

Table 1-1
Groundwater Standards for
Inorganic Compounds

2005 BNL Groundwater Status Report

| CHEMICAL CONSTITUENT | CAS # | NYSDEC GROUNDWATER QUALITY STANDARDS AND GUIDANCE VALUES (a) µg/L | FEDERAL DRINKING WATER STANDARDS (b) µg/L |
|--------------------------|-----------|--|---|
| <i>Inorganics</i> | | | |
| Aluminum | 7429-90-5 | - | 200 (d) |
| Antimony | 7440-36-0 | 3 | 6 |
| Arsenic | 7440-38-2 | 25 | 10 |
| Barium | 7440-39-3 | 1000 | 2000 |
| Beryllium | 7440-41-7 | 3 | 4 |
| Cadmium | 7440-43-9 | 5 | 5 |
| Calcium | 7440-70-2 | - | - |
| Chromium | 7440-47-3 | 50 | 100 |
| Cobalt | 7440-48-4 | - | - |
| Copper | 7440-50-8 | 200 | 1300 |
| Cyanide | 57-12-5 | 200 | 200 |
| Iron | 7439-89-6 | 300 | 300 (d) |
| Lead | 7439-92-1 | 25 | 15 |
| Magnesium | 7439-95-4 | 35000 | - |
| Manganese | 7439-96-5 | 300 | 50 (d) |
| Mercury | 7439-97-6 | 0.7 | 2 |
| Nickel | 7440-02-0 | 100 | 100 |
| Potassium | 7440-09-7 | - | - |
| Selenium | 7782-49-2 | 10 | 50 |
| Silver | 7440-22-4 | 50 | 100 |
| Sodium | 7440-23-5 | 20000 | - |
| Thallium | 7440-28-0 | 0.5 | 2 |
| Vanadium | 7440-62-2 | - | - |
| Zinc | 7440-66-6 | 2000 | 5000 (d) |

Notes:

- No standard available
- (a) NYSDEC June 1998 Ambient Water Quality Standards and Guidance Values for Groundwater Class GA.
- (b) USEPA February 1996, Drinking Water Regulations and Health Advisories. Note that the information under MCL was converted from mg/l to µg/L in order to maintain uniform units for this table.
- (c) The chemical screening concentration was selected as the more stringent of the state and federal standards.
- (d) Listed standard represents a secondary MCL, which has been developed to control the aesthetic quality of drinking water only.

NYSDEC = New York State Department of Environmental Conservation
µg/l = micrograms per liter (ppb)
mg/l = milligrams per liter (ppm)
MCL = Maximum Contaminant Level
USEPA = United States Environmental Protection Agency