



North Carolina Pretreatment Consortium, Inc.

January 25, 2010

Ms. Jennifer Everett
NC Division of Water Quality
Planning Section
E-mail Submittal

Re: Draft Revised 2008 NC 303(d) List for Copper and Zinc Impairment

Dear Ms. Everett:

The North Carolina Pretreatment Consortium (NC-PC) submits the following comment regarding the Draft Revised 2008 NC 303(d) list that includes copper and zinc impaired water bodies. The NC-PC is a non-profit organization representing pretreatment professionals from 147 municipal wastewater treatment plants throughout the State of North Carolina.

Review of a memorandum released on April 3, 2007 by the NC Division of Water Quality (NC DWQ) Director, issued a suspension of ambient collections for metals from the NC DWQ Ambient Monitoring System and NPDES Discharger Monitoring Coalitions (Attachment A.). The NC DWQ Director indicated:

"I find that ambient total recoverable metals are an ineffective indicator of toxic impacts on aquatic life. I have considered many issues in making this decision including the changing uses of our water quality standards and the changing scientific approaches used to establish appropriate water quality criteria. We will continue to evaluate new approaches to collect more meaningful information for evaluating the impacts of metals on aquatic life"

NC DWQ continued the April 3, 2007 ambient monitoring suspensions on March 18, 2008 (Attachment B.) and March 30, 2009 (Attachment C.).

The NC-PC is concerned with the 2008 NC 303(d) listing for copper, zinc, and potentially other metal listings, if total metals data was used to assess and list water bodies as impaired during the evaluation period. If total recoverable metals are an ineffective indicator of toxic impacts on aquatic life, then ambient total metals data alone would not be appropriate for developing the 2008 NC 303(d) list for water bodies impaired by those metals. Water bodies listed with a category 5 metal impairment would necessitate a total maximum daily load (TMDL) for NPDES permitted users of that water body. Permit holders in a situation where a water body was inaccurately assessed could face unnecessary and significant impacts on permit requirements, operating costs, pretreatment programs, and industrial users.

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The NC-PC supports appropriate protection of state waters, identification of impaired water bodies, and proactive measures to improve impaired waters. The NC-PC believes that NC DWQ should re-evaluate and base metals water quality assessments on meaningful information. Appropriate scientific based evaluations should be established, adopted, and approved prior to assessing water bodies for the 2008 NC 303(d) list for metal action levels and water quality standards for aquatic life standards.

If there are any questions concerning our comment, please feel free to contact me at (919) 319-4564.

Respectfully Submitted,

Donald Smith

Donald Smith
2010 NC-PC Chairman

- Attachment A. - April 3, 2007, NC DWQ Suspension of Routine Ambient Data Collections For Metals
- Attachment B. - March 18, 2008, NC DWQ Continued Suspension of Routine Ambient Data Collections For Metals
- Attachment C. - March 30, 2009, NC DWQ Continued Suspension of Routine Ambient Data Collections For Metals



April 3, 2007

MEMORANDUM

To: Jimmie Overton
Regional Surface Water Quality Supervisors
Rick Shiver
Kent Wiggins

From: Alan W. Klimek 

Subject: Suspension of Routine Ambient Data Collections For Metals

Based on discussions with Senior DWQ managers, I am temporarily suspending the collection of total recoverable metals as part of the DWQ Ambient Monitoring System. This includes a suspension of required total recoverable metals samples collected by Memorandum of Agreement with the NC NPDES Discharger Monitoring Coalitions. This decision will not change any requirements for other components of NPDES permits. No changes to effluent or instream monitoring requirements in individual NPDES permits will be affected. This is not a permanent suspension of ambient metals collections. DWQ is conducting a review of our water quality assessment techniques, evaluation criteria, and relevant standards. We are also collecting new ambient data pertinent to this review. Upon completion of this review, the resumption of metals collections will be considered.

I find that ambient total recoverable metals are an ineffective indicator of toxic impacts on aquatic life. I have considered many issues in making this decision including the changing uses of our water quality standards and the changing scientific approaches used to establish appropriate water quality criteria. We will continue to evaluate new approaches to collect more meaningful information for evaluating the impacts of metals on aquatic life. We will incorporate these new approaches into our ambient monitoring program as soon as feasible. I will re-evaluate this suspension within one year and at that time the suspension will either be continued or monitoring programs will be altered to a more meaningful evaluation of metals impacts on aquatic life.

