

2009 Triennial Review of NM Water Quality Standards

Briefing for the
Western Coalition of Arid States
February 17, 2010

Triennial Review Background

- Required by CWA 303(c)
- Last Triennial Review was conducted in 2005
- EPA partial approval was granted in 2006
 - *Did not approve* less stringent “limited aquatic life” and uses for unclassified ephemeral waters – UAA required
 - *Did not approve* generic “aquatic life” use for unclassified intermittent waters - more specific aquatic life use designation required
 - *Did not approve* less stringent secondary contact designated uses for unclassified waters – UAA required



Triennial Review Schedule



Date	Who	Event
12/1/2008	NMED	Petition and proposed amendments
12/16/2008	WQCC	Hearing Officer appointment
6/1/2009	Non-NMED	Proposed amendments
7/6/2009	NMED	Revised proposed amendments
8/28/2009	Parties	Pre-filed technical testimony
10/13/2009	Parties	Pre-filed rebuttal testimony
11/6/2009	Parties	Pre-hearing motions
11/20/2009	Parties	Responses to pre-hearing motions
12/8-12/2009	WQCC and HO	Triennial Review Hearing
2/26/2010	Parties	Closing argument and proposed statement of reasons
4/12/2010	Hearing Officer	Draft statement of reasons and report
5/12/2010	Parties	Responses to Hearing Officer drafts
6/8/2010	Hearing Officer	Final proposed statement of reasons and report
8/10/2010 (?)	WQCC	Final WQS revisions and statement of reasons

NMED Proposed Amendments

- Narrative Biocriterion (20.6.4.13.M)
 - EPA priority for improving water quality protection framework
- New Public Water Supply Designated Use (20.6.4.7)
 - No numeric or narrative criteria proposed
- New Coolwater Aquatic Life Designated Use (20.6.4.7)
 - Better address intermediate species and transitional waters that are common in New Mexico
- Revised Domestic Water Supply Criteria (20.6.4.900.J)
 - Match safe drinking water standards (MCLs) where they exist



NMED Proposed Amendments

- Revised Standards for Unclassified Waters (20.6.4.11.H)
 - Responds to EPA concerns over 2005 WQS
 - Draft hydrology protocol for identifying ephemeral waters
- Revised UAA Provisions (20.6.4.15)
 - Improved clarity, simplification and consistency with EPA regulations, using draft “hydrology protocol”
- Exclusion of Tribal Waters (20.6.4.100–899)
 - State has no water quality jurisdiction within Tribal lands
- New/Revised Criteria Based on EPA Updates (20.6.4.900)
 - Aquatic life, domestic water supply and human health criteria updates based on new science



NMED Proposed Amendments

- Clarification of Designated Contact Uses (20.6.4.100-899)
 - Eliminate confusing 2^o contact uses with 1^o criteria
- Simplified Statement of Numeric Criteria (20.6.4.97-899)
 - List only segment-specific criteria in sections 97-899 to avoid repetition and confusion



Other Parties: Technical Testimony

- Amigos Bravos
 - Adopt radionuclide criteria for Rio Grande
 - Recognize climate change as human-caused impairment
 - Categorize certain acequias as classified water segments
 - Classify segments as perennial based on historical data
 - NMED's proposed UAA process bypasses WQCC authority
 - Eliminate mixing zones
 - Eliminate or limit compliance schedules
 - Add detection limits to numerical criteria tabulation
- Peabody Energy
 - Exempt man-made impoundments from recreational use designations



Other Parties: Technical Testimony

- Freeport McMoran Mining
 - Adopt rules allowing variances from standards or broaden site-specific standards authority (*Withdrawn*)
 - Account for natural background when setting criteria
 - Application of “ephemeral”, “intermittent” and “perennial” classifications to different segments of the same stream
- Dairy Producers of New Mexico
 - Adopt USGS definitions for ephemeral and intermittent
 - Account for natural background when setting criteria



