



"Walker, William T SAW"
<William.T.Walker@usace.army.mil>

03/11/2009 04:32 PM

To Tom Welborn/R4/USEPA/US@EPA, Rebecca
Fox/R4/USEPA/US@EPA, "Ron Sechler"
<ron.sechler@noaa.gov>, "Pace Wilber"
cc "Jolly, Samuel K SAW" <Samuel.K.Jolly@usace.army.mil>,
"Lamson, Brooke SAW"
<Brooke.Lamson@saw02.usace.army.mil>

bcc

Subject PCS

History:

📧 This message has been forwarded.

All,

We have scheduled a teleconference with Pete Benjamin tomorrow @ 1330 to discuss potential permit conditions. Since we all seem to be talking to one another individually, I think it would be a great idea to talk collectively. I spoke with Ron and he cannot make tomorrow so I have set up a second time with him at 0930 Friday morning. I would encourage as many of you as can to join us on one or both calls. If you would like to, please let me know and give me the best number at which to reach you and I will initiate a conference call from here.

thanks

Tom Walker



"Heather"
<riverkeeper@ptrf.org>

03/12/2009 12:53 PM

To Rebecca Fox/R4/USEPA/US@EPA

cc

bcc

Subject FW: Petition has been filed, release is pending

History:

✉ This message has been replied to and forwarded.

FYI

Heather Jacobs Deck
Pamlico-Tar Riverkeeper
Pamlico-Tar River Foundation
Phone: (252) 946-7211
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www.ptrf.org
Waterkeeper Alliance Member

From: Geoff Gisler [mailto:ggisler@selcnc.org]

Sent: Thursday, March 12, 2009 12:51 PM

To: 'Heather'; 'David Emmerling'; David McNaught; 'Sam Pearsall'; toddm@nccoast.org; 'Jim Stephenson'; 'Molly Diggins'

Cc: Derb Carter; Kathleen Sullivan

Subject: Petition has been filed, release is pending

All,

The petition was just filed. I have attached a copy. The press release will go out shortly.
Geoff

Geoff Gisler
Staff Attorney
Southern Environmental Law Center
200 W. Franklin St. Suite 330
Chapel Hill, NC 27516
Ph: (919) 967-1450
Fax: (919) 929-9421
www.southernenvironment.org

PLEASE PRINT CLEARLY OR TYPE

STATE OF NORTH CAROLINA

IN THE OFFICE OF
ADMINISTRATIVE HEARINGS

COUNTY OF (1) Wake

(2) Pamlico-Tar River Foundation, North Carolina Coastal Federation, Environmental Defense Fund, and Sierra Club

(your name) PETITIONERS,

v.

(3) North Carolina Department of Environment and Natural Resources - Division of Water Quality

RESPONDENT.

(The State agency or board about which you are complaining)

**PETITION
FOR A
CONTESTED CASE HEARING**

I hereby ask for a contested case hearing as provided for by North Carolina General Statute § 150B-23 to challenge the actions of the Department of Environment and Natural Resources - Division of Water Quality in issuing Water Quality Certification No. 3771 to PCS Phosphate Company on January 15, 2009. The Water Quality Certification authorizes an expansion of PCS's phosphate mine in violation of water quality standards and the designated existing uses within the affected area. (Please see attached statement)

This petition challenges the Division of Water Quality's issuance of Water Quality Certification No. 3771 to PCS Phosphate's Aurora operation, the permitted facility in the recent contested case U.S. Department of the Interior v. N.C. Department of Environment and Natural Resources (08 EHR 1067-Morrison).

(If more space is needed, attach additional pages.)

(4) Because of these facts, the State agency or board has: (check at least one from each column)

 deprived me of property;

 ordered me to pay a fine or civil penalty; or

 X otherwise substantially prejudiced my rights;

AND

 X exceeded its authority or jurisdiction;

 X acted erroneously;

 X failed to use proper procedure;

 X acted arbitrarily or capriciously; or

 X failed to act as required by law or rule.

