

Benefits Analysis for Proposed Drinking Water Regulations

Introduction

A program is underway to develop a new framework for benefits estimation, within the context of SDWA, for proposed drinking water regulations. The new framework will be based on methodologies and procedures used in other parts of EPA, in other Agencies, and in the academic world. The 1996 SDWA Amendments explicitly include cost-benefits analysis as part of the regulatory process, a change from earlier requirements.

Time Frame

This new framework will be phased in over the next few years, into rulemaking efforts, as it is developed.

Need for Activity

The Safe Drinking Water Act (SDWA) amendments of 1996 require that EPA fully consider both quantifiable and non-quantifiable benefits that accrue to drinking water regulations; these benefits must be compared with the projected costs of the regulations. Development of cost information, while challenging, is fairly well understood. Benefits assessment, by contrast, is less well understood (at least in connection with drinking water regulations). Also the Unfunded Mandates Reform Act (UMRA) and Small Business Regulatory Enforcement Fairness Act (SBREFA) have cost/benefit provisions, which will factor into future regulatory analysis.

Detail of Activities

The benefits of regulatory action are reflected in improvements in human welfare. Equivalently, they represent the avoided damages or losses in welfare that humans would have experienced in the absence of regulatory action. As a part of the EPA program, a review of the economics literature pertaining to the evaluation of drinking water quality improvement benefits was performed. This review found a broad categorization of the possible benefits of drinking water regulations to include: human health improvements, enhanced aesthetic qualities, avoided costs of averting behavior, avoided materials damages, avoided costs of market production, nonuse benefits, and information benefits.

A number of benefits analysis projects are currently underway, including the preparation of a guidance manual for benefits evaluation directed towards regulation development managers. Also underway are projects on risk assessment data needs (of regulation development managers), methods of evaluating and presenting data in view of uncertainties, cost of illness for various health endpoints, and bottled water and home

treatment expenditures. In addition, the new EPA benefits program includes assistance to ongoing rulemaking efforts, such as arsenic and radon.

Opportunities for Public Involvement

A working group on benefits has been formed under the National Drinking Water Advisory Council (NDWAC). This group held its first meeting on May 19-20, 1998, in Alexandria, VA. The NDWAC working group on benefits discussed the development of the framework for evaluating the benefits of proposed drinking water regulations, including the categories of benefits that EPA should routinely consider in the development of its drinking water regulations.

EPA encourages public input into regulation development. Public meetings on the development of the new benefits framework are announced in the *Federal Register*.

Related Links

- [Recent Meeting Summaries](#)
- [Cost Development and Regulatory Impact Assessment](#)

For more information, contact EPA's [Safe Drinking Water Hotline](#), 1 (800) 426-4791.

Benefits Analysis Status Report 4/20/98

Projects

- Benefits guidance manual (for regulatory development managers)

This project is expected to take two fiscal years, primarily due to the need for extensive review. A first draft is expected by the end of the current fiscal year. A proposed outline of the guidance manual has been submitted and is in review.

- Cost of illness studies

This project will be extended to various health endpoints over time. At this point a methodology has been developed and employed for stomach cancer. This work has been submitted to EPA and is currently under review. The next health endpoints to be examined are lung cancer and skin cancer.

- Risk Assessment data needs

This project is still in the early stages, with contracting issues still being resolved. The time frame for the project is the current fiscal year.

- Approaches to Uncertainty

This project is funded and the contractor is working, although no work has yet been submitted for review. This project is also expected to be completed in the current fiscal year.

- Study of averting expenditures (bottled water purchases) and attitudes

This project is well underway. Two focus groups in the D.C. area were formed and quizzed in preparation for a larger survey of consumer attitudes. This project will probably extend over a three-year period.

Meetings

The first meeting of the NDWAC benefits working group will be held on May 19-20, in Alexandria, VA. The group will discuss the categories of benefits that EPA should routinely consider in the development of its drinking water regulations, along with various approaches to dealing with data uncertainty. There will be three meetings of this group. The product of the group is expected to take the form of a report which will be available to regulatory development managers and will supplement their guidance manual.