what material and method that was used to properly decommission a well, typically by filling the entire well from bottom to top with the cement or bentonite mix delivered under pressure by a tremie pipe, and submitted within 90 days. This is the final record of the well and once properly decommissioned is no longer a threat to the environment.

Proper well decommissioning is required when wells are abandoned or constructed improperly. Proper decommissioning is important because they are considered a potential conduit for groundwater contamination. Backfilling a well with soil is not usually considered proper or typical decommissioning of a well and only in certain limited instance is it approved.

Well Permits are required prior to drilling, installing or altering a well by the driller and property owner. Permits contain the proposed construction, type and location of a well and are issued by the DEP. Typically permits may not be used more than once or for multiple boreholes before the final well is completed. Well permits are absolutely necessary prior to drilling so in cases where distances to another properties septic system or salt water area may require additional casing or specialized grout depending on the circumstances.

J. Altieri reported that Mr. Funkhouser failed to submit any of the outstanding well records or the decommissioning reports mentioned earlier and he has not settled any of the penalties assessed or even contacted the Department to discuss these issues. He has even failed to collect his certified mail and regular mail is returned, not deliverable. In closing, she stressed the fact that the Bureau views Mr. Funkhouser's violations to be significant and serious enough that they should be considered by the Board in their decision in the suspension or revocation of Mr. Funkhouser's Journeyman License.

Board members questioned B. Buttari, S. Reya and J. Altieri on some case-specific questions relative to the three (3) orders. They answered questions on DEP procedures, documentation and site inspection details. T. Pilawski asked whether most drillers respond to official orders from the Bureau before license sanctions are considered. J. Altieri said that generally drillers respond, which helps both parties work quicker to settling outstanding issues. This is especially important when there are construction related violations that if left unresolved could lead to negative consequences to the state's groundwater resource.

**G. Poppe made a motion to enter closed session to deliberate the matter of whether to recommend any license sanctions against Brian K. Funkhouser to the DEP Commissioner. The motion was seconded by G. Craig and approved unanimously at 12:00 pm.**

**Board members returned to open session at 12:26 pm, at which time G. Craig made the following motion:**

I make a motion that the Board, in accordance with the Subsurface and Percolating Waters Act, N.J.S.A. 58:4A-1 et seq., recommend to NJDEP Commissioner Robert Martin the revocation of the journeyman well driller's license (#JD1450) issued to Brian K. Funkhouser. The recommendation to revoke the subject license is based on a determination, following an investigation and enforcement actions undertaken by the Department and a hearing conducted by the Board pursuant to N.J.S.A. 58:4A-12, that Mr. Funkhouser violated both the Act and Well Construction, Maintenance, and Sealing of Abandoned Wells Rules, N.J.A.C. 7:9D-1, as outlined below:

1. Mr. Funkhouser was cited by the Department in at least three separate incidents involving failure to obtain a well drilling permit, improperly constructing a well, failure to decommission an abandoned well, and failure to submit a well record.

2. Following its investigation of complaints by clients of Mr. Funkhouser, the Department documented numerous violations that resulted in the issuance of multiple Administrative Orders and Notices of Civil Administrative Penalty Assessments.
3. Repeated attempts by the Department over the past four-plus years to serve Mr. Funkhouser with the applicable enforcement instruments (e.g. via regular and certified mail), to collect assessed penalties, and to provide due process and means of appeal provided by law all have been ignored. Despite the instruments ultimately having been hand-delivered to Mr. Funkhouser, he has not once responded to nor contacted the Department regarding this matter.
4. Because Mr. Funkhouser's actions represent gross misconduct and significant and serious violations of the laws and regulations governing the practice of well drilling in New Jersey, which potentially jeopardize the health, safety and welfare of State residents, the Board scheduled and invited Mr. Funkhouser and/or his attorney/representative to attend a hearing on this matter at its most recent meeting. The purpose of the hearing was to allow the licensee to hear charges brought against him, provide an opportunity to respond to said charges, cross-examine witnesses, and produce evidence in his defense.
5. Although the hearing notice clearly advised Mr. Funkhouser of the possibility that the Board may impose licensing sanctions afforded by the law against him upon consideration of the facts in the case, he neither responded to the invitation, personally attended the hearing, nor sent an attorney or representative to appear on his behalf.

Mr. Funkhouser's blatant disregard for the statute and rules governing his profession and well drilling practices in State of New Jersey, his failure to respond to the ensuing compliance/ enforcement actions administered by the Department, and finally his failure to attend the hearing and respond to the charges brought against him, are deserving of the serious licensing sanctions provided under N.J.A.C. 7:9D-4.6, and I resolve that the Board should act to recommend the revocation of Mr. Funkhouser's Journeyman well drilling license.

**Gary Poppe seconded the motion, and all members voted in favor of the motion.**

A. Becker said he believes that both the Department staff and Board members gave Mr. Funkhouser the utmost consideration to respond to the allegations made against him. While recognizing the severity of how a license suspension may affect this man's livelihood, he believes the Board's recommendation was warranted when considering the severity of the violations and the licensee's complete negligence in responding to such over a period of multiple years. S. Doughty expressed that revocation does not constitute a final action and that Mr. Funkhouser can return as an active member of the industry by serving his suspension, resolving all outstanding issues and coming before the Board to reapply for licensure and passing the journeyman test.

At this time C. Graff and Sergeant Larry Moss, New Jersey State Police, left the meeting.

## **8. Enforcement Topics -**

1. J. Altieri provided an update on the status of the case heard by an Office of Administrative Law judge last February against driller M. Kavlunas. The DAG representing the Department reports that he is awaiting notice of the filing of an appeal by Mr. Kavlunas' attorney to the appellate division regarding the findings made by the Administrative Law Judge at the original hearing.
2. In a separate case, J. Altieri reported that a well driller has mentioned he has been constructing non-conforming rock wells and alleging that he is using PVC well casing instead of the

regulatory required black steel when installing a rock well. The driller maintains the use of steel promotes bacterial growth. Staff has repeatedly requested evidence for such but he has never provided any. This individual brought up the issue again when sent a Department order (AONOCAPA) to address two violations completely unrelated to his contention about the use of black steel. In response to the AONOCAPA, the driller filed a request for a hearing, which is scheduled for June 23<sup>rd</sup> in Newark.

T. Pilawski requested volunteers to form a small group of Board members to meet with the well driller, as he often discredits the comments by Bureau staff because none are licensed well drillers. P. Bono says this well driller openly talks about not adhering to the regulations so the Department must be assertive in notifying him that these actions must cease. T. Pilawski will contact the DAG assigned to the case and see if a meeting between a Board subcommittee and the driller might help resolve this matter in a timely fashion.

## **9. DEP Program Updates –**

Readoption of the Well Rules (N.J.A.C. 7:9D): A. Becker asked Terry Pilawski for a status report regarding the long awaited Well Regulation revisions. She stated that the current regulations were recently readopted without change in order to avoid having the rules sunset. She stressed, however, that this was because the expiration date was coming due and asserted that the draft revisions continue to be a priority within the Department. She added that the Office of Legal Affairs provided technical comments to the Division of Water Supply and Geoscience (Division) following their review of the document. Division staff will address these comments by the end of January and make any changes necessitated by legal review.

Historic Well Records Project: P. Bono and T. Pilawski talked about the Bureau's progress in correcting well locations and data entering information into the Department's database for decades of "historic" well permits and well records. Under direction from Director Fred Sickels, this has become a major effort within the Bureau and T. Pilawski has enlisted staff from the Water Allocation Section of the Bureau to complete this important task. Once completed, approximately 65 years of well permitting information will be contained within the Department's database, consisting of information that is as accurate as can be obtained from information depicted on the original permit applications.

A new employee to the Bureau of Water Allocation and Well Permitting, Imani McGowan, was introduced to the Board members. Previously, she assisted in well permit application review as an hourly employee. The Bureau is extremely pleased to have the opportunity to bring her on board as a full time permanent employee.

## **10. Developing Water System Resiliency -**

S. Doughty spoke about guidance documents he has been asked to coordinate on behalf of the Water Supply Programs. Resiliency of both water and wastewater systems has received increased attention in the wake of Hurricane Sandy. S. Doughty noted that as far as water systems served by wells are concerned, the guidance documents stress the elevating of wellheads, well vents and electrical components to better ensure resiliency to flooding and impacts from debris. He anticipates that the documents he has been spearheading will be released within a matter of weeks. Finally, he noted that while the information will be contained in guidance documents, many of the recommendations therein will be incorporated in regulation as updates are adopted.

**11. Adjournment -1:05 PM**

A motion to adjourn was made by G. Poppe, seconded by G. Craig and approved unanimously.



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EXAMINING AND ADVISORY BOARD*

### **New Jersey Department of Environmental Protection NJ State Well Drillers and Pump Installers Examining and Advisory Board Meeting Minutes for March 20, 2014**

*Final minutes as approved by Board on May 15, 2014*

**Board Members Present:** Art Becker (Chairman), Gary Poppe (Vice Chairman), Steve Doughty, Joe Pepe, Joe Yost, Richard Dalton and Dr. Karl Muessig.

**Board Members Absent:** Gordon Craig and Carol Graff

**Board Legal Advisor Present:** Jill Denyes, Deputy Attorney General (DAG)

**NJDEP Bureau of Water Allocation & Well Permitting Staff Present:** Terry Pilawski, Pat Bono, Steve Reya, Michael Schumacher, Robert Hawke, Letitia Jones and Melia Stoop, Julia Altieri (not present from 11:00 am to 12:15 pm), Brian Buttari (not present from 11:00 am to 12:15 pm).

