

Parameters for Water Supply Well Sampling Near Coal Ash Facilities

Parameter	Federal Drinking Water MCL	15A NCAC 02L .0202 Standard	15A NCAC 02L .0202 IMAC	Secondary Drinking Water Standard ¹	DHHS-DPH-OEEB Screening Level	Comments
Alkalinity	-	-	-	-	-	Water quality indicator
Aluminum	-	-	-	50 to 200 µg/L	3,500 µg/L	
Antimony	6 µg/L	1 µg/L	-	-	1 µg/L	
Arsenic	10 µg/L	10 µg/L	-	-	10 µg/L	
Barium	2,000 µg/L	700 µg/L	-	-	700 µg/L	
Beryllium	4 µg/L	-	4 µg/L	-	4 µg/L	
Bicarbonate	-	-	-	-	-	Water quality indicator
Boron	-	700 µg/L	-	-	700 µg/L	
Cadmium	5 µg/L	2 µg/L	-	-	2 µg/L	
Calcium	-	-	-	-	-	Major ion used for assessment purposes.
Carbonate	-	-	-	-	-	Water quality indicator
Cobalt	-	-	1 µg/L	-	1 µg/L	
Chromium (total)	100 µg/L	10 µg/L	-	-	10 µg/L	
Chromium, (hexavalent)	-	-	-	-	0.07 µg/L	
Copper	1.3 mg/L	1 mg/L	-	1 mg/L	1 mg/L	
Iron	-	300 µg/L	-	300 µg/L	2,500 µg/L	
Lead	15 µg/L	15 µg/L	-	-	15 µg/L	
Magnesium	-	-	-	-	-	Major ion used for assessment purposes.
Manganese	-	50 µg/L	-	50 µg/L	200 µg/L	
Molybdenum	-	-	-	-	18 µg/L	
Mercury	2 µg/L	1 µg/L	-	-	1 µg/L	
Nickel	-	100 µg/L	-	-	100 µg/L	
pH	-	6.5 – 8.5 Su	-	6.5 – 8.5 Su	-	
Potassium	-	-	-	-	-	Major ion used for assessment purposes.
Selenium	50 µg/L	20 µg/L	-	-	20 µg/L	-
Sodium	-	-	-	-	20,000 µg/L ²	Major ion used for assessment purposes.
Strontium	-	-	-	-	2,100 µg/L	
Thallium	2 µg/L	0.2 µg/L	-	-	0.2 µg/L	
Total Dissolved Solids	-	500 mg/L	-	-	-	
Turbidity ³	-	-	-	-	-	Water quality indicator
Vanadium	-	-	0.3 µg/L	-	0.3 µg/L	
Zinc	-	1 mg/L	-	5 mg/L	1 mg/L	
Chloride	-	250 mg/L	-	250 mg/L	250 mg/L	
Sulfate	-	250 mg/L	-	250 mg/L	250 mg/L	

DHHS-DPH-OEEB = Department of Health and Human Services, Division of Public Health, Epidemiology Section, Occupational and Environmental Epidemiology Branch
 IMAC = Interim Maximum Allowable Concentration

NCAC = North Carolina Administrative Code

MCL = Maximum Contaminant Level

µg/L = micrograms per liter

mg/L = milligrams per liter

Su = standard units

¹National Secondary Drinking Water Regulations (NSDWRs or secondary standards) are non-enforceable guidelines regulating contaminants that may cause cosmetic effects (such as skin or tooth discoloration) or aesthetic effects (such as taste, odor, or color) in drinking water. EPA recommends secondary standards to water systems but does not require systems to comply.

²Applicable only to persons with sodium-restricted diets.

³Turbidity is a measure of the cloudiness of water. It is used to indicate water quality and filtration effectiveness (such as whether disease-causing organisms are present). Higher turbidity levels are often associated with higher levels of disease-causing microorganisms such as viruses, parasites and some bacteria. These organisms can cause symptoms such as nausea, cramps, diarrhea, and associated headaches. (EPA 816-F-09-004, May 2009). 15A NCAC 02C North Carolina Well Construction Standards require turbidity to be less than 10 NTUs for water supply wells.