


Overview of CWA § 304(a) Criteria



Hillary Glover
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What are CWA § 304(a) Criteria?

- ❖ The numbers (e.g., concentrations of pollutants) or narratives that EPA recommends that States put into their Water Quality Standards to protect waters for aquatic life, wildlife, consumption of aquatic organisms by humans, and primary contact recreation.
- ❖ Once adopted and approved, Water Quality Standards are binding Clean Water Act regulatory standards.

How can CWA § 304(a) criteria be expressed?

- ❖ Typically expressed as concentrations in the water column and generally have a time and duration component.
- ❖ For example:
 - ◆ An annual average concentration that cannot be exceeded;
 - ◆ A daily value that cannot be exceeded;
 - ◆ A seasonal concentration that cannot be exceeded, or
 - ◆ A value that cannot be exceeded more than one time every three years (for acute aquatic life criteria).

How do States use CWA § 304(a) Criteria?

- ❖ State Water Quality Standards may compel a variety of actions, including:
 - ◆ CWA § 303(d) listings to identify impaired water bodies
 - ◆ Total Maximum Daily Loads (TMDL) calculations
 - ◆ NPDES permits
 - ◆ Public Notification at Beaches

How are criteria used in CWA § 303(d) listings?

- ❖ Monitoring results are compared to State Water Quality Standards (WQS).
- ❖ States provide a listing of impaired and threatened waters that are not meeting their designated uses (i.e., those waters exceeding the WQS and needing a TMDL).

How are criteria used in developing TMDLs?




- ❖ Calculations for impaired waters must be written to achieve State WQS.
- ❖ Loads from both point and non-point sources to waters cannot result in exceedences of these numbers.

How are criteria used in writing NPDES permits?



- ❖ Criteria are used to develop water quality-based effluent limits for point source dischargers (WQBELs).
- ❖ NPDES permits that are issued after State Water Quality Standards are in place for a pollutant, must have discharge limits that ensure that WQS are met.

How are criteria used in Public Notification at Beaches?

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- ❖ Under the BEACH Act of 2000, states that receive BEACH Act grants for their beach advisory programs must use their State WQS to trigger closings and advisories.

Where are we today?

- ❖ EPA has been conducting research to develop the scientific foundation for new or revised 304(a) criteria for coastal recreational waters.
 - ◆ Research by EPA's Office of Research & Development
- ❖ These criteria need to be scientifically sound, implementable for broad CWA purposes, and provide for improved public health protection over the 1986 criteria.
- ❖ We are requesting input from experts on critical path research needs to develop criteria in the near-term.

What are examples of EPA's current thinking for new recreational criteria development?

- ❖ Use fecal indicator-based approach using enterococci for all waters.
- ❖ Use molecular-based qPCR for beach notification and monitoring purposes.
- ❖ Develop possible other methods/criteria for other CWA uses as part of a "tool box."
- ❖ Assume that criteria to protect human health from pathogens in human waste will also be protective of human health from pathogens in animal waste.

Summary

- ❖ EPA's new or revised criteria must meet broad CWA § 304(a) purposes, including:
 - ◆ CWA § 303(d) listings to identify impaired water bodies
 - ◆ Total Maximum Daily Loads (TMDL) calculations
 - ◆ NPDES permits
 - ◆ Public Notification at Beaches
- ❖ Criteria need to be scientifically sound, implementable, and provide for improved public health protection.