**NJDEP/Division of Water Quality-Bureau of Non-Point Pollution Control:** Jim Murphy, Ron Bannister, Mark Miller, Eleanor Krukowski (all four present until 10:55 am).

**Other NJDEP Staff Present:** Jeffrey Hoffman, NJDEP Central Bureau of Water Compliance and Enforcement.

**Visitors Present:** Mr. Glenn Slater and Ms. Catherine Meyer, Slater Well Drilling Co. (both present from 10:55 am to 12:15 pm).

#### **1. Call to Order –**

The meeting was called to order by Chairman A. Becker at 9:51 am, with a quorum present.

## **2. Review of Minutes for the January 23, 2014 Meeting-**

A motion to approve the meeting minutes without change was made by J. Yost, seconded by K. Muessig and approved unanimously.

## **3. Review of Closed Session Minutes for the January 23, 2014 Meeting-**

A motion to approve the Closed Session Minutes was made by K. Muessig, seconded by G. Poppe and approved unanimously.

## **4. Review and Certification of Applicants for the April 3, 2014 Pump Installer and Master, Journeyman, Journeyman B, Monitoring, Soil Borer and Dewatering Well Driller Exams –**

**Master** – A motion to approve all listed exam applicants was made by G. Poppe, seconded by K. Muessig and approved unanimously.

**Journeyman** - A motion to approve all listed exam applicants was made by S. Doughty seconded by G. Poppe and approved unanimously.

**Journeyman B** – A motion to approve all listed exam applicants was made by R. Dalton, seconded by J. Yost and approved unanimously.

**Monitoring** – A motion to approve all listed exam applicants was made by G. Poppe, seconded by K. Muessig and approved unanimously.

**Soil Borer** – A motion to approve all listed exam applicants was made by G. Poppe, seconded by K. Muessig and approved unanimously.

**Pump Installer** – A motion to approve all listed exam applicants was made by J. Pepe, seconded by S. Doughty and approved unanimously.

**Dewatering** – A motion to approve one listed exam applicant was made by J. Yost, seconded by R. Dalton and approved unanimously.

## **5. License Sanction Recommendation for Journeyman Driller Brian Funkhouser-**

T. Pilawski, Chief of the Bureau of Water Allocation and Well Permitting, provided the memo sent by Chairman A. Becker to DEP Commissioner Martin, conveying the Board's recommendation revoke the Journeyman Well Driller license held by Mr. Brian Funkhouser. This recommendation was based on the hearing and deliberative sessions that were held at the Board's January 23, 2014 meeting. Following the Commissioner's delegation of the matter to Division of Water Supply and Geoscience Director, Fred Sickels, Mr. Sickels promptly issued a written response to the Board affirming his agreement with the Board's recommendation to suspend Mr. Funkhouser's license for the reasons specified in Mr. Becker's memo (see minutes of January 23, 2014 meeting for details). J. Hoffman, Supervisor in the Department's Central Region of Water Compliance and Enforcement Bureau, stated that his office has subsequently prepared an Administrative Order ("Order") that will be sent to Mr. Funkhouser. The Order will specify that the Department intends to revoke Mr. Funkhouser's license and will inform him of his right to file an appeal within twenty (20) days. Should Mr. Funkhouser elect not to file an appeal, the Order becomes a final agency action on the twenty first (21<sup>st</sup>) day and the Department would issue another order notifying him that the license has been revoked. The revocation would coincide with the three year license renewal deadline of June 30, 2014; therefore, if Mr. Funkhouser elects not to appeal, he will not receive a renewal invoice when they are mailed to all current licensees.

## **6. New Bureau of Water Allocation and Well Permitting Employee-**

Robert Hawke, a recent Temple University graduate with a degree in Geology was introduced to the Board. He has been working as an hourly employee within the Well Permitting section under the supervision of Michael Schumacher.

## **7. Review of Well Redevelopment Methods (Chemical and Physical Well Rehabilitation)-**

Members of NJDEP's Division of Water Quality (DWQ), Bureau of Non-Point Pollution Control (BNPC): Jim Murphy, Ron Bannister, Mark Miller, Eleanor Krukowski attended the meeting to become more familiar with the processes involved in the development and redevelopment of existing water supply wells. Specifically, they said that their Bureau is charged with regulating discharges to ground and surface water. They have concerns regarding the chemicals used in the well rehabilitation process and want to ensure that they do not cause adverse impacts to the State's ground or surface waters.

Board member Joe Yost, Master Well Driller from Layne Christiansen Co., who has worked for 41 years drilling industrial and public community supply wells, led a thorough discussion of well development and redevelopment techniques. This discussion detailed the following:

- Chemical development/redevelopment – handling, pH buffering, drilling fluids and chemicals used to break down drilling mud (if developing a new well following drilling), placement and concentration of chemicals (primarily acids), duration of time left in well to treat the well (generally overnight).
- Redevelopment frequency – often occurs every 7-10 years. Contractors generally recommend redevelopment when the well yield exhibits a 25% reduction (drop off) from the initial yield
- Methods of physical development/redevelopment and how these methods may be used in conjunction with chemical methods.
- Storage of redevelopment chemicals (acids) onsite while pH is neutralized prior to discharge. Chlorine residual also monitored prior to discharge as well would be chlorinated after chemical treatment.
- Discharging of the waste water to sanitary sewer after being neutralized. Other possible ways to discharge once water is neutralized.
- Solid material in discharge water: sediments (iron encrustation/clay from drilling mud), very high turbidity.
- Factors affecting frequency of redevelopment (aquifers with naturally occurring high levels of iron is the most common factor that leads to shorter intervals between well redevelopment).

## **8. Proposal to Allow for the Installation of Liners In Existing Wells by G. Slater**

Mr. Glenn Slater, licensed Journeyman Well Driller and owner of Slater Well Drilling Co., and his co-worker of 18 years, Ms. Catherine Meyer, introduced themselves to the Board. Mr. Slater noted that he is a fourth generation well driller and has extensive experience drilling and maintaining wells that are drilled into bedrock, as he drills exclusively in the northern region of the state near the New York state border. One of his biggest areas of concern, he explained, is older wells that contain water comprised of high iron and/or bacteria. Such wells often contain very short casing lengths, he explained, as it was not common practice to install casing to significant depths into bedrock many years ago with the drilling methods that were generally utilized.

He detailed how DC current in the ground combined with oxidation in the reduction zone (redox front) where the ground water elevations rise and fall as the well pump cycles on and off can lead to extremely poor water quality. He indicated that research in the field of microbiology suggests that this zone is the primary site of bacteriological growth within a well.

Lining such contaminated wells with materials such as PVC well casing of a smaller diameter or a flexible liner material like Insitu form was his suggestion for how to combat this problem (when working on existing wells only, not in the case of new well installations). Mr. Slater stated that such liners provide a means of sealing off the zone below the original steel well casing through which bacteria contaminated water often enters the well. He added that they provide an economical alternative to forcing property owners to drill new wells containing steel casing lengths that meet current state regulations. Such well modification proposals, however, have been denied by the Department in the past said Mr. Slater. Alternatives to simply requiring well owners to drill new wells should be acceptable to the Department, he argued, if the licensed well driller can install a product that would provide a cleaner and safer water supply to the user. He also noted that he believes in treating groundwater problems at the source rather than continuing to pump water of questionable quality and installing a treatment system. Samples of oxidized casing and sediment laden water were also presented to the Board for reference to demonstrate some of the deplorable conditions of older wells upon which Mr. Slater often works.

S. Reya discussed the Bureau's concerns with installing PVC liners in existing wells by describing the dimensions of the annular space between the outside of the PVC pipe and inside of the existing steel well, a space that is further limited by the iron/mineral encrustation and oxidation discussed by Mr. Slater. This leads to a concern that the annular space cannot be grouted in a satisfactory manner because a tremie pipe often cannot be installed to the bottom of the liner or the liner must be pushed all the way to one side of the existing casing to make space. Both of these situations are likely to create the problem of an inadequate grout seal.) Additionally, the existing casings are often either ungrouted driven casings or the grout presence is either undocumented or of questionable quality. Therefore, installing liner casing in an improperly constructed well may not yield a satisfactory well.

S. Reya also noted that one of the issues the Bureau has encountered is with the difficulty and cost associated with decommissioning wells in which liners have been installed. Mr. Slater responded that he could always drill out a liner with his drill rig if need be. S. Reya noted that many existing wells, however, cannot be accessed with drilling equipment and stressed that the Department is hesitant to approve any well modification that could make an already non-conforming well more of a problem years later. Sometimes, when these wells are 50-60 years old (the age of many of the wells Mr. Slater referenced), drilling a conforming well and installing the required amount of grouted steel casing is the appropriate remedy, despite the additional costs borne the property owner. Mr. Slater agreed that there may be some instances in which the liner could not be removed or drilled out but felt this would be rare. He believed the benefit of rehabilitating the wells of many customers without unnecessarily making them drill new, conforming wells is worth the small number that may not be decommissioned to the satisfaction of the Department.

Board members discussed this issue and noted that Mr. Slater raised some valid points and that the Bureau should consider approving such modifications when appropriate. A. Becker pointed out that the well regulations provide for deviations from construction standards and suggested that Mr. Slater submit such an application when he feels it is warranted. He also said that liners are not appropriate in every instance. The Bureau could review the documentation submitted by Mr. Slater, as attached to the permit application, to determine whether the proposed modification represents a reasonable solution to a water quality issue, while not adversely affecting the well or owner at a later date. Another suggestion made by A. Becker was that any approved well permit for a liner installation be witnessed by Department staff to ensure that grout is placed properly within the entire annular space to be sealed. S. Doughty also

suggested that staff look into the draft revisions to the well rules (N.J.A.C. 7:9D) and determine if any language should be altered to address the aspect of modifying wells with liners. Finally, the Board thanked Mr. Slater for his time and for bringing this matter to their attention.

