

City of Norfolk

Water Quality Analysis

This report covers the 3rd Quarter of 2025

Friday, October 10, 2025

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
1,1,1-Trichloroethane	< 0.5 ug/L	200 ug/L	EPA 524.2
1,1,2-Trichloroethane	< 0.5 ug/L	5 ug/L	EPA 524.2
1,1-Dichloroethylene	< 0.5 ug/L	7 ug/L	EPA 524.2
1,2,4-Trichlorobenzene	< 0.5 ug/L	70 ug/L	EPA 524.2
1,2-Dichloroethane	< 0.5 ug/L	5 ug/L	EPA 524.2
1,2-Dichloropropane	< 0.5 ug/L	5 ug/L	EPA 524.2
2,3,7,8-TCDD	< 4.8 pg/L	30 pg/L	EPA 1613B
2,4,5-TP	< 0.1 ug/L	50 ug/L	EPA 515.4
2,4-D	< 0.1 ug/L	70 ug/L	EPA 515.4
Alachlor	< 0.049 ug/L	2 ug/L	EPA 525.2
Antimony	< 0.001 mg/L	0.006 mg/L	EPA 200.8
Arsenic	< 0.001 mg/L	0.010 mg/L	EPA 200.8
Atrazine	< 0.049 ug/L	3 ug/L	EPA 525.2
Barium	0.036 mg/L	2 mg/L	EPA 200.8
Benzene	< 0.5 ug/L	5 ug/L	EPA 524.2
Benzo(a)pyrene	< 0.02 ug/L	0.2 ug/L	EPA 525.2
Beryllium	< 0.0003 mg/L	0.004 mg/L	EPA 200.8
Cadmium	< 0.0005 mg/L	0.005 mg/L	EPA 200.8
Carbofuran	< 0.5 ug/L	40 ug/L	EPA 531.2
Carbon Tetrachloride	< 0.5 ug/L	5 ug/L	EPA 524.2
Chlordane	< 0.1 ug/L	2 ug/L	EPA 505
Chlorobenzene	< 0.5 ug/L	100 ug/L	EPA 524.2
Chromium	< 0.0009 mg/L	0.1 mg/L	EPA 200.8
cis-1,2-Dichloroethylene	< 0.5 ug/L	70 ug/L	EPA 524.2
Copper	< 0.001 mg/L	1.3 mg/L	EPA 200.8
Dalapon	< 1 ug/L	200 ug/L	EPA 515.4
Di(2-ethylhexyl)adipate	< 0.59 ug/L	400 ug/L	EPA 525.2
Di(2-ethylhexyl)phthalate	< 0.59 ug/L	6 ug/L	EPA 525.2
Dibromochloropropane	< 0.01 ug/L	0.2 ug/L	EPA 504.1
Dichloromethane	< 0.5 ug/L	5 ug/L	EPA 524.2
Dinoseb	< 0.2 ug/L	7 ug/L	EPA 515.4
Diquat	< 0.39 ug/L	20 ug/L	EPA 549.2
Endothall	< 5 ug/L	100 ug/L	EPA 548.1
Endrin	< 0.0098 ug/L	2 ug/L	EPA 525.2
Ethylbenzene	< 0.5 ug/L	700 ug/L	EPA 524.2
Ethylene dibromide	< 0.01 ug/L	0.05 ug/L	EPA 504.1
Glyphosate	< 6 ug/L	700 ug/L	EPA 547
HAA5 Compliance	22.8 ug/L	60 ug/L	EPA 552.2
Heptachlor	< 0.0098 ug/L	0.4 ug/L	EPA 525.2
Heptachlor epoxide	< 0.0098 ug/L	0.2 ug/L	EPA 525.2
Hexachlorobenzene	< 0.049 ug/L	1 ug/L	EPA 525.2
Hexachlorocyclopentadiene	< 0.049 ug/L	50 ug/L	EPA 525.2
Lead	< 0.0005 mg/L	0.015 mg/L	EPA 200.8

