



State of New Jersey

DEPARTMENT OF ENVIRONMENTAL PROTECTION

CHRIS CHRISTIE
Governor

BOB MARTIN
Commissioner

KIM GUADAGNO
Lt. Governor

Mail Code 401-04Q
DIVISION OF WATER SUPPLY & GEOSCIENCE
NEW JERSEY GEOLOGICAL AND WATER SURVEY ELEMENT
BUREAU OF WATER ALLOCATION & WELL PERMITTING
401 E. STATE STREET - P.O. BOX 420
TRENTON, NEW JERSEY 08625-0420
TELEPHONE (609) 984-6831
FAX (609) 633-1231
www.nj.gov/dep/watersupply

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 14, 2016

Approved by the Board on March 17, 2016

Board Members Present: Art Becker (Chairman), Gary Poppe (Vice-Chairman, arrived at 10:18 am) Gordon Craig, Joe Pepe, Richard Dalton, Carol Graff and Steve Doughty.

Board Members Absent: Joe Yost.

NJDEP Bureau of Water Allocation & Well Permitting Staff Present: Terry Pilawski, Pat Bono, Steve Reya, Julia Altieri, Michael Schumacher, Jeff Brennan, Jennifer Ngo and Melia Stoop. Mark Ortega and Jeremy Wick present from 10:30 until the conclusion of the meeting.

New Jersey Geologic & Water Survey (NJGWS) Staff: Jeffrey L. Hoffman, NJ State Geologist.

Other NJ DEP Member Present: Bryan Barrett, Water Compliance and Enforcement-Central Region

1. Call to Order –

The meeting was called to order by Chairman A. Becker at 9:42 am with a quorum present.

2. Introductions-

Two (2) new employees of the Bureau of Water Allocation and Well Permitting (Bureau), Jeff Brennan and Jennifer Ngo, were introduced to Board members. They will be working for the Department on a part-time basis to assist the Well Permitting Section in the review of Well Records and Well Decommissioning Reports.

- 3. Review and Certification of the Minutes for the November 24, 2015 Meeting –**
A motion to approve the minutes without change was made by G. Craig, seconded by S. Doughty and approved unanimously.

- 4. Review and Certification of Exam Scores for the December 9, 2015 Master Well Driller, Journeyman, Journeyman B, Monitoring Well Driller, Soil Borer and Pump Installers Exams –**

Master Well Driller– A motion to approve the sole listed exam score was made by R. Dalton, seconded by C. Graff and approved unanimously.

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

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

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

Soil Borer – A motion to approve all listed exam scores was made by C. Graff, seconded by S. Doughty and approved unanimously.

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

Dewatering –A motion to approve the sole listed exam score was made by G. Craig, seconded by C. Graff and approved unanimously.

- 5. Pump Installer Surveys-**

Board members reviewed the Pump Installer exam surveys from the December 9, 2015 exams. S. Reya noted only two (2) applicants sat for the exam, resulting in limited information. A. Becker said the National Ground Water Association (NGWA) recently produced some new instructional videos about well pump installation and repair. He suggested that the well permitting technical staff view them for content and any potential discrepancies with NJ state well regulations. A. Becker noted these would be valuable study aids for applicants preparing for licensing exams. As has been previously noted, the Bureau has developed a regulatory study guide that has already significantly improved scores on this section of the exam.

- 6. Review of the GeoPro Power TECx Geothermal Grout Mix Letter (Steve Reya) –**

S. Reya stated that after discussing GeoPro, Inc.'s latest request for approval of their PowerTECx geothermal grout product with R. Dalton, some additional clarification from the manufacturer representative is needed. The independent lab's testing results for the product's permeability state that the permeability of the product did not exceed the Department's maximum allowable permeability value of 1×10^{-7} cm/sec (as tested in accordance with ASTM D5084). In a December 7, 2015 letter and accompanying product field mixing instructions, GeoPro, Inc. noted that the PowerTECx product must be mixed with GeoPro's Thermal Grout (either Thermal Grout Lite or Thermal Grout Select as defined by the specific mix). The fact that there are two (2) thermal grouts with which the additive can be mixed leads to the question of whether altering the Thermal Grout bentonite product would affect the permeability of the mix.

Although GeoPro is requesting approval for two separate products, lab permeability data was only provided for the mix containing Thermal Grout Select. Board members discussed the necessity of requiring that a separate lab test be conducted using Power TECx mixed with Thermal Grout Lite. Since the base bentonite products are extremely similar, G. Craig suggested the Department request

permeability data for Thermal Grout Lite and Thermal Grout Select (without the addition of silica sand or any other thermal enhancement compound) to compare the permeability of the base materials. Board members agreed that required field demonstrations for each grout mix will still be required. Permeability data generated as part of the field data will demonstrate if each grout product will meet the Department's standards. S. Reya noted that the company representative also informed him that they may have lab permeability data for both mixes. R. Dalton suggested that they provide the data and attach an accompanying notarized letter that attests to which product was tested. This may help GeoPro avoid performing re-tests of the same material. S. Reya will contact the manufacturer's representative, Allan Skouby, for further clarification and report back to Board members.

7. Presentation on amendments to the Safe Drinking Water Revised Total Coliform Rule-

L. Ofori, from the Bureau of Water Systems Engineering's Compliance Assistance Unit, presented a summary of a new Federal rule mandated by the US EPA for public drinking water systems. The Revised Total Coliform Rule (RTCR), effective April 1, 2016, regulates microbial standards and actions to be taken by the public water systems. The purpose of the RTCR is to transition to total coliform (TC) bacteria as an indicator of potential pathways to contamination and to improve public health protection by requiring the identification and correction of defects in the sanitary system. Under the current Total Coliform Rule, if after sampling, total coliform or E.coli is detected there are no requirements for assessment or corrective action. The RTCR, however, utilizes a "find and fix" approach to locate problems or weaknesses in sanitary system by conducting specific assessment protocols spelled out in the rule.