## **9. Enforcement Activities:**

### **Ongoing actions against Michael Kavlunas/Total Quality Drilling-**

J. Altieri provided an update on the status of the case between the Department and Master Well Driller Michael Kavlunas, which was heard by an Office of Administrative Law Judge in February 2013. According to a letter received by Mr. Kavlunas' attorney, he has reportedly decided to drop his appeal of the DEP Commissioner's ruling. This ruling reinstated the original penalty amount (fine) assessed by the Department and required that he properly decommission the well in a manner satisfactory to the Department. Bureau staff hopes to receive a decommissioning proposal shortly and work to resolve this matter, but as of yet an adequate decommissioning proposal has not been submitted nor any fines paid. K. Muessig suggested that the Department (possibly via their legal counsel) draft a letter, which urges compliance in a timely manner and states that license sanctions will be pursued against his license if the matter is not resolved in a satisfactory timeframe.

### **Ongoing actions regarding the decommissioning of a test (public community) well drilled by Charles Kramer/A.C. Schultes, Inc.-**

J. Altieri discussed a well originally drilled as a test well by A. C. Schultes, Inc. that was proposed for re-designation as a public water supply. The Department denied the re-designation of the well and pursued enforcement action against the drilling contractor and licensed well driller, as it is the Department's contention that the well was not properly grouted. This position is based on the original well record and multiple letters and subsequent supporting documentation submitted by the contractor, A.C. Schultes, Inc. Recently, representatives from A.C. Schultes met with Division representatives Terry Pilawski, Karl Muessig and Fred Sickels. As a result of this meeting the Department will be reviewing the documentation submitted by the contractor to ensure that they fully considered all relevant documentation and fully understands the contractor's point of view as to why they feel the well is constructed in full accordance with the well regulations.

## **10. CETCO HIGH TC Geothermal Grout-**

S. Reya provided final lab permeability data for the CETCO High TC Geothermal Grout mixtures that were mixed and pumped onsite in the presence of Bureau and Board representatives in 2013. The lab permeability values for the mix containing the highest sand content of all mixes being proposed for approval in NJ (400 lbs. to one 50-lb bag of CETCO High TC Geothermal Grout compound) were obtained by an independent laboratory in accordance with ASTM D-5084. The permeability value was found to be less than the Department's maximum allowable permeability of  $1 \times 10^{-7}$  cm/s specified in the well rules (N.J.A.C. 7:9D). S. Reya stated that he believes CETCO has satisfied all applicable regulatory standards and demonstrated that the product can be mixed and placed in a geothermal well (by a grout pump and tremie line) via the field demonstration.

**K. Muessig motioned that the Board recommend to the Department, that all mixtures for which approval had been requested by CETCO, be approved for use in New Jersey (Mr. Todd Tannehill's original request letter dated November 15, 2010 lists the mixtures containing less than 400 lbs of silica sand). The motion was seconded by G. Poppe and approved unanimously.**

## **11. Field Work-**

B. Buttari recently performed two (2) more spot checks in the field. Also, K. Muessig announced that Mr. Buttari would be assisting his program in the geologic logging of multiple core holes that are being drilled at Sandy Hook, in a cooperative project with the United States Geological Survey (USGS).

## **12. Adjournment -12:55 PM**

A motion to adjourn was made by G. Poppe, seconded by Richard Dalton and approved unanimously.



## State of New Jersey

DEPARTMENT OF ENVIRONMENTAL PROTECTION

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*Lt. Governor*

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*NJ STATE WELL DRILLERS AND PUMP INSTALLERS  
EXAMINING AND ADVISORY BOARD*

### **New Jersey Department of Environmental Protection NJ State Well Drillers and Pump Installers Examining and Advisory Board Conference Call Minutes for May 1, 2014**

**Approved by the Board on May 15, 2014**

**Board Members Participating:** Art Becker(Chairman), Gary Poppe (Vice Chairman), Joe Yost, Steve Doughty, Richard Dalton and Dr. Karl Muessig.

**Board Members Absent:** Gordon Craig, Joe Pepe, and Carol Graff

**NJDEP Bureau of Water Allocation & Well Permitting Staff Present:** Pat Bono, Steve Reya

1. **Call to Order-** The conference call was called to order by Chairman A. Becker with a quorum present at 10: 46 am.

2. **Review and Certification of Exam Scores for the April 3, 2014 Well Driller Exams-**

Board members reviewed scores for the Master, Journeyman, Journeyman Class B, Monitoring Well Driller, Soil Borer, Pump Installer and Dewatering Well Driller exams. It was noted that only two (2) license categories had any passing applicants: Master and Monitoring Well Driller. Also, none of the applicants scheduled for the Soil Borer exam showed up for the exam. Board members were discouraged by the generally poor exam scores and noted that the pattern of candidates passing the regulations portion but failing the technical sections seems to be very consistent.

**A motion to approve the exam scores for all license categories was made by G. Poppe, seconded by J. Yost and approved unanimously.**

3. **Adjournment-** A motion to adjourn the call was made by G. Poppe, seconded by S. Doughty and approved unanimously at 10:50 am.



## State of New Jersey

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*NJ STATE WELL DRILLERS AND PUMP INSTALLERS  
EXAMINING AND ADVISORY BOARD*

### **New Jersey Department of Environmental Protection NJ State Well Drillers and Pump Installers Examining and Advisory Board Meeting Minutes for May 15, 2014**

*Approved by the Board on July 17, 2014*

**Board Members Present:** Art Becker(Chairman), Gordon Craig, Carol Graff, Steve Doughty, Joe Pepe, Richard Dalton, Joe Yost and Dr. Karl Muessig (arrived late).

**Board Members Absent:** Gary Poppe (Vice Chairman)

**NJDEP Bureau of Water Allocation & Well Permitting (Bureau) Staff Present:** Terry Pilawski, Pat Bono, Steve Reya, Julia Altieri, Brian Buttari, Michael Schumacher, Robert Hawke, Letitia Jones and Melia Stoop.

#### **1. Call to Order-**

The meeting was called to order by Chairman A. Becker at 9:38am, with a quorum present.

#### **2. Review and Certification of Draft Meeting Minutes-**

**A motion to approve the March 20, 2014 Board meeting minutes without change was made by J. Yost, seconded by R. Dalton and approved unanimously.**

**A motion to approve the May 1, 2014 Board Conference Call minutes without change was made by J. Yost, seconded by R. Dalton and approved unanimously.**

#### **3. Review and Certification of approved Exam applicants for the June 11, 2014 Master, Journeyman, Journeyman B, Monitoring, Soil Borer and Pump Installers Exams –**

**Master – A motion to approve all listed exam applicants was made by G. Craig, seconded by J. Yost and approved unanimously.**

**Journeyman** - A motion to approve all listed exam applicants was made by S. Doughty, seconded by G. Craig and approved unanimously.

**Journeyman B** – A motion to approve all listed exam applicants was made by R. Dalton, seconded by C. Graff and approved unanimously.

**Monitoring** – A motion to approve all listed exam applicants was made by C. Graff, seconded by G. Craig and approved unanimously.

**Soil Borer** – A motion to approve all listed exam applicants was made by J. Yost, seconded by R. Dalton and approved unanimously. This motion included a conditional approval for the two listed applicants from Craig Test Boring, who had not yet supplied the required application fee. Both applicants were approved pending submission of the required fee in advance of the exam date.

**Pump Installer** – A motion to approve all listed exam applicants was made by J. Pepe, seconded by C. Graff and approved unanimously.

#### **4. Well Driller & Pump Installer Exam Application Deadline for the June 11 Exams and Board Meeting Date (Scheduling Problems)-**

Due to scheduling conflicts, the May Board meeting this year was held a week earlier than usual. As a result, the May Board meeting and the final day to file for the June exam are the same day. This poses a problem because applications must be postmarked by the deadline and often are not received by the Bureau until several days later. S. Reya expressed concern that it would be possible for some completed applications to arrive within the appropriate timeframe but after today's meeting. Accordingly, he requested that Board members make an allowance for the approval of applications received after the conclusion of the meeting provided the applicants are deemed to meet the regulatory and experience requirements following review by Bureau staff. A. Becker asked S. Reya to notify Board members of any "new" applicants (those who had been pre-approved for a previous exam of the same type would not be considered "new" applicants) via email. Once enough email responses from the Board are received such as to constitute a quorum S. Reya could schedule applicants for the June exam. Finally, he noted that care would have to be taken when developing the schedules for next year to ensure that this situation does not recur. Specifically, the deadline and meeting dates for all cycles would have to be staggered by a minimum of a week or so.

#### **5. License Sanction Against Journeyman Driller Brian Funkhouser (#JD1450)-**

T. Pilawski, Chief of the Bureau of Water Allocation and Well Permitting, stated that on May 5, 2014, a certified letter was sent to Brian Funkhouser notifying him that the Administrative Order and Notice of License Revocation became final on April 30, 2014 (21 days following Mr. Funkhouser's documented after the receipt of notice). Following the January 23, 2014 Board hearing to consider the Department's charges of negligence and violations cited against Mr. Funkhouser and the Board's subsequent recommendation to revoke the license, the Department issued an Administrative Order and Notice of License Revocation, dated April 3, 2014. Mr. Funkhouser did not request a hearing to contest the AO/Revocation and, as a result, the Department sent an Administrative Order (dated April 30, 2014) advising Mr. Funkhouser that his license had been revoked.