These issues are not unique to North Carolina. Many states, the EPA, and other interested groups are adapting to new scientific information concerning the best possible evaluation techniques for understanding the toxic affects of metals on aquatic life. This action is prompted by complex CWA 303(d) listing issues and our current understanding of the impacts of metals on aquatic life. Changes from total to dissolved forms and complex scientific issues have been incorporated in the most recent publications from the US EPA concerning the Biotic Ligand Model for Copper (<http://www.epa.gov/waterscience/criteria/copper/2007/criteria200702.pdf>) and the March 2007 EPA Framework for Metals Risk Assessment. These EPA publications identified critical scientific issues that need addressing including consideration of the various properties of metals and additional key environmental chemistry parameters that control the toxic properties of metals <http://www.epa.gov/OSA/metalsframework/>.

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Questions regarding special circumstances or special studies requiring continued monitoring of ambient surface waters should be directed to Jay Sauber. Questions on water quality standards for metals should be directed to Connie Brower.

Cc: Coleen Sullins
Paul Rawls
Alan Clark
Ted Bush
Jay Sauber
Connie Brower



Michael F. Easley, Governor

William G. Ross Jr., Secretary
North Carolina Department of Environment and Natural ResourcesColeen H. Sullins Director
Division of Water Quality

March 18, 2008

MEMORANDUM

To: Jimmie Overton
Regional Surface Water Quality Supervisors
Kent Wiggins
Rick Shiver

From: Coleen H. Sullins 

Subject: Continued Suspension of Routine Ambient Data Collections for metals

On April 3, 2007, DWQ Division Director Alan W. Klimek temporarily suspended the collection of routine total recoverable metals as part of the DWQ Ambient Monitoring System. This suspension also included a suspension of required total recoverable metals samples collected by Memorandum of Agreement with the NC NPDES Discharger Monitoring Coalitions (Memorandum April 3, 2007 attached).

DWQ has made significant progress in reviewing our metals water quality assessment techniques, evaluation criteria, and relevant standards. DWQ recognizes the potential significance of modernizing our water quality standards for metals on environmental assessments and the NPDES regulated community. By this Memorandum, I am therefore continuing the April 3, 2007 suspension for routine ambient data collections for metals as we develop an appropriate modification of our water quality standards.

Questions regarding special circumstances or special studies requiring continued monitoring of ambient surface waters should be directed to Jay Sauber at 919-743-8416. Questions on water quality standards for metals should be directed to Connie Brower at 919-733-5083 ext 380.

Cc: Chuck Wakild
Paul Rawls
Alan Clark
Ted Bush
Jay Sauber
Connie Brower



North Carolina Department of Environment and Natural Resources

Division of Water Quality

Coleen H. Sullins

Director

Beverly Eaves Perdue
Governor

Dee Freeman
Secretary

March 30, 2009

MEMORANDUM

To: Regional Surface Water Quality Supervisors
Jimmie Overton
Kent Wiggins

From: Coleen H. Sullins

Subject: Continued Suspension of Routine Ambient Data Collections for Metals

On April 3, 2007, DWQ Division Director Alan W. Klimek temporarily suspended the collection of routine total recoverable metals as part of the DWQ Ambient Monitoring System. This suspension also included a suspension of required total recoverable metals samples collected by MOA agreement with the NC NPDES Discharger Monitoring Coalitions.

DWQ has made significant progress in conducting a review of our metals water quality assessment techniques, evaluation criteria, and relevant standards. DWQ recognizes the potential significance of modernizing our water quality standards for metals on environmental assessments and the NPDES regulated community. By this Memorandum, I am continuing the April 3, 2007 suspension for routine ambient data collections for metals as we consider appropriate modifications of our water quality standards.

Questions regarding special circumstances or special studies requiring continued monitoring of ambient surface waters should be directed to Jay Sauber (919-743-8416). Questions on water quality standards for metals should be directed to Connie Brower (919-807-6416).

Cc: Chuck Wakild
Alan Clark
Ted Bush
Jay Sauber
Jeff Poupart
Kathy Stecker
Connie Brower