

April 9, 2004

Water Docket ID# OW-2003-0079  
Environmental Protection Agency  
Mail Code 4101T  
1200 Pennsylvania Avenue, NW  
Washington, D.C. 20460

Re: Draft Aquatic Life Criteria Document for Copper and Request for Scientific Views Docket  
ID# OW-2003-0079

IPC – The Association Connecting Electronics Industries, would like to thank the U.S. Environmental Protection Agency (EPA) for the opportunity to submit these comments on EPA's *2003 Draft Update of Ambient Water Quality Criteria for Copper*. IPC supports EPA's revision of the freshwater copper criteria, but believes that EPA's proposed revisions to the existing saltwater criteria are inappropriate.

IPC represents over 2,200 member companies involved in the manufacture, assembly and use of printed circuit boards (PCBs) and electronic assemblies. PCB based electronic assemblies are used in a variety of electronic devices that include computers, cell phones, pacemakers, and sophisticated missile defense systems. Copper electroplating and etching are key processes in the manufacture of PCBs. PCB manufacturers operate sophisticated wastewater treatment facilities for copper removal as required under the Clean Water Act Part 413 and Part 433 pretreatment standards. The proposed criteria for copper could affect PCB manufacturers through the establishment of local POTW limits as needed to meet water quality criteria for copper.

IPC commends the EPA for incorporating the biotic ligand model (BLM) in the update of the freshwater ambient water quality criteria for copper. EPA's use of the BLM represents state-of-the-art science used in a technically sound manner and is a significant improvement over EPA's previous methodology. The BLM and its underlying chemical speciation model have undergone significant peer review and represent the latest scientific knowledge on the speciation of copper ions and complexes. The BLM appropriately accounts for the important organic and inorganic ligand interactions of copper as well as the competitive interactions influencing the binding of copper at the target site. In particular, use of the BLM allows a more realistic assessment of copper bioavailability by taking into account site-specific water quality conditions.

We are concerned, however, the proposed saltwater criteria do not allow for proper consideration of bioavailability factors through utilization of the BLM or another appropriate model. The lack of incorporation of the latest scientific developments in this field is also particularly problematic given the large lapse of time that often occurs between criteria revisions. We strongly urge that the proposed saltwater criterion be set aside until pending further development of the BLM for saltwater. After further validation of the BLM and refinement of the criterion calculation method for saltwater systems, a saltwater-specific update of the ambient water criterion for copper could then be issued independently of the freshwater criterion update.

IPC appreciates the opportunity to offer these comments. IPC encourages EPA to to revise the freshwater copper criteria as proposed while withdrawing the proposed saltwater copper criteria, until more scientifically appropriate criteria can be developed.

Sincerely,

Fern Abrams  
Director of Environmental Policy