

## Drinking Water Quality at Norsborg Waterworks, 2025

Parameter	Unit	Raw water mean <sup>(1)</sup>	Drinking water mean <sup>(1)</sup>	Limit value <sup>(2)</sup>	
<b>Microbiological parameters</b>					
Actinomycetes	cfu/100 ml	12	< 1	100 <sup>(3)</sup>	
Cultivable microorganisms, 3 days	cfu/ml	267	1	No abnormal change <sup>(4, 3)</sup>	
Slow-growing bacteria, 7 days	cfu/ml	95	1	No abnormal change <sup>(5, 3)</sup>	
Presumptive <i>Clostridium perfringens</i>	cfu/100 ml	1	< 1	Detected <sup>(3)</sup>	
Intestinal enterococci	cfu/100 ml	1	< 1	Detected	
<i>E. coli</i>	cfu/100 ml	1	< 1	Detected	
Coliform bacteria	cfu/100 ml	165	< 1	Detected	
Microscopic fungi	/100 ml	94	1	100 <sup>(3)</sup>	
<b>Chemical parameters</b>					
Alkalinity	HCO <sub>3</sub>	mg/l	49	53	-
Acrylamide	C <sub>3</sub> H <sub>5</sub> NO	µg/l	< 0.050	< 0.050	0.1 <sup>(3)</sup>
Aluminium	Al	µg/l	110	23	200 <sup>(3)</sup>
Ammonia	NH <sub>4</sub> <sup>+</sup>	mg/l	0.017	0.074	0.50 <sup>(3)</sup>
Antimony	Sb	µg/l	0.11	0.11	10 <sup>(3)</sup>
Arsenic	As	µg/l	0.52	0.35	5.0 <sup>(3)</sup>
Benzene	C <sub>6</sub> H <sub>6</sub>	µg/l	< 0.20	< 0.20	1.0 <sup>(3)</sup>
Benzo(a)pyrene	C <sub>20</sub> H <sub>12</sub>	µg/l	< 0.0030	< 0.0030	0.010 <sup>(3)</sup>
Bisphenol A	C <sub>15</sub> H <sub>16</sub> O <sub>2</sub>	µg/l	< 0.0050	< 0.0050	2.5 <sup>(3)</sup>
Lead	Pb	µg/l	0.10	1.8	5.0 <sup>(3)</sup>
Boron	B	mg/l	0.019	0.017	1.5 <sup>(3)</sup>
Bromate	BrO <sub>3</sub> <sup>-</sup>	µg/l	< 2.0	< 2.0	10 <sup>(3)</sup>
Cyanide	CN <sup>-</sup>	µg/l	< 0.50	0.57	50 <sup>(3)</sup>
1,2-dichloroethane	C <sub>2</sub> H <sub>4</sub> Cl <sub>2</sub>	µg/l	< 1.0	< 1.0	3.0 <sup>(3)</sup>
Epichlorohydrin	C <sub>3</sub> H <sub>5</sub> ClO	µg/l	< 0.05	< 0.05	0.10 <sup>(3)</sup>
Fluoride	F <sup>-</sup>	mg/l	0.27	< 0.20	1.5 <sup>(3)</sup>
Colour	Pt	mg/Pt/l	28	5.5	15
Halogenated acetic acids (HAA)		µg/l	< 1.75	< 1.75	60 <sup>(3)</sup>
Iron	Fe	µg/l	54	1.0	100
Cadmium	Cd	µg/l	< 0.0040	0.0092	0.50 <sup>(3)</sup>
Potassium	K	mg/l	2.4	2.4	-
Calcium	Ca	mg/l	17	24	100 <sup>(3)</sup>
Chlorine, Total active		mg/l	-	0.25	0.40 <sup>(6)</sup>
Chlorate	ClO <sub>3</sub>	mg/l	< 0.00500	0.028	0.70 <sup>(3)</sup>
Chloride	Cl <sup>-</sup>	mg/l	13	13	250 <sup>(3)</sup>
Chlorite	ClO <sub>2</sub> <sup>-</sup>	mg/l	< 0.020	< 0.020	0.70 <sup>(3)</sup>
Conductivity		µS/cm	180	230	2500 <sup>(3)</sup>
Copper	Cu	mg/l	0.0020	0.0016	2.0 <sup>(3)</sup>
Chromium	Cr	µg/l	0.15	0.17	25 <sup>(3)</sup>
Mercury	Hg	µg/l	< 0.1	< 0.1	1.0 <sup>(3)</sup>
Odor, field and laboratory		Ingen		Ingen	Tydlig <sup>(3)</sup>
Magnesium	Mg	mg/l	4.2	4.2	30 <sup>(3)</sup>
Manganese	Mn	µg/l	19	0.16	50 <sup>(3)</sup>
Microcystin-LR (during bloom)	C <sub>49</sub> H <sub>74</sub> N <sub>10</sub> O <sub>12</sub>	µg/l	< 0.30	< 0.30	1.0 <sup>(3)</sup>
Sodium	Na	mg/l	11	11	200 <sup>(3)</sup>

