



State of New Jersey

DEPARTMENT OF ENVIRONMENTAL PROTECTION

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NJ STATE WELL DRILLERS AND PUMP INSTALLERS
EXAMINING AND ADVISORY BOARD

BOB MARTIN
Commissioner

New Jersey Department of Environmental Protection NJ State Well Drillers and Pump Installers Examining and Advisory Board Minutes for November 29, 2012

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

Board Members Absent: Carol Graff

Board Legal Advisor Present: Michael Schuit, Deputy Attorney General (DAG)

NJDEP Bureau of Water Allocation & Well Permitting Staff Present: Terry Pilawski, Pat Bono, Steve Reya, Julia Altieri, Mike Schumacher, Julie Mullins and Melia Stoop

NJDEP-Central Water Compliance and Enforcement Member- Jeff Hoffman

Member(s) of the Public: None.

1. Call to Order –

The meeting was held at the DEP headquarters at 401 East State Street, Trenton, NJ. Chairman Art Becker called the meeting to order at 9:39 am with a quorum present. A. Becker then stated that Deputy Attorney General Tirza Wahrman has left State service and that another legal advisor will be assigned.

2. Review of the Minutes from the September 13th Meeting and the November 7th conference call–

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

Board members reviewed the minutes for the conference call held on November 7, 2012 to approve the scores for the October 3rd exam. A motion to adopt the minutes without change was made by J. Yost and seconded by G. Poppe. It was approved unanimously.

3. Board Meeting Schedule for 2013-

Board members set the meeting schedule dates for 2013 as follows:
January 17, March 21, May 23, July 18, September 12 and November 21. These dates will be publically noticed as required.

4. Review and Certification of Exam Applicants for the December 12, 2012 Master, Journeyman, Journeyman B, Monitoring, Soil Borer and Pump Installers Exams –

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

Journeyman - A motion to approve all listed applicants for the exam was made by G. Craig, seconded by R. Dalton and approved unanimously.

Journeyman B – A motion to approve all listed applicants for the exam was made by R. Dalton, seconded by S. Doughty and approved unanimously.

Monitoring – A motion to approve all listed applicants for the exam was made by G. Poppe, seconded by A. Becker and approved unanimously.

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

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

5. Review of the Pump Installers Exam Surveys Provided by Applicants Who Took the October 3rd 2012 Exam-

J. Pepe noted that he believes the proposed change to a two-year experience requirement of applicants will significantly improve applicant scores. He indicated that he simply does not feel that one year is an adequate amount of time to properly learn diagnostic and repair skills for well pumping systems. A. Becker noted that several applicants indicated studying the regulatory portion of the exam for significant amounts of time (as much as 40 hours). This made the Board members question whether applicants are actually studying the “right” material. A discussion ensued about whether Pump Installer applicants are only studying relevant pump installation regulatory requirements and safety issues or if the applicants are overwhelmed by the study material and studying information that really pertains to well drillers. S. Doughty suggested that the Bureau draft a study guide that narrows down the portions of the regulations that apply to pump installers and give them a concise area to study. Finally, it was noted by A. Becker that both the National Ground Water Association (NGWA) and several well-known well pump manufacturers are looking to provide technical assistance and training to the industry, as lack of technical knowledge has proven to be a major problem in recent years.

6. Update on the Work Sessions –

S. Reya provided an update on the proposed revisions to the existing exams which will be submitted to the NGWA when the Department institutes the new (to be proposed) NGWA testing program at a future date. He indicated that several Board volunteers participated in the work session held on October 23rd to revise the monitoring well driller exam. Participants were able to generate a pool of about 50-60 questions. This provides enough surplus questions so that a slightly different mix of

questions can be generated each time the test is administered. To date, workgroups have covered the Pump Installer exam and the Monitoring Well Driller exam. Creation of a new exam to the Vertical Closed Loop Geothermal driller license would be taking place after the Board meeting this afternoon. S. Reya asked for volunteers to work on the Journeyman's test questions, which is anticipated to commence in the afternoon after the regular Board meeting in January adjourns.

The 2013 well driller and pump installer exam schedule was provided to Board members. The 2013 exams will be held on: April 3rd, June 12th, October 2nd and December 11th.

7. Status of Draft Regulations-

T. Pilawski said that unfortunately there are a few other draft regulations that are in DEP's legal division ahead of the well regulations in the queue to review. She added that some "emergency" rules may also soon be proposed to address concerns resulting from damage incurred by Hurricane Sandy. This would further delay the Department's internal review of the well regulations. It is also anticipated that once the regulations are proposed, it would be at least nine to ten months before they are adopted and become effective. Board members expressed being discouraged by the lack of progress with implementing the proposed regulations, as many feel the current regulations are out of date and ineffective. DAG Michael Schuit stated that he and several others from his office intend to meet with the DEP rule writers to address some questions that their office (Office of Legal Affairs) has with regard to the draft revision proposal.

