

Minutes – Thursday January 11, 2007

State Well Drillers and Pump Installers Examining and Advisory Board

Members Present: Norman Primost, Joseph Pepe Sr., Art Becker, Robert Stothoff, Anthony Tirro, Richard Dalton, and Fred Sickels

Members Absent: Karl Muessig, Peter Demicco

Others Present: Kristin Tedesco (DEP), Holly Papp (DEP), Pat Bono (DEP), Steve Reya (DEP), Brian Buttari (DEP), Michael Schumacher (DEP), Julia Altieri (DEP), Vince Monaco (DEP)

- 1. Call to Order** - The meeting was called to order by N. Primost at 9:35 am with a quorum present.
- 2. Review of Minutes from November 21, 2006, Board Meeting** – A motion to accept the minutes as written was made by R. Stothoff, seconded by A. Tirro, and approved unanimously.
- 3. Review of Executive Session Minutes from November 21, 2006, Board Meeting** – A motion to accept the minutes was made by F. Sickels, seconded by R. Stothoff, and approved unanimously.
- 4. Membership Update** – The Well Permitting Section has forwarded a letter recommending the renewal of the terms of all board members whose positions are expired.
- 5. Certification of December 5, 2006, Exam Results for Monitoring Well Driller** – The results of the exam were reviewed. A motion to accept the Monitoring Well Driller scores was made by R. Stothoff, seconded by A. Becker and approved unanimously.
- 6. Certification of December 5, 2006, Exam Results for Soil Borers** – The results of the exam were reviewed. A motion to accept the Soil Borer scores was made by A. Becker, seconded by R. Stothoff and approved unanimously.
- 7. Certification of December 5, 2006, Exam Results for Pump Installer** – The results of this exam were reviewed. R. Stothoff and J. Pepe questioned why two applicants, Kenneth Perkowski and Paul Denning, had been allowed to sit for the exam. At the November meeting, the Board passed a resolution stating that these two applicants should not be allowed to sit for the December Pump Installer Exam. This was based on the fact that both men worked for New Jersey American Water Company, not a well drilling or pump company. V. Monaco explained that after further consultation with Bureau staff and the Department's legal council, it was determined that both

applications were consistent with what had been accepted in the past. A licensed Master Well Driller and a licensed Pump Installer completed both reference questionnaires. There is no minimum amount of installations and/or hours required by Department regulations. Supervision is also never defined in the regulations so it is unclear whether the supervision is required to be direct onsite supervision. The Bureau did obtain further submittals from each of the applicants detailing the well pumping systems they had worked on over the past year in addition to the drilling company they worked with on the particular job.

A motion to accept the Pump Installer scores was made by R. Dalton and seconded by A. Tirro – F. Sickles, A. Tirro, A. Becker, R. Dalton, N. Primost. Two members, R. Stothoff and J. Pepe, opposed the motion. The Board then discussed how future clarification of the regulations should address the specific information applicants will be required to submit. The idea of issuing business licenses was also discussed. Bureau staff noted that they would have to further research legal issues regarding issuing a company license, not just individual licenses. The Board members expressed the opinion that if the Department were to license the well drilling companies, an enforcement link could be established between the actions of the company and their individual drillers/pump installers. J. Pepe noted that most licensing boards he has worked with issue licenses to companies. He suggested that Bureau staff look into how other agencies handle this issue.

- 8. Subcommittees on Review of Licensing Test Questions** – A motion was made by R. Stothoff, seconded by A. Becker, and approved unanimously to suspend the Open Session and go into Executive Session at 10:22 a.m., to discuss proposed exam questions. The Board came back into Open Session at 11:01 a.m.
- 9. Subcommittees on Review of Test Application Instructions** – A member of the Bureau staff will type up the application instructions and e-mail a copy to A. Becker. A. Becker will work on revising the instructions to make them easier for applicants to complete and hopefully raise the quality of the applications the Bureau receives. A Subcommittee of Board members will then meet and go over the results. Members would comment back to Art Becker who will forward to staff for revisions. A final draft of the application instructions will be brought to the March meeting.
- 10. Subcommittees on Review of Pump Installer Test** – S. Reya would like to review Pump Installer test. A committee will review existing test. J. Pepe Sr. will review test after the March meeting. J. Pepe, R. Stothoff, and N. Primost will stay after the May 15th Board Meeting to go over test with S. Reya. New questions (5 each –R. Stothoff, J. Pepe Sr., N. Primost), will be brought to the May 15th meeting. R. Stothoff and J. Pepe also indicated that they would be willing to meet with S. Reya after the March 8th meeting to get an idea of the current exam format.
- 11. Bylaws**- This will be the first item on the agenda for the May Board meeting. The election of chairman/vice chairman will take place at that time. A. Becker will run the March meeting in N. Primost’s absence. A typo on page two of the bylaws will

be revised to clarify the duties of the secretary to the Board. The word “a” in item 3A on page two of the bylaws will be changed to “as.”