There are two (2) levels of assessment that are based on the severity and frequency of potential contamination. The goal of the RTCR is for systems to take a more proactive approach to public health protection compared to the current TCR rule. L. Ofori stressed the fact that the drilling/pump installation industry will be a primary player in identifying and performing corrective actions, along with completing the required assessment forms, which will be submitted to her program for review. She noted that common corrective actions include: well maintenance/repair, disinfection, flushing, replacement/repair of distribution system or storage components, storage facility maintenance, development/implementation of operations plan, maintenance of adequate pressure and training on proper sampling technique. Finally, she covered how the RTCR affects seasonal water systems and provided pertinent information regarding start-up procedures that must be followed by seasonal systems.

8. Enforcement and Field Work Activities –

A summary of the Well Permitting Program's recent (past 7 weeks) enforcement and field activities was presented by Julia Altieri.

- A) Decommissioning of Hand-Dug Wells by a Pump Installer- Staff are investigating several incidents in which a licensed Pump Installer decommissioned multiple hand-dug wells; an activity for which he is not licensed to perform. After performing the work he then had a New Jersey licensed Journeyman Well Driller provide letters on company letterhead to verify that the wells were properly decommissioned. Notices of Non-Compliance have been issued to the licensed pump installer for decommissioning wells without a proper license, and to the Journeyman well driller and his company for aiding and abetting for the same violation.

- B) Unpermitted Domestic Well Drilling by Unlicensed Individual-The Section is currently investigating an incident of a Pennsylvania based well drilling company who started drilling a

new domestic well in Warren County without a New Jersey licensed well drill onsite and without a valid permit. The situation was discovered by the local health department as part of routine inspection. At this time, the unlicensed driller has abandoned the drill site after partially completing a 200 ft, deep pilot hole with PVC casing in the borehole. The Bureau is currently gathering all documentation to begin formal enforcement action against the unlicensed driller and his company and working with the health department and property owner to resolve the issue of the uncompleted well.

- C) Improper Well Construction by NJ Licensed Master Well Driller (17 Wells)- The Bureau is preparing to send four (4) formal enforcement documents (AONOCAPA's) with orders to decommission approximately 17 improperly constructed wells. This is the result of an ongoing investigation of a Master well driller who has been constructing wells with suspected insufficient grout. According to the driller's own admission via his submitted well records and decommissioning reports, various closed loop geothermal, domestic, irrigation well records and decommissioning records have been submitted listing insufficient grout mixtures and/or quantities. The driller and his company have repeatedly ignored the Department's efforts to resolve the compliance issues. More recently, the driller partially responded to some of the notices, but failed to provide sufficient documentation to resolve the outstanding issues.
- D) Failure to Submit Well Records- The Department is formally pursuing a well drilling company for failure to submit 901 outstanding well records owed to the Bureau from the years 2000 to 2015.
- E) Field work- Well Permitting Section staff performed two (2) field inspections during the past seven (7) weeks. Staff inspected existing monitor well locations and wells for pending well decommissioning work.
- F) Michael Kavlunas/Total Quality Drilling Salem County Case Resolution- The Department received the final payment from Master Well Driller Michael Kavlunas and his company, Total Quality Well Drilling. The payments totaling \$2070.16 were for the additional penalty he was issued for the State's legal fees in addition to the already paid amount of the penalty assessed to him for \$3,900. The case is now total officially closed.

9. Drought Status Update-

S. Doughty provided an update on the status of drought conditions. Precipitation levels have continued to increase and are now representative of the anticipated long-term average. Reservoir storage has improved markedly, while the recovery of stream flows and unconfined groundwater levels, which typically rebound more slowly following drought conditions, are continuing to improve. The Department continues to monitor drought indicators.

J. Hoffman and G. Poppe also briefly discussed the groundwater level monitoring that the United States Geologic Survey (USGS) will be performing in Colts Neck Township to assess the extreme water table drawdown reportedly affecting the Englishtown aquifer during the summer season.

10. Wild West City Appeal Update-

T. Pilawski provided an update on the appeal status of an amusement park located in Byram Twp, Sussex Co. The appeal, which pertains to a Department order requiring a well at the site to be either decommissioned or re-designated as a non-potable water source, stems from E. coli bacteria contamination in the well. The property owner continues to fight the requirement to re-designate the well for a new proposed use (livestock supply) rather than decommissioning the well. A recent summary judgment ruling upheld the Department's previous order that the well be re-designated. Additionally, the owner needs to obtain a local permit to operate the new (potable replacement) well. Sussex County Health Department is requiring that either the submission of a well decommissioning report or a new state well permit be issued which re-designates the use of the well prior to issuing their approval to use the new well.

11. Status of the Well Rules Proposed Readopted-Terry Pilawski-

P. Bono, S. Reya and M. Schumacher have been revisiting the draft revisions to the well rule (N.J.A.C. 7:9D). The draft is now approximately four (4) years old. The review is to incorporate any new industry technologies or techniques developed since they were drafted. A. Becker asked if Board members could review the draft, particularly with regard to the Board procedures and enforcement sections, as they were directly involved in the initial draft several years ago. Bureau staff will provide these sections either at the upcoming meeting or preferably earlier via email to allow members to review the material in advance of the meeting.

12. Adjournment- A motion to adjourn was made by S. Doughty at 12:34 pm. The motion was seconded by G. Poppe and approved unanimously.