Proposed Water Quality Standards
Regulatory Clarifications
&
FWQS Matrix

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1994 Amendment to CWA passed by the House but not Senate requiring EPA to develop Arid West Water Quality Standards which recognize the differences in the Arid West ecosystem. This was supported by environmental groups.

Net Environmental Benefit Policy by Region IX which was translated to State Water Quality Standards.

The concept of Effluent Dependent Waters.
The Arid West Water Quality Research Project:
1. Surveys of effluent dominated ecosystems – What’s out there?
2. Copper WQS
3. Zinc WQS

Water quality standards consist of:

- Designated uses of the water body (e.g., recreation, water supply, aquatic life, agriculture). CWA § 101(a)(2) “provides for the protection and propagation of fish, shell fish, and wild life and provides for recreation in and on the water....”

- Water quality criteria to protect designated uses (numeric pollutant concentrations and narrative requirements).

- An antidegradation policy to maintain and protect existing uses and high quality waters.

- General policies addressing implementation issues, i.e. Variances and Compliance Schedules.
Who sets WQS?

- Under the CWA, states and authorized tribes establish standards.
- States and tribes must hold public hearings to review their standards every 3 years and revise them as necessary.
- EPA must approve the standards in order for them to be in effect for CWA purposes.
- The CWA requires EPA to impose federal WQS, if EPA disapproves WQS or determines that new or revised WQS are necessary to meet the requirements of the CWA, unless the state or tribe adopts WQS that meet CWA requirements.
SIX WATER QUALITY STANDARDS PROPOSALS
(Issued September 4, 2013 – Similar to 1998 ANPRM)

- REQUIREMENTS FOR ADMINISTRATOR’S DETERMINATION OF NEW WQS
- DESIGNATED USES
- TRIENNIAL REVIEWS
- COMPLIANCE SCHEDULES
- ANTIDEGRADEATION IMPLEMENTATION
- WQS VARIANCES
ISSUE:
Courts have determined that EPA has made a determination when EPA did not intend to.

EXAMPLE:
Florida nutrients

SOLUTION:
Clarify what constitutes an Administrative determination:

- Requires administrator’s signature
- A finding that it is a determination for purposes of 303(4)(B) of The Act.
The presumption is a CWA 101(a) use (e.g., fishable, swimmable) is attainable. If it is found not to be attainable, the next highest attainable use will apply.

- Use Attainability Analysis (UAA) is needed to remove a 101(a) use or to designate a use for water body for the first time that is not a 101(a) use.
Must Adopt Highest Attainable Use (HAU). “Highest attainable use is the aquatic life, wildlife, and/or recreation use that is both closest to the uses specified in section 101(a)(2) of the Act and attainable, as determined using best available data and information through a use attainability analysis defined in 131.3(g).”

No UAA is needed to modify a non 101(a) use, such as agriculture.

Subject to EPA review.
Six categories for removing a designated use:

1. Naturally occurring pollutant concentrations prevent the attainment of the use; or

2. Natural, ephemeral, intermittent or low flow conditions or water levels prevent the attainment of the use, unless these conditions may be compensated for by the discharge of sufficient volume of effluent discharges without violating State water conservation requirements to enable uses to be met; or

3. Human caused conditions or sources of pollution prevent the attainment of the use and cannot be remedied or would cause more environmental damage to correct than to leave in place; or
4. Dams, diversions or other types of hydrologic modifications preclude the attainment of the use, and it is not feasible to restore the water body to its original condition or to operate such modification in a way that would result in the attainment of the use; or

5. Physical conditions related to the natural features of the water body, such as the lack of a proper substrate, cover, flow, depth, pools, riffles, and the like, unrelated to water quality, preclude attainment of aquatic life protection uses; or

6. Controls more stringent than those required by sections 301(b) and 306 of the Act would result in substantial and widespread economic and social impact.
When EPA issues new recommended criteria, the states must re-examine their current criteria.

This will apply to new ammonia criteria which has just been issued.
If states wish to have compliance schedules in permits, they must have a provision that clearly indicates the regulations they are allowed.

