

WATER SYSTEM UPDATE

December 18, 2015

TOTAL COLIFORM

- **No violations since the initial violation in July 2015.** The Township has been in compliance every month since the violation. No further violations are expected at this point.

CHLORINE BY-PRODUCTS

- Chlorine by products remain a concern.
- 4th-quarter, running average for Trihalomethanes TTHM for two locations (61 Bukowski Place and 127 Evans Road) exceeded the maximum contaminant level of 80 ppb. It was 89 and 81 ppb respectively.
- 4th-quarter running average for Haloacetic Acids remain in compliance for all four locations.
- **This will require a public notice via US mail to all water customers and website posting.**
- Please see the attached document summarizing the results

STEPS BEING TAKEN

- Fall hydrant flushing was completed. However, the effectiveness of the flushing did not meet the anticipated expectations. The Engineering Department will review the policies and procedures now that we have gone through two full flushing seasons in order to improve the results.
- The watermain looping project to eliminate dead ends will be completed by December 31, 2015. The contract was in the amount of \$400,000. This will directly impact the Bukowski Place location. This the first phase of watermain looping.
- A second contract is currently under design and will require easements and agreements from the Upper Montclair Country Club and the Township of Nutley. This is anticipated to be bid for construction in the Spring of 2016. The Evans Road dead-end will be eliminated under this contract.
- A new interconnection and pump station is currently being designed for a direct connection to the NJDWSC aqueduct.
- The township has adopted an Asset Management Plan which calls for other capital improvements in the future, including replacement of larger watermains, new metering and other projects to improve drinking water quality.

CHLORINE BY-PRODUCT SUMMARY SHEET

- The Township does not treat the water and is not licensed or permitted to treat the water.
- All drinking water is obtained through three interconnections with the Newark Water System at Grove Street, Bloomfield Center and Garrabrant Avenue. The water is delivered at the interconnections at the appropriate disinfectant/chlorine concentrations.
- The only control we have over chlorine residuals and maintaining proper by-product concentrations is through maintenance of the distribution system: watermain improvements, watermain cleaning and lining, hydrant flushing, etc.
- Chlorine by product levels are based upon a running average over the course of four quarters of the year. Samples are therefore taken four times a year at the same four locations within the system. These locations and sampling intervals are based upon EPA and DEP safe drinking water regulations. These are not “real time” levels and the levels are not based upon a single concentration but an average of four levels throughout a twelve-month period. Therefore having some levels above the maximum contaminant level at specific locations does not constitute a violation. The following is a summary of the results for the fourth quarter:

TRIHALOMETHANE CONCENTRATION

Maximum average contaminant level – 80 parts per billion

	1 st quarter <u>Taken 2/15</u>	2 nd quarter <u>Taken 5/15</u>	3 rd quarter <u>Taken 8/15</u>	4 th Quarter <u>Taken 11/15</u>	Average Over <u>Four Quarters</u>
61 Bukowski Place	62	87	117	90	89
127 Evans Road	52	90	90	90	81
1409 Broad Street	58	87	87	70	75
25 Daka Court	58	58	83	84	71

HALOACETIC ACIDS CONCENTRATION

Maximum average contaminant level – 60 parts per billion

	1 st quarter <u>Taken 2/15</u>	2 nd quarter <u>Taken 5/15</u>	3 rd quarter <u>Taken 8/15</u>	4 th Quarter <u>Taken 11/15</u>	Average Over <u>Four Quarters</u>
61 Bukowski Place	73	47	23	38	45
127 Evans Road	66	58	49	42	54
1409 Broad Street	64	56	39	57	54
25 Daka Court	76	57	43	59	59

- As indicated, having one quarter at any location over the maximum contaminant level (*items in bold italics*) does not lead to a violation. However, consistent or very high levels will lead to a violation due to their impact on the average.
- Bukowski Place had a very high third quarter level which led to the violation. This is why this location was designated a priority in eliminating the dead end. However, **there may be a subsequent first quarter violation** (February 2016) until this number cycles out or is balanced by a lower concentration in that quarter.