(5) Date: March 12, 2009

(6) Your phone number: (919) 967-1450

(7) Print your full address: 200 W. Franklin St., Suite 330 Chapel Hill, NC 27516

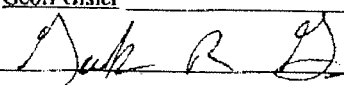
(street address/p.o. box)

(city)

(state)

(zip)

(8) Print your name: Geoff Gisler

(9) Your signature: 

You must mail or deliver a COPY of this Petition to the State agency or board named on line (3) of this form. You should contact the agency or board to determine the name of the person to be served.

CERTIFICATE OF SERVICE

I certify that this Petition has been served on the State agency or board named below by depositing a copy of it with the United States Postal Service with sufficient postage affixed OR by delivering it to the named agency or board:

(10) Mary Penny Thompson

(name of person served)

(11) N.C. Department of Environment and Natural Resources

(State agency or board listed on line 3)

(12) 512 North Salisbury Street, 14th Floor

(street address/p.o. box)

Raleigh

(city)


NC

(state)

27604

(zip code)

(13) This the 12th day of March, 2009

(14) 
(your signature)

When you have completed this form, you **MUST** mail or deliver the **ORIGINAL AND ONE COPY** to the Office of Administrative Hearings, 6714 Mail Service Center, Raleigh, NC 27699-6714.

I. INTRODUCTION

The Pamlico-Tar River Foundation, North Carolina Coastal Federation, Environmental Defense Fund, and Sierra Club (collectively "Citizen Groups") respectfully submit this Petition for a Contested Case Hearing ("Petition") to formally object to a final action of the North Carolina Division of Water Quality ("DWQ") approving and issuing Water Quality Certification No. 3771 ("Water Quality Certification" or "401 Certification") to PCS Phosphate, Inc. ("PCS") for its proposed expansion of its strip-mining operation northwest and west of Aurora in Beaufort County. The Citizen Groups respectfully file this petition because the Water Quality Certification authorizes PCS to expand its mining operation into nearly 4,000 acres of wetlands and approximately 5 miles of streams in violation of state water quality standards. A copy of the Water Quality Certification issued on January 15, 2009 is included as Exhibit 1 to this Petition.

II. JURISDICTION AND STANDING

A. This Petition is Timely

The North Carolina Administrative Procedure Act sets forth a 60-day general limitation for filing a petition in a contested case, which "shall commence when notice is given of the agency decision." N.C. Gen. Stat. § 150B-23(f). DWQ approved the Water Quality Certification on January 15, 2009. Therefore, Citizen Groups timely file this Petition for a Contested Case Hearing within the 60-day limitation prescribed by N.C. Gen. Stat. § 150B-23(f) and stated within the terms of the Water Quality Certification.

B. Citizen Groups are Entitled to Bring this Contested Case as "Persons Aggrieved" Within the Meaning of North Carolina's Administrative Procedure Act

North Carolina's Administrative Procedure Act, N.C. Gen. Stat. § 150B-23, provides that a contested case may be brought by a "person aggrieved." The Act defines "person aggrieved" as "any person or group of persons of common interest directly or indirectly affected substantially in his or its person, property, or employment by an administrative decision." N.C. Gen. Stat. § 150B-2(6). A "person" is defined to include "any natural person, partnership, corporation, body politic and any unincorporated association, organization, or society." N.C. Gen. Stat. § 150B-2(7). As alleged in further detail below, DWQ has substantially prejudiced Citizen Groups' rights by issuing the Water Quality Certification for the mine expansion.

1. Pamlico-Tar River Foundation

The Pamlico-Tar River Foundation, Inc. ("PTRF") is a North Carolina non-profit corporation founded in 1981. For generations, the Tar-Pamlico River has supported life in the watershed, and its future health is directly tied to impacts from future development.

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PTRF strives to preserve the high quality of life of residents in the Tar-Pamlico watershed by protecting the river's environmental resources.

PTRF has approximately 2,000 members, most of whom live and work on or near the Pamlico and Tar Rivers. PTRF has its principal office in Washington, Beaufort County, North Carolina. Many PTRF members visit, recreate, fish, hunt, boat, swim, view wildlife, and otherwise use and enjoy the waters of the Pamlico River.

Protecting the quality of the nutrient-sensitive waters of the Pamlico River is one of PTRF's central missions. The organization is involved in educational initiatives, documenting environmental impacts on the river, legislative efforts, and submitting comments during regulatory rulemaking. PTRF has sought to protect the water quality of the Pamlico River during the process leading to this 401 Certification by participating in the Review Team that provided input during the environmental impact statement ("EIS") process as well as commenting on the draft EIS, supplemental EIS, final EIS, and 401 Certification application.

