



State of New Jersey

DEPARTMENT OF ENVIRONMENTAL PROTECTION

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New Jersey Department of Environmental Protection State Well Drillers and Pump Installers Examining and Advisory Board Meeting Minutes for November 17, 2022

Approved by the Board on December 15, 2022

Board Members Present at NJDEP Headquarters Building: N/A

Board Members Participating Via Telephone/Microsoft Teams: Art Becker (Chairman), Gary Poppe (Vice-Chairman), Joe Yost, Gordon Craig, Dave Lyman, Eric Hoffmann, Jeff Hoffman, Richard Dalton, and Steve Domber

Board Members Absent: Gordon Craig

Board Legal Representative Present: Deputy Attorney General (DAG) Jill Denyes, NJ Division of Law

NJDEP Water Supply (Bureau of Water Allocation and Well Permitting) Staff Present: Joe Mattle, Steve Reya, Mark Ortega, Steve Vargo, Jillian Walker, Michelle Herbert, Ray Bousenberry, and Abby Lodge

Members of the Public: Brian McGuire; MB Drilling

1. Call to Order and Introductions-

The meeting was called to order at 9:32 am with a quorum present via Microsoft Teams and telephone. Notice of the meeting and instructions on how to participate by video or phone were listed on the Department's website. Before the roll call, S. Reya noted that G. Craig contacted him ahead of the meeting to let him know that he would be unable to attend.

S. Reya introduced Ms. Abby Lodge to the Board. He said that A. Lodge recently joined the Water Allocation Section as an Environmental Services Trainee. The Board welcomed her.

2. Review and Certification of the October 20, 2022 Meeting Minutes-

A motion to approve the draft minutes from October 20, 2022 as written was made by J. Yost, seconded by D. Lyman, and approved by all except for G. Poppe and S. Domber who abstained due to not being present at the October meeting.

3. Sunoco Jacobs Creek Horizontal Directional Drilling (HDD) Pipeline Replacement Project-

S. Reya informed the Board that Department staff recently visited the site of the Sunoco Jacobs Creek HDD project. He reminded the Board that A. Becker and G. Craig participated in discussions with the Science Advisory Board's investigation into the potential regulation of HDD by the Department. S. Reya discussed the Department's current involvement with HDD projects. He said that the Department reviews geotechnical data from the soil borings completed before an HDD project starts. The Department also reviews inadvertent release (IR) response plans.

S. Reya discussed some of the details of the HDD project. The pilot hole, which begins in Upper Makefield, Pennsylvania, would be drilled under the Delaware River and come out on the border of Ewing and Hopewell Townships. A 10" pilot hole will be drilled approximately 2500 linear feet, as deep as 85 feet below the base of the Delaware River. The pilot hole will be reamed to 20" and a 14" pipe will be installed.

J. Hoffman asked Water Compliance and Enforcement to notify the Division of Water Supply and Geoscience in the event of an IR on this site. The consulting company has spotters along the Delaware River and uses drones to monitor for IRs.

R. Dalton noted that it was informative as he was able to discuss mud pump pressure versus "downhole" pressure at both the drill bit and annulus with the contractor representatives onsite. He mentioned that downhole pressure is important in understanding the potential for IRs and he briefly discussed the difference in pressure values reported at the mud pump and how that could differ from the downhole pressure.

A. Becker asked what drilling company was doing the drilling for this project. S. Reya said that Aaron Enterprises Inc. is performing the work. S. Reya noted that Aaron Enterprises Inc. also performed some of the drilling on the New Jersey Natural Gas Southern Reliability Link Pipeline. A. Becker asked where the company was based out of. R. Dalton said that they were based out of Pennsylvania.

A. Becker asked the Department if a licensed person will need to be on site during drilling if the Department regulates this part of the industry. Specifically, if a licensed person would be needed when drilling from another state into New Jersey. The Board members agreed that a licensed person would need to be on site if a well was being drilled into New Jersey. J. Hoffman briefly mentioned that if the Department does regulate this part of the industry, there will need to be revision to the current licensing program to allow for individuals who drill HDD wells to become licensed.

A. Becker asked if anyone on the Board knew about any HDD projects in the Long Beach Island area. R. Dalton talked about potential wind farm projects that are occurring in that area and noted that it is possible that HDDs would be utilized at points where power is brought onshore.

4. Drought Conditions Status Update and Domestic Well Installation Data Presentation-

S. Domber presented two Power Point presentations to the Board. The first presentation was a drought conditions update and the second was a presentation on domestic wells. S. Domber told the Board members that he would share the slides with S. Reya at the conclusion of the meeting so he could distribute them.

