

## Executive Summary

This section summarizes the Report of the Small Business Advocacy Review Panel (SBAR Panel or the Panel) convened for the proposed rulemaking for the Stage 2 Disinfectants and Disinfection Byproducts Rule (Stage 2 DBPR) and the Long-Term 2 Enhanced Surface Water Treatment Rule (LT2ESWTR) that the Environmental Protection Agency (EPA) is currently developing.

On April 25, 2000, EPA's Small Business Advocacy Chairperson convened this Panel under Section 609(b) of the Regulatory Flexibility Act (RFA) as amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA). In addition to EPA's Small Business Advocacy Chairperson, the Panel consists of the Chief of EPA's Standards and Risk Reduction Branch, the Deputy Administrator of the Office of Information and Regulatory Affairs within the Office of Management and Budget, and the Chief Counsel for Advocacy of the Small Business Administration.

The Panel's findings and discussion are based on the information available during the term of the Panel. EPA is continuing to conduct analyses relevant to these proposed rules, and additional information may be developed or obtained during the remainder of the rule development process and from public comment on these proposed rules.

### **Small Entities that May Be Subject to the Proposed Regulation**

Based on the regulatory options under consideration, EPA anticipates that the Stage 2 DBPR will impact small community water systems. The rule may also impact non-transient non-community (NTNC) water systems serving fewer than 10,000 people.

EPA also anticipates that LT2ESWTR will impact small community water systems using surface water as a source or ground water under the direct influence of surface water (GWUDI). In addition, non-community surface water systems serving under 10,000 may also be impacted by the LT2ESWTR.

EPA estimates that fewer than 8% of small non-purchased surface water systems will be affected by a DBPR rule of 80/60 LRAA with no required inactivation of *Cryptosporidium*. For an option of 80/60 LRAA with *Cryptosporidium* inactivation across the board, EPA currently estimates 79-83% of small surface water systems would be impacted. These estimates are less than 100% because it is anticipated that some systems will have already gone to advanced technologies under Stage 1 DBPR. Current discussions in the FACA on criteria for requiring *Cryptosporidium* inactivation suggest that only a small percentage of small systems would actually need to inactivate.

### **Summary of Small Entity Outreach**

The Panel conducted SER outreach, building on EPA's extensive efforts prior to the Panel. This included a package to the SERs on May 11, 2000 and a meeting held with SERs on May 25, 2000. The Panel received seven sets of comments from SERs. A summary of these comments is located in Section 8 of this report.

### **Panel recommendations for Stage 2 DBPR and LT2ESWTR**

The Panel discussed each of the issues raised in the outreach meetings and in written comments by the SERs. Following are the Panel's findings and recommendations regarding these and related issues.

### **Projected Reporting, Recordkeeping, and Other Compliance Requirements of the Proposed Rule**

SERs commented that requirements may be burdensome to small systems and that the States should play a part in relieving this burden. The Panel recommends that EPA evaluate ways to minimize the recordkeeping and reporting burdens under the rule.

The Panel also recommends that EPA provide as much monitoring flexibility as possible to small systems. The Panel suggests exploring long term monitoring options similar to those under the Stage 1 rule, while acknowledging that increased short term monitoring may be necessary to establish a baseline of DBP occurrence in the distribution system.

Some SERs were concerned that the Stage 2 DBPR may limit their use of chlorine as a preoxidant. The Panel recommends that EPA carefully consider the importance of preoxidation in various treatment trains before proposing any regulatory requirements that would significantly impact its availability as a treatment step.

### **Other Relevant Federal Rules Which May Duplicate, Overlap, or Conflict with the Proposed Rule**

The Panel is unaware of any Federal rules that would duplicate or overlap with these proposed rules. There are a number of existing rules that are closely associated with the rules under development; these include the THMR, SWTR, IESWTR, Stage 1 DBPR, LT1ESWTR, FBR, and GWR. The Panel is aware of the potential conflict between rules regulating control of microbial contaminants and those regulating disinfection byproducts, as well as between those regulating DBPs and other treatment needs that may require preoxidation. EPA is sensitive to the importance of maintaining preoxidation treatment options for utilities. The Panel recognizes that the availability of UV disinfection may partially address these concerns by providing a cost-effective technology for controlling *Cryptosporidium* that does not appear to generate significant

DBPs. The Panel recognizes, however, that use of UV would not necessarily eliminate the need for preoxidation for purposes other than disinfection and recommends that EPA carefully considers the impacts on other treatment steps of any DBP requirements that might limit the use of preoxidation.

