



**American Water Works
Association**

The Authoritative Resource on Safe WaterSM

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June 21 , 2005

Ms. Lorraine Hunt
Office of Information and Regulatory Affairs
Office of Management and Budget
NEOB, Room 10202
725 17th Street, N. W.
Washington, DC 20503

RE: Draft 2005 Report to Congress on the Costs and Benefits of Federal Regulations

Dear Ms. Hunt,

The American Water Works Association (AWWA) appreciates the opportunity to review and comment on the Draft 2005 Report to Congress on the Costs and Benefits of Federal Regulations as published on March 23, 2005 (70 Federal Register 14735).

The American Water Works Association (AWWA) is an international non-profit, scientific and educational society dedicated to the improvement of drinking water quality and supply. Our over 57,000 members include more than 4,700 utilities that supply roughly 80 percent of the nation's drinking water. We appreciate your review and consideration of the attached comments. We would also appreciate feedback from the agency on these comments.

If you have any questions regarding this letter or the attached comments, please contact Alan Roberson or me at (202) 628-8303.

Best regards,

A handwritten signature in black ink that reads "Tom Curtis".

Thomas W. Curtis
Deputy Executive Director

cc: Cynthia Dougherty—USEPA OGWDW
Phil Oshida—USEPA OGWDW
Kim Nelson—USEPA OEI
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**COMMENTS BY THE AMERICAN WATER WORKS ASSOCIATION ON THE DRAFT
2005 REPORT TO CONGRESS ON THE COSTS AND BENEFITS OF FEDERAL
REGULATIONS, NOTICE AND REQUEST FOR COMMENTS
(March 23, 2005, 70 FR 14735)**

INTRODUCTION

The American Water Works Association (AWWA) is an international, nonprofit, scientific and educational society dedicated to the improvement of drinking water quality and supply. Founded in 1881, the Association is the largest organization of water supply professionals in the world. Our 57,000-plus members represent the full spectrum of the drinking water community: treatment plant operators and managers, environmental advocates, scientists, academicians, and others who hold a genuine interest in water supply and public health. Our membership includes more than 4,700 utilities that supply roughly 80 percent of the nation's drinking water.

The comments provided herein reflect the consensus of the AWWA that, given the depth and breadth of its representation, also reflect the predominant view of the nation's drinking water professionals. It is therefore appropriate that these AWWA comments be heard on behalf of the drinking water community in general.

GENERAL COMMENTS

AWWA is pleased to submit this set of comments on the Office of Management and Budget's (OMB) *Draft 2005 Report to Congress on the Costs and Benefits of Federal Regulations*, as printed in the March 23rd *Federal Register* (70 FR 14735). AWWA has commented on the previous OMB reports, and appreciates OMB's efforts to improve rulemakings by federal agencies through such actions as the Data Quality Guidelines and new updated guidance for Cost-Benefit Analyses (CBAs). The various federal agencies are working to implement these in their traditional rulemaking processes and the success of this implementation varies substantially from agency to agency.

AWWA is dedicated to providing safe drinking water to the American public, and recognizes the importance of setting health-based standards that are balanced against the need to keep drinking water affordable. This is a delicate balance for the Environmental Protection Agency's (EPA) Office of Groundwater and Drinking Water (OGWDW) that warrants careful oversight by OMB.

The Draft Report, under "E. The Impact of Federation Regulation on State, Local, and Tribal Government, Small Business, Wage, and Economic Growth," list six final regulations that the EPA has issued over the past eight years that have imposed costs of over \$100 million per year on State, local, and tribal governments and thus have been classified as public sector mandates under the Unfunded Mandates Act of 1995. The following three drinking water regulations are of specific interest to AWWA:

- *EPA's Primary Drinking Water Regulations: Disinfectants and Disinfection Byproducts (1998)*

- *EPA's National Primary Drinking Water Regulations: Interim Enhanced Surface Water Treatment (1998)*
- *EPA's National Primary Drinking Water Regulations: Arsenic and Clarifications to Compliance and New Source Contaminants Monitoring (2001)*

In addition, EPA also promulgated final drinking water regulations for radionuclides in December 2000 and the Long-Term 1 Enhanced Surface Water Treatment Rule (LT1ESWTR) in January 2002. EPA proposed the Stage 2 Disinfection By-Products Rule (DBPR) and the Long-Term 2 Enhanced Surface Water Treatment Rule (LT2ESWTR) in August 2003, and is planning to finalize these rules in late 2005 or early 2006.