The 401 Certification would substantially affect the interests of PTRF and its members in protecting the water quality of the Tar-Pamlico River basin. Specifically, the Water Quality Certification would allow destruction of wetlands, surface waters, and riparian buffers that are integral to PTRF's efforts to protect basin-wide water quality and would impair the use of waters in the Tar-Pamlico River basin and downstream for commercial and recreational fishing, recreational boating, wildlife, and fish and aquatic life propagation and survival.

2. North Carolina Coastal Federation

The North Carolina Coastal Federation ("Coastal Federation") is a non-profit corporation dedicated to the promotion of better stewardship of coastal resources. The Coastal Federation was founded in 1982 and has approximately 8,500 members, including numerous members who live near, shellfish or fish in, or regularly visit the Pamlico River estuary, Pamlico Sound, and nearby coastal waters.

Part of the Coastal Federation's purpose is to protect coastal waters and estuaries for the use and enjoyment of all of the citizens of the state. As part of this work, the Coastal Federation has played a lead role in investigating, documenting, publicizing, and seeking enforcement of violations of state and federal sedimentation, stormwater, water quality, and wetlands laws. In addition, to protect coastal waters from degradation from stormwater-borne pollutants, the Coastal Federation is working extensively through the state regulatory process to improve and strengthen the State's stormwater control program applicable to coastal areas.

The Coastal Federation has actively participated in the deliberations and rulemaking proceedings initiated by the Coastal Resources Commission and the Environmental Management Commission that relate to wetlands, stormwater, water quality, coastal outstanding resource waters, and shellfish issues, and has been a party to

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several administrative and judicial appeals related to these matters. Through regular participation in informal and formal proceedings and through its broader public education efforts, the Coastal Federation represents its members' interests in the appropriate stewardship of North Carolina's coastal resources, including its public trust waters.

To further those environmental protection goals, the Coastal Federation joined PTRF, Environmental Defense Fund, and other organizations as intervenors in PCS's variance request before the Water Quality Committee in September 2008. That challenge built on the Coastal Federation's long track record of direct participation in permit decisions involving the phosphate mining operations now managed by PCS. In the mid-1980s it was instrumental in identifying, and pushing for adoption of, significant enhancements to the operation's National Pollution Discharge Elimination System wastewater permit. DWQ required the facility to implement the recycling technology that the Coastal Federation advocated for, resulting in reduced pollution discharges from the site.

The 401 Certification would substantially affect the interests of the Coastal Federation and its members in protecting the water quality, wetlands, and nursery areas that are essential to a productive coastal ecosystem. The impacts to wetlands, streams, and riparian buffers approved by the 401 Certification will have long-term impacts on finfish and shellfish in the Pamlico River, Pamlico Sound, and coastal North Carolina. Those impacts will impair Coastal Federation members' use of waters downstream for fishing, recreational boating, wildlife, and fish and aquatic life propagation and survival.

3. Environmental Defense Fund

The Environmental Defense Fund ("EDF"), representing a national board and membership of more than 300,000 individuals, is dedicated to protecting the integrity and function of important ecosystem resources and processes, including wetlands and other aquatic systems. With more than 9,000 members in North Carolina, EDF has had a formal presence in the state since 1987. Since the establishment of the North Carolina office, EDF has been intimately engaged in the environmental affairs of eastern North Carolina and specifically with the issues related to protection of wetlands and water quality at the PCS facility site.

Since 1987, EDF has been directly engaged in multi-agency discussions relating to proposed mining advance scenarios, which would disrupt thousands of acres in the central Pamlico watershed. EDF has reviewed and commented on a series of mine advance and mitigation documents, including those produced in the inter-agency discussions held by the U.S. Army Corps of Engineers ("Corps") since 2001. EDF has been a member of the Corps' Review Team convened to provide input during PCS's Clean Water Act permit process and the development of the environmental impact statement. EDF submitted substantive comments on the draft EIS for the proposed mine expansion and has consistently expressed reservations about the company's most recent alternative which is the basis for the current 401 Certification.

