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DEPARTMENT OF ENVIRONMENTAL PROTECTION

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NJ State Well Drillers and Pump Installers

Examining and Advisory Board

Minutes for July 18, 2013

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

Board Members Absent: Joe Pepe and Carol Graff

Board Legal Advisor Present: Alison Reynolds, Deputy Attorney General (DAG)

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

NJDEP Bureau of Safe Drinking Water Staff Present: Kristin Tedesco

NJDEP Enforcement Member Present: Jeff Hoffman, NJDEP Water Compliance and Enforcement, Central Region

Member(s) of the Public: None

1. Call to Order –

The meeting was called to order by Chairman A. Becker at 9:45 am with a quorum present. T. Pilawski introduced Jeremy Wick, a student majoring in Geology at Temple University, who is a new hourly employee recently hired to work in the Bureau of Water Allocation and Well Permitting (Bureau). He is assisting technical staff with the review of recently submitted well documents and will also be gaining some field experience by observing drilling activities. A second hourly employee who will soon start working with the well permitting staff is Fayard Ali, a recent graduate from Rutgers University who majored in Geology. T. Pilawski anticipates he will receive permission to start working in the next few weeks. He will perform similar tasks as Mr. Wick. The assistance of these two individuals will provide the permanent technical staff with more time to conduct needed site inspections site inspections.

2. Review of the Minutes from the May 23rd, 2013 Meeting-

A motion to approve the May 23rd, 2013 open session Board meeting minutes without change was made by G. Craig seconded by R. Dalton and approved unanimously.

3. Review of the Minutes from the Executive Session for May 23rd, 2013-

A motion to approve the May 23rd Executive (Closed) Session meeting minutes without change was made by J. Yost seconded by G. Craig and approved unanimously.

4. Well Driller Exam Schedule for 2013-

S. Reya again reminded Board members of the two remaining 2013 exams in the event that members have any employees or associates who wish to sit for an exam. Well driller and pump installer exams for all licenses classes will be held on the following dates:

October 2 (September 1 application deadline)

December 11 (November 15 application deadline)

5. Review and Certification of Exam Scores for the June 12th, 2013 Master, Journeyman, 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 G. Craig and approved unanimously.

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

Journeyman B – S. Reya noted that for the first time in years there were no Journeyman Class B applicants for an exam session.

Monitoring – A motion to approve all listed applicants for the exam 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 R. Dalton, seconded by G. Craig and approved unanimously.

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

6. Review of Pump Installer Surveys—

The June exam cycle marked the first time that the names of the individuals completing the Pump Installer Exam Survey were provided since the Bureau began including the survey in exam envelopes. This allowed the Board members to correlate the experience, training and feedback provided by each applicant with their exam score. S. Reya noted that three of the five applicants who sat for the exam returned a completed survey. Of particular interest on one of the surveys reviewed by Board members was a written paragraph stating that much of the information contained in the study material pertained to well construction, well drilling methods and regulations and was therefore not specifically geared toward Pump Installer applicants. S. Reya mentioned how the recently developed Pump Installer Study Guide that focuses specifically on those portions of the regulations relevant to Pump Installers was not posted to the Bureau's website until recently (which was after he checked the website upon reading the applicant's comments). Regrettably, the applicant would not have seen this

material unless he obtained the study guide from the Bureau via regular postal mail. A. Becker felt that since the applicant took such effort to write his complaint, the DEP should send a reply to let him know that the info is now available directly online and to thank him for his feedback. .

7. Proctoring of Exams—

Now that the Well Permitting program staff proctor the exams directly, they are getting better acquainted with the process. P. Bono described how she noticed how nervous some of the test takers become when they enter the testing center and observed that some of them arrived visibly rattled if they were late due to heavy traffic. She attempts relieve concerns on the part of the test takers by announcing that the Bureau Staff will stay all day at the test center so there is plenty of time to finish any exam, regardless of the license category for which the applicant is sitting.

