



Center for Environment & Human Toxicology

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March 9, 2007

Ligia Mora-Applegate
Bureau of Waste Cleanup
Florida Department of Environmental Protection
2600 Blair Stone Road
Tallahassee, FL 32399-2400

Re: Recommendation for Additional Sediment Sampling, Site 41 – Wetlands 10 and 48,
Naval Air Station, Pensacola, FL

Dear Ms. Mora-Applegate:

At your request, we have reviewed the *Technical Memorandum, Naval Air Station (NAS) Pensacola, Florida, Recommendation for Additional Sediment Sampling, Site 41 – Wetlands 10 and 48*. This document was prepared by EnSafe Inc. and is dated December 12, 2006. The document describes additional sampling and toxicity testing to be conducted for sediments in two wetlands within Site 41. The objective of this effort is to reevaluate areas around sampling locations where significantly high constituent concentrations were previously found. We have some comments regarding this sampling plan and also on a technical memorandum from Tom Dillon dated February 15, 2007 commenting on the workplan.

Wetland 10

It is not clear why the proposed sediment samples to evaluate chemical concentrations within the wetland are collected from the boundary of the wetland. A more accurate description of wetland contaminant concentrations would be obtained from samples taken within the wetland area. We suggest revising the proposed sampling points to include the interior of Wetland 10.

We concur with the comments provided by Dr. Dillon and would emphasize the importance of selecting the appropriate organism for testing in this situation. *Hyalella azteca* is a freshwater organism, and therefore current or even past brackish conditions in Wetland 10 could make the tests invalid due to high mortality unrelated to constituents of concern. If conditions at Wetland 10 do not prevent the use of *H. azteca*, we think the proposed methodology is sound because it not only serves to detect acute effects on survival, but also chronic effects on growth.

Wetland 48

The proposed sediment sampling for Wetland 48 is acceptable.

We also stress the comment made by Dr. Dillon that PELs (or the more up-to-date PECs) are not screening values and should only be used during the refinement process.

Additionally, the *Development and Evaluation of Numerical Sediment Quality Assessment Guidelines for Florida Inland Waters Technical Report* (January 2003) lists TECs for chromium (43 mg/kg), cobalt (50 mg/kg), zinc (120 mg/kg), and heptachlor epoxide (2.5 µg/kg) that are lower than the values presented in the workplan. The screening values for these chemicals should be changed to reflect the current guidance.

Please let us know if you have any questions regarding this review.

Sincerely,

A handwritten signature in black ink, appearing to read "Stephen M. Roberts". The signature is fluid and cursive, with a large loop at the end.

Stephen M. Roberts, Ph.D.

A handwritten signature in black ink, appearing to read "Hugo Ochoa-Acuna". The signature is very stylized and cursive, with many overlapping loops.

Hugo Ochoa-Acuna, Ph.D.

A handwritten signature in black ink, appearing to read "Leah D. Stuchal". The signature is cursive and somewhat stylized.

Leah D. Stuchal, Ph.D.