

Bureau of Mining Regulation and Reclamation

GUIDANCE DOCUMENT

APPROVED TEST METHODS FOR MERCURY ANALYSIS

The Nevada Division of Environmental Protection, Bureau of Mining Regulation and Reclamation (Division) has determined that mercury analysis data submitted in fulfillment of Part I.D of the Water Pollution Control Permit using EPA method 200.8 ICP-MS (inductively coupled plasma, mass spectrometry) will not be accepted. EPA 200.8 is not an approved method for the analysis of mercury under the Clean Water Act, which is the basis of the Division's Mining Regulation Program.

The only certified methods for total mercury (in milligrams per liter, mg/L), per Nevada Administrative Code (NAC) 445A.0622.4, which references Title 40 of the Code of Federal Regulations (C.F.R.) Part 136.3 are as follows:

1. Cold vapor, manual
 - EPA method 245.1, Revision 3.0 (1994)
 - Standard method 3112 B-2009
 - ASTM D3223-02 (07)
 - USGS / AOAC / Other 977.22, I-3462-85
2. Cold vapor, automated
 - EPA method 245.2 (1974)
3. Cold vapor atomic fluorescence spectrometry (CVAFS)
 - EPA method 245.7, Revision 2.0 (2005)
 - USGS / AOAC / Other I-4464-01
4. Purge and Trap CVAFS
 - EPA method 163 IE

If any of the above criteria are not met, the Permittee must re-sample the compliance monitoring points for mercury analysis utilizing the approved method.

If any mercury data are submitted in which EPA 200.8 ICP-MS was utilized for analysis of mercury, the data will be rejected. Additional sampling and analysis will be required.

If you have any questions regarding acceptable analytical procedures, please contact the Division at (775) 687-9400.