For many years, AWWA has been carefully reviewing Cost-Benefit Analyses (CBAs) for national primary drinking water regulations issued by EPA under the Safe Drinking Water Act (SDWA). We have extensively commented on many significant cost-benefit issues in our lengthy comments on EPA's proposals for radon, radionuclides, arsenic, the groundwater rule, and the multiple rules known as the Microbial/Disinfection By-Product (M/DBP) Cluster, which includes the 1998 Stage 1 Disinfectants and Disinfection Byproducts Rule (D/DBPR) and the Interim Enhanced Surface Water Treatment Rule (IESWTR).

We have also taken a very small step in looking backwards with the development of a "report card" for the CBA for the final radionuclides drinking water regulation. This was our first attempt at a retrospective analysis, and we agree that more retrospective analyses are needed. We were an active participant in the 2001 review of the arsenic regulation, and still have significant unresolved concerns with several issues with this final rulemaking including the number of impacted systems and the number of impacted wells, differences in the cost curves between different versions of EPA documentation, and the cost estimates for the handling of the waste stream (residuals) resulting from arsenic control technologies. This last issue is critical, as handling of the waste stream with concentrated arsenic (and other regulated contaminants such as radium) is turning out to be more problematic than originally thought. AWWA would support a retrospective analysis of the arsenic and radium regulations, with a special emphasis on the unit costs estimates for residuals handling.

AWWA's review of the background documentation for arsenic residuals handling revealed several inconsistencies between the cost estimates for residual handling and disposal costs in the proposal and background documentation referenced in the arsenic Notice of Data Availability (NODA). These inconsistencies included: (1) lack of unit cost models within the flow range of medium and large system sizes; (2) lack of waste production estimates for various technologies identified by EPA (namely, activated alumina and anion exchange); and (3) inconsistencies in the waste production levels. Therefore, we still have unresolved issues with the unit cost estimates for the residual handling and disposal costs associated with arsenic control technologies.

We also have some significant unresolved concerns with the Economic Analyses (EAs) for the proposed Stage 2 DBPR and the proposed LT2ESWTR. These concerns have been detailed in our lengthy comments on these two proposals, and these concerns were summarized in our comments to OMB on the 2004 Report.

As part of developing comments on EPA's proposed rules, the drinking water community as a whole has invested thousands of member man-hours and spent millions of dollars with the hope of improving the regulatory development process. EPA has made some improvements in the quality of its CBAs for drinking water regulations. However, despite considerable efforts by Association staff, members, and experts on AWWA's behalf, and some improvement from EPA, significant concerns remain about many of the CBAs developed by EPA for drinking water regulations. Therefore, AWWA supports the retrospective analyses of the above regulations to ensure that they have worked as intended and to determine what the actual benefits and costs were. We would be willing to provide technical support to OMB and EPA in these retrospective analyses through our volunteer network of utilities, engineering consultants, and economists.

Judicious use of Cost-Benefit Analysis (CBA) is an important tool for evaluating rulemakings, but especially so for regulations issued under the Safe Drinking Water Act (SDWA). The 1996 SDWA Amendments have elevated the importance of CBA by providing explicitly for the consideration of costs and benefits in the development of drinking water standards. The 1996 SDWA Amendments are the benchmark for both OMB and EPA for the quality and dissemination of the data underlying the regulatory development process. AWWA commends OMB for its incorporation of the CBA language in the 1996 SDWA Amendments as the benchmark for information quality and dissemination standards for federal agencies to use in CBAs for their respective rulemakings. AWWA and its member utilities worked hard to include this specific language in the 1996 SDWA Amendments to ensure that the regulatory process was not hidden behind statistical "smoke and mirrors". EPA has made progress in meeting these information quality and dissemination requirements in its recent rulemakings, but more work is still needed.

Frustration is starting to grow within the drinking water community with the slow progress in meeting those requirements. Frustration is continuing to grow with the lack of a comprehensive implementation plan to continually improve CBAs to move close to the goals underlying those requirements. Some of our CBA comments have been incorporated in recent EPA rulemakings, but many comments have not been addressed and/or the response has been superficial in some cases. Overall, while EPA's CBAs have improved in recent rulemakings, there is still a lot of room to improve.

