



State of New York
County of Broome Government Offices

Broome County Health Department · Environmental Health

Jason T. Garnar, County Executive · Rebecca A. Kaufman, MS, Director of Public Health
225 Front Street, Binghamton, NY 13905
Phone: (607)778-2887 · Fax (607) 778-3912 · www.gobroomecounty.com

January 19, 2021

Linda Jackson, Mayor
Village of Endicott
1009 East Main Street
Endicott, NY 13760

RE: Water Supply Sanitary Survey - 2020

Dear Mayor Jackson:

On Wednesday, October 21, 2020, the Broome County Health Department conducted a Water Supply Sanitary Survey of the Endicott Municipal Water System. Kevin Pero accompanied me for the sanitary survey. The following report discusses system deficiencies and improvements and general operational conditions of the water supply.

Deficiencies Observed

- 1) A large tree fell and damaged the security fencing at Northfield storage tank during the spring of 2017. Fortunately, the tank did not sustain damage; however, there are several large trees behind the tank that should be removed before tank damage occurs. The water operator stated the property owner has been notified but has still not initiated any action to correct this.
- 2) The Taft Heights storage tank ladder cage door was unsecured at the time of the sanitary survey. Personnel were dispatched to secure and lock the ladder cage door.

System Improvements and Preventative Maintenance

Water system improvements and preventative maintenance are the most effective ways to avoid water interruptions and more costly repairs in the future. Several water system improvements and maintenance items have been completed over the past year.

- 1) An inspection was conducted in November 2019 and a thorough cleaning completed in the Spring 2020 of the Ranney Well clear well.
- 2) Both high lift pumps at the Ranney Well clear well were rebuilt since the last inspection. New check valves were also installed.
- 3) Pine Street #1 storage tank was drained and the interior cleaned, sandblasted and repainted in 2020. The exterior of the tank was sandblasted and repainted. A water mixer was installed which should reduce winter icing and water stagnation. Water stagnation is the cause of many problems such as disinfection byproduct formation

and excessive tank corrosion. New cathodic protection was also installed. During the rehabilitation, a faulty tank drain valve was identified and is being replaced.

- 4) A new pump station is being constructed at Hayes Avenue. This above-ground structure will have redundant and higher capacity pumps for more reliable water delivery to the Endwell area. Tree clearing at the site was recently completed and site prep work was to begin soon.
- 5) New pumps and motors were installed at Taft Heights pump station.
- 6) Twist Run storage tank was inspected and cleaned.
- 7) Lott Street storage tank was inspected and cleaned.
- 8) A new check valve was installed and an actuator valve rebuilt at the Boswell Hill Road pump station.
- 9) Two new pumps and motors were installed at Hillside Terrace pump station. The new pumps will increase the pumping capacity at the pump station.
- 10) New security cameras were installed at the Ranney Well facility and the South Street/Water Department offices.
- 11) A multi-year inspection/maintenance agreement has been entered into with Liquid Engineering Corporation whereby water tanks and clear wells will be inspected and maintained on a rotating basis.
- 12) Approximately 40 feet of 6-inch water main was installed at the Patterson Creek bridge on Smith Drive, connecting two dead end water mains.
- 13) Approximately 1,200 feet of 8-inch water main was installed on North Oak Avenue.
- 14) Approximately 300 water meters were replaced with radio-frequency read meters during 2019 and 2020. It is anticipated that approximately 3000 additional meters will be ordered in 2020/2021. This project is ongoing.

Future Improvements

- 1) Wells #5 and #28 will be cleaned and rehabilitated again with carbon dioxide in an attempt to reduce iron and manganese levels.
- 2) Pine Street #2 storage tank will be drained and the interior cleaned, sandblasted and repainted in 2021.
- 3) Western Heights storage tank exterior requires pressure washing and should be evaluated for repainting.
- 4) Pheasant Lane storage tank was reported to be in fair condition with heavy corrosion, blistering and pitting of the tank walls and floor. The inspection report recommends draining, sandblasting the interior and exterior and recoating as soon

as possible. Site clearing and regrading is currently being done to allow access to the exterior of the tank.

- 5) Continue to plan and construct back-up power capability at critical facilities. A new generator is being considered for the Robble Avenue pump station. Continue exploring funding opportunities for Ranney Well #32 back-up power generation.
- 6) New and more secure entry doors are scheduled to be installed at the Ranney Well and chemical storage building.
- 7) The South Street wells have exhibited concentrations of 1,4-dioxane above the NYS Maximum Contaminant Level. Preliminary design work has begun on a treatment system for the wells. The scope of work will also include treatment for iron and manganese.
- 8) Continue to work cooperatively with Johnson City on interconnection. Johnson City now has full pumping capability during emergencies; unfortunately, the Fairmount Park interconnect pump station is prone to flooding.
- 9) An Asset Management/Rate Structure Study has been completed by Hunt Engineering. This study should identify water system facilities requiring improvement and the methods to raise revenue to pay for the improvements.

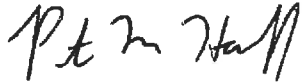
General Operation

- 1) No Incidents have occurred in the treatment or distribution system since the last inspection that resulted in public notification.
- 2) Sampling and operation reports have been completed and submitted to this department in a timely fashion. All sampling is current for 2020. Remaining sampling was reviewed with the water system operator.
- 3) The 2019 Annual Water Quality Report for consumers has been completed and distributed in a timely fashion. Certification of distribution has been received by this department.
- 4) Endicott Water customer complaints about discolored water to the Water Department have significantly decreased. The Endicott Water Department is improving procedures to flush water mains and is investigating other methods to continue to reduce iron and manganese sediment in the water distribution system.
- 5) Upcoming regulatory initiatives under America's Water Infrastructure Act (AWIA), such as Risk and Resiliency Assessments, were discussed with the water system operator.
- 6) A surveillance bacteriological sample was collected by BCHD. The result was satisfactory.

Summary

After completing the water supply sanitary survey for the Endicott Municipal Water System, and reviewing our records, it appears that the water system is being operated efficiently and is well managed. The water system is in substantial compliance with Federal, State and local regulations.

Sincerely,

A handwritten signature in black ink, appearing to read "Peter M. Haff". The signature is written in a cursive, slightly slanted style.

Peter M. Haff, P.G.
Ground Water Management Specialist

cc: Kevin Pero
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