8. NJDEP Enforcement Activities Update-Julia Altieri Updates-

Recent Field Activities-

J. Alteri reported that Bureau staff has inspected over ten well drilling sites within the past six weeks. The monthly average in the past has been about two sites per month. Staff reported that for each of the sites visited, properly licensed drillers were present and copies of the requisite well permits were on hand for inspection. In addition, grouting materials and equipment were on site. All present agreed that this was encouraging news. Several of these inspections were prompted by the Bureau's new policy of adding a condition to permits which requires the drilling company to provide advance notice of when the work will be done, so that Bureau staff have the opportunity to plan a site inspection. To date, these conditions have been randomly assigned to seven permits, said J. Altieri, other spot checks are the result of staff observing drill rigs/drillers while on route to some of these sites. The Bureau intends to continue to conduct more spot checks in the future.

M. Schumacher indicated that the Bureau is now catching up on both well records and well decommissioning reports; this is partly attributable to the assistance of the new hourly employees trained to review these documents. As previously noted, this is also furthering the Bureau's field initiative by opening time for the technical staff. J. Hoffman suggested that if the Well Permitting staff could provide training on how to conduct and document a spot check, Enforcement staff would be able to respond quicker when a complaint or problem is called into the Department. He also believes that in the course of traveling to other sites, Enforcement staff could keep an eye out for operating drill rigs and conduct spontaneous inspections for basic compliance. The same could be provided to local health department staff to provide even more surveillance in the field. Chairman Becker volunteered the idea that various drilling industry representatives would be willing to assist with this effort to train folks.

Status of Ongoing Enforcement Cases-

J. Altieri noted that two longstanding enforcement cases are continuing to progress.

1) The E.A. DeSantis case in which the Bureau required the decommissioning of three wells has progressed to the point where two wells have been decommissioned and two replacement wells have been drilled. The third and final well that must be decommissioned is located at a summer produce farm stand. Therefore, the Bureau has been working with the drilling contractor and property owner to allow use of the existing well throughout the summer, while making it clear that the well must be decommissioned and replaced in the fall.

2) The illegal direct expansion (DX) geothermal installation case is also moving along. Bureau staff and Department DAGs have been working to reach a settlement with the contractor that installed the system.

Further enforcement activity was summarized by T. Pilawki and J. Altieri as follows:

- The Bureau is working to resolve some wells that were drilled by the deceased driller, John Ricigliano. While the Bureau will not be pursuing any fines against Mr. Ricigliano's estate, there remains the issue of working with property owners to decommission any illegally drilled, nonconforming wells. T. Pilawski will be reaching out to K. Muessig to see if there is a possibility that the New Jersey Geological and Water Survey (NJGWS) staff can assist in this endeavor.
- Finally, the Bureau anticipates sending a letter to licensed Journeyman Driller, Brian Funkhouser, notifying him of the Bureau's intention to not allow him to renew his license at the June 30, 2014 deadline, as he has a number of outstanding violations. This letter will specify that Mr. Funkhouser is requested to attend an upcoming Board meeting to answer for his outstanding violations and give his account of what happened. He may also bring legal counsel should he choose.

9. Well Regulations (N.J.A.C. 7:9D): Status of Draft Regulations-

T. Pilawski said that the Department continues to resolve comments from several state DAGs who have reviewed the draft regulations. These rules have been prioritized and fast-tracked within the Department, she stated. Multiple DAGs have commented on the draft so far and it is the task of Kristin Tedesco, the Division's rule manager, to address comments and concerns raised by all involved DAGs. Once these are resolved, DEP's internal legal review will commence (expected to begin in August). It is hoped that the rule proposal will be published in the New Jersey Register for public comment in October of 2013, which would mean a filing deadline in September.

K. Tedesco provided copies of the Board procedures, which are specified in the draft regulations. She discussed the fact that Board DAG, Jill Denyes, was involved in the drafting of this section. Upon review by other DAGs, however, some questions and concerns arose. Board members reviewed the section and accompanying comments and provided feedback to K. Tedesco so she can finalize the language in this section and relay the members' comments and opinions to legal counsel.

