

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WSG 20

Date Signed: April 6, 1981

MEMORANDUM

SUBJECT: Procedures for Rounding-Off Analytical Data to Determine Compliance with Maximum Contaminant Levels Present in NIPDWR

FROM: Joseph A. Cotruvo, Ph.D., Director  
Criteria and Standards Division, ODW (WH-550)

TO: Water Supply Representatives, Regions I-X, and holders of the Water Supply Guidance Series

All Maximum Contaminant Levels (MCL) contained in the National Interim Primary Drinking Water Regulations are expressed in the number of significant digits permitted by the precision and accuracy of the specified analytical procedure(s). Data reported to the State or EPA should be in a form containing the same number of significant digits as the MCL. In calculating data for compliance purposes, it is necessary to round-off by dropping the digits that are not significant. The last significant digit should be increased by one unit if the digit dropped is 5, 6, 7, 8 or 9. If the digit is 0, 1, 2, 3, or 4, do not alter the preceding number.

For example, if the monthly mean for coliform bacteria is 1.4999, the reported result should be 1 (one). A result of 3.50 should be rounded to 4 (four).

Chemical and radiological data may be treated in like manner. Analytical results for mercury of 0.0016 would round off to 0.002 while 5.4 pCi/l of combined radium-226 and radium-228 would round down to 5 pCi/l.