8. Enforcement Activities- Julia Altieri & Jeff Hoffman (NJDEP Central Water Compliance and Enforcement) –

J. Altieri spoke about several active enforcement cases. One case involved three wells, two of which, are alleged to be improperly constructed in an area of saltwater intrusion. The DAG assigned to represent the Department has successfully negotiated a settlement of the case prior to the court hearing date. Of the utmost importance to the settlement was that the well driller agrees to completely overdrill and decommission the wells. As a result of his agreeing to do so, the Department has been willing to reduce the fines assessed against the well driller. The Bureau intends to send staff to witness the decommissioning of these wells to insure full compliance.

Board members and Bureau staff discussed appropriate well drilling construction methods that should be utilized in potential saltwater intrusion areas. A. Becker said that most people need to be educated on the subject of saltwater intrusion because if we lose a large quantity of fresh water to saltwater contamination, we lose the most valuable resource in the state.

It was also noted that the case concerning a well drilled by Michael Kavalunas from Total Quality Drilling, who discussed this case with the Board at a previous meeting, is still ongoing and that a date for the hearing has been set for February 4, 2013. The Bureau is currently compiling reports and photo/video documentation with the assigned DAG in preparation of a court hearing.

J. Hoffman discussed a draft document for referring license suspension cases to the Board for further action. Since the regulation and statute state that the Board is authorized to suspend licenses, he is attempting to create a document that would lay out the charges against an individual and the rationale for why the Department believes an individual's license should be suspended. He believes that the current well regulations, N.J.A.C. 7:9D, already allow for this and there is no need to wait for the new regulations to pursue license suspension against egregious violators in certain situations. This

document would detail the final agency actions that the DEP has taken against an individual and would be the first step, prior to conducting Board hearings. T. Pilawski stated that Bureau staff will verify that DEP can legally suspend a license under the current regulations. The Well permitting program staff will provide feedback to J. Hoffman once a legal opinion. T. Pilawski will talk to Division Director, Fred Sickels prior to the next Board meeting.

A suggestion made by J. Hoffman was to publicize the final agency actions that J. Altieri discussed earlier via an industry newsletter. He felt that if word spread through the industry that the Department pursued violations against these two individuals and companies, it would increase compliance. J. Yost said he feels that NJDEP simply does not have enough people out in the field to catch the illegal activity on a regular basis.

T. Pilawski stated that the Bureau will be initiating an effort to identify the "top" drilling companies who fail to submit well records. The goal is to gain compliance by meeting with representatives from these and to arrange a schedule for the submission of late well records.

9. Resolving Illegally Drilled (Unpermitted) Wells-

P. Bono asked the Board members for technical guidance regarding acceptable and feasible ways to deal with unpermitted well installations. She stated that generally the Bureau requires such wells to be overdrilled entirely to the original drilled depth, followed by complete grouting of the cleared borehole. The rationale for this is that if the drilling contractor is unable to provide sufficient conclusive information that proves the well was constructed properly, DEP cannot assume that it was. Therefore, if the annular space between the casing and the borehole was not properly grouted, it serves little environmental purpose to grout inside the well casing upon decommissioning. A. Becker stated that Cement Bond Logs, if available, could be used to document grouting. This activity is extremely costly and conducted only on larger capacity wells. The consensus of the Board was that every well and geologic formation creates a unique situation, but in general, removing the entire well would be protective of the state's aquifer and should be required if the original well construction details cannot be verified. The Board also stressed that it is the personal responsibility of every licensed well driller to complete and submit the required paperwork such as permit applications, records and drilling logs. Individuals should be held accountable if requirements are not followed.

10. Public Community Supply Well Permitting and Construction-

J. Yost raised a problem he has repeatedly witnessed in the municipal well drilling industry. Master well drillers are the licensed professionals charged with installing wells in accordance with DEP rules, however, the wells are designed and submitted for DEP review by NJ professional engineers. The plans that are approved as part of NJDEP Safe Drinking Water construction permit may or may not comply with the well rules. Additionally, he pointed out how the driller must apply for the permit through one DEP Bureau (BWA&WP), while the engineer must submit the proposed construction plans to another DEP Bureau (BWSE). He feels that the entire process makes it almost impossible for the licensed Master drillers to comply with the regulations yet they are held accountable if the well does not meet the well construction regulations. Often, the project engineers do not seek input from licensed drillers at the most critical point when the well is in the initial design and bidding phases. At no point is there an appropriate time in the process when a Master driller can provide feedback to the water company or the project engineer prior to final design of the well or contract. Further, it is the driller whose license is at risk if the well is not installed according to the approved design in the SDW permit or the drilling contract.

The driller must submit the well permit, be onsite for the drilling and submit the well record, yet their expertise is often overlooked by engineers and the DEP. He also mentioned that the well construction regulations (N.J.A.C. 7:9D) and the Safe Drinking Water Act Regulations (N.J.A.C. 7:10) do not cover all aspects of large diameter public supply well construction. Often times, the engineers also do not provide them with enough information at the time the well permit application is submitted to the Bureau of Water Allocation and Well Permitting. He questioned how the engineers can be encouraged by the Department to design wells, yet they often don't have the technical expertise and knowledge of the regulations to effectively do this. It would appear there needs to be a change to the Department's permit approval process.

