

Information Redacted pursuant to  
5 U.S.C. Section 552 (b)(5), Exemption 5,  
Privileged Inter/Intra Agency Document

Specific Privilege: Deliberative Process Privilege

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----- Forwarded by Palmer Hough/DC/USEPA/US on 04/26/2009 10:46 PM -----

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Fox/R4/USEPA/US@EPA  
Date: 04/26/2009 10:05 PM  
Subject: Letter pertaining to PCS Phosphate permit

I attach a signed letter, the text of which follows

April 26, 2009

US Army Corps of Engineers  
Terrence C. Salt  
Principal Deputy Assistant Secretary of the Army (Civil Works)

Dear Sir:

It is our understanding that the US Army Corps of Engineers and the US Environmental Protection Agency are considering whether PCS Phosphate should be permitted to mine a tract of Nonriverine Wet Hardwood Forest (Schafale & Weakley 1990; 198-199) in Beaufort County, North Carolina. We are botanists and ecologists who focus much of our work on the natural communities of North Carolina. We have reviewed materials prepared by the North Carolina Natural Heritage Program on the Nonriverine Wet Hardwood Forest community and the tract of Nonriverine Wet Hardwood Forest proposed for mining. We have individually worked with the North Carolina Natural Heritage Program for many years and consider the program to be the most authoritative, scientific and unbiased source of information in North Carolina on rare or endangered plants, animals and natural communities. Based on this information, and our individual knowledge of this natural community type, we strongly encourage the responsible federal agency to provide the maximum protection afforded by

applicable laws and regulations to all remaining significant examples of Nonriverine Wet Hardwood Forests.

Nonriverine Wet Hardwood Forests are wetland communities occurring on poorly drained mineral soils in broad inter-stream flats more generally associated with peat-lands on the Atlantic Coastal Plain. These distinctive natural communities have a climax canopy with oak species (*Quercus michauxii*, *Q. laurifolia*, *Q. pagoda*) typically associated with bottomland hardwoods and an understory and herb layer consisting of plants more associated with pocosin wetlands (e.g., *Persea palustris*, *Clethra alnifolia*) (Schafale and Weakley 1990 Classification of the natural communities of North Carolina. NC Natural Heritage Program, Rheinhardt and Rheinhardt 2000 J. Torrey Bot. Soc 127:33). The hydrology of these wetland systems is driven by seasonal fluctuations in the water table, with the plant community adapted to seasonally high water table conditions. Because Nonriverine Wet Hardwood Forests occur on mineral soils suitable for agricultural, silvicultural and other uses, this distinctive wetland community has been much reduced in extent through hydrological modification and conversion to other land uses. In 1897, Ashe and Pinchot reported that this community type was common. In 1982, Peacock and Lynch reported that it was one of the most threatened community types on the NC Coastal Plain. Between 1998 and 2006, 42% of the remaining acreage of this community type was destroyed (M. Schafale, personal communication). The North Carolina Natural Heritage Program is aware of only a few scattered remaining tracts of Nonriverine Wet Hardwood Forests, all in North Carolina and Virginia. Only five of these sites in NC comprise 200 acres or more. The PCS Bonnerton Road site is one of those five.

NatureServe classifies Nonriverine Wet Hardwood Forests as a G2 or globally imperiled natural community, meaning that there are between 5 and 20 viable sites left, and all of these are considered threatened. Clearly, this is one of the most imperiled wetland types in the United States, and all efforts should be made to protect the remaining significant examples by management on public lands, acquisition, and/or regulatory means.

The remaining significant Nonriverine Wet Hardwood Forest sites are important for preservation of our natural biodiversity as well as scientific research and education. We are not aware of any successful efforts to restore a Nonriverine Wet Hardwood Forest that has been converted to another more intensive land use. While restoration efforts may be attempted in the future, loss of the few remaining significant sites jeopardizes even having adequate reference and study sites to guide future restoration efforts.

In summary, Nonriverine Wet Hardwood Forests are an exceedingly rare natural community unique to NC and adjacent VA. They are globally imperiled as a result of hydrologic modification and conversion to other more intensive land uses. We strongly encourage the federal agencies responsible for insuring protection of the nation's wetlands and aquatic ecosystems to provide the maximum protection the law affords to preservation of this imperiled natural community.

We appreciate the opportunity to provide these comments.

Robert K. Peet  
Professor of Biology, University of North Carolina at Chapel Hill  
President, International Association for Vegetation Science

Alan S. Weakley,  
Curator Univ. North Carolina Herbarium, North Carolina Botanical Garden  
[former] Chief Ecologist, The Nature Conservancy  
[former] Chief Ecologist, NatureServe

Peter S. White  
Director, North Carolina Botanical Garden  
Professor of Biology, University of North Carolina at Chapel Hill

Norman L. Christensen  
Professor of Ecology (and formerly Dean), Nicholas School of the  
Past President, Ecological Society of America

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 EPA.pdf



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Palmer F. Hough  
US Environmental Protection Agency, Wetlands Division

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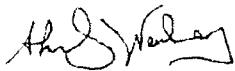
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