S. Doughty noted that he believed the May 5<sup>th</sup> letter should also have stated a pathway by which Mr. Funkhouser could become licensed once the revocation had run its course. This would be both in accordance with the Department's well drilling statute (N.J.S.A. 58:4A) and the Board's position that the licensee would have recourse to re-enter the drilling community if and when he satisfies all outstanding violations and penalties to the satisfaction of the Board and Bureau.

**6. Request to Waive the Exam Requirement for a Dewatering Driller License by Joseph Hockberger, General Manager, Mi-con-**

Board members reviewed an April 27, 2014 letter from Mr. Joseph H. Hockenberger, General Manager of Mi-con, in which he requested that the Board consider his almost 40 years of wellpointing and well drilling experience, along with his qualifications and licensure in multiple other states to allow him to qualify for a NJ Dewatering Well Driller License without sitting for the exam. His letter referenced N.J.S.A. 58:4A-16, which states that “the department may license without examination, upon payment of the required license fee, applicants who are duly licensed under the laws of any other state having requirements deemed by the department to be at least equivalent to those of this State.” After thorough discussion, the consensus of the Board was that Mr. Hockenberger’s qualifications (which included National Ground Water Association certifications that are required as exam prerequisites for out-of state applicants) demonstrate that he would be qualified to sit for the Dewatering Well Driller, Journeyman or Journeyman Class B well driller licenses. As is consistent with past precedent, however, the Board did not feel that the requirements in any other state would qualify him for a license without taking an exam. NJ licensing, permitting, well construction and decommissioning requirements are unique to this state so it would not be reasonable to expect that he would possess this knowledge without ever working in the state or demonstrating this knowledge base by passing a written exam. Bureau staff will notify Mr. Hockenberger of the Board’s position on this issue.

**7. Pump Installer Exam Application Inquiry (Experience Requirements) from Arthur Matthews-**

Mr. Arthur Matthews submitted a March 25, 2014 email requesting that he be eligible for obtaining a pump installer license based on his experience working for Merck & Co. Specifically, Mr. Matthews noted that he had worked over 35 years as a millwright, until he retired in 2003. During that time he stated that he had worked on repairing all types of pumps, including well pumps. He listed five (5) supervisors under whom he worked. Finally, Mr. Matthews requested permission to sit for the pump installer exam. S. Reya indicated that he had previously spoken with Mr. Matthews, who was apparently unaware of any of his supervisors’ possessing a pump installer or well driller license. S. Reya had checked all supervisor names provided and was unable to find a record that any of the individuals had ever held one of the required licenses. Since the requester’s experience was obtained under the supervision of unlicensed individuals and is completely undocumented, Board members determined that he is not eligible to sit for the Pump Installer exam unless he obtains the minimum one year of experience under the supervision of a properly licensed individual.

**8. Update on Pump Installer Survey Results-**

Four (4) additional Pump Installer exam surveys that were completed with the April 4, 2024 exams were reviewed by the Board. Members provided feedback on problems that the pump service industry has as a whole, such as lack of properly diagnosing water supply problems, and how this may be affecting pump installer applicant scores.

**9. Well Driller and Pump Installer License Renewals-**

P. Bono stated that 1,140 license renewal invoices were sent out to all licensees in late April/early May. She added that some renewals were mailed to outdated addresses and some were returned as undeliverable, cutting short the due dates for these licensees to submit the renewal payment prior to the June 30<sup>th</sup> license expiration. This illustrates the importance of licensees maintaining accurate contact information with the Bureau at all times. It was also mentioned that any license not renewed

by June 30 will become inactive as of July 1. The license can, however, be reinstated prior to December 31, 2014 but will require remittance of the initial renewal fee in addition to a \$50.00 late payment fee. S. Reya encouraged members to have any of their industry associates to contact the Bureau if they have not yet received a renewal invoice in the mail. Included in the mailed license bills was a flyer clarifying that it is the responsibility of licensed pump installers and drillers to keep their contact information updated in our system and stressing the need for drillers to know how to access their e-permitting accounts. More details are presented in Item 14 below.

#### **10. Approval of Geothermal Grout (CETCO Drilling Products- High TC Geothermal Grout)-**

S. Reya summarized a May 14, 2014 letter signed by Bureau of Water Allocation and Well Permitting Chief, Terry Pilawski, which detailed the Department's approval of this grout mixture (in accordance with the Board's recommendation), as the manufacturer sufficiently demonstrated that the grout met all regulatory performance criteria set forth by the Department.

#### **11. Geothermal Grout Additive Proposed for NJDEP Approval (GeoPro's Power TEC and Power TECx)-**

S. Reya stated that he has been speaking with a representative from GeoPro Inc. regarding the process that would be required to obtain approval of a geothermal grout additive that is added to bentonite-based geothermal grouts. Mr. Reya stated that the grout manufacturer did submit independent lab permeability data that was generated using the appropriate ASTM standards; however, the tested mixes differed from those for which they are requesting approval. GeoPro has agreed to re-test the proposed mixtures and will forward this data to S. Reya upon completion. If this new data proves acceptable, GeoPro will then schedule the required field demonstration with a drilling contractor.

#### **12. Enforcement Topics by Julia Altieri-**

##### **A) Kavalunas/Total Quality Well Drilling Case –**

Michael Kavalunas' attorney has recently been in contact with the state Deputy Attorney General (DAG) assigned to this case and discussed resolving the outstanding issue of decommissioning the improperly constructed well. The fines associated with this case have been paid in full, however, if the well is not decommissioned in accordance with the timeframes set forth in the official order that was sent by the Department's Compliance and Enforcement Section, the next step will be for the Department to refer the issue to Superior Court for enforcement. The state DAG will continue to work with Mr. Kavalunas' counsel to resolve the well decommissioning as quickly as possible.

##### **B) Lakeview Mobile Home Park Case-**

The longstanding issue of decommissioning this test well is also approaching the stipulated deadline. A decommissioning proposal submitted from the drilling contractor, A.C. Schultes Inc. has been approved by the Bureau. The final step is to schedule the well decommissioning with the Bureau, as staff intends to witness the decommissioning of this well. If the drilling company does not meet the specified deadline, this case could also be referred to Superior Court for enforcement of the Department's Order.

##### **C) Bureau Field Work-**

- 1) S. Reya recently witnessed a driller install a double cased well in an area of potential saltwater intrusion. The multiple cased well was installed properly and no problems were encountered.

- 2) In a spot check, B. Buttari recently found a dewatering who was unable to produce a driver's license (identification), driller license or well permit onsite.

**D) Field Training-**

A photography training seminar that instructed Bureau staff on how to photograph and document jobsites was put on by members of the Department's Compliance and Enforcement staff. The instructors were well versed in conveying how to document a situation where violations are taking place so that follow-up enforcement actions are well supported.

- 13. Well Drilling Inspection Guidebook-** B. Buttari presented the draft version of a new enforcement guide: "The Well Drilling Inspection Guidebook." This handbook is designed to be a useful resource for health department personnel or other DEP staff (such as Compliance and Enforcement) when performing inspections in the field. The document describes basics of well construction, common drilling methods and the most important regulations, along with those that are frequently violated. Also, he noted that Letitia Jones has been working on developing maps for each county that could be downloaded from the Bureau's website and attached to the handbook to give the user specific information on the aquifers/bedrock geology specific to the county. It was also stated by several Board members that the maps would be useful to them when evaluating how best to drill wells in particular regions of the state. B. Buttari requested comments and suggestions on how to improve the guidebook.

**14. Well Driller Personal Identification Numbers (PINs) Used With ePermitting-**

M. Schumacher expressed some major security and compliance problems that stem from the misuse of PINs by well drilling company staff using the PINs of licensed drillers. The practice of fraudulently submitting information under a driller's name and number prevents the licensed driller from setting up an online profile if he/she moves to another company because the original company maintains control of the individual's online account. Additionally, it causes problems for the Bureau because when enforcement documents are sent to a driller regarding information reported on an official state well record or well decommissioning report the driller often claims that it was merely the "office staff" that completed the online reports. The driller then may attempt to submit the "corrected" information, which will show that the well in question does not contain a violation.

To better educate drillers of these problems, M. Schumacher and P. Bono developed a mass mailing letter and included it with all license renewal invoices that were recently mailed out. The letter stressed the importance of drillers knowing and using their own PIN numbers and not casually giving them out to office staff or allowing staff to set up accounts on behalf of the driller and essentially use their identity in the online permitting system. Mr. Schumacher noted that if a driller leaves a company, all online reports must be submitted under the original company and the driller must then be removed from that company's profile. Otherwise the Department's system will prohibit the driller from creating an account at the "new" company.

**15. Historic Well Records Project-**

P. Bono said that the backlog of data entry and scanning of well decommissioning reports is almost caught up. Also, the Bureau is currently transitioning to new imaging software, which may affect the retrieval of document images for permits, records and decommissioning reports in the short term. Mainly, however, it will affect internal users such as DEP staff and will have little to no impact on members of the public or the drilling community.

**16. Adjournment-** A motion to adjourn was made by S. Doughty at 12:12 pm, seconded by G. Craig and approved unanimously



## State of New Jersey

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*NJ STATE WELL DRILLERS AND PUMP INSTALLERS  
EXAMINING AND ADVISORY BOARD*

### **New Jersey Department of Environmental Protection NJ State Well Drillers and Pump Installers Examining and Advisory Board Meeting Minutes for July 17, 2014**

*Approved by the Board on November 20, 2014*

**Board Members Present:** Art Becker (Chairman), Gary Poppe (Vice-Chairman), Gordon Craig, Carol Graff, Steve Doughty, Richard Dalton, Joe Yost and Dr. Karl Muessig.