Other Parties: Technical Testimony

- Elephant Butte Irrigation District
 - Exclude irrigation channels from definition of “surface waters of the state” (*Withdrawn*)
- San Juan Water Commission
 - Allow for temporary water quality degradation in ONRWs
- Buckman Direct Diversion Board
 - Adopt radionuclide criteria for Rio Grande above Otowi



Other Parties: Technical Testimony

- Chevron Mining
 - Revise hardness-based criteria for some metals
- Los Alamos National Security, LLC and USDOE
 - Radionuclide criteria are illegal under NRC rules (*Withdrawn*)
 - Account for natural background when setting criteria
 - Revise hardness-based criteria for some metals

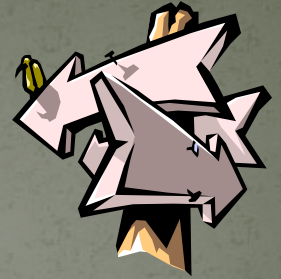


Other Parties: Public Comment

- Santa Fe Girls' School
 - Request phosphorus criterion for Santa Fe River
- Agua Es Vida Action Team
 - Request radionuclide and PPCP criteria for Rio Grande
- Citizen Against Radioactive Dumping
 - Request radionuclide criteria for Rio Grande
- NM Department of Game and Fish
 - Chronic criteria exemption for ephemeral waters may jeopardize non-perennial waters downstream
 - Biotic ligand and water-effects ratio methods for site-specific criteria not well evaluated for arid environments

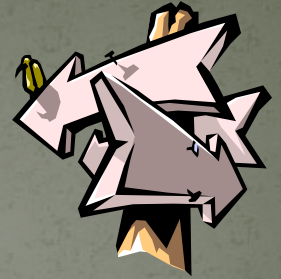


Unresolved Issues



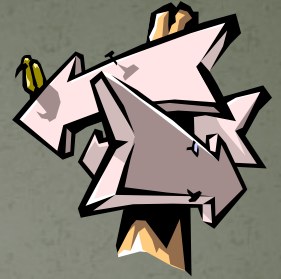
- 20.6.4.7(E) – Definition of “Ephemeral”
 - NMED-proposed definition vs. USGS definition proposed by Dairy Producers of New Mexico.
- 20.6.4.7(I) - Definition of “Intermittent”
 - NMED-proposed definition vs. USGS definition proposed by Dairy Producers of New Mexico.
- 20.6.4.7(N) - Definition of “Natural background”
 - Amigos Bravos proposes that water quality effects attributable to human-caused climate change be excluded from definition of natural background (*Withdrawn 02/11/10*)

Unresolved Issues



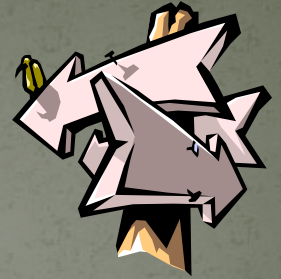
- 20.6.4.7(P) - Definition of “Perennial”
 - NMED-proposed definition vs. USGS definition proposed by Dairy Producers of New Mexico.
 - Amigos Bravos proposes required evaluation of historical flows (from aerial photographs or testimony from local residents) when deciding if a particular water body is perennial.

Unresolved Issues



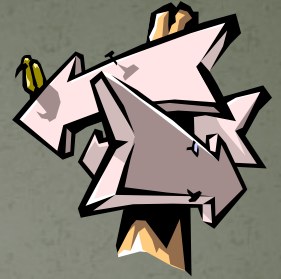
- 20.6.4.10(D) - Site Specific Criteria
 - NM Game and Fish Department expressed concerns about NMED proposal to allow site-specific criteria using the water effect ratio and biotic ligand model – applicability to arid environments not well established.
- 20.6.4.11(D) – Mixing Zones
 - Amigos Bravos proposes to limit the application of mixing zones for point source discharges, arguing that mixing zones are contrary to the intent of the federal Clean Water Act.