Hence, the concerns raised here are not only about how benefits and costs are estimated, but also about how they are compared to one another and interpreted in the standard setting context. Further, because the consumers who receive the benefits of drinking water standards are also the same group that will bear the costs, it is especially important that the CBAs clearly and accurately reflect the risk/cost tradeoffs that regulations will impose on them.

AWWA understands the difficulties and frustrations of trying to evaluate federal agency CBAs for national regulations. AWWA commends OMB for its efforts in assembling and reviewing the complex issues associated with reviewing the entire federal regulatory program. However, most of EPA's drinking water CBAs have been difficult to review or replicate, and/or appear to be in error in several respects. Additionally, in certain respects, a number of EPA's CBAs also

have not conformed to the explicit requirements of the SDWA (notably, CBA-related provisions under various portions of Section 1412). These include:

- Lack of transparency, replicability, and consistency. In several instances, it is difficult or impossible to follow the Agency's analyses. Key citations are not always made available (or refer back to other documents until the trail ends short of the key facts). Results from intermediate steps are not always provided, so it is impossible to "put the pieces together" to determine the source of numerical discrepancies. The General Accounting Office (GAO) faced similar difficulties in its 2002 review of the radon regulation (GAO, 2002). This means that in certain instances the public must accept the EPA estimates on faith. This is at odds with sound practice, and also does not conform to the SDWA requirement for public information [Section 1412(b)(3)(B)].

There also has sometimes been a lack of consistency among studies in terms of data, methods, or assumptions applied. Inconsistency would not be a problem if the changes over time reflected a steady evolution toward improved methods and data. Regrettably, this is not the case for the CBAs coming out of EPA's Office of Groundwater and Drinking Water (OGWDW).

- Reliance on overly conservative assumptions and default values when estimating benefits. In the face of uncertainty, risk assessors traditionally apply the "precautionary principle" in determining what exposure levels are "safe." This is done through use of uncertainty factors, reliance on upper confidence limits and a linear dose-response model for carcinogens, and the application of other practices that are intentionally designed to avoid understating risk. The use of the precautionary principle is perhaps suitable in defining a risk-free goal such as an MCLG. For other purposes, however, it is inappropriate for risk assessment to include such conservative policy judgments.

For its CBAs, EPA should provide unbiased estimates of risk that are in turn suitable for risk *management* applications such as the use of CBA in standard setting. Otherwise, the risk assessments will lead to a considerable overstatement of benefits. The degree to which benefits are overestimated (if at all) will vary considerably from the contaminant to contaminant, depending on many factors. The General Accounting Office (GAO) nicely summarized these issues surrounding regulatory and other policy decisions that are not always based on the best (most accurate) science information available (i.e., the most likely or central tendency estimates of risks and benefits) (GAO, 2000).

Additionally, benefits analyses need to reflect "best estimates" (or suitable probability distributions) for key exposure, dose-response, latency period, and benefits valuation issues. This is not only sound economics and policy analysis, but it also is required under the SDWA [Section 1412 (b) (3) (B)]. AWWA and other drinking water associations have made such recommendations in comments on EPA's recent drinking water proposals. Unfortunately, EPA appears to be hesitant to incorporate these recommendations in its final CBAs for final drinking water regulations.

- Reliance on national incremental comparisons of benefits to costs. EPA is beginning to show national incremental CBAs in its final drinking water regulations, along with the traditional comparison of total benefits to total costs in evaluating MCL options. This is a significant step forward in meeting the requirements of SDWA Section 1412 by comparing incremental benefits to incremental costs and maximizing net social benefits. Additionally, EPA needs to develop multiple incremental CBAs, using its system size categories. Small systems in particular feel the increasing impacts of compounding regulations such as the radon rule, the arsenic rule, and the groundwater rule. A comparison of total benefits and costs by each individual system size, as opposed to incremental benefits and costs by each of the major size categories (large, medium, and small), indicates only whether or not a rule is a break-even proposition. This is an insufficient basis for choosing whether or not to regulate, or how stringently to set the standard.
- Reluctance to use “state of the art” measures of risk reduction benefits, such as “Life Years Saved” (LYS) or other alternative measures. Reduced risks of premature fatalities need to be viewed in the context of the amount of increased longevity (years of life extension) provided by a regulation. This provides a more meaningful way to interpret regulations, some of which may reduce premature fatalities early in life, and others that are aimed more at risks faced late in life. EPA’s Office of Groundwater and Drinking Water (OGWDW) has steadfastly adhered to the more generic, less informative “lives saved” approach, even though other EPA offices (in its own Clean Air Act analysis) and other federal agencies (e.g., FDA) have published more informative CBAs using the LYS approach.

