Picking Up the Pieces after the OMB Peer Review Bulletin

Richard B. Belzer, PhD President Regulatory Checkbook Mt. Vernon, VA Spring 2002 SRA Forum on Peer Review 'Interests and Incentives in Government Peer Review'

- Governmental and scholarly purposes are fundamentally different
 - Scholarly settings: Is it worth publication?
 - Governmental settings: Is it correct?
- Governmental peer review performs as expected given interests and incentives
- Capacities and responsibilities of scientists are badly mismatched in government settings
 - Policy hacks doing science: bad
 - Scientists doing policy: bad

The Example of the Auto Mechanics

- My mechanic says I need major engine work
- I am not an expert on cars
- I hire a 'peer review' panel of 10 best mechanics
 - 'Science' charge: Is my mechanic right?
 - 'Policy' charge: Should I fix or sell?
- All mechanics have views on fix or sell
 - They are liberal with advice
 - Often easier to answer the policy charge
 - A consensus on 'policy' says nothing about 'science'

Spring 2002 SRA Forum on Peer Review 'Perfect Peer Reviewers'

- Rules are set out clearly in advance
- They stick to the rules without exception
- They can't be controlled by stakeholders
- They are despised
 - Everybody will complain about something
 - Rulings can't be predicted with certainty
- They are essential
 - You can't play the game without them



Norman Rockwell' s "Tough Call" Dodgers' vs. Pirates, Ebbets Field. *Saturday Evening Post* cover April 23, 1949.

Problems with Governmental Peer Review

- Ownership by the sponsor
- Objective is ratification of the sponsor's preferences
- Expert selection stays under the sponsor's control
- Scope constrains science by 'science policy'
- Procedures controlled, closed to public, opaque
- Compensation by status, special access to sponsor
- Conflict of interest applies only to 'private sector'
- Coincidence of interest is strongly preferred
- Accountability missing, reviews not taken seriously

Problems with Conventional Peer Review Remedies in OMB Proposed Bulletin

- Ownership by the sponsor
- Objective is effective IQA pre-dissemination review
- Expert selection expertise, indep, COI 'factors'
- Scope limited to science; excludes policy
- Procedures make public comments part of review
- Compensation by status, special access to sponsor
- Conflict of interest applies symmetrically
- Coincidence of interest is slightly deterred
- Accountability improved but depends on APA

Public Comments Illustrate Variation in Peer Review Agendas

Supporters

- Industry
- Believers in <u>scholarly</u> peer review
- Advocates of information quality

Opponents

- Agencies themselves (comments not disclosed)
- Rejectionists
- Advocates of (more stringent) regulation
- Ready-Fire-Aims
- National Academies of Science

Final OMB Peer Review Bulletin

- All provisions (except peer review planning and reporting to OMB) are now discretionary
- Expansion of COI provisions abandoned
- Expansion of public participation abandoned
- NAS is King
 - Its procedures satisfy IQA procedures
 - Agencies are encouraged to mimic NAS
 - Is this feasible? Verifiable? Who would know?
 - Its outputs satisfy IQA standards
 - No tests for relevance or propriety of substitution
 - No shelf date
 - Is rebuttal even permitted?

Can OMB's Proposed Bulletin Work? Yes, If Used to Resolve IQA Issues, Not Policy

- Strictly limit the review to science
 - The appropriate RfD/RFC/CSF is not science
 - Finding qualified independent scientists is easy
 - Balancing a panel reviewing science and policy is hard
- Limit the review to a small number of big issues
 - Complex work products are too complex
 - Even 15 member committees are too small
- Focus on primary science, not derivative reviews
 - IQA peer review should precede risk characterization
 - Risk characterizations always include policy
 - Peer review that includes risk characterization is doomed

PS³ 2003

Nebraska Medical Center

Perchlorate State-of-the-Science Symposium

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 Planning Committee

Participants

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Registration • State Agency

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2003 Perchlorate State-of-the-Science Symposium

What is PS³ About?

The Perchlorate State-of-the-Science Symposium (PS³ 2003) will provide a review of five fundamental science issues related to the potential health risks from low-level exposure to perchlorate. Researchers who performed the most important recent scientific studies will present their work. Leading scientific experts will evaluate these studies and develop consensus reports on the state-of-the-science as of 2003.

Symposium Proceedings on CD

The symposium proceedings may be purchased for \$75. The package available for purchase is a 5 set CD compilation made from the video recordings taken during the symposium. To purchase please contact:

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What Went Well

- An unambiguous improvement in peer review
 - Began with apparently intractable controversies
 - Science focus lowered the temperature
- NRC judged work products to be high-value
 - Topics were highly relevant
 - Panelists were credible experts
- Procedures were credible and appropriate
 - Planning Committee and sponsors didn't interfere
 - Generous opportunity for public participation

What Needs Improvement

- Better cultivation of critical research speakers
 - □ Some are cooperative; some are not
 - Peer pressure is needed to cajole the latter
- Development of targeted research agendas
 - Panels always recommend research; sometimes these recommendations are helpful
 - Focus should be on falsifiable hypotheses that critical to 'science policy' defaults
 - Panels should be very explicit about
 - What data to collect
 - How the data should be analyzed
 - What alternative research outcomes mean



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