Overview of Topics

• Background on Triennial Review Requirement
• History of the 2008-2010 Triennial Review
• Recent Triennial review activities
• Summary of Proposed Changes and Implementation Issues
• Potential areas to comment
• Schedule
• Discussion
**Triennial Review Requirements**

Based on EPA Regulations – Section 303 (c) of Clean Water Act and 40 CFR 131.20

(a) **State review**
   - From time to time but at least once every three years, hold public hearings to review applicable water quality as appropriate, modifying and adopting standards.
   - Any water body segment with water quality standards that do not include the uses specified in section 101(a)(2) of the Act shall be re-examined every three years

(b) **Public participation**
   - Public hearings and standards review/update process must be in accordance with State Law, EPA’s water quality management regulation (40 CFR 130.3(b)(6)) and public participation regulation (40 CFR part 25)

(c) **Submital to EPA**
   - The State shall submit the results of the review, any supporting analysis to the Regional Administrator for review and approval, within 30 days of the final State action to adopt and certify the revised standard, or if no revisions are made as a result of the review, within 30 days of the completion of the review.

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**Triennial Review Requirements**

EPA Review and Approval of State Water Quality Standards – 40 CFR 131.20

(a) After the State submits its officially adopted revisions, the Regional Administrator shall either:
   - (1) Notify the State within 60 days that the revisions are approved, or
   - (2) Notify the State within 90 days that the revisions are disapproved including:
     - Specifying the changes needed to assure compliance with the requirements of the Act and this regulation, and
     - Explaining why the State standard is not in compliance with such requirements.

(b) The Regional Administrator's approval or disapproval of a State water quality standard shall be based on the requirements of the Act as described in §§131.5 and 131.6, and, with respect to Great Lakes States or Tribes (as defined in 40 CFR 132.2), 40 CFR part 132

(c) (d) (e) and (f) Additional clarifications
**Triennial Review Requirements**

**Important EPA Definitions – 40 CFR 131.3**

(a) *The Act* means the Clean Water Act (Pub. L. 92-500, as amended (33 U.S.C. 1251 et seq.)).

(b) *Criteria* are elements of State water quality standards, expressed as constituent concentrations, levels, or narrative statements, representing a quality of water that supports a particular use. When criteria are met, water quality will generally protect the designated use.

(f) *Designated uses* are those uses specified in water quality standards for each water body or segment whether or not they are being attained.

(i) *Water quality standards* are provisions of State or Federal law which consist of a designated use or uses for the waters of the United States and water quality criteria for such waters based upon such uses. Water quality standards are to protect the public health or welfare, enhance the quality of water and serve the purposes of the Act.

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**History of the 2008-2010 Triennial Review**

- Prior NC Triennial Reviews
  - 2000-2003 Review
  - 2004-2006 Review

- Original Schedule for Review
  - **January 2009 – Early Fall 2009:** Public presentations and information sessions
  - **June – November 2009:** Develop draft rule package for DENR review
  - **September 2009:** Triennial Review Information Item for the EMC
  - **November 2009:** Draft revisions to Chlorophyll a standards for fresh and salt waters presented to the Water Quality Committee of the EMC
  - **January 2010:** Triennial Review recommendations to the Water Quality Committee of the Environmental Management Commission (EMC); Request permission to proceed to the full EMC
  - **June 7, 2010:** Public Request for Information to be incorporated into fiscal analysis
  - **September 7, 2010:** Deadline for submission of cost and benefit information for inclusion into fiscal analysis
  - **June 2010 – ?:** DWQ development of Fiscal Note, timeline dependent on Office of State Budget Management (OSBM) approval
Recent Triennial Review
Activities

• EPA and Environmental Group comments about delays in Triennial Review
• Public Hearing and Comment Period
  – Purpose - to provide public comment in accordance with EPA requirements [40 CFR 131.20 (a)]
  – Comment period – November 1, 2013 to January 3, 2014 with hearing on November 19, 2013
  – Report to EMC with Specific Recommendations for Rules and Implementation Procedure changes on March 13, 2014
• Stakeholder Group Discussion
  – February and March 2014
• Proposed Rules Developed
  – Presented to EMC WQ Committee and EMC on May 7 and 8, 2014
  – Permission granted to proceed to public hearing

Proposed Changes in WQ Standards Rules

• Freshwater Metals Standards
  – Replace existing Total Recoverable Metals standards with Dissolved Metal standards except for
    • Mercury
    • Selenium
  – Adopt the current Aquatic Life protective National Recommended Water Quality Criterion for dissolved metals, as acute and chronic criteria for the following:
    • Arsenic
    • Chromium III and VI
    • Copper
    • Lead
    • Nickel
    • Silver
    • Zinc
  – Adopt acute and chronic criteria for Cadmium recalculated from National Criteria to reflect trout and non-trout waters
  – Delete standard for Total Chromium and Manganese (WS Classifications)
Proposed Changes in WQ Standards Rules

Freshwater Metals Standards Implementation Issues

- Use EPA hardness equations as applicable, minimum of 25 mg/L and maximum of 400 mg/L hardness
- Implement standards based on median hardness in 8-digit USGS Hydrological Units
- Allow use of EPA Biotic Ligand Model for Copper
- Retain action level provision but
  - Recalculated dissolved criteria for Copper, Silver and Zinc
  - Delete action level for Iron
- Use 1Q10 flow for implementing acute metals criteria
- Sampling protocol for assessment of compliance with dissolved metals criteria
- Specifies that biological integrity takes precedence over exceedances of criteria—except for mercury and selenium—for assessment (303d) purposes

Saltwater Metals Standards and Implementation Issues

- Replace existing Total Recoverable Metals standards with Dissolved Metal standards except for
  - Mercury
  - Selenium
- Adopt the current Aquatic Life protective National Recommended Water Quality Criterion for dissolved metals, as acute and chronic criteria for the following:
  - Arsenic
  - Chromium VI
  - Copper
  - Lead
  - Nickel
  - Silver
  - Zinc
- Sampling protocol for assessment of compliance with dissolved metals criteria
- Specifies that biological integrity takes precedence over exceedances of criteria—except for mercury and selenium—for assessment (303d) purposes
Proposed Changes to WQ Standards Rules

• Other issues
  – No proposed changes to Chlorophyll a standard
  – No changes to mixing zone rules

• Procedural changes (not in rules)
  – Reasonable Potential Procedures
    • Use of 95th versus 99th percentile
    • Use detection limit for truncated (<) data
  – Pretreatment Program
    • Changes to address implied over-allocation of metals

Issues for Comment

• Use of median hardness from 8-digit HUC
Issues for Comment

• General comments of support
  – Need comments from regulated community because expect many comments from Environmental Community
• Use of median hardness from 8-digit HUC
  – Entire HUC may not be representative of discharge situation
  – Some hardness data in STORET is very old without method specified
• Water Effect Ratio (WER)
  – Proposed changes do not allow use of WER in permit process (as allowed in EPA Guidance)
  – WER must be approved as part of a Site Specific Criteria adoption by EMC
  – Issue is more important if EPA disapproves Action Levels

Triennial Review Schedule

• Public Notice in June (planned June 16th)
• Hearings
  – July 15 in Raleigh
  – July 16 in Statesville
  – Mid-late afternoon to evenings
• EMC action in November 2014 or January 2015
Discussion