Parameter		Unit	Raw water <i>mean</i> <sup>(1)</sup>	Drinking water <i>mean</i> <sup>(1)</sup>	Limit value <sup>(2)</sup>
Nickel	Ni	µg/l	2.0	1.8	20 <sup>(3)</sup>
Nitrate	NO <sub>3</sub> <sup>-</sup>	mg/l	0.74	0.88	50 <sup>(3)</sup>
Nitrite	NO <sub>2</sub> <sup>-</sup>	mg/l	0.0083	< 0.0070	0.10
PFAS 4		ng/l	2.5	2.5	4.0 <sup>(3)</sup>
PFAS 21		ng/l	7.8	8.3	100 <sup>(3)</sup>
pH		pH-units	7.6	8.3	10.5
Sum of polyaromatic hydrocarbons (PAH)		µg/l	< 0.0090	< 0.0090	0.10 <sup>(3)</sup>
Selenium	Se	µg/l	< 0.50	< 0.50	20 <sup>(3)</sup>
Sulfate	SO <sub>4</sub> <sup>2-</sup>	mg/l	23	42	250 <sup>(3)</sup>
Total hardness		°dH	3.3	4.4	-
Tetrachloroethene and trichloroethene	C <sub>2</sub> Cl <sub>4</sub> /C <sub>2</sub> HCl <sub>3</sub>	µg/l	< 2.0	< 2.0	10 <sup>(3)</sup>
Total organic carbon (TOC)		mg/l	9.0	4.1	No abnormal change <sup>(3,7)</sup>
Sum of trihalomethanes (THM)		µg/l	< 4.0	< 4.0	100 <sup>(3)</sup>
Turbidity		FNU	1.7	0.05	0.5 <sup>(3)</sup>
Water temperature		°C	9.5	9.4	-
Vinyl chloride	C <sub>2</sub> H <sub>3</sub> Cl	µg/l	< 0.50	< 0.50	0.50 <sup>(3)</sup>
Pesticides, total		µg/l	< LOQ <sup>(8)</sup>	< LOQ <sup>(8)</sup>	0.50 <sup>(3)</sup>
Aldrin	C <sub>12</sub> H <sub>8</sub> Cl <sub>6</sub>	µg/l	< 0.03	< 0.03	0.030 <sup>(3)</sup>
Dieldrin	C <sub>12</sub> H <sub>8</sub> Cl <sub>6</sub> O	µg/l	< 0.03	< 0.03	0.030 <sup>(3)</sup>
Heptachlor	C <sub>10</sub> H <sub>5</sub> Cl <sub>7</sub>	µg/l	< 0.03	< 0.03	0.030 <sup>(3)</sup>
Heptachlor epoxide	C <sub>10</sub> H <sub>5</sub> Cl <sub>7</sub> O	µg/l	< 0.03	< 0.03	0.030 <sup>(3)</sup>
Pesticides, individual		µg/l	< LOQ <sup>(8)</sup>	< LOQ <sup>(8)</sup>	0.10 <sup>(3)</sup>

1) The reported results represent annual mean values for the specified parameters for the year 2025. The symbol "<" denotes "less than".

2) Applicable limit values in the Swedish National Food Agency's Drinking Water Regulations (LIVSFS 2022:12) for treated drinking water.

3) No limit value for treated drinking water is specified in LIVSFS 2022:12; the stated limit value applies to drinking water at the point of use.

4) The limit value defined by Stockholm Water and Waste for "no abnormal change" is 100 cfu/ml.

5) The limit value defined by Stockholm Water and Waste for "no abnormal change" is 550 cfu/ml.

6) During the warmer part of the year, monochloramine is dosed to achieve a chlorine residual of 0.3 mg/l Cl<sub>2</sub> in treated drinking water leaving the treatment works. During the colder part of the year, the dosage is reduced to achieve a total active chlorine concentration of 0.2 mg/l Cl<sub>2</sub>.

7) The limit value defined by Stockholm Water and Waste for "no abnormal change" is 5.5 mg/l.

8) Results below the limit of quantification (LOQ) are reported as < LOQ.