Unresolved Issues



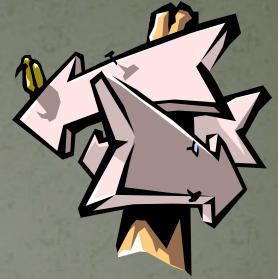
- 20.6.4.12(B) – Compliance with chronic criteria
 - Freeport-McMoran proposes to require at least 4 samples, taken at least 24 hours apart under stable hydrological conditions to determine compliance with chronic water quality criteria.
- 20.6.4.12(I) – Compliance Schedules
 - Amigos Bravos proposes to limit compliance schedules to 3 years for dischargers to meet new water quality-based discharge limits established in response to new water quality standards.

Unresolved Issues



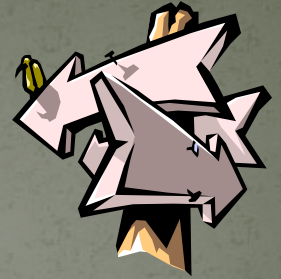
- 20.6.4.13(M) – Biological integrity
 - Freeport-McMoran proposes that the biological integrity narrative standard should be applied only to perennial streams.
 - Dairy Producers of New Mexico proposes that biological integrity criteria must never be more stringent than criteria established by the US Fish and Wildlife Service for NPDES permits in New Mexico.

Unresolved Issues



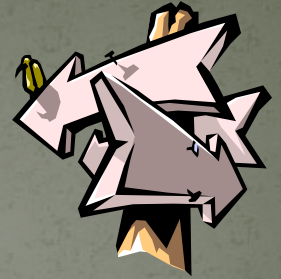
- 20.6.4.15(A) – Use Attainability Analysis
 - NMED-proposed language vs. a reference to 40CFR131.10(h) prohibitions, as proposed by Amigos Bravos.
 - Amigos Bravos argues that expedited hydrology protocol-based UAA procedure proposed by NMED to place unclassified water bodies into the 20.6.4.97 Ephemeral Water “bin” (pending WQCC approval) bypasses (temporarily) the authority and responsibility of the WQCC to rule on water body reclassifications.

Unresolved Issues



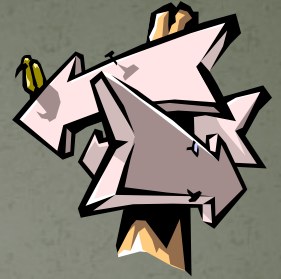
- 20.6.4.97 – Ephemeral Waters
 - Amigos Bravos proposes to upgrade designated uses for unclassified ephemeral waters from “limited aquatic life” (which excludes chronic criteria) to some other “aquatic life” use, and from “secondary contact recreation” to “primary contact recreation.”
- 20.6.4.100 – Man-Made Ponds and Wetlands Used for Livestock Purposes (Proposed)
 - Peabody Energy proposes a new category for unclassified surface waters of the state (outside the federal definition of waters of the United states) to which primary and secondary human contact designated uses will not apply.

Unresolved Issues



- 20.6.4.114 – Rio Grande Basin; Radionuclide Criteria
 - Agua es Vida Action Team and Amigos Bravos argue that criteria for radionuclides should be based on a 10^{-6} risk level (compared to the 10^{-5} risk level used to set criteria for other pollutants).
 - Is WQCC authorized under the NM Water Quality Act to adopt criteria “for monitoring and public disclosure purposes only”?

Unresolved Issues



- 20.6.4.900(J) – Detection limits
 - Amigos Bravos proposes including detection limits for pollutants in the numeric criteria tabulation.
- 20.6.4.900(J) – Numeric Criteria
 - LANS/DOE and Chevron Mining propose revised hardness-based criteria computations for cadmium, molybdenum and zinc, and whether to adopt new hardness-based criteria for aluminum and manganese.

Next Steps ...

- 02/26/2010: Parties submit closing arguments and proposed statements of reasons to Hearing Officer
- 04/12/2010: Hearing Officer prepares draft report and draft statement of reasons
- 05/12/2010: Parties comment on Hearing Officer's draft documents
- 06/08/2010: Hearing Officer revises report and draft statement of reasons
- 08/12/2010(?): WQCC reviews HO report and deliberates on draft statement of reasons
- 10/2010(?): Revised standards submitted to EPA



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