

LAND USE

230 Attachment 18

Township of Delaware

**Appendix IX
Notice of Aquifer Test**

Date

John and Mary Smith

_____, NJ _____

**Re: Aquifer Testing for Block _____, Lots _____
_____ Delaware Township
Hunterdon County, New Jersey**

Dear Mr. and Mrs. Smith,

Aquifer testing for proposed groundwater withdrawals of up to _____ gallons per day from Block _____, Lots _____, has been tentatively scheduled for the week of _____, 20 _____.

_____ new wells are/will be located on Block _____, Lots _____, the lot in question. The purpose of the wells is _____. One of these wells will be pumped and the remaining _____ wells will be monitored to determine aquifer coefficients and interference effects as per § 230-125 of the Delaware Township Land Use Ordinance. All aquifer test activities will be conducted in accordance with this chapter.

Your property is located within 500 feet of a boundary of the lot in question, and, in accordance with the Delaware Township Land Use Ordinance, you are hereby notified of the pending aquifer test. Based on Delaware Township's Land Use Ordinance, you may request that the water level in your well be monitored during the aquifer test.

If your well is monitored, the water level measurements will be used to directly determine water level drawdown interference effects from the proposed new wells and/or increased groundwater withdrawals on your well. If your well is not monitored, then the applicant's hydrogeologist and the Township's appointed hydrogeologist will calculate potential water level drawdown interference effects on your well from the data obtained from other wells observed during the test; however, such calculation will only be a hypothetical calculation.

If you would like to participate in the monitoring of water levels during the aquifer test, please sign and return the enclosed Access Agreement form. The Access Agreement form should be returned to _____ on or before _____, 20____. In addition,

DELAWARE CODE

please include copies of all well construction details and a geologic log that you may have for your well. Based on the level of response to this request and the well details/geologic log, not all well owners that request monitoring may be included in the test. The Township's Land Use Ordinance requires that the developer select three of the nearest wells for monitoring. However, if your well is completed to a depth of 100 feet or less, then the developer must also monitor your well, if you so request.

If your well is selected for monitoring during the aquifer test, the applicant's hydrogeologist will conduct the following activities on your well:

1. Collect a pre-test water sample from a tap such as at your kitchen sink. The water sample will be analyzed for the presence/absence of bacteria in your well water.
2. Remove the top of your well to gain access. All equipment placed into your well for the test will be cleaned with a disinfectant to prevent the introduction of bacteria into your well.
3. Install access tubing (dip tube) into the well, if necessary, to prevent the accidental entanglement of measuring equipment with pump discharge piping and pump wiring.
4. Install a pressure transducer with a data logging device in the dip tube. This instrumentation will be used to measure water level changes in your well and will be installed at least 24 hours before the start of pumping.
5. Install a temporary cover over your well to prevent rainwater or foreign matter entering your well.
6. Periodically check your well, during the aquifer test, to directly measure water levels with an electronic measuring device or to download data from the pressure transducer.
7. Remove the pressure transducer and dip tube installed in your well for the aquifer test.
8. Add sufficient chlorine to your well to disinfect your well prior to replacing and securing the cap on your well. The water in your house should be run at all taps to ensure adequate disinfection of the entire water supply system. After chlorine is noted at each tap, an outside tap can be used to further pump the well and dissipate the chlorine. The addition of chlorine will most likely result in a chlorine odor for one or more days.
9. Collect a post-test sample from the tap sampled prior to the test and analyze the sample for the presence/absence of bacteria.

If you require additional information regarding the aquifer test, please contact Judy Allen, Township Clerk at 609-397-3240.

Sincerely,

LAND USE

Access Agreement

All expenses related to the performance of the aquifer test will be borne by the applicant (owner/developer) for Block _____, Lot(s) _____. However, access to neighboring wells must be provided by the owners of those properties. All reasonable precautions will be observed by the applicant, the applicant's hydrogeologist, and the well driller to avoid damage to any adjacent residential property including both the well itself and its surroundings.

The owner of the neighboring well, who signs below, agrees to provide access to a commonly used tap for the collection of water samples prior to and after testing for bacteria analysis. After the initial water sample is collected, the well will be opened to permit access to measure water levels and the well will remain unsealed during the testing process which will be a maximum of 72 hours. A dip tube may be installed within your well to facilitate the measurement of water levels.

All equipment placed in your well will be cleaned to minimize the potential introduction of bacteria. However, to ensure that no bacteria are accidentally introduced into your well during the testing process, chlorine will be added to your well at the conclusion of the testing procedures. If you would prefer that chlorine not be added to your well, please check the box below the signature line.

With your signature and submittal of this form, you request participation in the monitoring of water levels during the aquifer test on the Lot identified as Lot _____, in Block _____, in accordance with the Delaware Township Land Use Ordinance, § 230-125, and that you have read and accept the requirements of this form.

Property Owner

Date

Please **do not add** chlorine to my well at the conclusion of testing. I understand and will accept responsibility that bacteria may have been accidentally introduced into my well.