

The State of New Hampshire

Department of Environmental Services



Robert R. Scott, Commissioner

March 12, 2024

Daniel J. Tinkham transmitted via email to Daniel.Tinkham@gza.com
Emery & Garrett Groundwater Investigations
P.O. Box 1578
Meredith, NH 03253

RE: Preliminary Large Well Siting/Large Groundwater Withdrawal Permit Application CWS Exeter; PWS ID 0801010; DR005398
Proposed SG1-TPW, GPW4
Town of Exeter

Dear Mr. Tinkham:

The New Hampshire Department of Environmental Services (NHDES) has reviewed the preliminary community well siting and large groundwater withdrawal permit application (Preliminary Application) based on two submittals titled:

- "Large Groundwater Withdrawal Application Test Production Well SG1-TPW Exeter, New Hampshire" prepared by Emery & Garrett Groundwater Investigations (EEGI) on behalf of the Town of Exeter, dated December 29, 2022.
- "EGGI/GZA Response to the NHDES Comments regarding the Preliminary Application for Large Groundwater Withdrawal Permit for Test Production Well SG1-TPW, Town of Exeter, New Hampshire (CWS Exeter; PWS ID 0801010; DR005398)" dated July 10, 2023.

In summary, the Town of Exeter is seeking a large groundwater withdrawal permit and community well siting approval for one new gravel packed production well, called SG1-TPW [GPW4], located on Philips Exeter Academy-owned property west of Drinkwater Road, East of the Exeter River, and northwest of Judes Pond. The proposed permitted production volume of the SG1-TPW Well is 576,000 gallons per day or approximately 400 gallons per minute (gpm). Both the Town of Exeter and Phillips Exeter Academy entered into an agreement on February 23, 2024, with a letter of Intent – Option to Purchase a water supply easement for the proposed well site that was received by NHDES on March 12, 2024.

NHDES has reviewed the Preliminary Application in accordance with: RSA 485-C:21, Approval for Large Groundwater Withdrawals; New Hampshire Administrative Rules Env-Wq 403, Large Groundwater Withdrawals; and New Hampshire Administrative Rules Env-Dw 302, Large Production Wells for Community Water Systems. NHDES approves the Preliminary Application as proposed with the following conditions:

- 1. NHDES approves the private water well identification and outreach process with the following conditions:
 - a. GZA completes the mailing (via a method with return receipt) in accordance with Env-Dw 302.14(h) as described in the July 10, 2023, response letter. Change the NHDES contact email in the "water well questionnaire" letter from David.B.Hisz@des.nh.gov to the large groundwater withdrawal program email address at largegw@des.nh.gov.

- b. Provide NHDES copies of the return receipts via email to largegw@des.nh.gov.
- c. Based on the responses received, GZA shall propose a final private well monitoring network for NHDES comment and approval in accordance with Env-Wq 403.11(f) and 403.13(c)&(i). Please include a shape file of proposed sites in addition to a list and map showing the proposed monitoring locations, well information obtained for each property, and the status of the response received from the mailing.
- d. Provide a final updated inventory of private wells within the 1000-foot buffer around the PZOI at least 30 days prior to the scheduled pumping test.
- 2. The pump used for the withdrawal test shall be equipped with a check valve to ensure that the groundwater level recovery measurements are adequately usable. Water Well Board rule We 702.05(a) requires that the pump installations have two check valves.
- 3. At least 30 day(s) prior to the start of the pumping test, contact Jonathan Whaland of the Groundwater Discharge Program at (603)-271-2858 or GWdischarge@des.nh.gov and obtain a Temporary Discharge Permit for waters generated during the pumping test.
- 4. In addition to manual measurements, NHDES recommends the pumping rate be recorded digitally throughout the pumping period either via the output of the flow meter or using another method that measures the pressure in the discharge pipe.
- 5. GZA will alert NHDES to the anticipated start of the pumping test at least two weeks in advance so that NHDES can plan a site visit accordingly.
- 6. Submit along with the final report:
 - Per Env-Dw 302.08(c), provide documentation to demonstrate that the sanitary protective area is
 or will be under the direct legal control of the applicant and will be maintained as required by EnvDw 302.10.
 - Provide a copy of the executed and recorded easement between the two parties (Town of Exeter and PEA)
 - A digital version of the water quality analysis results for the propose production well via email to largegw@des.nh.gov. The data shall be formatted using NHDES' Environmental Monitoring Database (EMD) "Activity Data Upload Template for Consultants and Labs" which can be found at the following link: NH Online Forms System EMD Activity (Sample). Version 1.3
 - A digital version of all water level data collected during the pumping test in an excel file. No special formatting required, as prepared is acceptable, to the community well siting program via email at largegw@des.nh.gov.

If you have any questions about this letter or any other groundwater permitting issues, please contact me at (603) 271-8866 or largegw@des.nh.gov.

Sincerely,

David Hisz

Drinking Water and Groundwater Bureau

cc: Steve Dalton; Exeter Water Department

Russell Dean; Town Manager, Town of Exeter

Kathleen Felch, Town Administrator, Town of Kensington

Mark Leighton; Phillips Exeter Academy

Stephen Roy, Jennifer Mates, Kelsey Vaughn, Jon Whaland; NHDES