

**APPENDIX 9**

**Minimum Levels and Test Methods for Groundwater Sources of Non-Contact Cooling Water**

Inorganic Parameters	Minimum Levels (ug/l) and Test Methods				
	Flame Atomic Absorption	Inductively Coupled Plasma	Inductively Coupled Plasma Mass Spectrometry	Furnace Atomic Absorption	Other
1. Antimony	200 ug/l	50 ug/l	2 ug/l	5 ug/l	
2. Arsenic		5 ug/l	2 ug/l	2 ug/l	
3. Cadmium	10ug/l	5 ug/l	0.5 ug/l	0.5 ug/l	
4. Chromium Total	50 ug/l	10ug/l	0.5 ug/l	5 ug/l	
5. Chromium VI					10 ug/l Method 218.4
6. Copper	20 ug/l	5 ug/l	0.5 ug/l	3 ug/l	
7. Lead	100 ug/l	40 ug/l	0.5 ug/l	3 ug/l	
8. Mercury					0.2 ug/l Method 245.1
9. Nickel	30 ug/l	10 ug/l	0.5 ug/l	5 ug/l	
10. Radionuclides					MA Methods <sup>3</sup>
11. Silver	50 ug/l	10 ug/l	1 ug/l	2 ug/l	
12. Zinc	30 ug/l	10 ug/l	5 ug/l		
13. Iron		Method 6010b and Method 200.7 <sup>1</sup>			
14. Hardness					Approved Part 136 Methods <sup>2</sup>
15. Chloride					Approved Part 136 Methods <sup>2</sup>
16. pH					Approved Part 136 Methods <sup>2</sup>

1. Methods 6010b and 200.7 for metals may only be used when sample prepared with SW-846 digestion method, Method 3010
2. Approved 40 CFR Part 136 test methods that will achieve the lowest available ML
3. Radionuclides: Gross Alpha, Radium 226, and Radium 228 and Uranium are to be tested using methods found in 310 CMR 22.09A Drinking Water Regulations, available at: <http://www.mass.gov/eea/docs/dep/service/regulations/310cmr22.pdf>.