The Board then discussed the requirements to serve as chairperson, as detailed in Item 1 on page two. Several members were unsure of whether the language would exclude a Board member who held a Master Driller License but was serving the Board in the capacity of the “licensed category of any class.” All members felt that any Master Driller on the Board would qualify as chairperson. N. Primost believed that the language should be clarified to reflect this.

12. Grout Document Update – no comments have been sent to R. Dalton since the November Board meeting. R. Dalton will bring samples to next meeting. He will also finalize the grout document and distribute upon completion.

13. Geothermal wells (14 total) grouted with unapproved grout mixture-
S. Reya requested the Board’s guidance with regard to a proposal submitted by a drilling contractor requesting to have the two altered grout mixes tested at a commercial lab for several parameters. S. Reya questioned whether the three-inch by six-inch sample tube would be large enough to accurately represent the grout used in the geothermal wells. Additionally, he questioned the percentage of deviation from the standard cementitious thermally enhanced grout (T-111) that should be considered acceptable to the Bureau. Finally, he inquired as to whether visible cracking should be noted at the completion of the thermal cycling.

Board members recommended several standards for Morrison Inc. to meet in order to ensure that the grout mixtures used would result in satisfactory geothermal wells. The permeability, infiltration rate, pumpability, bond strength, and resistance to cracking would all have to be acceptable to the Bureau before the grout mixtures would be approved for the fourteen wells in question. Field demonstrations would have to be performed in the presence of Bureau Staff and Board Members to demonstrate the pumpability of the altered grout mixtures. The tremie pipe would have to be the same length and diameter as initially used. Additionally, the same model paddle mixer utilized during initial construction would have to again be used to mix and pump the grout. Several other parameters would also have to be addressed, which were not acceptable in the proposal.

S. Reya noted that he would write a letter detailing the concerns of both the Board and the Bureau. This letter would require the drilling contractor to submit a revised proposal prior to performing any lab testing and/or work at the site. Alternatively, the contractor would still be allowed to drill out the wells in question to the original depth and diameter and properly decommission the boreholes or set new geothermal loops in the cleared borehole.

14. Fee Rule – The well permitting staff is working on response to comments received on the fee rule proposal. The rules sunset on March 3, 2007 and therefore must be

adopted prior to that date. Publication of the adoption document is expected in the spring.

15. E-Permitting – Well permitting has been identified as the highest priority program in Land Use Management to go into an e-permitting program.

16. List of Tech Rule Issues– The Department provided a list of tech rule issues that have been compiled from unofficial comments received from the well drilling industry. The Board members will review the list for any additions or changes.

17. DEP implementation of regulations for use of drive/cutting shoes for wells – V. Monaco requested the Board's guidance in how the Bureau can enforce regulations concerning the driving of well casing. According to V. Monaco, outer casings, intended solely as temporary casings, are actually being left in the ground at the time the well is completed. Specifically, many wells drilled with air rotary have an outer casing that is often left in the ground and the Bureau is usually unable to determine what attempt, if any, was made to remove the temporary casing. The fact that the outer casing was not installed with a cable-tool rig with a drive shoe larger than the casing diameter has caused concern to some Bureau staff. V. Monaco stated that he believes that any temporary casings must be removed and never left in the ground permanently. A. Tirro felt that the installation of well casing with a cable-tool rig was more destructive to a natural foundation but that method meets the regulations. He also felt that the Bureau should look at different areas of the state and to determine what methods would be acceptable in different geologic conditions. N. Primost felt that this issue would have to be addressed during the revisions of the technical rules since it was a major change in the current regulations and industry practice.

R. Stothoff indicated that the outer casing is generally required to facilitate the construction of the well and that often times it cannot be removed. Also, he noted that in certain parts of the state there is no reasonable way to construct a well without driving an outer casing (excluding eccentric bits and dual-rotary discussed at previous meetings). M. Schumacher stated that during his review of a sampling of well records, he had concluded that drillers appeared to be making an honest attempt to remove outer casings. He had found that many outer casings were pulled from the well upon completion, whereas some others were left in the hole. He did not notice a pattern among certain drilling companies or a tendency for certain companies to always leave the outer casing in the hole. R. Stothoff also suggested that future regulations could require that the inner/permanent casing be set further into rock (as much as fifty feet) to better seal off the uncased portion of the well from any contamination in the overburden. F. Sickels suggested that Bureau staff may want to present a more developed proposal to the Board.

18. Adjournment – A motion was made by R. Stothoff, seconded by A. Becker and approved by all to adjourn the meeting at 3:22 p.m.

Action Items:

- DEP staff will type test application instruction and send to A. Becker
- Steve R. will have the pump installer exams ready for review by J. Pepe and R. Stothoff after the March 8, 2007 Board meeting.
- Kristin T. will send the R. Stothoff the list of Tech Rule Issues
- DEP staff will revise 10 questions on OSHA/NJ One Call for review at March meeting