

Drinking Water Quality at Lovö Waterworks, 2025

Parameter		Unit	Raw water mean ⁽¹⁾	Drinking water mean ⁽¹⁾	Limit value ⁽²⁾
Microbiological parameters					
Actinomycetes		cfu/100 ml	11	< 1	100 ⁽³⁾
Cultivable microorganisms, 3 days		cfu/ml	126	1	No abnormal change ^(4, 3)
Slow-growing bacteria, 7 days		cfu/ml	51	1	No abnormal change ^(5, 3)
Presumptive <i>Clostridium perfringens</i>		cfu/100 ml	3	< 1	Detected ⁽³⁾
Intestinal enterococci		cfu/100 ml	1	< 1	Detected
<i>E. coli</i>		cfu/100 ml	1	< 1	Detected
Coliform bacteria		cfu/100 ml	101	< 1	Detected
Microscopic fungi		/100 ml	345	1	100 ⁽³⁾
Chemical parameters					
Alkalinity	HCO ₃	mg/l	70	72	-
Acrylamide	C ₃ H ₅ NO	µg/l	< 0.050	< 0.050	0.1 ⁽³⁾
Aluminium	Al	µg/l	76	27	200 ⁽³⁾
Ammonia	NH ₄ ⁺	mg/l	0.014	0.082	0.50 ⁽³⁾
Antimony	Sb	µg/l	0.13	0.11	10 ⁽³⁾
Arsenic	As	µg/l	0.56	0.26	5.0 ⁽³⁾
Benzene	C ₆ H ₆	µg/l	< 0.20	< 0.20	1.0 ⁽³⁾
Benzo(a)pyrene	C ₂₀ H ₁₂	µg/l	< 0.0030	< 0.0030	0.010 ⁽³⁾
Bisphenol A	C ₁₅ H ₁₆ O ₂	µg/l	< 0.0050	< 0.0050	2.5 ⁽³⁾
Lead	Pb	µg/l	0.11	0.010	5.0 ⁽³⁾
Boron	B	mg/l	0.020	0.019	1.5 ⁽³⁾
Bromate	BrO ₃ ⁻	µg/l	< 2.0	< 2.0	10 ⁽³⁾
Cyanide	CN ⁻	µg/l	< 0.50	< 0.50	50 ⁽³⁾
1,2-dichloroethane	C ₂ H ₄ Cl ₂	µg/l	< 1.0	< 1.0	3.0 ⁽³⁾
Epichlorohydrin	C ₃ H ₅ ClO	µg/l	< 0.05	< 0.05	0.10 ⁽³⁾
Fluoride	F ⁻	mg/l	0.29	< 0.20	1.5 ⁽³⁾
Colour	Pt	mg/Pt/l	31	5.3	15
Halogenated acetic acids (HAA)		µg/l	< 1.75	< 1.75	60 ⁽³⁾
Iron	Fe	µg/l	53	0.88	100
Cadmium	Cd	µg/l	< 0.0040	< 0.0040	0.50 ⁽³⁾
Potassium	K	mg/l	2.8	2.8	-
Calcium	Ca	mg/l	23	33	100 ⁽³⁾
Chlorine, Total active		mg/l	-	0.25	0.40 ⁽⁶⁾
Chlorate	ClO ₃	mg/l	< 0.00500	0.015	0.70 ⁽³⁾
Chloride	Cl ⁻	mg/l	15	15	250 ⁽³⁾
Chlorite	ClO ₂ ⁻	mg/l	< 0.020	< 0.020	0.70 ⁽³⁾
Conductivity		µS/cm	220	290	2500 ⁽³⁾
Copper	Cu	mg/l	0.0031	0.00079	2.0 ⁽³⁾
Chromium	Cr	µg/l	0.13	< 0.050	25 ⁽³⁾
Mercury	Hg	µg/l	< 0.10	< 0.10	1.0 ⁽³⁾
Odour, field and laboratory		Ingen	-	No odour	Distinct ⁽³⁾
Magnesium	Mg	mg/l	4.9	4.8	30 ⁽³⁾
Manganese	Mn	µg/l	20	0.16	50 ⁽³⁾
Microcystin-LR (during bloom)	C ₄₉ H ₇₄ N ₁₀ O ₁₂	µg/l	< 0.30	< 0.30	1.0 ⁽³⁾
Sodium	Na	mg/l	12	13	200 ⁽³⁾

Parameter		Unit	Raw water <i>mean</i> ⁽¹⁾	Drinking water <i>mean</i> ⁽¹⁾	Limit value ⁽²⁾
Nickel	Ni	µg/l	2.2	1.4	20 ⁽³⁾
Nitrate	NO ₃ ⁻	mg/l	0.97	1.1	50 ⁽³⁾
Nitrite	NO ₂ ⁻	mg/l	< 0.0070	< 0.0070	0.10
PFAS 4		ng/l	3.4	3.1	4.0 ⁽³⁾
PFAS 21		ng/l	9.7	9.3	100 ⁽³⁾
pH		pH-units	7.6	8.4	10.5
Sum of polyaromatic hydrocarbons (PAH)		µg/l	< 0.0090	< 0.0090	0.10 ⁽³⁾
Selenium	Se	µg/l	< 0.50	< 0.50	20 ⁽³⁾
Sulfate	SO ₄ ²⁻	mg/l	27	47	250 ⁽³⁾
Total hardness		°dH	4.3	5.7	-
Tetrachloroethene and trichloroethene	C ₂ Cl ₄ /C ₂ HCl ₃	µg/l	< 2.0	< 2.0	10 ⁽³⁾
Total organic carbon (TOC)		mg/l	10	4.4	No abnormal change ^(3,7)
Sum of trihalomethanes (THM)		µg/l	< 4.0	< 4.0	100 ⁽³⁾
Turbidity		FNU	2.1	0.07	0.5 ⁽³⁾
Water temperature		°C	8.1	8.1	-
Vinyl chloride	C ₂ H ₃ Cl	µg/l	< 0.50	< 0.50	0.50 ⁽³⁾
Pesticides. total		µg/l	< LOQ ⁽⁸⁾	< LOQ ⁽⁸⁾	0.50 ⁽³⁾
Aldrin	C ₁₂ H ₈ Cl ₆	µg/l	< 0.03	< 0.03	0.030 ⁽³⁾
Dieldrin	C ₁₂ H ₈ Cl ₆ O	µg/l	< 0.03	< 0.03	0.030 ⁽³⁾
Heptachlor	C ₁₀ H ₅ Cl ₇	µg/l	< 0.03	< 0.03	0.030 ⁽³⁾
Heptachlor epoxide	C ₁₀ H ₅ Cl ₇ O	µg/l	< 0.03	< 0.03	0.030 ⁽³⁾
Pesticides. individual		µg/l	< LOQ ⁽⁸⁾	< LOQ ⁽⁸⁾	0.10 ⁽³⁾

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 Cl₂ 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 Cl₂.

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.