#### **INFORMATION QUALITY**

GW Regulatory Studies Center Executive Course on Regulatory Analysis October 3-4, 2012

Richard B. Belzer, Ph.D.



# BACKGROUND MATERIALS

- Information Quality Act (44 USC 3516 note)
- Government-wide IQG guidance
- Safe Drinking Water Act excerpts
- Your agency's IQG, pre-dissemination review and/or peer review policies and procedures
- Your agency's administrative procedures
- Some petitions filed with your agency

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### THE LAW

- What did Congress direct OMB to do?
- What was Congress' objective?
- What metrics did Congress establish to evaluate OMB and agency performance?



#### GOVERNMENT-WIDE GUIDELINES

- What is covered? What is exempt?
- General requirements for agency IQGs
  - Pre-dissemination review to minimize errors
  - Administrative procedures to correct errors upon petition
  - Internal appeal process
  - Judicial review?



# DEFINITIONS OF CRITICAL TERMS: SCOPE

- Information (V.5)
- Government information (V.6)
- Information dissemination product (V.7)
- Influential information (V.9)
- Oissemination (V.8)



# INFORMATION

*'Information* means any communication or representation of knowledge such as facts or data, in any medium or form, including textual, numerical, graphic, cartographic, narrative, or audiovisual forms.'

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# **GOVERNMENT INFORMATION**

'*Government information* means information created, collected, processed, disseminated, or disposed of by or for the Federal Government.'



# INFORMATION DISSEMINATION PRODUCT

'Information dissemination product' means any books, paper, map, machine-readable material, audiovisual production, or other documentary material, regardless of physical form or characteristic, an agency disseminates to the public.'



# INFLUENTIAL INFORMATION

'Influential scientific, financial, or statistical information means that the agency can reasonably determine that dissemination of the information will have or does have a clear and substantial impact on important public policies or important private sector decisions.'



# DISSEMINATION

'*Dissemination*' means agency initiated or sponsored distribution of information to the public (see 5 CFR 1320.3(d) (definition of 'Conduct or Sponsor')).'



## INCLUDED WITHIN DISSEMINATION

- Information prepared by an agency
- Information prepared by third parties that
  - Was sponsored by the agency
  - Is contractually required to be disclosed
  - Is subject to agency review and approval
  - Is disseminated 'in a manner that reasonably suggests that the agency agrees with the information'
  - Is subsequently disseminated by an agency



### EXCLUDED FROM DISSEMINATION

- Oistributions limited to government employees or agency contractors or grantees; intra- or inter-agency use or sharing of government information; responses to requests for agency records
- Orrespondence with individuals or persons, press releases, archival records, public filings, subpoenas or adjudicative processes
- Occuments distributed for peer review (2005)
- Work products of agency scientists, grantees or contractors containing disclaimers



## DEFINITIONS OF CRITICAL TERMS: STANDARDS

- Quality (V.1)
- O Utility (V.2)
- Objectivity (V.3)
  - Substantive (V.3.b)
  - Presentational (V.3.a)
- Integrity (V.4)
- Reproducibility (V.10)



#### QUALITY

'Quality is an encompassing term comprising utility, objectivity, and integrity.'



# UTILITY

*'Utility* refers to the usefulness of the information to its intended users, including the public.'

'When transparency of information is relevant for assessing the information's usefulness from the public's perspective, the agency must take care to ensure that transparency has been addressed in its review of the information.'



## INTEGRITY

*Integrity* refers to the security of information protection of the information from unauthorized access or revision, to ensure that the information is not compromised through corruption or falsification.'



# SUBSTANTIVE OBJECTIVITY

'Substantive objectivity involves a focus on ensuring accurate, reliable, and unbiased information.'

'In a scientific, financial, or statistical context, the original and supporting data shall be generated, and the analytic results shall be developed, using sound statistical and research methods.'



# PRESENTATIONAL OBJECTIVITY

- - Sometimes, in disseminating certain types of information to the public, other information must also be disseminated in order to ensure an accurate, clear, complete, and unbiased presentation'



# REPRODUCIBILITY

*'Reproducibility* means that the information is capable of being substantially reproduced, subject to an acceptable degree of imprecision.'

- Reproducibility ≠ replication
- Generally requires full disclosure of assumptions, data, models and code
- Exceptions require 'especially rigorous robustness checks'



#### SPECIAL STANDARD FOR HUMAN HEALTH, SAFETY & ENVIRONMENTAL RISK (1)

'Adopt or adapt' principles in Safe Drinking Water Act (42 USC 300g–1(b)(3)(A) & (B))



#### SPECIAL STANDARD FOR HUMAN HEALTH, SAFETY & ENVIRONMENTAL RISK (2)

- A. Use of science in decisionmaking.— In carrying out this section, and, to the degree that an Agency action is based on science, the Administrator shall use—
  - the best available, peer-reviewed science and supporting studies conducted in accordance with sound and objective scientific practices; and
  - ii. data collected by accepted methods or best available methods (if the reliability of the method and the nature of the decision justifies use of the data).



#### SPECIAL STANDARD FOR HUMAN HEALTH, SAFETY & ENVIRONMENTAL RISK (3)

- **B.** Public information.— In carrying out this section, the Administrator shall ensure that the presentation of information on public health effects is comprehensive, informative, and understandable. The Administrator shall, in a document made available to the public in support of a regulation promulgated under this section, specify, to the extent practicable
  - i. each population addressed by any estimate of public health effects;
  - ii. the expected risk or central estimate of risk for the specific populations;
  - iii. each appropriate upper-bound or lower-bound estimate of risk;
  - iv. each significant uncertainty identified in the process of the assessment of public health effects and studies that would assist in resolving the uncertainty; and
  - v. peer-reviewed studies known to the Administrator that support, are directly relevant to, or fail to support any estimate of public health effects and the methodology used to reconcile inconsistencies in the scientific data.

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# STANDARDS FOR DEMONSTRATING ERROR (1)

'If data and analytic results have been subjected to formal, independent, external peer review, the information may generally be presumed to be of acceptable objectivity. However, this presumption is rebuttable based on a persuasive showing by the petitioner in a particular instance.'



# STANDARDS FOR DEMONSTRATING ERROR (2)

- 1. Direct showing of error
- 2. Indirect showing of error:
  - a. Not transparent and/or reproducible
  - b. Peer review was...
    - a. Absent
    - b. Not formal, independent, and external
    - c. Not compliant with other OMB guidance
    - d. Did not address information quality



#### QUESTIONS?

Richard B. Belzer President Regulatory Checkbook <u>belzer@regulatorycheckbook.org</u> 703-780-1850

