

6



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

AUG 19 1998

OFFICE OF
WATER

SUBJECT: Total vs. Total Recoverable Metals

FROM: William A. Telliard, Director
Analytical Methods Staff *W. A. Telliard*
Engineering and Analysis Division (4303)

TO: Pat Sosinski, Chemist
Region 3

This memorandum responds to your E-mail dated July 31, 1998, concerning the definition of the terms "total metal" and "total recoverable metal." EPA uses the terms synonymously to refer to the metals solubilized by digestion with strong solutions of mineral acids. I am enclosing a memorandum dated May 21, 1996, from Dr. Theodore Martin, Chemist, Chemical Exposure Research Branch, Office of Research and Development, that provides a historical perspective of these terms. Dr. Martin recently updated this memorandum at our request to reflect his latest thoughts on the subject (copy attached). His recent revisions to the 1996 memorandum are highlighted in the text.

☆ For effluent guidelines, for permitting under NPDES, and for other purposes in EPA's water programs, the terms "total metal" and "total recoverable metal" may be used interchangeably to reflect that it is the hard mineral acid digestion procedure that is used.

If you have any questions or would like to discuss this further, please do not hesitate to contact me at (202)260-7134, or Maria Gomez-Taylor at (202)260-1639.

Attachment

cc: Maria Gomez-Taylor
Regional QA Officers/QA Managers
Regional Permit Chiefs