



HRSD

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June 16, 2008

By e-mail and First Class Mail

Dr. Thomas Armitage, DFO
EPA Science Advisory Board (1400F)
US Environmental Protection Agency
1200 Pennsylvania Ave, NW
Washington, DC 20460

RE: White Paper on Aquatic Life Criteria for Contaminants of Emerging Concern, Parts I and II

Serving the Cities of
Chesapeake
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The Hampton Roads Sanitation District (HRSD), a wastewater treatment entity servicing 17 counties and cities in southeastern Virginia, is pleased to offer the following comments on the referenced document:

HRSD greatly appreciates the EPA's efforts and focus on moving forward with developing the aquatic life criteria (ALC) for contaminants of emerging concern (CEC). Knowledge of what constitutes a safe concentration of these compounds is a key component to addressing the issue and ensuring our waterways are protected for their designated uses.

Serving the Counties of
Gloucester
Isle of Wight
James City
King & Queen
King William
Mathews
Middlesex
York

HRSD agrees with many of the recommendations of the OW/ORD Emerging Contaminant Workgroup. The continued focus on linking endpoints to population level effects is critical. Endpoints must be carefully selected to ensure that they are representative of instream impacts on an aquatic population. Current data may link certain endpoints with exposure yet not link directly to a population impact. Intersex in fish populations is a good example of an endpoint which does not seem to necessarily impact fish populations. This is clearly demonstrated in effluent dominated streams where intersex fish are present within healthy populations.

This focus on the biological significance of endpoints must not be lost. Endpoints used in the derivation of criteria must be linked to population level effects and must be driven by science and not public sentiment as is suggested appropriate in the following statement:

"Selection of appropriate endpoints (and their associated effects thresholds) may, in some instances, transcend "biological importance" (the focus of the Guidelines (Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses)) to reflect societal concerns (e.g., physical appearance of wild-caught fish)."

Criteria are based on the best available science and must not be altered based on these "societal concerns".

While it is certainly appropriate to consider alternate endpoints to the traditional survival, growth and reproduction endpoints, one of the challenges identified by the Workgroup lies in determining what constitutes an unacceptable effect. The difficulty in addressing this challenge and the importance of a technically sound resolution cannot be overemphasized. Defensible criteria must have minimal uncertainty. Careful consideration must be given to ensure equivalency in endpoints and their associated levels of unacceptable effect.

HRSD is concerned about the use of non-native species in criteria development. While it is likely defensible in some situations, implementation must proceed with caution. In particular, the behavioral endpoints of non-native species must be carefully reviewed to ensure that these same behaviors translate to those seen in species native to North America. Further, the expert panel must ensure that the use of non-native species does not mischaracterize the distribution of sensitivities in North America.

HRSD does not agree that certain situations as described on Page 11 of Part II may necessitate relaxation of minimum data requirements (MDR). The defensibility and acceptability of ALC rely on consistent standards for criteria development. Departures from these minimum requirements will result in varying degrees of uncertainty from one compound to another.

In addition to maintaining MDR, it is also important to standardize the methods used for effects assessment to achieve consistency in criteria development. There are a number of new methodologies and associated endpoints that are well-suited for defining effects of many of these CEC, endocrine disrupting compounds in particular. However, without a standardized approach and stringent QA/QC requirements, interstudy comparability cannot be assured. EPA must take the lead in this effort to ensure resulting criteria are technically defensible and appropriately protective.

HRSD strongly supports the idea of the formation of an expert panel to address criteria development for specific chemical contaminants. It is essential that the panel selection, as well as its activities, is transparent. The panel must also consist of experts from all stakeholder groups to facilitate defensible criteria development.

HRSD appreciates your consideration of these comments and looks forward to reviewing the final document.

Sincerely,

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