



Division of Mining & Reclamation

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Director

Changing Regulatory Landscape

- January 20, 2009 – EPA sends first of several comment/objection letters to the Corps
- June 11, 2009 MOU – EPA, Corps, Interior “Interagency Action Plan” for mining
- July, 2009 – EPA rescinds waiver of review of minor NPDES permits for coal in W.Va.
- April 1, 2010 – EPA Issues Interim Guidance
- July 13, 2010 – PQR – WVa, Ky, Ohio, Tenn

Changing Regulatory Landscape

- 2010 – EPA’s Updated Interim Guidance for State 401 Certifications
- March 25, 2011 – Science Advisory Board – Report on draft Benchmark & Effects docs
- May 27, 2011 – EPA’s Benchmark Document:
< 300 Conductivity prevents
Extirpation of > 5 % of Benthics
- May 27, 2011 – EPA’s Effects Document
- July 21, 2011 - EPA Final Guidance

July 21, 2011 Mining Guidance

- Not Binding/Non-Binding – 11 times
- Case-by-Case/Site Specific – 27 times
- Gives Guidance to EPA Staff
- Apply Best Available Science – Summary of EPA-Approved Science in Appendix I

July 21, 2011 Mining Guidance

- 300 $\mu\text{S}/\text{cm}$ Est. as Aquatic Life Benchmark
- Protects Against Extirpation of More Than 5% of Native Macroinvertebrate Genera
- 300 $\mu\text{S}/\text{cm}$ Applicable in Ecoregions 68, 69, 70 in West Virginia and Kentucky only
- 300 $\mu\text{S}/\text{cm}$ Not Applicable, for the Time Being, in Ephemeral Streams

July 21, 2011 Mining Guidance

- Rest of Guidance Applies to Mining in EPA Regions 3, 4, and 5
 - CWA § 402 (NPDES) Permits
 - CWA § 404 Permits
 - Environmental Justice
 - National Environmental Policy Act
 - CWA § 401 Certifications

July 21, 2011 Mining Guidance - § 402

- Mining Has Reasonable Potential (RP) to Violate Narrative Water Quality Standards
- Where there is RP there must be a WQBEL
 - Chemical Specific Numeric Limits
 - Whole Effluent Toxicity (WET) Limits
 - Narrative Best Management Practices

July 21, 2011 Mining Guidance - § 402

- EPA Believes Calculation of Numeric Limits for Conductivity is Feasible
 - Is this Chemical Specific?
- EPA Recommends States Use 300 μ S/cm
 - Wva, Ky and Va do not have a numeric WQS
- WET Limits with C. Dubia – Underprotective
- EPA-Approved BMPs are in Appendix 4

Narrative Water Quality Standards

- Kentucky: TDS or Conductivity shall not be changed to the extent that the indigenous aquatic community is adversely affected.
- Virginia: State waters shall be free from substances in concentrations, amounts, or combinations which are inimical or harmful to aquatic life.
- West Virginia: Prohibits Significant Adverse Impacts to Chemical, Physical, Hydrologic or Biologic Components of Aquatic Ecosystem

Narrative Water Quality Standards

- House Concurrent Resolution III:
 - a. WVDEP is charged with any interpretation and implementation of West Virginia's narrative WQS;
 - b. That the narrative WQS are satisfied when a stream:
 - i. Supports a balanced aquatic community diverse in species composition;
 - ii. Contains appropriate trophic levels of fish (that is, appropriate levels of fish on each level of the food chain), provided that the stream has sufficient water flow to support fish populations;

Narrative Water Quality Standards

- iii. And the aquatic community is not composed only of pollution tolerant species or the aquatic community is composed of benthic invertebrate assemblages sufficient to perform the biological functions necessary to support fish communities within the assessed reach, or if the assessed reach has insufficient flows to support a fish community, in the downstream reaches where fish are present;
- c. That interpretation of West Virginia's water quality standards must faithfully balance environmental protection with the need to maintain and expand employment, agricultural, and industrial opportunities.

CWA's Federal – State Relationship

- EPA Can Approve/Disapprove State WQS
- EPA Can Recommend Criteria
- EPA Can Promulgate a WQS for a State
- Primary Rights of States to Plan Use of Land and Water Resources is Preserved
- States Have Primary Responsibility for Developing WQS
- WQS Include Designation of Uses and Establishment of Criteria to Protect Them