Kristen M. Lentz Water Treatment Plant

Lindane	< 0.0098	ug/L	0.2 ug/L	EPA 525.2
Mercury	< 0.0002	mg/L	0.002 mg/L	EPA 200.8
Methoxychlor	< 0.049	ug/L	40 ug/L	EPA 525.2
o-Dichlorobenzene	< 0.5	ug/L	600 ug/L	EPA 524.2
Oxamyl	< 0.5	ug/L	200 ug/L	EPA 531.2
p-Dichlorobenzene	< 0.5	ug/L	75 ug/L	EPA 524.2
PCB 1016	< 0.07	ug/L	0.5 ug/L	EPA 505
PCB 1221	< 0.1	ug/L	0.5 ug/L	EPA 505
PCB 1232	< 0.1	ug/L	0.5 ug/L	EPA 505
PCB 1242	< 0.1	ug/L	0.5 ug/L	EPA 505
PCB 1248	< 0.1	ug/L	0.5 ug/L	EPA 505
PCB 1254	< 0.1	ug/L	0.5 ug/L	EPA 505
PCB 1260	< 0.07	ug/L	0.5 ug/L	EPA 505
Pentachlorophenol	< 0.04	ug/L	1 ug/L	EPA 515.4
Picloram	< 0.1	ug/L	500 ug/L	EPA 515.4
Selenium	< 0.002	mg/L	0.05 mg/L	EPA 200.8
Simazine	< 0.049	ug/L	4 ug/L	EPA 525.2
Styrene	< 0.5	ug/L	100 ug/L	EPA 524.2
Tetrachloroethylene	< 0.5	ug/L	5 ug/L	EPA 524.2
Thallium	< 0.0003	mg/L	0.002 mg/L	EPA 200.8
Toluene	< 0.5	ug/L	1,000 ug/L	EPA 524.2
Toxaphene	< 0.5	ug/L	3 ug/L	EPA 505
trans-1,2-Dichloroethylene	< 0.5	ug/L	100 ug/L	EPA 524.2
Trichloroethylene	< 0.5	ug/L	5 ug/L	EPA 524.2
TTHM Compliance	38.1	ug/L	80 ug/L	EPA 524.2
Vinyl Chloride	< 0.3	ug/L	2 ug/L	EPA 524.2
Xylenes, Total	< 0.5	ug/L	10,000 ug/L	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
Aluminum	< 0.02 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 200.7
Langelier Index	-1.04 LANG	Noncorrosive	Calculated
Manganese	< 0.002 mg/L	0.05 mg/L	EPA 200.8
Silver	< 0.0005 mg/L	0.1 mg/L	EPA 200.8
Solids, Total Dissolved	121 mg/L	500 mg/L	SM 2540 C
Zinc	0.17 mg/L	5 mg/L	EPA 200.8

Kristen M. Lentz Water Treatment Plant

Monitored Unregulated Compounds

These compounds are not regulated by the EPA and have no established limits. Mandatory monitoring for these compounds helps EPA determine where certain compounds occur and whether those compounds need to be regulated.

Compound	Result	Method
Aldrin	< 0.01 ug/L	EPA 525.2
Perchlorate	< 0.5 ug/L	EPA 331.0

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	2.7 gr/Gal	Calculated
Potassium	2.8 mg/L	EPA 200.7
Silica	6.8 mg/L	EPA 200.7
Sodium	26 mg/L	EPA 200.7
Solids, Total	135 mg/L	SM 2540 B
Solids, Volatile	25.3 mg/L	SM 2540 E
Temperature, C	27.2 °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	0.061 mg/L	EPA 200.7
Molybdenum	< 0.002 mg/L	EPA 200.8
Nickel	< 0.001 mg/L	EPA 200.8
o-Xylene	< 0.5 ug/L	EPA 524.2
Vanadium	< 0.002 mg/L	EPA 200.8

Samples collected on: 8/12/2025 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.

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>