

# Pollution Control Standards

2015 Review

Primary purpose of this  
agenda item to  
determine means of  
moving forward to  
develop specific  
proposals for revisions.

# Results of Public Comment Period

- Comment period held Mar 20-May 9.
- 2 webinars and web page in support of review.
- 6 webinar participants.
- 8 initial issues identified.
- 35 sets of comments received.

# 8 Initial Issues

## 1. Frequency of exceedance:

Review of EPA standards handbook and states water quality standards.

Aquatic life "toxics" criteria

Other aquatic life criteria (DO, temp)

Human health carcinogens

Human health non-carcinogens

Contact rec bacteria criteria

## 2. Two Mercury-Related Issues

- Total Mercury Criterion & MZ ban
  - Hannibal mercury study results seem to indicate 0.005 ug/L range for long-term avg condition. Report needs to be written & peer reviewed.
  - Analysis of river-wide data (Emery/Spaeth) indicate similar results.
- Did EPA conduct a review of extending MZ ban nationally?
- Status of EPA draft mercury treatability report.
- Investigate scientific background for MZ ban.

### 3. Total Dissolved Solids (500 mg/L)

- TDS Study Completed
  - No criteria violations.
  - Cl & SO<sub>4</sub> account for 40 % of TDS.
- USFWS comment 500 mg/L may not protect aquatic life – f/u with USFWS.
- 500 mg/L secondary DW standard.
- Look at protections needed for industrial water supplies.
- Question of need for criteria for other constituents.
- Task WUAC to justify need?

## 4. E. coli Criterion

- E. coli: 130/100mL as 90-day geometric mean; not to exceed 240/100mL in more than 25%.
- USEPA through their BEACHES program originally recommended above criteria, then adopted:

CRITERIA ELEMENTS	Recommendation 1 Estimated Illness Rate 36/1,000		Recommendation 2 Estimated Illness Rate 32/1,000	
	GM (cfu/100 mL)	STV (cfu/100 mL)	GM (cfu/100 mL)	STV (cfu/100 mL)
Enterococci (marine & fresh)	35	130	30	110
<i>E. coli</i> (fresh)	126	410	100	320

- ORSANCO's criteria less stringent than states & EPA.
- Understanding is that Region 3 states in holding pattern waiting for implementation guidance.



# 5. Human Health Temp Criterion

- 110 deg F
- Question of inconsistency:
  - In section that applies outside mixing zone.
  - Then specifically states applies wherever public access is possible.
- Originally proposed by workgroup 116 deg F to prevent 2<sup>nd</sup> degree burns in 10 minutes.
- PCS committee felt that was underprotective.
- Went to next lower value of 110 deg F used by PADEP.
- Monitoring effort to utilize satellite data to look at point source impacts during a hotter, lower flow year.
- Surface water temps to +/- 1.5 C in 3 m pixels.



# 6. Aquatic Life Ammonia Criteria

- USEPA updated criteria.
- Review to ensure that they are applicable to Ohio River and that site-specific approach not necessary.
- Investigate USFWS recommendation to eliminate modifications that allow higher concentrations during periods when juvenile fish not present.

# 7. Numeric Nutrient Criteria

- Continue to work with EPA HQ on data assessment issues.
- Proposing to change our monitoring program in support of numeric nutrient criteria development.
- Numeric criteria probably not proposed during this review.

# Additional Issues Identified

- Hydraulic Fracturing Issues
  - Revise all radionuclide criteria to BDL.
  - Develop Br & salinity discharge requirements.
  - Require 10 yr surety bond for frac waste shippers.
- Chloride Criterion (250 mg/L)
  - Not protective of mussels.
- Thallium
  - Remove 0.24 ug/L criterion based on USEPA recommendation.

# Additional Issues

- AL Metals Criteria
  - Expand translators list
  - Include WER
  - Adopt USGS approach to cadmium criteria development.
- Upset Notifications
  - Utilize federal rules.
- Net Discharge Provision
  - Extend net discharge provision to POTWs.
- Clarification of Uses
  - Change “months” to “periods”.

# Additional Issues

- Analytical Methods
  - Only refer to USEPA approved methods under 40CFR136.
- Variances
  - Utilize different terminology than “variance”.
- General
  - All criteria should be protective of all mussels.
  - All criteria should align with USEPA recommendations.

# General Approach

- Assign to Stream Criteria Subcommittee.
- Ensure USEPA & USFWS at table.

# Process

- Schedule for 2015 review requires specific proposals be developed by February 2015 meetings.
- Begin development of specific proposals now.
- Report to PCS Committee and back to TEC at October meeting.
- Evaluate need to revise schedule at October meetings.



# Streamlined Mercury Variance Position Paper

- Recommends against need for streamlined mercury variance and provides rationale.
- Must comply with provisions in standards.
- Discharge should meet highest level quality achievable.
- Require monitoring to demonstrate compliance with standards (designated uses and criteria outside MZ).