

CONRAD LAW & POLICY COUNSEL
1155 CONNECTICUT AVE., N.W., SUITE 500
WASHINGTON, DC 20036-4327
202-822-1970
202-822-1971 (FAX)
JAMIE@CONRADCOUNSEL.COM
WWW.CONRADCOUNSEL.COM

January 30, 2012

Angela Nugent, Ph.D.
Designated Federal Officer, EPA Science Advisory Board
U.S. Environmental Protection Agency (1400R)
1200 Pennsylvania Avenue, NW
Washington, DC 20460

Re: Draft Report on Science Integration for Decision Making
at the U.S. Environmental Protection Agency

Dear Ms. Nugent:

I am writing in response to the SAB's January 12, 2012 Federal Register notice (77 Fed. Reg. 1932), which invited comments on the draft report of the SAB's Committee on Science Integration for Decision Making. I trust you will forward these comments to the members of the Committee. I apologize for filing them so close to the date of Committee's conference call; unfortunately, I did not become aware of the draft until very recently.

I. Background & Qualifications

I am filing these comments on my own behalf, as someone who has worked for a more than a quarter century on issues involving EPA's use of science. I spent 14 years at the American Chemistry Council, where these issues were always in play, and for over four years have represented a number of clients on the same types of matters. I've published several articles on agency use of science, and I am the creator and managing editor of the ENVIRONMENTAL SCIENCE DESKBOOK.¹ I specialize in administrative law, the field of law applicable to the topic of the SAB's notice, and am currently the Chair-Elect of the American Bar Association's Section of Administrative Law & Regulatory Practice.²

¹ <http://west.thomson.com/environmental-science-deskbook-law-series/5051/16624886/productdetail>.

² These comments are my own and do not necessarily reflect the views of the ABA or the Section.

II. Comments

The SAB's 2000 report, *Toward Integrated Environmental Decision-Making*, may rival the "Red Book"³ in the way that it established an analytically clear and practically useful paradigm for prescribing how EPA should go about making decisions in the complex, multi-dimensional and multi-party contexts in which it must operate. Given the centrality of science to virtually all of its program activities, EPA was wise to request the SAB to evaluate the extent to which the Agency's scientific processes have been integrated, per this time-tested model, into its decision making processes. The magnitude and diversity of EPA's obligations, and the resource limitations that it faces, require that EPA integrate the best available science into those processes in the most effective and efficient ways.

The draft report reflects a great deal of effort over the past almost three years to gather data on this important question. I think the project's approach was appropriate and its conclusions generally well-supported. In support of this effort, I offer the following comments:

A. Don't Lose Sight of Quality

Given the charge before the Committee, it is understandable that it focused on whether the decision making processes EPA uses promote or impede science integration, rather than the quality of that decision making or the quality of the science supporting EPA decisions (p. 3). It is vitally important, however, that the SAB never lose sight of the overriding importance of those ultimate questions. It is also important to bear in mind that conformance to the scientific integration framework does not necessarily guarantee quality outcomes.

The report notes that the NAAQS process "comes closest to full implementation" of the SAB's 2000 framework (p.4). While I agree with that statement, I also note that, even with all the procedure the NAAQS process employs, and despite its narrow orientation (single pollutant focus, no consideration of costs and benefits), many stakeholders still raise significant criticisms of the quality of the resulting output, and the utility of that output as input for EPA decision making. For example, the major uncertainties affecting the PM and ozone NAAQS were highlighted by the National Academy of Sciences a decade ago,⁴ but surprisingly little has been done to resolve them. Despite intensive reviews of the issue, the asserted hazards of PM are still premised on two epidemiological studies conducted years ago, whose underlying data are still not publicly available, and which presume a biological

³ National Research Council (NRC), RISK ASSESSMENT IN THE FEDERAL GOVERNMENT: MANAGING THE PROCESS (1983).

⁴ NRC, ESTIMATING THE PUBLIC HEALTH BENEFITS OF PROPOSED AIR POLLUTION REGULATIONS (2002).

mechanism of toxicity that is still not well-understood. In particular, EPA is still not prepared to estimate health effects based on the relative toxicity of different species of particulate matter.⁵ While the science underlying the NAAQS is reviewed by its own standing advisory committee, that committee itself is arguably a self-reinforcing “intellectual silo”: its members include the authors of the studies upon which EPA is relying, and multiple EPA grantees, while respected dissenting views are excluded.⁶ When scientific issues are hotly contested and the basis for extremely costly regulation, the science integration framework alone is not necessarily sufficient to overcome the institutional forces within EPA that seek to maintain a scientific input that supports a preferred regulatory outcome.

B. Silos vs. Legal Frameworks

Certainly it is apparent to those of us who have engaged with EPA continuously over decades that the programmatic and regional divisions or “silos” into which EPA is divided do present obstacles to effective integration of science across the Agency, as the draft report recognizes. It is a mistake, however, to think of the need to “meet[] statutory requirements” as equivalent to “program silos” (p. 5). The physical location of staff, and the extent to which they only interact among a narrow subset of EPA employees, does indeed create problems of “program isolation” and “intellectual silos” that the Agency must constantly struggle against if its decision-making is to be maximally integrated.

