

WATER



Inorganic Chemical And Metals Fact Sheet

The Federal Safe Drinking Water Act requires that all of the nation's public water supplies be tested periodically for various potential contaminants. Inorganic chemical and metals analyses of drinking water are among the many analytical services provided by the Department of Environmental Quality, State Environmental Laboratory. Costs for these tests are included in the annual public water supply fee for regulatory services. Analyses of your system are enclosed and the purpose of this Fact Sheet is to assist you in interpreting the meaning of these reports. The analyses for inorganic chemicals and metals include some parameters for which there are primary drinking water standards and others for which there are secondary recommended maximum levels. Primary

drinking water standards are established for contaminants which, when present at excessive levels, may have an adverse effect upon human health. The following primary drinking water standards have been set for inorganic chemicals and metals:

Parameter	Standard	Unit of Measure
Arsenic	50	ug/l*
Asbestos	7 million	fibers/l (>10um**long)
Barium	2000	ug/l
Cadmium	5	ug/l
Chromium	100	ug/l
Mercury	2	ug/l
Nitrate (as N)	10	mg/l
Selenium	50	ug/l
Fluoride	4	mg/l

* 1 ug/l = micrograms per liter = .001 milligrams per liter ** 1 um = micrometers = .001 centimeters

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Secondary recommended maximum levels are established for those parameters which can make the appearance or taste of the water less pleasing. Secondary recommended maximum levels have been set for the following:

Parameter	Unit of Measure	Standard
Aluminum	0.05 to 0.2	mg/l
Chloride	250	mg/l
pH	6.5 to 8.5	SU*
Sulfate	250	mg/l
Total Dissolved Solids	500	mg/l
Copper	1000	ug/l
Iron	300	ug/l
Manganese	50	ug/l
Silver	0.1	ug/l
zinc	5000	ug/l

*=Standard Unit

Secondary recommended maximum levels are not rejection levels and water may be safe for human consumption even if it exceeds one of these levels. Public water supply systems are, however, required to meet these levels if possible. You will note that the "Remarks" column on the enclosed "Report of Analysis" uses "<" as a symbol for less than the detection limit. When a result is reported as less than some number, it means that none was detected in that sample. In addition to analyses for primary and secondary drinking water standards, your water may also have been tested for alkalinity, hardness, specific conductance, turbidity, and sodium. The corrosivity of the water

may also have been calculated. In order to minimize the costs of analyses, we no longer run many of these tests routinely, and you will note that the more recent analyses do not include all of these tests. The units of measure for most of the primary and secondary drinking water standards are either ug/l (micrograms per liter) or mg/l (milligrams per liter). one mg/l is equivalent to one part per million. Should you have any questions concerning the enclosed report, please contact us at the State Environmental Laboratory for assistance. We may be reached by telephone at (405) 702-1000.