

City of Norfolk

Water Quality Analysis

This report covers the 4th Quarter of 2022

Friday, January 20, 2023

Kristen M. Lentz Water Treatment Plant

Primary Regulated Compounds

These are compounds for which there are actual limits called Maximum Contaminant Levels, or MCLs. The MCL is the highest level of a contaminant that is allowed in drinking water. The Environmental Protection Agency establishes these levels based on health effects research.

Compound	Result	MCL	Method
Antimony	< 0.002 mg/L	0.006 mg/L	EPA 200.8
Arsenic	< 0.002 mg/L	0.010 mg/L	EPA 200.8
Barium	0.027 mg/L	2 mg/L	EPA 200.8
Beryllium	< 0.002 mg/L	0.004 mg/L	EPA 200.8
Cadmium	< 0.002 mg/L	0.005 mg/L	EPA 200.8
Chromium	< 0.002 mg/L	0.1 mg/L	EPA 200.8
Copper	< 0.025 mg/L	1.3 mg/L	EPA 200.8
Lead	< 0.003 mg/L	0.015 mg/L	EPA 200.8
Mercury	< 0.0002 mg/L	0.0002 mg/L	EPA 200.8
Selenium	< 0.002 mg/L	0.05 mg/L	EPA 200.8
Thallium	< 0.002 mg/L	0.002 mg/L	EPA 200.8
TTHM Compliance	22.6 ug/L	80	EPA 524.2

Secondary Regulated Compounds

These compounds have no health significance, but can cause tastes or odors in your water. For this reason, secondary limits called Secondary Maximum Contaminant Levels (SMCLs) have been established. Exceeding these standards does not mean that the water is unhealthy, only that it might taste or smell unusual.

Compound	Result	SMCL	Method
Aggressive Index	10.74	Noncorrosive	Calculated
Aluminum	0.006 mg/L	0.05-0.2 mg/L	EPA 200.8
Chloride	16 mg/L	250 mg/L	EPA 300.0
Foaming Agents	< 0.1 mg/L	0.5 mg/L	HACH TNT 874
Iron	< 0.01 mg/L	0.3 mg/L	EPA 200.8
Langelier Index	-1.28	Noncorrosive	Calculated
Manganese	< 0.004 mg/L	0.05 mg/L	EPA 200.8
Silver	< 0.002 mg/L	0.1 mg/L	EPA 200.8
Solids, Total Dissolved	119.3 mg/L	500 mg/L	SM 2540 C
Zinc	0.234 mg/L	5 mg/L	EPA 200.8

Compounds and Physical Characteristics of Interest

These water quality parameters are not regulated, but are frequently requested by customers.

Compound	Result	Method
Hardness, gr/Gal	2.5 gr/Gal	Calculated
Potassium	2.542 mg/L	EPA 200.8
Silica	9.2 mg/L	EPA 200.7
Sodium	24.14 mg/L	EPA 200.8
Solids, Total	132 mg/L	SM 2540 B
Solids, Volatile	18.7 mg/L	SM 2540 E
Temperature, C	18.3 °C	CALCULATED

Kristen M. Lentz Water Treatment Plant

Additional Unregulated Compounds

Although we are not required to monitor for the following compounds, we include them in order to evaluate compliance with future regulations.

Compound	Result	Method
Boron	0.058 mg/L	EPA 200.7
Molybdenum	< 0.002 mg/L	EPA 200.8
Nickel	0.002 mg/L	EPA 200.8
Vanadium	< 0.002 mg/L	EPA 200.8

Samples collected on: 11/9/2022 Location: KML Water Treatment Plant Effluent

Notes of Interest:

1. The MCLs for Lead and Copper, the "action levels," are measured at the 90th percentile of all samples collected.
2. THMs and HAAs are based on a four quarter running average of eight locations throughout Norfolk.
3. Water treatment plant is on a reduced monitoring schedule as of Quarter 3 2021.
4. Under "Primary Regulated Compounds," turbidity compliance is based on the percentage of filtered water samples below 0.3 NTU. Highest month of the quarter is listed. "TT" stands for Treatment Technique, a required process intended to reduce the level of a contaminant in drinking water. The turbidity value listed under "Compounds and Physical Characteristics of Interest" is the finished water turbidity leaving the plant on the day of sampling.

For questions concerning this report, please call the Division of Water Quality's Laboratory at 441-5678, Monday thru Friday 8:00am to 4:00pm.

Rachel Pleuthner
Senior Water Chemist, Data Quality Analyst

Victoria Smith
Water Quality Manager

<http://www.epa.gov/safewater/mcl.html>