G. Craig noted that in the geothermal industry he has encountered similar problems, where a bid that is written by an engineer calls for a design that is either impractical or would result in an illegal installation (not in compliance with DEP regulations). He stated that these issues must be caught and pointed out at the time of bidding to make it clear that the contractor will not be required to install a non-conforming well. With regard to DEP's internal permitting process, S. Reya noted that the two Bureau's referenced by J. Yost are now better coordinated. When the well permit application is reviewed, it is checked for consistency with engineering submittals, such as the SDW Permit to Construct and/or Permit to Operate. He said that the Bureau of Water Allocation and Well Permitting also recently began requiring proposed well construction schematics to accompany the well permit application, so the Bureau can ensure that the proposed well design is in full compliance with applicable regulations. However, S. Reya also acknowledged that Bureau staff members do receive calls from drillers that complain that local municipalities or water companies often put out bid specifications that are clearly not in compliance with our well regulations. Yet once a drilling company submits a bid, they are required to build that well design.

11. Update to the Heating, Ventilation, Air Conditioning and Refrigeration (HVACR) Board Rule Meeting-

S. Doughty updated the Board members on the Department's progress regarding the resolution of direct conflicts between the proposed HVACR rules and the well regulations NJAC 7:9D with the HVACR Board and the Department of Community Affairs (DCA). NJDEP Division of Water Supply and Geoscience Director, Fred Sickels, recently accompanied board members G. Poppe and G. Craig to the HVACR Board meeting on October 11th in Newark. At that meeting, it was reported that the HVACR Board is still reviewing the written comments that were submitted by the New Jersey Ground Water Association (NJGWA) and Director Sickels. Following that meeting S. Doughty, Director Sickels and a DEP Assistant Commissioner were scheduled to have a conference call with their counterparts at DCA to discuss the conflicting regulations. Additionally, one person from DEP's radon mitigation program was also to be included because some areas of the proposed regulation are thought to also be in conflict with that program (and associated DEP regulations). Unfortunately the call was cancelled by DEP due to Hurricane Sandy preparatory work. S. Doughty hopes to conduct this conference call (or resolve the problem by alternative method) shortly because he believes the proposed rules may be adopted soon due to the approaching expiration of the proposal (April 16, 1013). This means DEP must make their point to DCA and the HVACR Board very soon so the proposal is not adopted without change. Finally, he noted that the Board's replacement DAG (Jill Denyes) will have to assist in picking up this matter from Tirza Wahrman, who had initially reached out to the DAG working with the HVACR Board on the proposal of their new rule.

12. Hurricane Sandy Update-

T. Pilawski said that Division staff called each of the 605 public water systems in the days immediately following the hurricane to ask for the status of operations and resources. For example, is the water system still in operation and does the system have back-up power (generators) and fuel? Also, she said that Division staff worked shifts at the Regional Operations and Intelligence Center (ROIC) in Ewing, NJ and provided 24-hour coverage to address issues related to water systems as they arose for several weeks following the storm.

P. Bono said that wells subject to flooding and wells in high risk salt water areas have become an issue recently. She has suggested that the Bureau of Safe Drinking Water maintain up to date chlorination documents online. Also, she has recently been working with affected homeowners whose wells have been impacted by salt water flooding and/or damage from Hurricane Sandy and the associated cleanup. Many of these wells are located in areas of salt water intrusion so the replacement well permits are now being issued with conditions requiring double casing. T. Pilawski also noted that NJGS staff had recently provided a helpful GIS layer tool that will help the Well Permitting Program staff identify well permit coordinates that are located in areas of salt water intrusion potential. Additional training will also soon be provided to the well permit processing staff to identify such areas of concern upon review of the well permit application.

T. Pilawski said new flood maps, which are soon to be released from FEMA, may play into the issuance of well permits in flood plain areas. Fred Sickels has suggested that the updated maps be forwarded to all licensed well drillers so they can set up well vents accordingly in these areas. It is anticipated that the flood maps may differ from current maps by as much as two to eight feet. T. Pilawski also plans to run a report of all water systems located in flood plains to see if their designs are adequate for hurricanes and other such emergencies.

The Safe Drinking Water Ground Water Rule sampling document is now posted online. This is the document that was finalized after consulting with the Board at a past meeting, according to P. Bono. J. Pepe questioned whether there is any reference to this federal Ground Water Rule on the website section pertaining to Pump Installers, Journeyman Well Drillers, Journeyman B Well Drillers, or Master Well Drillers. Bureau staff said it is not contained in these sections, nor is it referenced in any of the suggested study material. It was suggested the Department make this information more readily available for these licensees because it is essential information that they need to know to effectively do their job. J. Pepe also suggested that ground water sampling and disinfection questions from the Federal Ground Water Rule be included on these exams, which all members said was an excellent idea.

13. Adjournment-

A motion to adjourn was made at 1:20 pm by G. Craig, seconded by K. Muessig and approved unanimously.