



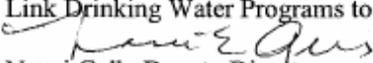
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

MAR 10 2008

MEMORANDUM

OFFICE OF
WATER

SUBJECT: Request for Science Advisory Board (SAB) Consultation on Measures to Link Drinking Water Programs to Public Health Outcomes

FROM: 
Nanci Gelb, Deputy Director
Office of Ground Water and Drinking Water

TO: Sue Shallal, Ph.D
Designated Federal Officer
EPA Science Advisory Board Staff Office (1400F)

The Office of Ground Water and Drinking Water is requesting a consultation by the Science Advisory Board on the draft document entitled "Drinking Water Program Health Outcome Based Performance Measures for Chemical and Microbial Contaminants." This "Measures Document" describes the Agency's approach for linking drinking water programs to public health outcomes.

In order to develop the performance measures, the Office of Ground Water and Drinking Water considered several approaches, the availability of data, and input from the National Drinking Water Advisory Council (NDWAC). The new measures are based on reduced bladder cancer and cryptosporidiosis cases for chemical and microbial contaminants, respectively. Since the measures are based on methodologies used in the Stage 2 Disinfection Byproducts Rule (for reduced bladder cancer cases) and Long Term 2 Enhanced Surface Water Treatment Rule (for reduced cryptosporidiosis cases), the Office is seeking SAB's consultation on the application of these methodologies for measures purposes. EPA will estimate out-year target measures in 2008 and compare these measures to actual cases avoided in 2014.

Attached are the charge to the Science Advisory Board, which identifies the questions and issues we would like SAB to address, and the Measures Document. We have also included the NDWAC recommendations to EPA on Performance Measures to provide additional background material for the consultation.

Attachments

- Charge
- Measures Document
- NDWAC Recommendations to EPA

Background and Request for SAB Drinking Water Committee Consultation on Measures to Link Drinking Water Programs to Public Health Outcomes

The Office of Water (OW) has developed new performance measures to link Drinking Water Program actions to public health outcomes. After considering several possible approaches, data available to support potential measures for a number of regulated contaminants, and input from the National Drinking Water Advisory Council (NDWAC), OW has developed two performance measures. The measures are based on reduced bladder cancer and cryptosporidiosis cases for chemical and microbial contaminants, respectively. OW will estimate the annual cases that will be reduced for each measure in 2014 and include these target estimates in EPA's 2008 Strategic Plan.

The chemical and microbial measures are based on methodologies used in economic analyses for the Stage 2 Disinfection Byproduct Rule (Stage 2) and Long Term 2 Enhanced Surface Water Treatment Rule (LT2), respectively. The Office of Water is not requesting consultation on these methodologies because they have previously been peer reviewed. The attached draft *Drinking Water Program Health Outcome Based Performance Measures for Chemical Contaminants and Microbial Contaminants* (Measures Document) provides 1) language describing the measure metric, 2) a summary of the measure methodology, 3) measure baseline metrics (i.e., "Pre-Rule" baselines) 4) "Post-Rule" measure predictions or targets, 5) the methodology the Agency plans to use for calculating "Post-Rule" measure metrics in the future when data are collected and 6) a discussion of uncertainty (i.e., modeling and model-based measure metrics). The document was developed as a tool for EPA to use in finalizing new Strategic Plan measures and as a future reference in implementing measures and in evaluating progress toward measure targets. OW has asked the SAB Drinking Water Committee to hold a consultation on this document. Specifically, OW is interested in feedback from the SAB Drinking Water Committee on the following general questions / topics related to the draft Measures Document:

1) Please comment on the discussion of the program measures (i.e., health outcomes and relationship to regulatory program activities) and model / measure uncertainty. Does the discussion provide the reader with a balanced understanding of the measure's value in assessing program results?

2) In order to use actual compliance data to calculate the cases avoided by 2014, EPA will need to work with States to obtain drinking water data not available at the federal level. Practically, EPA envisions using data collected through 2012 to allow time for analysis in completing a "Post-Rule" measure by 2014. The NDWAC recommended that EPA continue to work with States to institute an ongoing data-sharing process to support current and future drinking water rules and any related performance measures. Please identify other data sources besides state compliance data that EPA can draw on for the 2014 analysis.

3) OW has also included a cumulative measure as well as an annual measure. Please comment on which of these indicators might serve as a better indicator of public health outcomes and include the basis for the selection.

In addition to the above charge on the document, please identify issues for further research that could support development of other measure approaches as the Stage 2 and LT2 rules are fully implemented, as well as any future program measures that the Agency should consider developing.