

CHERYL HOGUE



CHANGING HOW EPA GETS SCIENCE ADVICE

HOUSE OF REPRESENTATIVES BILL would have repercussions on agency's regulations

CHERYL HOGUE, C&EN WASHINGTON

LEGISLATION MOVING through the House of Representatives could significantly hinder the Environmental Protection Agency's ability to act against pollution. The measure makes key changes, sought by the chemical industry, to a panel of outside experts who review EPA's draft scientific conclusions on matters including the toxicity of pollutants. Those changes allow greater industry input. Critics charge that this will delay actions like cleanup requirements that get reviewed by this expert panel.

The bill (H.R. 1422) does not take aim at EPA's regulatory authority. It focuses on the agency's Science Advisory Board. SAB reviews EPA's scientific work on issues such as the effects of mountaintop coal mining on streams and assessment of the health hazards of dioxins. These scientific analyses aren't regulations. But policymakers who do make rules rely on them heavily. The bill would remove limits on spoken public comments to SAB and require the board to respond to public comments in writing.

House Republicans concerned that EPA is going overboard on regulations support the measure. So do industries that face liability for cleanups or that make or use chemicals undergoing scrutiny at EPA. "This is going to really help improve the science discourse" at SAB, Richard A.

Becker, senior toxicologist at the American Chemistry Council, a chemical industry trade group, tells C&EN.

Opponents—including many House Democrats, the Union of Concerned Scientists, and environmental groups—say otherwise. "The bill contains several provisions which appear designed to bury the board in a mountain of work simply to keep it from getting anything accomplished," says Rep. Eddie Bernice Johnson of Texas, the top Democrat on the House Science, Space & Technology Committee.

That committee approved the bill last month, voting along party lines to send it to the full House. The bill's sponsor, Rep. Christopher Stewart (R-Utah), says the measure will bring more balance and expertise to EPA's science advice. As an example, he points to SAB's newly formed panel that is reviewing EPA research into the potential impacts of hydraulic fracturing—a method to extract natural gas from shale—on drinking water sources. He criticizes EPA for selecting few advisers for

SCIENCE UNDER SCRUTINY Reviews of EPA assessments of mountaintop coal mining (shown) and other activities may be delayed if legislation in the House becomes law.

this panel who have recent experience in this industry.

Citing what he called EPA's "over-reaching and economy-threatening agenda," Stewart says, "commonsense reforms that im-

prove scientific advice should make EPA's regulatory end-products more credible."

ACC says H.R. 1422 would institute "reforms that will improve scientific integrity of EPA's advisory panels." ACC is also part of an organization pushing for enactment of the bill. That coalition, called the American Alliance for Innovation, is composed of industry groups representing companies that make, distribute, or use chemicals or formulate products. The alliance endorses the bill in part for "improving the process for public engagement and ensuring that scientific concerns are clearly addressed and communicated."

THE LEGISLATION would mandate changes, which ACC has sought for years, in the way SAB operates. Under H.R. 1422, members of the public who make oral public comments to SAB panels "shall not be limited by an insufficient or arbitrary time restriction." ACC and other industry representatives complain that SAB panels inappropriately limit how long public commenters may speak at board meetings.

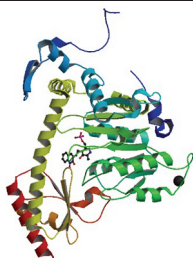
In addition, H.R. 1422 would require that SAB reports include written responses to "significant comments" from the public, though the bill does not define what type of comments would be considered significant. Stewart, the bill's sponsor, says these provisions are designed to facilitate meaningful public participation in SAB deliberations.

The bill would provide greater opportunities for input and discussion by scientific and technical experts from research institutions, consultancies, industry, universities, or environmental or health groups, Becker says. These members of the public often offer analyses that are alternatives to the ones in EPA's draft scientific docu-

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ments or they may provide different models to address highly technical issues, he points out. The time SAB provides to public speakers has gotten shorter over the years, he says.

Jennifer Sass, a senior scientist with the Natural Resources Defense Council, an environmental group, disagrees that the public has insufficient time. A frequent attendee of SAB meetings, she says the board regularly affords opportunities to industry scientists or consultants for robust presentations. Sass favors SAB continuing its current time limits for all public commenters.

