

The RTCR and Chlorine Residual Standard related to Lehigh County Authority Water Systems



Lehigh County Authority

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Concern : Proposing Disinfectant Residual Limits Without Comprehensive Study

Historical data show no or few coliform results with varying disinfectant residual levels

LCA Division	Years	Total Number of Samples	Number of Samples <0.3 mg/L	Number of Total Coliform Positive Samples	Number of E. Coli Positive Samples	Range of Reported Average Distribution Chlorine Residuals
Allentown	2010-2014	6,026	298	6	0	0.55 TO 0.8
13 Suburban Divisions	2014	816	27	0	0	0.45 to 1.15

Total Coliform Positive Sample Details

Positive total coliform and heterotrophic bacteria exist where residuals are >0.3 mg/L

LCA-Allentown Division

2010-2014

Sample Date/Time	Sample Site ID	Total Coliform	E. coli	HPC	Total Chlorine Residual
10/4/10 8:02	14065	Positive	Negative	146	0.79
9/14/11 9:23	14085	Positive	Negative	5	0.07
10/17/11 9:37	14007	Positive	Negative	6	0.89
6/4/13 9:17	14032	Positive	Negative	14	0.74
7/16/13 8:37	14105	Positive	Negative	523	0.43
10/13/14 10:48	14095	Positive	Negative	1	0.61

Concern : Separation of the RTCR from proposed chlorine residual standards and 109 updates

- Develop a process for examining the chlorine residual issue similar to the approach used by EPA in developing the RTCR
- Fully study the relationship between chlorine residuals and public health protection
- Understand Public Notice challenges

Separation (continued):

- Collect data and scientifically determine and evaluate costs, benefits and determine whether there is any meaningful increased public health protection
- Determine whether a new minimum chlorine residual level addresses any significant public health threat
- Engage the regulated utilities

AWWA New Regulation Adoption Criteria:

- The regulation is based on sound science
- The regulation produces benefits that exceed the cost; and
- The regulation is workable and easily understood

LCA supports this process for determining mandatory disinfectant levels.