But the statutory frameworks within which the Agency must operate are really constitutive of what the Agency does – they give it its legal authority.⁷ The Agency is well-advised to hew to that authority, both to remain within its limits and to avoid improperly constraining it. For example, in setting the NAAQS, the Clean Air Act instructs EPA to take into consideration “identifiable” health effects attributable to exposure to a criteria air pollutant. EPA previously interpreted that word to encompass only “adverse” health effects, thus excluding consideration of the health benefits of tropospheric ozone, despite scientific work characterizing them. The D.C. Circuit struck down that interpretation.⁸ It is proper, therefore, for EPA to ensure

⁵ See Arthur Fraas, *The Treatment of Uncertainty in EPA’s Analysis of Air Pollution Rules: A Status Report*, 2 JOURNAL OF BENEFIT-COST ANALYSIS 1 (2011).

⁶ Letter to Arthur Elkins, EPA Inspector General, from Senator James Inhofe (Aug. 4, 2011), available at

http://epw.senate.gov/public/index.cfm?FuseAction=Files.View&FileStore_id=d55fa42f-7c41-456e-893f-2963eb26e07e.

⁷ In this connection, the Committee might move the phrase “legal/institutional milieu” up to the “problem formulation” step in the graphic on page 5, since legal considerations ordinarily are fundamental to formulating the problem to be solved.

⁸ *American Trucking Associations v. EPA*, 175 F.3d 1027, 1051-53 (D.C. Cir. 1999). While other holdings in this decision were reversed by the Supreme Court in *Whitman v. American*

that its scientific integration process remains within the proper bounds of the statutes that govern EPA's work. "Defensibility" (p. 5) can be overstated and cripple analyses, but it originates from a well-founded concern.

C. Problem Formulation and Public Participation

I agree with the Committee that "[e]ffective leadership for science integration emphasizes the importance of problem formulation to allow EPA to step 'out of the box' of narrow programmatic concerns" (p. 7). If the problem is not appropriately envisioned, the Agency risks committing significant time and resources to investigating the wrong questions or omitting relevant considerations.

I also agree that public and particularly stakeholder involvement is essential to problem formulation (7-8). Outside stakeholders typically have a greater degree of specialized understanding than do agency scientists, since there are simply more of the former and they often work for years or decades in specific subject areas. Also, outside stakeholders often are more aware of, or are actively generating, the most relevant scientific research and assessments. Budgetary limitations counsel that the Agency should actively seek to leverage outside expertise and work wherever possible.⁹

For all these reasons, I strongly support the suggestion on page C-1 that the Action Development and analytical blueprint process should "[i]nclude a new requirement that action plans include a plan for inclusion of stakeholder science perspectives, from problem formulation through evaluation of decisions." Consistent with this suggestion, page 8 of the draft report lists "Stakeholder engagement" as a component of the problem formulation step. I would recommend, however, that the SAB include explanatory language clarifying that stakeholder engagement in this context should not be an afterthought or even the final step, but rather a continuous feature from the inception of the process. A "public comment" opportunity at the end of the process will largely forfeit the benefits of stakeholder engagement in actually formulating the right statement of the problem early on in the process.

I vehemently disagree, however, with the comments of the Center for Progressive Reform, which argue that "[s]takeholder involvement in the problem formulation phase should be limited" (p. 2). CPR's concern is that:

Trucking Associations, 531 U.S. 457 (2001), EPA did not appeal this particular ruling to the Supreme Court and it remains the law.

⁹ To this extent, at least, I echo the concerns of the Center for Progressive Reform, which urges EPA to "give due consideration to resource constraints faced by EPA program offices" (p. 2).

[I]ndustry dominates the public comment periods in rulemakings that involve technical material and have a direct impact on a small number of potentially regulated parties. It follows that the problem formulation step in the committee's recommended framework will likely also be dominated by a small number of stakeholders with constrained views.

The first statement is hardly surprising: where a rule will have a direct impact on a group of regulated entities, and involves technical issues, it seems blindingly obvious that those entities – whose very businesses may be at stake, and who likely understand their processes better than anyone else – will be highly motivated to supply information to the Agency to ensure that its actions do not unnecessarily impair those processes.

But it does not follow that the Agency will be “dominated” by these comments – Agency staff are intelligent people and the Agency enjoys substantial discretion in the choices it makes, limited only by a minimal requirement of rationality. The Agency is even less likely to be “dominated” in the problem formulation stage of a scientific assessment, which may well be independent of any particular rulemaking, and which is fundamentally a professional, intellectual conversation or dialogue about what scientific considerations are most relevant and important in a given Agency decision. The Agency ought not be focused on how it can shield itself from outside input, as if that input were some sort of irresistably tempting but incapacitating force, like the poppies in *The Wizard of Oz*. Nor should it concentrate on ensuring that it hears only from equal numbers of “industry” and “NGO” perspectives. The Agency should reach out to, and be open to, all intellectually legitimate perspectives on a given issue. I trust that its staff then can, and will, think for themselves.¹⁰

¹⁰ CPR's comments are intellectually premised on an article entitled *Administrative Law, Filter Failure, and Information Capture* (Wendy E. Wagner, 59 Duke L. J. 1321 (2010)). An adequate rebuttal to this over 100-page article is far beyond the scope of these comments, but I will note two things: First, the “new research” to which CPR adverts at 2 consists of two unpublished papers; *see id.* at 1334 n. 37 and 1336 n. 47. Second, the concept of “filter failure” originated in a presentation by Internet writer Clay Shirky, who is also famous for the “Shirky Principle”: “Institutions will try to preserve the problem to which they are the solution.” (See http://www.kk.org/thetechnium/archives/2010/04/the_shirky_prin.php.) Certainly this principle seems applicable to NGOs like CPR.

* * *

I appreciate the opportunity to provide the SAB with these comments, and would be happy to respond to questions about them or provide further information.

Sincerely,

James W. Conrad, Jr.