**Board Members Absent:** Joe Pepe

**Board's Legal Representation:** Jill Denyes, Deputy Attorney General (DAG), Department of Law

**NJDEP Bureau of Water Allocation & Well Permitting Staff Present:** Terry Pilawski, Pat Bono (arrived 10:19 am), Steve Reya, Julia Altieri, Michael Schumacher, and Melia Stoop.

**Other NJ DEP Member Present:** Jeff Hoffman (Water Compliance and Enforcement-Central region) and Tom Atherholt (Office of Science and Research)

**Two Members of the Public (10:13 am arrival):** Rodger Ferguson, License Site Remediation Professional (LSRP), and Dwight Pederson (private homeowner who submitted a letter to the Board).

#### **1. Call to Order –**

The meeting was called to order by Chairman A. Becker at 9:48am, with a quorum present.

#### **2. Review and Certification of the Minutes for the May 15, 2014 Meeting Minutes-**

A motion to approve the meeting minutes without change was made by G. Craig, seconded C. Graff and approved by all present with the exception of G. Poppe and K. Muessig who abstained due to not being present for some or all of the May meeting.

**3. Review and Certification and Approval of Exam Scores for the June 11, 2014 Master, Journeyman, Journeyman B, Monitoring, Soil Borer and Pump Installers Exams –**

**Master** – A motion to approve all listed exam scores was made by G. Poppe, seconded by J. Yost and approved unanimously.

**Journeyman** - A motion to approve all listed exam scores was made by S. Doughty seconded by J. Yost and approved unanimously.

**Journeyman B** – A motion to approve all listed exam scores was made by G. Poppe, seconded by C. Graff and approved unanimously.

**Monitoring** – A motion to approve all listed exam scores was made by G. Craig, seconded by R. Dalton and approved unanimously.

**Soil Borer** – A motion to approve all listed exam scores was made by G. Poppe, seconded by K. Muessig and approved unanimously.

**Pump Installer** – A motion to approve all listed exam scores was made by K. Muessig, seconded by C. Graff and approved unanimously.

It was noted that the final two (2) exams for 2014 are scheduled for October 1 and December 10.

- 4. Update on Pump Installer Survey results-** S. Reya noted that the June Pump Installer exam (at which the surveys were completed) applicants scored quite well. The exam results, which showed that the three applicants who did not pass (out of four total) were all within five points of passing, were fairly encouraging. He also said that these applicants were sitting for the exam for the first or second time. Therefore, he believed that although based on a small sample size, the scores were the highest in quite some time and felt that the surveys were indicative of the fact that a modest amount of studying, as indicated on the survey answers, can yield respectable if not passing scores.

**5. Discussion of the Licensing Renewal Notices for July 1, 2014, thru June 30, 2017.**

S. Reya summarized the well driller and pump installer license renewal process and provided the total number and percentage of non-renewals by license type. He also added that a second written notification will be sent to all non-renewed licensees within the next few days. This notification will assess a \$50 late payment fee in addition to the license renewal amount. The licensee must pay the original assessment plus the late fee should he or she wish to reinstate the currently lapsed license. C. Graff volunteered to forward a list of non-renewed licenses to the New Jersey Ground Water Association (NJGWA) for inclusion in their newsletter and/or website to better spread the inform the community. It was noted that the Department may in fact be sending the notifications to outdated addresses if the licenses have moved and not updated their addresses with the Department since the last renewal cycle three (3) years ago. S. Reya will provide the list to C. Graff as soon as possible. Finally, it was mentioned that the electronic well permitting system (e-permitting) used by the Department will prohibit those with inactive licenses from obtaining well drilling permits. This too has served to inform lapsed licensees or their status.

**6. Technical Topic: Update on the GeoPro, Inc. Power TEC Geothermal Grout Additive-**

S. Reya provided an update on the review of two grouts under consideration for NJ approval: GeoPro Inc.'s Power TEC and Power TECx Geothermal Grout additives. He stated that as a result of the Department's request, GeoPro had an independent laboratory conduct permeability testing on the exact mixtures for which an approval is being requested. Geo Pro has since submitted all documentation of this testing. R. Dalton has reviewed the information and found that the measured permeability values were all below the Department's maximum permeability value ( $1 \times 10^{-7}$  cm/sec),

as stipulated in the well construction regulations. Therefore, the remaining step to obtain NJ approval is to perform a field demonstration, as is required of all other grout manufacturers, to prove that the product can be mixed and placed within a geothermal borehole as designed. Additionally, “field” mixtures would have to again be tested for permeability to ensure that the product, when mixed in the field does not exceed the allowable limit.

G. Poppe, R. Dalton, G. Craig and A. Becker all volunteered to attend the demo, if the proposed date fits within their schedules. S. Reya will contact the GeoPro representative and report back to the volunteers once a proposed date has been selected.

**7. Comments on Article on Arsenic Published by National Ground Water Association (NGWA) by Pat Bono-**

P. Bono provided copies of a July 1, 2014 article published by the National Ground Water Association (NGWA), which pertains to arsenic in groundwater and what water well drillers should know about this problem. She added that staff members from K. Muessig’s office, the New Jersey Geological & Water Survey (NJGWS), contributed to the article and have specific knowledge of the geologic formations (and corresponding locations in NJ) where arsenic is naturally occurring. Drilling contractors may wish to contact NJGWS prior to drilling if working in an area with suspected arsenic. It was noted that the NJ Safe Drinking Water Standard is 5 mg/l, which is half of the USEPA standard for arsenic in drinking water set at 10 mg/l.

**8. Complaint brought against NJ licensed pump installer Edward Del Carlo of D&L Well Drilling & Pump Company-**

Dwight Pederson, a Hunterdon County resident, and Rodger Ferguson, Licensed Site Remediation Professional (LSRP) from Pennjersey Environmental Consulting, addressed the Board to provide details about a formal complaint raised to the Board regarding the actions of a pump installer hired to address problems with Mr. Pederson’s well. Specifically, the complaint is that in the process of removing a nonfunctioning pump, Mr. Del Carlo spilled the contents of the pump’s oil onto the adjacent ground and, upon replacing the pump, allowed oil in the well to contaminant the interior storage tanks and plumbing. A formal complaint, dated June 23, 2014, had been sent to the Board via the Department by John Scagnelli, Mr. Pederson’s attorney, and a hard copy of the complaint and accompanying documentation was provided by Department staff to each Board member for reference during the meeting. The letter alleges that Mr. Del Carlo and D&L Well Drilling & Pump Company are guilty of gross neglect, incompetency and misconduct in the practice of well drilling and pump installing under N.J.S.A. 58:4A-12 and demands that the Board take appropriate action against the pump installer and the company.

The purpose of Mr. Pederson’s coming before the Board was to describe the events that led up to the contamination problems and to state the reasons why he believes Edward Del Carlo was negligent and therefore responsible for the subsequent damage. Upon failure of the original well pump that was reportedly installed in the well in 1977, Mr. Pederson called D&L Well Drilling & Pump Co. (D&L) to repair the pump. D&L sent licensed Pump installer Edward Del Carlo to the residence to diagnose the problem. According to Mr. Pederson, upon removing the well pump from the well, the pump motor and associated pumping equipment were found to be coated with oil. Mr. del Carlo worked to clean out the failed pump, clean out the oil in the well and disinfected the well with chlorine. Mr. Pederson was present throughout the process and at times assisted Mr. Del Carlo with various tasks.

Mr. Pederson is alleging that Mr. Del Carlo caused several problems: the spread of oil throughout his water system illegally discharged oil onto his property in the course of removing the oil from his well

and demonstrated gross negligence by not taking adequate precaution with the pump oil that was later found to contain PCBs.

Both Mr. Ferguson and a previous LSRP who was retained by the property owner's insurance carrier have followed all required procedures in notifying the Department of the hazardous material release (notification via the Spill Hotline). The contaminated well has since been decommissioned and replaced by a conforming well, which has been tested to meet all applicable water quality parameters. Additionally, it was noted that since the static water level was shallower than the depth to the bottom of the steel casing of the well, no release of PCB containing oil migrated from the well into the surrounding strata.

Board members asked some questions of Mr. Pederson and Mr. Fergusson. At one point Mr. Pederson mentioned that it is possible the rubber bladder had some oil in it before Mr. Del Carlo showed up as he had noted the pump was "running" all night and was hot to the touch.

Board members discussed whether or not they believed the Pump Installer should have known that based on the age of the pump the lubricating oil contained PCBs. The consensus was that since environmentally friendly vegetable oil has been used in pump motors since the late 1970s, many Pump Installers operating today would be totally unaware of the possibility of older pumps containing harmful PCBs. Also, since most pumps made prior to this switchover have since been replaced, members felt that the odds of encountering a pump containing PCBs are now very rare. The alleged discharge of the oil laden water onto the ground would seem to be a violation of the NJ Spill Act and that the reporting of such a discharge is also a requirement.

Mr. Rodger Ferguson and Mr. Dwight Pederson left the meeting at 11:34 AM.

After the departure of Mr. Ferguson and Mr. Pederson, Chairman A. Becker asked the WP Staff to delve into the details of the situation further so that the Board can determine whether the situation warrants a hearing or not. Staff will also review Mr. Del Carlo's compliance history and current license status.