Subject to EPA review.
In the matter of Star-Kist Caribe, Inc. (1990)

1. Permits must require immediate compliance with WQS adopted before July 1, 1977.

2. Compliance schedules are only allowed for effluent limits based on WQS adopted after that date.
• **Current Regulation:**
  States and tribes must adopt specific antidegradation policies, and must identify implementation methods; both must be consistent with 40 CFR 131.12

• **Proposed Regulatory Revisions:**
  - Clarify and define the options available to states and tribes when identifying high quality waters (“Tier 2”).
  - Clarify that states and tribes must conduct an alternatives analysis during “Tier 2” review and choose among such options.
  - Specify that states and tribes must develop and make available to the public the implementation methods.
Identification of High Quality Waters

• **Current Regulation:**
  - Does not specify how to identify high quality waters; EPA’s established view is that states and tribes may use a parameter-by-parameter approach or a water-body-by-water-body approach.

• **Issue:**
  - Some water-body-by-water-body approaches have been implemented such that a state or tribe may deny Tier 2 protection solely based on a 303(d) listing, even though the water body is still of high quality for another use specified in CWA 101(a)(2).

• **Proposed Regulatory Revision:**
  - States and tribes may choose how to identify high quality waters, as long as they do not exclude waters from Tier 2 protected solely because one of the uses specified in CWA section 101(a)(2) is not attained.
  - Requests comment on whether to specify how a state or tribe determines for which parameters Tier 2 review must be conducted, depending on the approach used to identify high quality waters.
Alternatives Analysis

• Current Regulation:
  - Does not specify how states and tribes evaluate whether a lowering of high quality water is necessary to accomplish the activity.

• Issue:
  - States and tribes may decide to authorize a lowering of water quality without evaluating any alternatives and thus without an appropriate finding consistent with the regulation.

• Proposed Regulatory Revision:
  - A decision to authorize lowering of a Tier 2 water may only be made after conducting an alternatives analysis that evaluates a range of non-degrading or minimally degrading practicable alternatives. If such alternatives are identified, the state or tribe must choose one of those alternatives to implement.
Implementation Methods

• Current Regulation:
  - States and tribes must adopt specific antidegradation policies, and must identify implementation methods.

• Issue:
  - Despite the requirement, some states and tribes have not developed or identified antidegradation implementation methods.

• Proposed Regulatory Revision:
  - States and tribes must develop and make available to the public antidegradation implementation methods.
  - If a state or tribe adopts implementation methods, the EPA would review whether those methods are consistent with § 131.12.
  - Requests comment on whether the EPA should, (A) require the adoption of implementation methods or (B) specify that adoption is not required.
Minimum Elements of an Antidegradation Implementation Method

- Scope and applicability
- Existing uses protection
- High quality water protection, including
  - Identification of high quality waters
  - Alternatives analysis and social/economic analysis
- Public Participation and intergovernmental coordination
- Expectations for point and nonpoint sources
- ONRW protection
- Thermal Discharges
WQS Variances

Can be issued at different levels of specificity:

- Discharge-specific
- Multiple discharge
- Water body-specific
WQS Variances (continued)

**Term:**
- Maximum of 10 years
- Renewals are allowed
- Facts must justify renewal
- Must meet 40 CFR 131.10 tests or new test for dam removal and stream reconfiguration
Variances must:

1. Specify highest use attainable during the term.

2. Specify interim numeric effluent limit during the term.

3. Subject to EPA review.
WATER QUALITY STANDARDS PROPOSAL
Comments due:   December 3, 2013

Webinar on:   November 14, 2013, register at

http://www.tetratech-fx.com/wqregs/public/

Proposed rule:   Federal Register Sept. 4, 2013

* Numeric based on pH and temperature.

* Species: mussels & snails

* Site specific standard

* Implementation affected by new WQS Rule

Standard adopted in State’s Triennial Review. No appeal of this criteria is available.
Federal Water Quality Coalition
Active Priority Projects as of 9/30/13
The Matrix
Major new rule making.

Doesn’t take into account arid conditions, therefore is more restrictive.

Forces implementation onto states.

Applies in part to all 402 dischargers
  * Wastewater
  * Stormwater

Applies to 404 dischargers
Connectivity of Streams & Wetlands to Downstream Waters
San Pedro River study basis for the arid west.
Ask a question, if you dare.