EPA has not used LYS in drinking water regulations for many reasons, including that the Science Advisory Board (SAB) raised some concerns with valuing LYS on the basis of adjusting estimates of the Value of a Statistical Life (VSL). Nonetheless, even if there are concerns about developing a monetary estimate of the value of a statistical life year (VSLY), this is no basis for refusing to at least quantify the degree of life extension provided by regulatory options developed under the SDWA regulatory program.

- Incorporation of latency periods and discounting estimated benefits. There is clear economic rationale for applying suitable latency scenarios to evaluate health effects that tend to manifest many years after exposure (as is typical of many cancers), and then discounting back to present value. EPA and OMB *Guidelines* point this out, and indeed an EPA Science Advisory Board (SAB) published a report (June 2000) reiterating the legitimacy of this practice. The EPA SAB again recommended using a cessation-lag concept in its review of the benefits from the arsenic regulation (August 2001). Admittedly, EPA is starting to alter its traditional approach of direct benefits transfer of VSL results without making these suitable adjustments for latency and discounting. In the past, EPA assumed that all benefits accrue immediately with implementation of its rules, whereas this is clearly not the case for most carcinogens or other compounds that pose chronic risks. EPA is starting to account for latency in its latest drinking water regulations, and this practice needs to become consistent for future rulemakings.
- Lack of more systematic approaches for considering unquantified benefits and costs within CBA and standard setting. In some instances, important benefits or costs may not be readily

quantified or portrayed in dollar value terms. In these instances, the unquantified or omitted benefits and costs need to be suitably considered in the regulatory decision-making process -- they should neither be ignored nor given undue weight. Again, EPA's SAB recommended that EPA take a harder look at unquantified benefits in its review of the benefits of the arsenic rule (August 2001). EPA's CBAs for drinking water standards have sometimes failed to use available information on unquantified outcomes in an informative manner, despite examples being provided to the Agency.

- Unwillingness to more adequately consider the affordability of rulemakings. EPA focuses only on median household incomes, and does not adequately consider the cumulative impact of multiple pending regulations on household water bills. This is a particular concern when considering low-income households and residents of smaller communities. EPA's arsenic affordability study makes several recommendations that need to be implemented as soon as possible into future rulemakings (March 2002). EPA has established an Affordability Workgroup under the National Drinking Water Advisory Council to provide more detailed affordability recommendations. How EPA will incorporate these recommendations into future rulemakings is not yet clear.
- Masking significant regional economic impacts under a national context. Several SDWA regulations have regionalized impacts due to contaminant occurrence being concentrated in a few geographic areas (e.g., uranium, radium). The regional impact of these rules can be significant, but this important perspective is masked when the Agency uses only a national aggregate analysis which makes the issue seem modest. Again, EPA's recent arsenic affordability recommends investigating the feasibility of regional analyses, and this needs to be implemented as soon as possible (March 2002)

All of above recommendations (and more) are part of the recommendations in one of the following four recent reports on drinking water regulatory actions:

- *Report to Congress: Small Systems Arsenic Implementation Issues* (March 2002)
- *Drinking Water: Revisions to EPA's Cost Analysis for the Radon Rule Would Improve Its Credibility and Usefulness* (GAO, February 2002)
- *Report of the Arsenic Cost Workgroup to the National Drinking Water Advisory Council* (August 2001)
- *Arsenic Rule Benefits Analysis: An SAB Review* (August 2001)

While the recommendations from these reports (and other reports dating back several years) have been known and well articulated for several years, EPA needs to fully incorporate these recommendations in its drinking water CBAs. Again, AWWA supports the retrospective analyses of recent national drinking water regulations to ensure that they have worked as intended and to determine what the actual benefits and costs were. We would be willing to provide technical support to OMB and EPA in these retrospective analyses through our volunteer network of utilities, engineering consultants, and economists.