Drought Conditions Status Update

S. Domber began the presentation by stating that the Commissioner declared a drought watch on August 9, 2022. He briefly touched upon the different drought statuses: watch, warning, and

emergency. He added that the drought watch is ongoing as of the date of the meeting. S. Domber said that a drought watch focuses on voluntary reductions in water demand through increased public awareness.

S. Domber discussed the State Climatologist's report, which indicated that the Summer of 2022 was the fourth driest summer on record. He added that this past August was the warmest August on record. S. Domber showed the Board the most recent drought indicators, showing that precipitation was starting to rebound.

S. Domber finished the presentation and stopped for questions. A. Becker asked about water waste, specifically from communities waiting for water to heat up before taking a shower. He referenced his community, stating that he ran the numbers and estimated how much water was being wasted while waiting for a shower to heat up to the appropriate temperature. A. Becker said that he requested that his plumber to install a hot water recirculating system to ensure less waste occurs. S. Domber thanked A. Becker for his suggestion. S. Domber said that water conservation is a topic of discussion in the upcoming Water Supply Plan. He offered to brief the Board after the new Water Supply Plan is published. A. Becker accepted S. Domber's offer and mentioned that rain sensors should be mandatory for irrigation systems, in reference to water conservation.

Estimating Number and Location of Domestic Wells in New Jersey

S. Domber said that the 1981 New Jersey Water Supply Management Act directed the Department to develop and periodically revise the Water Supply Plan. He explained the different uses of water throughout the state, noting that domestic wells make up a small percentage of potable water usage in the state, about five percent.

Next, he presented some statistics which illustrated how the reliance on domestic wells varies significantly regionally. More urban areas are typically hooked up to public water and have less concentrations of domestic well usage, while more rural areas rely on domestic wells as their primary drinking sources.

S. Domber discussed how the Geological and Water Survey was able to estimate the total number of domestic wells in New Jersey. He added that in 2018, there were approximately 377,000 domestic wells in New Jersey.

S. Domber ended the presentation and thanked the Board for their time. A. Becker thanked S. Domber for presenting that information to the Board.

5. Type 1L Cement/Phasing Out of Type 1 Cement-

A. Becker reported that the well drilling industry has become more aware of this issue. He said that he spoke with a representative from Baroid, who said that the Type 1L cement is on their radar. A. Becker added that he'll be attending the National Ground Water Association's Groundwater Week in early December and will reach out to more contacts while he is there.

R. Dalton said that a lot of the cement used in New Jersey comes from New York and the Lehigh Valley. J. Yost asked if only Type 1 cement was going to be replaced. R. Dalton said that for now, only Type 1 would be replaced, but eventually Type 2 cement will also be replaced.

The Board speculated that grout mixes using Type 1L cement will require more water than normal. A. Becker said that it's the Board's goal to determine this grout's permeability and pumpability. S. Reya discussed A. Becker's letter to the Department, which requested the Division of Science and Research

to conduct the permeability test. A. Becker asked if E. Hoffmann had heard anything from Rutgers. E. Hoffmann had departed the call at 10:00 am, so S. Reya said that he would follow up with him to find out if he heard anything.

M. Schumacher suggested using N.J.A.C. 7:9D-2.8 to have the Board review this new material until the rules can be changed. R. Dalton reminded the Board that permeability tests still need to be conducted before the Board can take that action.

Mr. Brian McGuire advised the Board that the Port Authority has a laboratory that he is familiar with that performs a large volume of testing on concrete samples. He felt they may be able to assist as it is an intra-state agency. A. Becker recommended that the Department reach out to someone there to see if they could conduct some of these tests.

6. Program Updates-

J. Mattle addressed the ongoing delays with well permit reviews. He informed the Board that M. Herbert and some members of the Technical Assistance and Licensing Unit will undergo training so they can start to review permit applications. J. Mattle said that staff will also work on a letter to all well drillers which discusses technical deficiencies and how to avoid them. Someone will begin working on this over the holidays.

J. Mattle asked the Board a question regarding special permit conditions, which get placed on approved wells permits. Specifically, he asked if the property owner sees the special conditions that are placed on a permit. A. Becker asked if he was talking about a specific well use and J. Mattle said that he was mostly talking about Category 1 and Category 2 wells. A. Becker asked G. Poppe to provide his expertise on the subject. G. Poppe stated that everything is sent to the property owner, so they are made aware of any special permit conditions that appear on an approved well permit. J. Mattle thanked G. Poppe and the Board for their insight.

7. Adjournment-

A. Becker asked S. Reya when the next meeting would be held. S. Reya said that the next meeting will be held on Thursday, December 15, 2022.

At 10:44 am, a motion to adjourn the meeting was made by G. Poppe, seconded by S. Domber, and approved unanimously.