Engineers, Planners, Consultants and Operators
Environmental & Technical Services L.L.C.
822 Washington Avenue
P.O. Box 608
Woodbine, New Jersey 08270
Telephone (609) 861-7000
Fax (609) 861-7008
https://environmentaltechnicalservices.com

Dear Consumer:

The Borough of Woodbine has received two violations for the optimal water quality parameter (OWQP) pH as described in the attached public notice. These violations were triggered by incurring more than 9 days of excursions within the 01/01-06/30/2025 and 07/01-12/31/2025 monitoring periods. Excursions are defined as the number of days where the OWQP, in this case pH, was outside of its approved operating range. The Borough of Woodbine is approved for a pH OWQP range of **7.0-8.0** at the point of entry, which is a range that NJDEP approved and began enforcing as of 01/01/2025. Prior to this point, the Borough was required to maintain a pH range of 6.5-8.5, which is the range approved by the USEPA for all water systems. It should be noted that the lowest pH observed was **6.80**, which while outside the designated NJDEP range for this facility, is still within the USEPA approved range of 6.5-8.5.

The Borough originally had lime slurry, an alkaline solution, as its only form of pH adjustment. The NJDEP Bureau of Water System Engineering designated that the Borough had to install additional pH adjustment treatment, specifically orthophosphate chemical feed. Orthophosphate, while used for pH adjustment, is an acid which decreases the pH of the water and is commonly used to reduce lead and copper levels in drinking water. **It is the belief of ETS and the operators of the Borough of Woodbine water system that the addition of the zinc orthophosphate, put into operation in May 2025, is what led to the OWQP pH excursions.**

Based on daily pH readings, it was determined that the zinc orthophosphate was influencing the finished water pH. To resolve this, the lime slurry dosing was increased and the orthophosphate dosing was decreased. These adjustments had to be made incrementally to find the right balance and once made the bi-weekly pH at the point of entry has been in compliance with the OWQP in all samples. The dosing systems have now been optimized and constant adjustments, unlike previously, are no longer necessary to maintain the required OWQP range for pH.

Respectfully,

Jeanette Dietrich
Jeanette Dietrich, ETS Compliance Manager