## **Regulatory Alternatives**

The Panel considered a wide range of options and regulatory alternatives for providing small businesses with flexibility in complying with the Stage 2 DBPR and the LT2ESWTR. As part of the process, the Panel requested and received comment on several options that were suggested by the Panel members. Taking into consideration the comments received on these options, the Panel summarizes the major options below. The complete set of recommendations can be found in Section 9 of the Panel's full Report.

## **Major Panel Recommendations**

The Panel recognizes the concern shared by most stakeholders with reducing temporal and spatial variability of DBPs in the distribution system. This concern stems from recent studies which, while not conclusive, suggest that there may be adverse reproductive effects associated with relatively short term exposure to DBPs. In general, this is less of a concern for small systems because even under Stage 1 DBPR, most will be monitoring at only a single point in the distribution system (which is supposed to represent the point of maximum exposure), and many will be monitoring only once during the year, which is supposed to correspond to the season with the highest potential occurrence. Thus, these systems are effectively complying with a single highest maximum. However, given that small systems have the option under Stage 1 to average across both monitoring locations and quarterly measurements to determine compliance, there may still be concerns with seasonal or locational "hot spots" even for small systems. The Panel thus supports EPA's efforts to explore options for reducing spatial and temporal variability, while still minimizing the compliance burden on small systems.

An approach based on compliance with an 80/60 LRAA appears to be an effective way of addressing concerns regarding spatial variability. As noted before, most small systems will be effectively complying with such requirements under Stage 1 anyway, so making it the formal basis for compliance would not impose any additional burden on most small systems, although it would remove flexibility and potentially impose burden for that subset of small systems that are voluntarily taking samples in more than one point at the distribution system. EPA may also require additional short term monitoring to better characterize the spatial distribution of DBP occurrence throughout the system, and this would impose additional burden. In developing any additional monitoring requirements for small systems, EPA should minimize any such burden.

Regarding temporal variability, the Panel would be concerned about an approach requiring regulatory compliance with an 80/60 single highest (SH), because this may impose significant additional cost on some small systems. The Panel recommends that EPA explore instead an

approach under which individual high values might trigger additional assessment and/or notification requirements, rather than an MCL violation.

The Panel also recommends that EPA provide with the rulemaking record, more detailed information from the FACA modeling effort about the estimated changes in DBP effluent levels, technology changes, system costs and household costs that are projected for each Stage 2 regulatory alternative under consideration by the Agency. Comparisons should be made with the changes required currently by the Stage 1 regulation.

The Panel notes the strong concerns expressed by some SERs with the uncertainty in the current scientific evidence regarding health effects from exposure to DBPs, particularly with regard to short term exposure. Given this consideration, one Panel member recommends that, in addition to considering options to reduce temporal and spatial variability, EPA give further serious consideration to making a determination that the currently available scientific evidence does not warrant imposing additional regulatory requirements, beyond Stage 1, at this time. This Panel member recommends that EPA instead continue to vigorously fund on-going research into health effects, occurrence, and appropriate treatment techniques for DBPs, and reconsider whether additional requirements are appropriate during its next six-year review of the standard, as required under SDWA. This panel member also recommends that EPA separately explore whether adequate data exist to warrant regulation of NTNCs at a national level at this time.

Regarding the LT2 rule, the Panel would be concerned by an across-the-board additional log inactivation requirement because of the potential high cost to small systems and the lack of current data on the extent to which implementation of the Stage 1 rules will adequately address *Cryptosporidium* contamination at small systems. The Panel notes that the FACA is currently exploring a more targeted approach based on limited monitoring and system assessment that would identify some subset of vulnerable systems that might be required to provide additional inactivation in the range of 0.5 to 2.5 log removal.

The Panel is also encouraged by recent developments suggesting that UV is likely a viable, cost-effective means of fulfilling any additional inactivation requirements that may be commercially available to small systems on a widespread basis in the near future.

The Panel recommends that, in developing any additional inactivation requirements based on a targeted approach, EPA carefully consider the potential impacts on small systems and attempt to structure the regulatory requirements in a way that would minimize burden on this group. The Panel supports e-coli as an indicator parameter if additional monitoring is required.

The Panel further recommends that, among the options EPA analyzes, the Agency also evaluate the option of not imposing any additional *Cryptosporidium* control requirements on small systems at this time as it considers various options to address microbial concerns. Under this option, EPA would evaluate the effects of Stage 1, once implemented, and then consider whether to impose additional requirements during its next six-year review of the standard, as required by SDWA.

