



1 February, 2018

MaryAnn Stevens
Rules Development Branch
Office of Legal Counsel
Indiana Department of Environmental Management
mstevens@idem.in.gov

RE: LSA Document #14-58 Ambient Water Quality Criteria for Metals

Dear Ms Stevens;

The Hoosier Environmental Council appreciates the opportunity to respond to the proposed amendments to Indiana's ambient water quality criteria for select metals.

First, we would like to express our appreciation to the agency for its efforts to revise and update the metals criteria. The criteria are important for the continued health of Indiana's surface waters, their aquatic life, and the health of all Hoosiers who depend on surface water for drinking water, fishing, and recreation. A good deal of research and scientific expertise went into drafting this update, and we are sincerely grateful to the agency staff who have made it possible.

Selenium

Selenium is particularly toxic to aquatic life, but its regulation is complicated since the toxicity is most closely related to its concentration in fish eggs and tissues. There was an extensive process at the federal level to draft the national criteria for selenium (USEPA 2016 NRWQC), and we support IDEM's adoption of those criteria.

Nickel

We appreciate that the proposed change in the criteria for nickel are more stringent than the current criteria. However, we have seen evidence to suggest that some species are sensitive at even lower concentrations¹. On this subject, we support the comments we understand were submitted by Greg Bright of Commonwealth Biomonitoring.

Arsenic

We are concerned by the removal of arsenic (III) from Indiana's water quality criteria for the protection of human health. We understand the national criteria are still under revision. In that case, it seems advisable to retain the existing criteria until the national criteria have been released.

We are similarly concerned with the removal of criteria for beryllium, cadmium, and chromium (III and VI).

Lead

We object to the less stringent criteria for lead and for the removal of the lead criteria for human health. Lead is extremely neurotoxic. The human toxicology and public health literature have lowered the 'safe' blood levels for lead repeatedly over the last 5 decades, and finally in 2012 the CDC adopted the statement that there is no safe level of lead exposure for children. In light of those findings in the human health literature, it is difficult to imagine that the science of aquatic life toxicology has found evidence that lead is less toxic than we used to believe. We request that the agency consider restoring the previous lead criteria.

General

At Section 6(a)(1)(C), we would like to suggest wording similar to that found at (D) such that item (iv) would read "other conditions to an extent that creates a nuisance or otherwise impairs the designated uses of the surface waters."

The Hoosier Environmental Council sincerely appreciates the opportunity to comment on this rulemaking. If there are any questions about these comments, please contact Indra Frank at ifrank@hecweb.org.

Sincerely,



Indra N. Frank, MD, MPH
Director of Environmental Health and Water Policy

ⁱ Keithly, J. et al. (2004). Acute and chronic toxicity of nickel to a cladoceran (*Ceriodaphnia dubia*) and an amphipod (*Hyaella azteca*). *Environmental Toxicology and Chemistry*, 23(3);691-696.