

Science Integration in EPA Decision-Making: A Regional Perspective

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My Background

- Joined EPA in 1977
- Headquarters: DC, RTP – 13 years
- Regions: R6, R4 – 16 years
- National EPA Liaison to CDC – 2 years

Kinds of Decisions Regions Make

- Permits: Air, Water, RCRA
- State air implementation plans
- Superfund cleanups
 - Site selection
 - Site cleanups
 - Removals vs. Remedial Actions
- Enforcement
 - Priority areas
 - Specific actions
- Community and Ecosystem Evaluations
- Grants
- State Oversight

Characteristics of These Decisions

- Specific costs, generalized benefits
- Weigh, at least implicitly, costs and benefits
- Have a particular legal/regulatory framework
- Time constrained
- Depend on specialized expertise
- Rarely are purely “technical”
 - Time, quality, acceptability
 - Credentialed expertise may not receive deference

The Four Letter Word

SAFE

What Makes Decisions Easier?

- Clear decision rules (bright line national standards)
- Robust environmental and health information
- Consensus on the problem
- Short term health/ecological effects
- Clear attribution
- Respected/trusted civic leadership

What Makes Decisions Harder?

- Ambiguous decision rules
 - E.g., narrative water quality standards
- Incomplete environmental or health information
- Disagreement on the problem
- Chronic health or ecological effects whose causation is at best ambiguous
- In the face of this, public expectation of direct causal relationships
- Civic leadership which the community does not accept

These circumstances are far more common!

Current Region 4 Examples

- TVA Kingston Ash Release, TN
- PFOA Contamination, AL
- PCS Phosphate Mine, NC

And one special past case:

- Danbury, CT Anthrax

What Would Help?

- Expedited Decisions on Numeric Standards
- Reasonable Temporal Stability
 - Five year reviews: too soon?
- Expanded Support for Field Assessments
 - Ecological and health
- Expanded Support for Risk Communication and External Involvement
- Tools that Explicitly Display Judgments on Risk Management Decisions

Thank You!

Questions?