**G. Craig made a motion requesting that the Department conduct a thorough investigation on the specific details of this matter by reviewing the submitted documentation and reaching out to the Department's Compliance and Enforcement staff for guidance on potential violations of DEP regulations outside the realm of well drilling/pump installation rules and regulations. The violation history of Mr. Del Carlo, if any, should also be researched and provided to the Board. The Department staff should report their findings to the Board at the next scheduled meeting for follow-up. G. Poppe seconded the motion and it was approved unanimously.**

#### **11. Enforcement Topics by J. Altieri-**

- A) Kavlunas/Total Quality Well Drilling Case-** Department staff and their legal counsel have continued to work with Mr. Kavlunas' attorney to urge him to submit an acceptable well decommissioning plan for the improperly constructed well. This issue has been ongoing for years at this point and the Department is giving Mr. Kavlunas a last chance to comply with the Administrative Hearing Order to decommission the well or the matter will be referred to Superior Court for enforcement.
- B) A.C. Schultes Case-** A.C. Schultes, Inc. is in the process of decommissioning a test public supply well under orders from the Department. A NJ licensed master well driller from A.C. Schultes has been working on the well decommissioning for approximately one week and B. Buttari has been

witnessing all phases of the work thus far. The Department will continue to oversee the decommissioning to make sure the contractor is successful in achieving the goal of reestablishing a seal through the confining units present at the site.

**C) Bureau Field Activity-** J. Altieri also said that Bureau staff members have been out in the field for 15 (working) days since the last Board meeting and the section has had at least one staff member out in the field an average of approximately two days a week. Five different full time staff and three hourly employees have participated in the effort to establish a more thorough field inspection program. Staff inspected the drilling and installation of a variety of wells types including monitoring, domestic and community supply wells. J. Altieri noted that staff has been verifying the required permits, licenses and compliance with construction standards. Spot checks find that the majority of drillers are in compliance.

**12. “The Well Drilling Inspection Hand Book”-** This handbook, which covers well construction standards and provides a county-specific geological overview, was again distributed to solicit suggested revisions from Board members. It was requested that any comments or proposed changes be submitted to B. Buttari as soon as possible. Once finalized the document will be posted to the Department’s website and made available to health officials and any other interested parties (such as the Department’s Enforcement staff or drilling contractors who wish to utilize the geologic maps when drilling in unfamiliar areas).

**13. Licensing and Continuing Education (Program Development with Outside Agency)-** Recent discussions with the National Ground Water Association (NGWA) were summarized by P. Bono. Primarily these conversations focused on questions the Well Permitting Program raised about setting up a program for implementing continuing education requirements, filing deadlines for continuing education credits, grace periods, etc. Since NGWA has many years of experience administering their own national certification program and routinely work with other states on their well driller licensing programs, the NJ well permitting program staff intend to learn as much as possible when setting up revisions to the NJ licensing program. P. Bono added that the NGWA staff have been extremely helpful in providing practical suggestions and pointing out pitfalls to avoid.

Administering NJDEP exams through NGWA as an alternative to the Department-proctored exams was also discussed. P. Bono questioned whether it would be possible under the current rules to establish a dual track program (where applicants could take a required exam through NJDEP or NGWA) in light of the fact that the draft regulations have still not been adopted and have been delayed for quite some time. DAG Jill Denyes, will have to further research applicable laws and statutes to make sure this approach would be acceptable.

**14. DEP Program Updates-**

T. Pilawski reported that there had not been any further advancement of the draft rules. Part of the draft rule revisions would be to establish clear procedures for holding hearings. Board members asked DAG Denyes if would be possible to establish procedures in advance of the rule revisions. J. Denyes suggested that the Board members might be able to pass a resolution to allow for them to establish procedures. She will look into the matter further.

15. **1:00 pm-Adjournment-** A motion to adjourn was made by G. Poppe, seconded by G. Craig and approved unanimously



## State of New Jersey

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*NJ STATE WELL DRILLERS AND PUMP INSTALLERS  
EXAMINING AND ADVISORY BOARD*

### **New Jersey Department of Environmental Protection NJ State Well Drillers and Pump Installers Examining and Advisory Board Conference Call Minutes for September 11, 2014**

*Approved by the Board on November 20, 2014*

It became known in advance that several Board members were unable to attend the September 11, 2014 Board meeting, so a quorum would not be attainable. Instead, arrangements were made to hold a conference call at the time, place and date originally published for the September Board meeting to review and certify exam applicants for the October 1, 2014 well driller and pump installer exams. Two Board members and the Board's legal advisor were present in the scheduled room for the conference call. The exam applicant roster was forwarded to members for review in advance of the call (via email from Steve Reya, Bureau of Water Allocation and Well Permitting, on September 9th). Joe Yost and Dr. Karl Muessig reviewed the list of applicants for each exam category and responded to S. Reya by email.

**Board Members Present for the Conference Call at NJ Department of Environmental Protection Offices (401 E. State St., Trenton, NJ):** Gary Poppe (Vice Chairman), Steve Doughty

**Board Members Who Participated in the Conference Call via Telephone:** Gordon Craig and Carol Graff

**Board Members Who Submitted Email Comments in Response to the Listed Applicants:** Dr. Karl Muessig, Joe Yost

**Board Members Absent:** Art Becker (Chairman), Joe Pepe, and Richard Dalton

**Board Legal Advisor Present:** Jill Denyes, Deputy Attorney General

**Public or outside parties in attendance:** None

**NJDEP Bureau of Water Allocation & Well Permitting Staff Present:** Pat Bono, Steve Reya

1. **Call to Order-** The conference call was called to order at 9:38 am
2. **Review and Certification of Exam Scores for the October 1, 2014 Well Driller Exams-**

**Journeyman Applicants-** A motion to certify all listed applicants for the exam was made by G. Craig and seconded by S. Doughty. The email certifications for all listed applicants made by K. Muessig and J. Yost were read aloud to Board members. All members participating in the call were in favor of the motion and none were opposed.

**Journeyman Class B Applicants-** A motion to certify all listed applicants for the exam was made by S. Doughty and seconded by G. Craig. The email certifications for all listed applicants made by K. Muessig and J. Yost were read aloud to Board members. All members participating in the call were in favor of the motion and none were opposed.

**Monitoring Well Driller Applicants-** A motion to certify all listed applicants for the exam was made by C. Graff and seconded by G. Craig. The email certifications for all listed applicants made by K. Muessig and J. Yost were read aloud to Board members. All members participating in the call were in favor of the motion and none were opposed.

**Soil Borer Applicants-** A motion to certify all listed applicants for the exam was made by G. Craig and seconded by S. Doughty. The email certifications for all listed applicants made by K. Muessig and J. Yost were read aloud to Board members. All members participating in the call were in favor of the motion and none were opposed.

**Pump Installer Applicants-**

Eight applicants were listed as “approved” on the applicant roster and one applicant; Eric Degen was listed with a status of “pending.” In S.Reya’s October 9, 2014 email previously referenced, he summarized Mr. Degen’s application status as follows:

One Pump Installer exam applicant, Eric Degen, is listed with a status of “pending.” A copy of his application is attached. He also included a letter, as he is reportedly unable to obtain signed reference questionnaires, including one from the licensed Pump Installer under whom he apparently once worked (Frank Cleveland). According to our records Mr. Cleveland was licensed as a Pump Installer at the time Mr. Degen states he worked under his supervision. Mr. Cleveland’s license was issued 2/17/81 and was valid until at least 7/22/92 (the date of the list we have on file).

Also, I spoke with Frank Cleveland Jr. today (son of the licensed individual). He did confirm that Mr. Degan worked with both he and his father during the time of 1987 to 1993. The company performed well pump installation and service along with plumbing service. He also confirmed that it would be difficult for his father Frank Cleveland Sr. to submit signed and notarized reference questionnaires, as he closed the business and retired in 1994. His son said his father is still alive and currently living in Florida, but it did not sound as though we (or the applicant) would likely be able to obtain anything in writing. (Frank Cleveland Jr. still runs a plumbing service company, but they no longer work on well pumps and it is a separate company from the one his father ran).

A motion to approve all listed applicants, including Mr. Degen, to sit for the exam was made by

G. Craig and seconded by C. Graff. The emails certifications made by K. Muessig and J. Yost also approved all listed applicants, including Mr. Degen. All members participating in the call were in favor of the motion, with the exception of S. Doughty, who abstained from voting.

3. **Adjournment-** A motion to adjourn the call was made by S. Doughty, seconded by G. Craig and approved unanimously at 9:50 am.



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*NJ STATE WELL DRILLERS AND PUMP INSTALLERS  
EXAMINING AND ADVISORY BOARD*

### **New Jersey Department of Environmental Protection NJ State Well Drillers and Pump Installers Examining and Advisory Board Scheduled Conference Call Minutes for October 30, 2014**

*Approved by the Board on November 20, 2014*

**Board Members Participating via Telephone:** Gary Poppe (Vice Chairman), Richard Dalton, Joe Yost, Gordon Craig, Joe Pepe and Carol Graff

**Board Members Present at NJDEP Offices (401 E. State St., Trenton, NJ):** Dr. Karl Muessig, Steve Doughty

**Board Members Absent:** Art Becker (Chairman),

**NJDEP Bureau of Water Allocation & Well Permitting Staff Present:** Pat Bono, Steve Reya

1. **Call to Order-** The conference call was called to order at 10:33 am by Vice Chairman G. Poppe with a quorum present.

2. **Review and Certification of Exam Scores for the October 1, 2014 Well Driller Exams-**

**Journeyman-** Board members reviewed the exam scores and noted that one of the five applicants passed, which is a 20% pass rate. A motion to approve the exam scores was made by G. Poppe, seconded by C. Graff and approved unanimously.

**Journeyman Class B-** Board members reviewed the exam scores and noted that none of the four applicants passed the exam. A motion to approve the exam scores was made by S. Doughty, seconded by J. Yost and approved unanimously.

