

Use of Screening Procedures for Drinking Water Monitoring

December 4, 1997

EXECUTIVE SUMMARY

The Office of Ground Water and Drinking Water held a one day public meeting on Thursday, Dec. 4 in Washington, D.C. The purpose of this meeting was to present information regarding EPA's plans for the approval of screening procedures for the compliance monitoring of drinking water contaminants, to solicit public input on the potential uses of screening procedures, and to seek the preferences of the public regarding approaches for continued public involvement.

Background

EPA is required by the 1996 Amendments to the Safe Drinking Water Act to review "new analytical methods to screen for regulated contaminants." After this review, EPA "may approve such methods as are more accurate or cost-effective than established reference methods for use in compliance monitoring"[SDWA, §1445(i)]. EPA is also exploring the use of screening procedures for use in the monitoring of unregulated contaminants with monitoring requirements. These methods are expected to provide flexibility to public water systems in compliance monitoring and are expected to be "better and/or cheaper and/or faster" than existing analytical methods.

Summary

The approximately 40 meeting attendees and six teleconference participants represented states, water utilities, professional associations, environmental groups, analytical laboratories, instrument manufacturers/method developers, and other federal agencies. EPA presented information and solicited input on a number of issues, including the working definition of a screening procedure, currently available technologies, the evaluation and approval process for these and future technologies, and next steps for the development of the proposed rule. There may be a follow-up meeting in the late winter/early spring of 1998. The specifics regarding this meeting would be announced in the Federal Register.

Stakeholders requested that the Agency: 1) provide more detailed information on the definition of a screening procedure and more specific examples of situations where screening procedures may prove useful in the compliance monitoring framework, 2) focus on compliance monitoring applications at the expense of discretionary monitoring applications, 3) emphasize that the use of screening procedures is intended to provide better, more efficient monitoring and not to merely provide monitoring relief, 4) clarify and carefully coordinate how screening procedures will fit in with other OW's initiatives, including Performance Based Measurement Systems (PBMS), National Laboratory Accreditation (NELAC), monitoring relief (CMR & AMG), data gathering for unregulated contaminants monitoring, the contaminant candidate list, the National Contaminant Occurrence Database, PE sample externalization, and the regulations being developed for radon, disinfectant/disinfection by-products, and arsenic, and 5) provide more information on the approval process for screening procedures. The Office of Ground Water and Drinking Water will present this information either at the next stakeholders meeting or will provide further information to those on the mailing list of interested parties.

Stakeholders had other significant comments. Representatives of a water utility (AWWS) and the state of Wisconsin described how they, without need EPA review or approval, used screening procedures to monitor and evaluate water sources and treatment plant operation, to obtain waivers, and to develop Source Water Protection Plans. Also, the suggestion was made that other viable technologies be

considered that were not presented at the meeting, including new colorimetric methods, single or limited ion GC/MS, and LC/MS. A "monitoring efficiency" hypothetical scenario was developed during the afternoon discussion: if a public water system obtains a three year monitoring waiver (or five year under CMR), the system could be required to screen for contaminants in the off years and to report any positive results (presence/absence methods) or results above a given threshold (more quantitative techniques) to customers.

Next Steps

The next steps for developing a regulation allowing screening procedures are planned as follows:

- 1) In the spring of 1998, the Agency will critically review promising screening procedures for use in the drinking water program;
- 2) in the summer of 1998, the Agency will develop a framework for the use of screening procedures in the drinking water program and concurrently will develop a framework for validating and approving specific screening procedures;
- 3) in the fall of 1998, these frameworks will be reviewed for scientific and technical merit;
- 4) in the late fall of 1998, the Agency will issue a Federal Register notice proposing the use of screening procedures and will solicit public comments; and
- 5) in the fall of 1999, after considering the comments received, the Agency will issue a Federal Register notice promulgating the use of screening procedures in the drinking water program.