10. Review of proposed drilling activities in areas of Saltwater Intrusion-

Recent activity concerning construction and decommissioning of wells in areas of known or suspected saltwater intrusion have focused the Bureau's resources on requiring certain well construction specifications and grout mixtures for these areas. Sites located in close proximity to the Atlantic Ocean, Delaware Bay and saltwater marshes are all areas where the Bureau considers requiring double cased well installations and/or saltwater resistant (cement based) grout materials. M. Schumacher discussed a meeting that was recently held between Bureau and NJGWS staff to develop tools to assist in flagging permits for sites located in areas that should receive further review by staff. Specifically, he indicated that he is in the process of modifying an existing saltwater wetlands layer and adding several other layers and buffers to develop a single layer. Board members commented that it would be helpful if drillers could view this layer through the GeoWeb or iMap programs so they can better determine if they are working in an area that is vulnerable to salt water intrusion prior

to submitting a well permit application. M. Schumacher anticipates that the layer would be a publicly available layer that would be identical to the layer utilized by Bureau staff when reviewing permit applications to determine the appropriate well construction.

G. Poppe questioned whether M. Schumacher could provide a summary of the Bureau's concerns with saltwater environments and a short description of how the Bureau is handling permit applications for sites located in these environmentally sensitive areas. He wishes to add this summary to the New Jersey Ground Water Association's newsletter to inform their members. M. Schumacher will provide the requested summary to G. Poppe.

11. GEO Supergrout- Geothermal Grout; Request for NJ Approval-

S. Reya discussed a July 12, 2013 email from David Bazzell, from SuperGrout Products, LLC describing GEO SuperGrout geothermal grouting product and requesting approval for use of this product in New Jersey. In addition to the product description of this cement-based geothermal grout, Mr. Bazzell provided supporting documentation, which consisted of the following: approvals for various states, Material Safety Data Sheet (MSDS), product literature, photographs, NSF/ANSI 60 Standard, NSF/ANSI 60 approval, Nebraska Grout Study article and permeability report. Board members discussed the fact that the permeability value on the lab summary sheet was below the maximum limit allowed the regulations, so the grout could be approved if all other applicable requirements were met. They requested, however, that the Bureau contact Mr. Bazzell and request the backup documentation that confirms the permeability value was obtained in accordance with ASTM D5084. Additionally, several members noted that the information provided did not contain enough hard evidence on shrinkage of the grout material (which is reported to be very little according to the supplied paperwork). Resistance to cracking as a result of thermal cycling was also noted as an item that was overlooked in the submission. Finally, no mention of the bond strength created between the cement based grout and polyethylene closed loop geothermal piping was made. Members stressed that if and when these items are addressed the manufacturer will be required to perform a field demonstration to illustrate that the product can be mixed and emplaced within a well borehole, while maintaining suspension of the solids within the grout slurry. S. Reya will draft a response letter to Mr. Bazzell requesting clarification and additional information for the items raised by Board members.

12. Proposed National Ground Water Association (NGWA) Testing- Progress of Updating Existing Exams-

S. Reya noted that Kathy Butcher from NGWA recently provided him with some helpful comments regarding the list of questions that will be used to make up the various NJ Regulatory exam modules. Once he and the volunteer Board members have completed revising the exam revisions to the Master and Dewatering Modules, he can complete the spreadsheet of all available questions and make sure that all questions and answer choices meet the requirements and guidelines of NGWA and the associations, testing vendor. Board members will postpone the review of the Master exam module until the September 12th meeting, as not all members had time to draft possible exam questions. S. Reya will email out a list of questions he has received from Board volunteers thus far and the remaining volunteers will provide suggested questions to S. Reya for inclusion in the list. The compiled list will then be reviewed after the regular Board meeting on September 12.

12:35pm Adjournment- A motion to adjourn was made by G. Poppe at 12:35 pm, seconded by K. Muessig, and approved unanimously.