**Monitoring Well Driller-** Board members reviewed the exam scores and noted that six of sixteen applicants passed the exam, which is a 38% pass rate. A motion to approve the exam scores was made by G. Poppe, seconded by G. Craig and approved unanimously.

**Soil Borer-** Board members reviewed the exam scores and noted that none of the three applicants passed the exam. A motion to approve the exam scores was made by R. Dalton, seconded by G. Poppe and approved unanimously.

**Pump Installer-** Board members reviewed the exam scores and noted that three of nine applicants passed the exam, which is a 33% pass rate. A motion to approve the exam scores was made by G. Poppe, seconded by G. Craig and approved unanimously.

3. **Adjournment-** A motion to adjourn the call was made by G. Poppe, seconded by G. Craig and approved unanimously at 10:41 AM.



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*NJ STATE WELL DRILLERS AND PUMP INSTALLERS  
EXAMINING AND ADVISORY BOARD*

### **New Jersey Department of Environmental Protection NJ State Well Drillers and Pump Installers Examining and Advisory Board Meeting Minutes for November 20, 2014**

*Approved by the Board on January 15, 2015*

**Board Members Present:** Art Becker (Chairman), Gordon Craig, Joe Pepe, Joe Yost, Carol Graff (arrived 10:54AM), Steve Doughty, Richard Dalton, and Dr. Karl Muessig

**Board Members Absent:** Gary Poppe

**Board's Legal Representation:** Helen Chudzik, Deputy Attorney General (DAG), NJ DOL

**NJDEP Bureau of Water Allocation & Well Permitting Staff Present:** Terry Pilawski, Pat Bono, Steve Reya, Julia Altieri, Michael Schumacher, Melia Stoop, Letitia Jones (arrived at 10:11 am), Monique Girona, (arrived 10:11 am) Brian Buttari (arrived at 10:45 am), Jeremy Wick (arrived at 10:45 am).

**Other NJ DEP Member Present:** Jeff Hoffman, Bryan Barrett (Water Compliance and Enforcement-Central region) and Tom Atherholt (Office of Science and Research)

#### **1. Call to Order –**

The meeting was called to order by Chairman A. Becker at 9:37am, with a quorum present.

#### **2. Announcement by A. Becker (Retirement of Jeff Hoffman, NJDEP Water Compliance and Enforcement-Central Region)-**

Chairman A. Becker announced that after 40 years of state service, J. Hoffman is retiring from the Department. On behalf of the entire Board, A. Becker thanked J. Hoffman for his assistance with enforcing the well regulations and credited many recent successes and the advancement of the well regulations enforcement program to J. Hoffman. He noted that in recent years the Department has resolved a number of longstanding and egregious violations. J. Hoffman complimented Board members for the professional manner in which they conduct business and introduced Bryan Barrett from his office. Mr. Barrett will take over many of the duties currently handled by J. Hoffman. Bureau of Water Allocation (Bureau) staff and the Board will work with B. Barrett to continue the

compliance and enforcement progress that has been made thus far. Finally, J. Altieri presented J. Hoffman with a card, signed by the Board members, as a token of their appreciation.

**3. Review and Certification of the Minutes for the July 17, 2014 Meeting-**

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

**4. Review and Certification of the Minutes for the September 11, 2014 Conference Call-**

A motion to approve the conference call minutes without change was made by G. Craig, seconded by K. Muessig and approved unanimously.

**5. Review and Certification of the Minutes for the October 30, 2014 Conference Call-**

A motion to approve the conference call minutes without change was made by Karl Muessig, seconded Joe Yost and approved by all present.

**6. Review and Certification of Exam Applicants for the December 10th, 2014, Journeyman, Journeyman B, Monitoring, Soil Borer and Pump Installers Exams –**

**Master** – There were no applicants for the master exam.

**Journeyman** - A motion to approve all listed exam applicants was made by S. Doughty, seconded by A. Becker and approved unanimously.

**Journeyman B** – A motion to approve all listed exam applicants was made by R. Dalton, seconded by J. Yost and approved unanimously.

**Monitoring** – A motion to approve all listed exam applicants was made by K. Muessig, seconded by G. Craig and approved unanimously.

**Soil Borer** – A motion to approve all listed exam applicants was made by S. Doughty, seconded by G. Craig and approved unanimously.

**Pump Installer** – A motion to approve all listed exam applicants was made by R. Dalton, seconded by J. Pepe and approved unanimously.

**7. 2015 Well Driller and Pump Installers Testing Schedule-**

The dates for upcoming licensing exams in 2015 were handed out to the Board members. Exams will be administered on April 1, June 10, October 7 and December 9 in 2015. All exams will be administered at the Rutgers Eco Complex facility, which is located near Bordentown in Burlington County.

**8. Pump Installers Exam Survey Review-**

S. Reya summarized the latest round of Pump Installer exam surveys, which were submitted by the nine (9) individuals who took the October 1, 2014 exam. He noted that for the first time in quite a while the exam scores were encouraging. One third of the applicants (three of nine) passed the exam. Of the six people who failed the exam, three passed one of the two sections. As part of the survey, applicants report how much time they spent preparing for the exam. S. Reya noted that the amount of study time reported correlated fairly well with that applicant's exam score.

**9. Bureau Update (New Staff)-**

M. Schumacher introduced Monique Girona, a recent graduate of Rutgers University, who received her degree in Geology. She has been working under Mr. Schumacher's supervision reviewing well records submitted online for compliance with the well regulations.

**10. Update on License Non-Renewals for July 1, 2014 through June 30, 2017-**

All pump installer and driller licenses expired on June 30<sup>th</sup> and those who have not yet paid for a three-year license renewal have until December 31<sup>st</sup> to do so. Even though the license has expired, individuals may still renew their license by paying the appropriate renewal fee and a \$50 late fee in accordance with the regulations. S. Reya reported that Treasury sent out a second invoice in mid-July to those who had not renewed which included the license renewal and an added late fee. Those who do not pay the invoice by December 31<sup>st</sup> are listed as "inactive" and may only be reinstated by passing the appropriate written exam. He also said that the New Jersey Ground Water Association (NJGWA) was especially helpful in spreading the word about lapsed licensees by posting the list of individuals on their website. He urged Board members to notify any of their associates who have not yet renewed to do so prior to the end of the year.

**11. Scheduling of Board Meeting Dates for 2015-**

**Board Members Selected the Following Dates for 2015 Meetings:**

**Thursday, January 15<sup>th</sup>**

**Thursday, March 19<sup>th</sup>**

**Thursday, May 21<sup>st</sup>**

**Thursday, July 23<sup>rd</sup>**

**Thursday, September 17<sup>th</sup>**

**Tuesday, November 24<sup>th</sup>**

**In addition, two conference calls will be held to certify the April and October exams scores. These calls will be held on Thursday, April 23<sup>rd</sup> and Thursday, October 29<sup>th</sup>.**

Notice of all meetings will be posted in multiple newspapers and on the Department's website, in accordance with the Open Public Meetings Act.

**12. Master Well Driller Exam Module-**

P. Bono discussed how one remaining exam module, the Master Well Driller Exam, still needs to be completed so that all exams will be ready to be turned over to the National Ground Water Association (NGWA) when the Department is able to enter into a contract to have that association administer the exams. Members volunteered to assist in finalizing this module after the regularly scheduled Board meeting on January 15, 2015. P. Bono and S. Reya will provide the existing bank of questions that has been drafted along with reference material (regulatory and technical manuals) from which additional questions can be written.

**13. Update on the Geo Energy Alternatives (GEA) GA-XTRA Geothermal Grout-**

A letter from Steve Skufka and Dr. Ray Hemmings from GEA, dated November 17, 2014, was provided to Board members. The letter and supporting documentation, S. Reya explained, is in response to a June 3, 2013 letter he sent to their office which requested clarification and additional information on GA-XTRA Geothermal Grout. Both gentlemen had originally presented information about their cement-based thermally enhanced geothermal well grout product to the Board at the

March 21, 2013 meeting along with a request to approve the product for use in NJ. The packet now submitted for Board review addressed the topics identified in S. Reya's letter point by point, which included: submission of independent lab permeability data in accordance with ASTM D5084, information on NSF 60 certification and/or the full description of materials that make up the grout (as concerns arose from the Toxicity Characteristics Leaching Procedure (TCLP) test results that were initially provided), shrinkage test data or further information on the plasticity of the material and information on the bond strength of the grout material and ability to adhere to polyethylene piping.

Board member R. Dalton had also reviewed the latest information from GA-XTRA approximately a day or two prior to the Board meeting (the day the information was received) and noted that the manufacturer did not submit the actual data sheets or raw data for the permeability testing, which would have been used to generate the final permeability value specified in the letter provided from the lab, AMEC Environment & Infrastructure. S. Reya tried to obtain this information in time for the meeting but the manufacturer was unable to provide it. G. Craig pointed out that ASTM standards generally contain reporting requirements. Therefore, he suggested that the standard be reviewed because if the standard does not require that the lab submit data sheets (such as time vs. permeability graphs), it is unreasonable to require such information. If they were told via letter to comply with ASTM D5084 they may have already done so. R. Dalton noted, however, that all other manufacturers have been required to submit this supporting documentation so the standard should be the same for all manufacturers seeking product approval. All other points addressed in their letter were found to be satisfactory.

G. Craig offered to work with R. Dalton and S. Reya S. to review the ASTM standard to determine if additional desired data points should be available for review. Once that is determined, the next step would be to schedule a field pumpability test. The pumpability test will be scheduled as soon as feasible so as not to hold up the manufacturer from scheduling the one remaining requirement for approval.