Sass points to a recent report by the nonprofit, independent Keystone Center. That report recommends that federal scientific advisory boards provide an opportunity for the public to comment in at least some meetings, just as SAB has done for years. The Keystone report says “adequate time” should be given to all views. “In general, this means affording all individuals participating in a public comment period equal time to address the panel,” the report explains.

THREE SCIENTISTS who formerly chaired SAB tell C&EN the board sets boundaries on oral comments so it can conduct its deliberations in a timely matter.

“You can’t go on forever,” says Raymond C. Loehr, an emeritus professor of civil engineering at the University of Texas, Austin, who chaired SAB from 1988 to 1993. He served on several panels of the board from 1978, the year SAB was established, to 2003.

SAB and its panels often meet in three-hour teleconferences or at day-and-a-half-long, in-person gatherings. Typically, public commenters are given five to seven minutes each to speak, notes Deborah L. Swackhamer, who chaired SAB from 2008 to 2012. This is a practical, not arbitrary, time period to fit into the meeting agenda, says Swackhamer, a professor of science, technology, and public policy at the University of Minnesota, Twin Cities. No member of the public is excluded from addressing the board orally, she adds.

The argument against SAB-specified time limits for oral comments “has come up quite a bit in recent years,” she says. During her tenure, most of these objections cropped up around EPA’s draft hazard assessments of specific chemicals and the mountain-top mining review.

Public comments to SAB aren’t limited to oral presentations, points out M. Granger Morgan, who served as chair of SAB from 2004 to 2008. “There is nothing that prevents folks from industry or anywhere else from supplying more extensive written comments,” says Morgan, a professor of engineering and public policy at Carnegie Mellon University. There are no limits on the amount of written comments the public may submit to SAB.

Oral presentations often reinforce more detailed written comments submitted to the board, Swackhamer says. “Frankly, written comments are the most useful.”

Providing a pertinent study that was published in a peer-reviewed journal is a better strategy for influencing SAB than making public comments, Morgan says. “Publications will get much more serious attention from SAB than presentations, or even extended write-ups, on findings that are not peer reviewed by a high-quality journal,” he says.

Meanwhile, ACC says H.R. 1422 would “hold peer review panels accountable in responding to public comment and ensure that legitimate scientific concerns are transparently addressed.” ACC’s Becker adds, “I just don’t think it’s going to be a great burden.”

Former SAB chair Loehr agrees. He says that on the basis of his experience, the board could respond to public comments. For

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instance, the board might simply summarize in a report what commenters said and whether and how it used the information in its deliberations. “It’s possible to do this without getting tied up,” Loehr tells C&EN.

But Swackhamer and Morgan see things differently.

Responding in writing to comments would eat up valuable time for SAB’s scientific deliberations and run up the cost of operating the board’s panels, Swackhamer says. “It would delay SAB reports tremendously.”

Morgan points out that SAB’s job is limited to giving science advice to the EPA administrator—the board does not make regulatory policy that affects the public. “I see no reason why SAB should be burdened with having to respond in writing to every comment from an outside group,” he says.

Some public commenters describe

to SAB what they anticipate will be the regulatory implications, including cost to industry, of EPA’s scientific conclusions undergoing board review, Swackhamer says. Since these comments do not deal with scientific matters, the board should not respond to them, she says.

THE BILL ALSO would expand industry representation on SAB. Under the bill, scientists with “substantial and relevant expertise” could serve as advisers even if they have a potential financial interest in the board’s advisory activities—as long as that interest is fully disclosed. It is unclear how this arrangement would fit with existing federal law that governs conflicts of interest. However, Republicans and many Democrats on the House Science, Space & Technology Committee say they support expanding the ability of industry scientists to serve on SAB.

Another provision in H.R. 1422 would prohibit scientists from participating in SAB efforts that directly or indirectly involve review and evaluation of studies on which they are coauthors. Stewart says he is concerned about having scientists whose work is cited in an EPA scientific assessment serve on an SAB panel reviewing that agency document.

But that raises a problem for some. “How can you have a panel that doesn’t have anybody that’s published in that area? You want a committee of experts,” says Sass of the Natural Resources Defense Council. The National Academies, the International Agency for Research on Cancer, and some SAB panels include authors of key scientific studies cited in documents that review panels examine, she points out.

The Republican-controlled House is likely to take up and pass H.R. 1422 in the coming weeks or months. The bill’s chance in the Senate, where Democrats hold sway, is dimmer. But if the House passes it, the measure could be tacked on to a larger bill with broad political support and wind up on President Barack Obama’s desk. ■

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