

## EPA REGION IV

### EPA's PARTIAL APPROVAL NC's 2016 303(d) LIST

Letter From  
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USEPA Region 4  
Regional Administrator  
[December 8, 2016](#)

**Comments due February 17, 2017**

## EPA HEADQUARTERS

### EPA DRAFT CRITERIA FOR ALGAL TOXINS

Human Health Recreational  
Ambient Water Quality Criteria  
or Swimming Advisories for  
Microcystins and  
Cylindrospermopsin  
[December 2016](#) [EPA 822-P-16-002](#)

**Comments due February 17, 2017**



## **EPA's Partial Approval of NC's 2016 303(d) List Submittal.**

# **EPA Conclusion – Falls Lake**

- The TMDL alternative path is intended to attain water quality standards within a reasonable period of time.
- Delays will prolong the standards attainment date.
- The Falls Lake Nutrient Rules are still in effect but could be rendered ineffective in the future.
- Significant change in the basis for approval of a TMDL alternative could result in the return of that waterbody to the 303(d) list

## **EPA's Partial Approval of NC's 2016 303(d) List Submittal.**

- EPA objects to NC's EMC's approach to listing and delisting using the current 10% / 90% statistical confidence approach.**
- EPA claims that delisting requires stronger evidence and a larger sample size than for listing -not included in NC's methodology - based on Florida WQS's and Florida rules.**
- EPA added 41 segments for metals based on greater than one exceedance in three years. No minimum # samples, No consideration for sample size  
(example 2 out of 3 samples or 2 out of 180 samples)**
- EPA claims age of data and minimum sample size not consistent with federal requirements  
(EPA no minimum #obs vs EMC minimum of 10)  
(EPA no limit on age of data vs EMC last 5 years)**

# EPA DRAFT CRITERIA FOR ALGAL TOXINS

## RECREATIONAL CRITERIA OR SWIMMING ADVISORIES

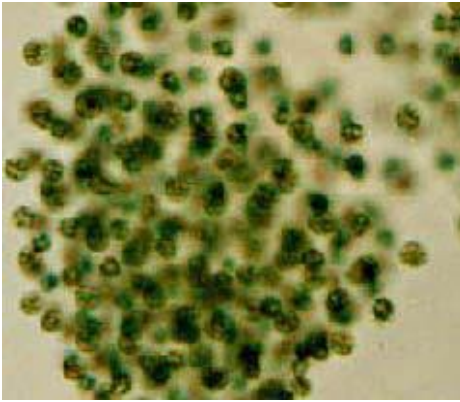
# Human Health Recreational Ambient Water Quality Criteria or Swimming Advisories for Microcystins and Cylindrospermopsin

December 2016 EPA 822-P-16-002



## Cyanobacteria in Falls Lake

Microcystis aeruginosa



Anabaena circinalis Cylindrospermopsis raciborskii



Cyanotoxins are naturally produced by cyanobacteria. Information is lacking on when or why these toxins are produced.

**Potentially toxic (can't tell by cell morphology)**  
Potential does not equate to toxin production.  
a. possibly but not yet actually  
b. capacity to develop or happen in the future

### EPA 2007 NLA (1,028 lakes)

- 76% of lakes were dominated by blue green algae.
- Potential microcystin producing algae in 95% of the lakes
- Potential cylindrospermopsin producing algae 67% of lakes.
- **Potential does not equate to toxin production.**
- 30 % of lakes had detectable levels of microcystin.

# EPA Draft Criteria

- EPA will publish so states can establish WQ standards.
- Alternatively,  
States may use these same values as swimming advisories for public notification purposes.

- Draft Criteria →
- Criteria →
- State Standards →
- Advisories →
- Impaired uses - 303(d) →
- Permits →
- Rules and Regulations →



# EPA's draft criteria for contact recreational exposure:

criteria based on:

children, Microcystin LR, science to develop 10-Day Drinking Water Advisories

- a. **Swimming Advisory not to be exceeded on any day.**
- b. **Recreational Criteria for impairment not exceeded more than 10% of days per recreational season up to one calendar year.**

| <b>Microcystins</b> | <b>Cylindrospermopsin</b> |
|---------------------|---------------------------|
| <b>4 ug/L</b>       | <b>8 ug/L</b>             |

**Recreational Season Example:**  
**90 days – no more than 9 days**  
**365 days – no more than 36 days**

No specifics on magnitudes  
No specifics on assessment period  
No specifics on > once in 3 years



- Swimming advisory criteria on whether to close, open, or warn about concerns whenever values are exceeded for one day
- CWA 304(a) criteria, even if used as swimming advisories, are not regulations, and thus, do not constitute legally binding requirements.
- If adopted by States as standards, values will be used for 303(d) listing purposes when exceeded more than 10% of days during a recreational season as an indicator of long-term impairment from multiple short-term blooms.

- EPA often pressures states to adopt criteria as WQ standards.
- Swimming advisories are often used by EPA to impair waters for 303(d) purposes – i.e. uses are not met.
- If waters are listed for 303(d) regulations require TMDL or similar





## EPA is specifically soliciting for public comments on:

- Scientific views, data, and information regarding the science and technical approach used in the derivation of the draft criteria.
- The CWA 303(d) use of a 10 % exceedance frequency as well as alternative exceedance frequencies.
- The swimming advisory recommended single day exceedance as well as alternative exceedance frequencies.

## EPA is not requesting comments on:

- The need for the criteria.
- The implementation of these criteria
- Potential intrusion on authority of local government health directors in establishing levels of risk.
- But does not mean public is constrained in making comments.



**CAUTION**

# Comments from the UNRBA Executive Director

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EPA DRAFT CRITERIA  
FOR ALGAL TOXINS

## Options for UNRBA

- Submit Comments on the EPA Region IV 303(d) review?
- Submit Comments on the EPA HQ Draft Toxin Criteria?
  
- Submit Detailed Comments?
- Submit only General Comments?
  
- Comments could assist in establishing public awareness of UNRBA in developing management and criteria thresholds

**Comments Due by February 17, 2017**

# *Questions*