#### **14. Presentation by Dr. Tom Atherholt, PhD on Bacteriological Contamination of Well Water-**

Dr. Atherholt, from the Department's Office of Science, presented findings of a study completed by members of his office and the Division of Water Supply & Geoscience. The research team obtained private well water quality data from the Bureau of Safe Drinking Water's Private Well Testing Act database. Some of the analyses presented covered 50,800 wells sampled over a 4 1/2 year period and some covered 78,500 wells sampled over a 10 year period. The wells were tested for total coliform (TC) bacteria. Those that tested positive were further tested for either fecal coliform or *Escherichia coli* (FC/E. coli) bacteria. The effects of the laboratory and the specific methods used were examined to see how each affected the results that were observed.

Dr. Atherholt also discussed how the geologic formation in which a well is installed greatly affects the bacteriological water quality. Specifically, he noted that wells drilled in bedrock regions typically exhibit three to four times the number of contaminated wells as those drilled in the unconsolidated sediments of the coastal plain region. The type of bedrock also plays an important role, as those wells completed in limestone and dolomite formations exhibited the highest percentage of TC and FC/E. coli contamination. Sediment accumulation or removal in the northern half of the state, resulting from glacial impacts during the ice age, also influenced coliform detection rates. Other variables he covered were the effects of pH, groundwater temperature, proximity to surface water bodies, amount of precipitation and nitrogen content. All of these variables influence the bacteriological water

quality of the ground water. Finally, well construction was discussed as an extremely important aspect in protecting wells from pulling in potentially harmful bacteria.

**15. Follow up on complaint brought against NJ licensed pump installer Edward Del Carlo of D&L Well Drilling & Pump Company-**

Board members were directed to review a June 23, 2014 letter submitted on behalf of a homeowner, Dwight Pederson, who resides in Holland Twp. The letter, which was prepared by his attorney John M. Scagnelli, from Scarinci Hollenbeck Attorneys at Law, alleged that a licensed Pump Installer, Edward Del Carlo, from D&L Well & Pump Company (D&L), had been sent to Mr. Pederson's residence to diagnose and repair a problem with his well. The pump reportedly exhibited catastrophic failure and released lubricating oil from the motor into the well. The letter alleges that Mr. Del Carlo installed a temporary test pump and discharged the oil laden water onto the lawn surrounding the well. Ultimately, the well was reconnected to the residence before the contamination was completely remediated according to the written complaint. The well has since been replaced and the contaminated well was decommissioned in accordance with Department regulations. The complaint further alleged that "Edward Del Carlo and D&L are guilty of gross neglect, incompetency, and misconduct in the practice of well drilling or pump installing under N.J.S.A. 58:4A-12. Wherefore, Complainant demands that the New Jersey State Well Drillers & Pump Installers Examining and Advisory Board take appropriate action against Defendants Edward Del Carlo and D&L as provided under N.J.S.A. 58:4A-12 and applicable New Jersey State laws, rules and regulations."

In addition to the June 23, 2014 letter, Board members were directed to the July 17, 2014 Board minutes, which summarized a presentation by both Mr. Pederson and his Licensed Site Remediation Professional (LSRP), Rodger Ferguson, in support of the submitted complaint. Mr. Del Carlo was not in attendance during the July Board meeting, and has not been afforded an opportunity to present his account of this matter. A motion at the July meeting requested that the well permitting staff carefully review the violation history of Mr. Del Carlo and D&L and to review the submitted complaint to determine if there were infractions against the provisions N.J.A.C. 7:9D or N.J.S.A. 58:4A-12.

P. Bono provided a summary of the staff's review in a November 20, 2014 memorandum she addressed to Chairman A. Becker stating that, following a review of the information in the complaint, there were no noted violations of the well regulations. The memo also noted that this is the first complaint against Mr. Del Carlo that has been brought to the Department's attention, and there is no history of violations or other enforcement actions. Finally, the memo indicated that, to the Department's knowledge, "Mr. Del Carlo has not been notified of the complaint, so there is nothing in writing from him regarding this incident. As reported in the written complaint, this incident of oil spilled onto the ground has been reported to the DEP hotline and is being tracked through the Department's enforcement program, which is outside the scope of the well rules."

D.A.G., Helene Chudzik, discussed the Subsurface and Percolating Waters Act, N.J.S.A. 58:4A-12, which is referenced in the complaint letter. This section of the statute pertains to suspension,

revocation of license, charges, hearing and final agency action. It specifies the Board's authority in that it "may, after conducting a hearing, recommend that the commissioner revoke indefinitely or suspend for a period of less than one year the license of any well driller or pump installer...if the board shall find the well driller or pump installer guilty of gross neglect, incompetency, or misconduct in the practice of well drilling or pump installing..." H. Chudzik advised that the complaint, by reference to this statute, is seeking action against Mr. Del Carlo's pump installer license. She stated that if a hearing is held the Department would work with the Office of Legal Affairs in imposing licensing sanctions if appropriate as a result of the hearing. She believed it would be difficult to prove that the licensee exhibited gross neglect, incompetency, or misconduct when the Department has reviewed applicable regulations and found no violations. Additionally, the man has no history of enforcement actions against his license. H. Chudzik noted that the property owner and his legal counsel may have civil or contractual issues with Mr. Del Carlo and D&L; however, nothing under the purview of the Board warrants further action. S. Doughty noted that the Department has not initiated any enforcement action against Mr. Del Carlo for any actions related to this site; therefore, he felt that sanctions against his license would be premature at this point.

The following motion was made by J. Yost:

A letter will be drafted for signature by Chairman A. Becker, which details that Board members and Bureau staff have reviewed the complaint letter, supporting documentation, enforcement history of Mr. Del Carlo and minutes from the meeting attended by Mr. Peterson and his LSRP and found that the actions of Mr. Del Carlo did not specifically violate any provision of N.J.A.C. 7:9D. Therefore, based on the lack of violation of the regulations within the Board's purview and the fact that the Department has reported no violation or complaint history against licensed pump installer, Edward Del Carlo, license sanctions in accordance with N.J.S.A. 58:4A-12 are not warranted.

The motion was seconded by G. Craig and approved unanimously.

#### **16. Bureau Enforcement Update by Julia Altieri-**

A. J. Altieri said she was pleased to announce that two longstanding enforcement cases had recently been resolved.

1. **Kavlunas/Total Quality Well Drilling Case-** Michael Kavlunas hired another licensed well drilling contractor to decommission a 430 ft. deep well in Salem Co. that the Department discovered was drilled without a permit and constructed in violation of applicable regulations (improperly grouted). The well was decommissioned from November 5 through November 7, 2014. S. Reya was onsite to ensure that the decommissioning followed the approved well decommissioning plan.
2. **A.C. Schultes Well-** A.C. Schultes, Inc. decommissioned a test well in Gloucester County that was installed to supply a public community drinking water system. The Department had ordered the well to be sealed when the driller and drilling company reported a grossly inadequate amount of grout (not grouted in accordance with N.J.A.C. 7:9D) and the drilling company admitted it could not provide the required

details of construction for the well record. This decommissioning took 15 days and was overseen the entire time by Bureau staff; primarily B. Buttari. Bureau staff also witnessed some of the drilling of the replacement well.

**B. Hearing Date set for Driller contesting Department violations** -A hearing has been scheduled for December 15, 2014, between Slater Well Drilling and the Department and their legal counsel. The hearing is in regard to two (2) separate enforcement issues involving wells on two different properties: a well modification that the Department contends was done illegally without the driller obtaining a well permit and a well decommissioning where the driller failed to follow a condition of the decommissioning plan approval (to notify the Bureau in writing prior to the start of decommissioning activity so that Well Permitting Program staff could be onsite). Mr. Slater is contesting fines assessed against him and his company in association with each of these violations.

**17. Bureau Field Activity-** J. Altieri also said that Bureau staff members made 43 site visits (including those related to the two enforcement cases noted above in Item 16A) in the past four (4) months. Five different full time staff and three hourly employees have participated in the effort to establish a more thorough field inspection program. J. Altieri noted that staff has been verifying the required permits, licenses and compliance with the well rules of N.J.A.C. 7:9D. These spot checks have verified that the majority of drillers are in compliance with the Department's regulations.

**18. DEP Program Updates-**

**A. Historic Well Program** - A landmark achievement involving multiple Department programs was announced: Every paper well permit, record, decommissioning report and cancellation is now data managed in NJEMS and scanned into HighView since the inception of the well permitting program in 1947! Dozens of staff from the Bureau, the Division of Water Supply and GeoScience and another 55 staff from a variety of other DEP programs assisted in working to identify the well documents which needed to be data managed, reviewed the location information to insure it's accuracy, properly data enter and scan the paper documents and finally sort the documents which are kept in the Department's warehouse. The Historic Well Document Project took nine (9) years to complete and officially ended in October 2014. The total number of wells tracked in the Department's database, NJEMS, is approximately 1.7 million. All "historic" documents were scanned, entered and located (via GIS mapping, block/lot matches, tax map information, etc.). It is anticipated that the completion of this monumental task will assist in water resource evaluations, site remediation activities and geological investigations in addition to assisting local health departments and well owners. Driller and members of the public can now see the entire list of available documents via an online web search.

**B. Regulations Update** - T. Pilawski reported that there has been no further advancement of the draft well rules. She has been told, however, that it is still deemed a priority rule within the Department and staff hopes to have the draft document forwarded to the Governor's Office in January.

**19. 12:50 pm-Adjournment-** A motion to adjourn was made by K. Muessig, seconded by S. Doughty and approved unanimously.