Appendix D. Drinking Water Standards

Parameter	Health Hazards	Effects Above Secondary Standard	Standards in mg/L				# Total Exceedances			Typical Range in SVRP Aquifer (in mg/L)
			MCL	Secondary Standard	WA State Trigger	WA State Reporting Limit	MCL	Secondary Standard	WA State Trigger	
Arsenic (As)	Skin damage, circulatory system problems, increased risk of cancer		0.010		0.010	0.001	1		1	0.002 - 0.0036
Cadmium (Cd)	Kidney damage		0.005		0.005	0.001	0		0	ND
Chromium (Cr)	Allergic dermatitis		0.10		0.10	0.007	0		0	ND
Fluoride	Bone disease, mottled teeth in children	Tooth discoloration	4.00	2.00	2.00	0.20	0	0	0	ND
Mercury (Hg)	Kidney damage		0.002		0.002	0.0002	0		0	ND
Nitrate	Blue baby syndrome in infants		10.00		5.00	0.50	0		33	1.1 - 2.5
Copper (Cu)	Gastrointestinal distress, kidney or liver damage	Metallic taste, blue-green staining	1.3*	1.00		0.02	0	0		ND - 0.0011
Lead (Pb)	Delays in development in children, kidney problems in adults		0.015*			0.001	4			ND
Iron (Fe)		Metallic taste, rusty color, staining		0.30		0.10		188		ND - 0.0181
Chloride		Salty taste		250.00		2.00		0		2.6 - 7.1
Manganese (Mn)		Bitter metallic taste, black or brown color, staining		0.05		0.01		40		ND
Sulfate		Salty taste		250.00		2.00		0		9.3 - 14.8
Zinc (Zn)		Metallic taste		5.00		0.20		0		ND
	*Action levels under Lead and Copper Rule									

Defininitions

MCL: Maximum Contaminant Level; highest level allowed in drinking water to protect human health. Concentrations above this level are a violation of drinking water standards.

Action Level: for lead and copper; concentrations above this level triggers treatment or other requirements for drinking water purveyors

Secondary Standard: non-mandatory guidelines set by the EPA to protect drinking water aesthetic qualities such as taste, odor and color

WA State Trigger: a level set by the WA State Dept. of Health; detections above this level trigger additional sampling by drinking water purveyors

WA State Reporting Limit: concentrations above this level are required to be reported to WA State Dept. of Health

ND: not detectable, occurs at concentrations below the analytical reporting limit