



Livestock Production

Animal Nutrition

Handout 2

Drinking Water Quality – Recommended Maximum Levels

	Human	Livestock	Poultry	Units
Alkalinity	30 - 500	<2000		mg/l
Aluminum	<0,2	<5,0	<5,0	mg/l
Ammonia (as N)	<0,5			mg/l
Antimony	<0,0002			mg/l
Arsenic	<0,05	<0,05	<0,02	mg/l
Barium	<1,0	<1,0		mg/l
Boron	<5,0	<5,0		mg/l
Cadmium	0.001	<0,01		mg/l
Calcium	200	<1000	35 - 600	mg/l
Cesium - 137	<50			Bg/l
Chloride	<250	<1000	<14 - 200	mg/l
Chromium	<0,05	<0,05		mg/l
Cobalt		<1,0		mg/l
Copper	<1,0	<1,0	<0,6	mg/l
Cyanide	<0,20	<0,20		mg/l
Fluoride	<1,5	<1,2	<2,0	mg/l
Hardness (CaCO ₃)	180	<2000	<2000	mg/l
Iodine		<1,0		mg/l
Iodine - 131	<10			Bg/l
Iron	<0,3	<0,4	<0,4	mg/l
Lead	<0,05	<0,05	<0,1	mg/l

Magnesium	150	<1000	<35 - 350	mg/l
Manganese	<0,05	<0,05	<0,05	mg/l
Mercury	<0,001	<0,003		mg/l
Molybdenum	<0,25	<0,06	<0,25	mg/l
Nitrogen (from NO ₂ +NO ₃)	<10	<23	<11	mg/l
Nitrate (NO ₃)	<44	<100	<50	mg/l
pH	6,5 - 8,3	5,5 - 8,3	6,4 - 8,0	unit
Phosphate (total P)	<0,1	<0,7		mg/l
Potassium	<10	<20	<300	mg/4
Radium	<1,0			Bg/l
Residue _total	<1000	<7000	<1000	mg/l
Total fixed	<1000	<7000	<1000	mg/l
Filterable	<1000	<7000	<1000	mg/l
Selenium	<0,01	<0,01		mg/l
Silver	<0,05			mg/l
Sodium	<10	<800	<50	mg/l
Specific conductance		<3000	<1000	µs/c
Strontium _90	<10			Bg/4
Sulphate	<250	<500	30 - 50	mg/l
Sulphide (as H ₂ S)	<0,05			mg/l
Uranium	<0,02			mg/l

Vanadium		0,1		mg/l
Zinc	<5,0	<5,0	<2,5	mg/l

Source: *Animal Nutrition, Concepts and Applications*, PA Boyazoglu, Revised Edition