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2008-02-15

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 2007 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 2007

Parameter	Unit	Drinking	Drinking	Limits ¹⁾
		water Norsborg mean	water Lovö mean	
Temperature	°C	9,1	7,2	20
Colour	Pt	< 5	5	15
Turbidity	FNU	0,05	0,06	0,5
Conductivity, 25°C	mS/m	22,1	26,6	250 ⁴⁾
Total organic carbon	TOC	3,6	4,0	5,5 ³⁾⁴⁾
Odour		none	none	weak ⁴⁾
Taste		none	none	weak ⁴⁾
pH		8,5	8,5	should be 7,5-9,0 ⁴⁾
Alkalinity	HCO ₃	mmol/l	0,83	1,2
Total hardness	CaCO ₃	mg/l	71	98
Calcium	Ca	mg/l	25	33
Magnesium	Mg	mg/l	4,3	4,9
Sodium	Na	mg/l	12	12
Potassium	K	mg/l	2,2	2,7
Iron	Fe	mg/l	< 0,02	< 0,02
Manganese	Mn	mg/l	< 0,001	< 0,001
Aluminium	Al	mg/l	0,02	0,03
Copper	Cu	mg/l	0,002	0,001
Lead	Pb	mg/l	< 0,001	< 0,001
Cadmium	Cd	mg/l	< 0,00005	< 0,00005
Mercury	Hg	mg/l	< 0,00005	< 0,00005
Arsenic	As	mg/l	< 0,001	< 0,001
Pesticides, total		mg/l	< 0,000050	< 0,000050
Polyaromatic hydrocarbons, total	PAH	mg/l	< 0,000020	< 0,000020
Trihalomethanes, total	THM	mg/l	< 0,002	< 0,002
Sulphate	SO ₄	mg/l	40	50
Chloride	Cl	mg/l	15	16
Fluoride	F	mg/l	< 0,20	< 0,20
Ammonia	NH ₄	mg/l	0,06	0,07
Nitrite	NO ₂	mg/l	< 0,02	< 0,02
Total chlorine residual ²⁾	Cl ₂	mg/l	0,27	0,25
Microorganisms, 22°C, 3days		per/ml	1	1
Slow-growing bacteria, 22°C, 7 days		per/ml	2	3
Coliform bacteria, 35°C		per 100 ml	< 1	< 1
Escherichia coli		per 100 ml	< 1	< 1
Clostridium perfringens		per 100 ml	< 1	< 1

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.