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Drinking Water in Stockholm – Certification of Quality

The drinking water in Stockholm City is produced by Stockholm Water Co. Stockholm Water is certified by ISO 9001 and ISO 14001.

The drinking water in Stockholm City is of a high and consistent quality, and is produced by treating water from the Lake Mälaren in our two water works, Lovö and Norsborg.

The control of the production and distribution of drinking water is regulated by the Swedish National Food Administration (Statens Livsmedelsverk) and the national directive SLV 2001:30 (based on the European drinking water directive, 98/83/EG). The drinking water quality and the quality control performed by Stockholm Water, is in full compliance to existing regulations and guidelines.

Lake Mälaren is by any standard a pure lake and well suited for the production of drinking water. The drinking water can therefore be produced by simple and robust processes.

A quality declaration (based on average water quality data 2008 from our two water works Lovö and Norsborg) is enclosed with this document.

Sincerely,

STOCKHOLM VATTEN AB

Christer Berg
Senior Adviser
Drinking Water Quality

Drinking Water Quality at the Norsborg and Lovö Water Work in Stockholm 2008

Parameter		Unit	Drinking water Norsborg <i>mean</i>	Drinking water Lovö <i>mean</i>	Limits ¹⁾
Temperature		°C	9,0	6,4	20
Colour	Pt	mg/l	< 5	5	15
Turbidity		FNU	0,06	0,07	0,5
Conductivity, 25°C		mS/m	21,6	27,7	250 ⁴⁾
Total organic carbon	TOC	mg C/l	3,6	4,0	5,5 ³⁾⁴⁾
Odour			none	none	<i>weak</i> ⁴⁾
Taste			none	none	<i>weak</i> ⁴⁾
pH			8,5	8,5	<i>should be 7,5-9,0</i> ⁴⁾
Alkalinity	HCO ₃	mmol/l	0,85	1,2	-
Total hardness	CaCO ₃	mg/l	73	100	267 ⁴⁾
Calcium	Ca	mg/l	23	32	100 ⁴⁾
Magnesium	Mg	mg/l	4,0	4,8	30 ⁴⁾
Sodium	Na	mg/l	9,9	12	100 ⁴⁾
Potassium	K	mg/l	2,3	2,7	
Iron	Fe	mg/l	< 0,02	< 0,02	0,100
Manganese	Mn	mg/l	< 0,001	< 0,001	0,050
Aluminium	Al	mg/l	0,023	0,026	0,100
Copper	Cu	mg/l	0,002	0,001	0,20 ⁴⁾
Lead	Pb	mg/l	< 0,0005	< 0,0005	0,010 ⁴⁾
Cadmium	Cd	mg/l	< 0,00001	< 0,00001	0,0050 ⁴⁾
Mercury	Hg	mg/l	< 0,0001	< 0,0001	0,0010 ⁴⁾
Arsenic	As	mg/l	< 0,0006	< 0,0006	0,010 ⁴⁾
Pesticides, total		mg/l	< 0,0001	< 0,0001	0,00050 ⁴⁾
Polyaromatic hydrocarbons, total	PAH	mg/l	< 0,000007	< 0,000007	0,00010 ⁴⁾
Trihalomethanes, total	THM	mg/l	0,008	< 0,001	0,050 ⁴⁾
Sulphate	SO ₄	mg/l	36	44	100 ⁴⁾
Chloride	Cl	mg/l	13	17	100 ⁴⁾
Fluoride	F	mg/l	< 0,20	< 0,20	1,5 ⁴⁾
Ammonia	NH ₄	mg/l	0,06	0,08	0,50 ⁴⁾
Nitrite	NO ₂	mg/l	< 0,02	< 0,02	0,10
Total chlorine residual ²⁾	Cl ₂	mg/l	0,28	0,26	0,4
Microorganisms, 22°C, 3days		per/ml	1	1	10
Slow-growing bacteria, 22°C, 7 days		per/ml	2	2	5000 ⁴⁾
Coliform bacteria, 35°C		per 100 ml	< 0,1	< 0,1	<i>detected</i>
Escherichia coli		per 100 ml	< 0,1	< 0,1	<i>detected</i>
Clostridium perfringens		per 100 ml	< 0,1	< 0,1	<i>detected</i> ⁴⁾

Comments :

The results are mean annual values. Basic analysis are made three times a week. Additional analysis are carried out four times a year. The analyses has been performed on Stockholm Water's accredited laboratory or by another accredited laboratory. The sign "<" is used to illustrate "smaller than".

- 1) Limits for acceptable values water without remarks in drinking, according to the Swedish regulation SLV FS 2001:30 and changes in legislation LIVSFS 2005:10
- 2) During the colder part of the year a smaller dosage disinfectant is used, giving a chlorine residual in the outgoing drinking water on 0,2 mg Cl₂/l. During the warmer part on the other hand, the chlorine residual is made 0,3 mg Cl₂/l.
- 3) Based on the relationship between TOC and oxidizability. Corresponds to a oxidizability of 4,0 mg O₂/l, which is the limit value in Swedish regulation.
- 4) Limit value for user. No limit value is applied by the water works.