

Guidelines For Livestock Drinking Water Quality

<u>Parameter</u>	<u>Maximum Acceptable, milligrams per litre (ppm)</u>	
	<u>Livestock</u>	<u>Humans</u>
<u>Major Ions and Nutrients</u>		
Calcium	1000	---
Nitrate plus nitrite	100	11
Nitrite alone	10.0	1.0
Sulphate	1000	500
Total dissolved solids	3000	500
<u>Heavy Metals & Trace Ions</u>		
Aluminum	5.0	---
Arsenic	0.025	0.025
Beryllium	0.1	---
Boron	5.0	5.0
Cadmium	0.08	0.005
Chromium	0.05	0.05
Cobalt	1.0	---
Copper	1.0 (cattle)	1.0
	5.0 (swine & poultry)	
	0.5 (sheep)	
Fluoride	2.0	1.5
Iron	---	0.3
Lead	0.1	0.01
Manganese	---	0.05
Mercury	0.003	0.001
Molybdenum	0.5	---
Nickel	1.0	---
Selenium	0.05	0.01
Uranium	0.2	0.02
Vanadium	0.1	---
Zinc	50.0	5.0

Note: --- indicates no guideline

Typical Livestock Water Consumption Levels

<u>Dairy (litres/day)</u>		<u>Beef (litres/day)</u>	
Dry Cows	40	Dry Cow	35
Lactating	100	Lactating Cow	55
Yearling Heifers	30	Yearling Heifers	30
		Feedlot Animals	50
<u>Swine (litres/day)</u>		<u>Poultry (litres/1000 birds/day)</u>	
Sows	25	Broilers	140
Weaners	2.5	Layers	190
Growing-finishing	7	Turkeys	700

Notes

(1) All intake levels are subject to large variation related to environmental temperature, humidity, water quality and availability, diet composition and animal performance level.

(2) Animals consuming wet feeds such as by-products, pasture or silages will drink considerably less water than indicated above.

Compiled by Murray Snowdon, NBAFA, 2000. Updated in 2008.