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This involvement by EDF fits within the organization's overall goal to protect the health of the Albemarle-Pamlico estuary. An essential ingredient in this effort is to protect habitats and water quality that serve as the nurseries for juvenile finfish and shellfish that supply the commercial and recreational fisheries on the North Carolina coast and beyond. The plan also includes promoting efforts to control nutrient inputs into the Tar-Pamlico River basin.

The mine expansion approved by the 401 Water Quality Certification includes the destruction of wetlands, streams, and buffers in locations and on a scale that will thwart EDF's efforts to protect this estuarine system. Moreover, the impacts of the mine expansion will impair use of waters downstream for fishing, recreational boating, wildlife, and fish and aquatic life propagation and survival. These impacts will adversely affect both EDF's organizational purpose and the interests of its members in fishing, swimming, paddling, and recreating in the Pamlico River.

4. Sierra Club

The Sierra Club is a national grassroots conservation organization with over 1.3 million members nationally and approximately 16,500 members in North Carolina. The organization has a three tier structure, with national, state, and local bodies. The Sierra Club has had a statewide chapter in North Carolina for over 20 years and a chapter office in North Carolina since 1997. That statewide chapter oversees 13 local groups, including the Greenville-based Cypress Group. The Cypress Group represents more than 1,000 members in the 23 counties of northeastern North Carolina, including Beaufort County.

The mission of the Sierra Club is to protect "communities, wild places, and the planet itself." At the state level, the organization advocates for strong water quality and coastal protection through the development of policy positions, education of the public and the media, grassroots organizing, and direct advocacy to elected and appointed officials. At a local level, the Cypress Group educates members and local citizens through educational programs; monthly meetings; and hiking, kayaking, and wildlife viewing trips, including trips on the Pamlico River in the vicinity of the PCS site.

The 401 Certification authorizes impacts to wetlands, surface waters, and riparian buffers that will adversely affect the efforts of the national, state, and local levels of the Sierra Club. As permitted, the mine expansion will have significant impacts to water quality, wildlife habitat, and downstream fisheries and will consequently impede the purpose of the national, state, and local levels of the Sierra Club as well as substantially affecting the interests of its members.

This substantial harm to PTRF's, NCCF's, EDF's, Sierra Club's, and their respective members' interests can only be redressed by a decision vacating the 401 Water Quality Certification issued to PCS Phosphate and remanding consideration of the permit to the Division of Water Quality.

III. GROUNDS FOR OBJECTION

In issuing the 401 Certification, DWQ exceeded its authority, acted erroneously, failed to use proper procedure, acted arbitrarily and capriciously, and failed to act as required by law or rule. Thus, DWQ issued a Water Quality Certification for the destruction of nearly 4,000 acres of wetlands and close to 5 miles of streams that will not protect water quality or existing uses of the Pamlico River and its watershed. Because Citizen Groups and their members live, work, and recreate in the area affected by the 401 Certification, DWQ's final agency decision will substantially prejudice Citizen Groups' rights. Therefore, Citizen Groups object to DWQ's issuance of the Water Quality Certification on the following non-exclusive grounds:

A. Factual Background

The Pamlico River carries the freshwater of the Tar River into the Pamlico Sound, where it joins with the Albemarle Sound to create the nation's second largest estuary system. In addition to its great scenic beauty and widespread recreational opportunities, the Pamlico River hosts commercially and recreationally important fish and shellfish species as well as waterfowl, shorebirds, and other migratory birds. The Albemarle-Pamlico estuary system functions as a nursery for more than 90 percent of the commercial seafood species caught in North Carolina, a \$1 billion annual industry. The stretch of the Pamlico River within Beaufort County alone contributes nearly \$3 million annually in commercial fish and shellfish.

In the Water Quality Act of 1987, Congress identified the Albemarle-Pamlico Sound as an estuary in need of priority actions to address water quality problems. 33 U.S.C. § 1330(2)(B). In October 1987, the State of North Carolina and the U.S. Environmental Protection Agency ("EPA") designated the Albemarle-Pamlico estuary as an estuary of national significance and convened a management conference to assess water quality and recommend measures to control sources of pollution. Albemarle/Pamlico Sounds: State/EPA Conference Agreement for National Estuary Program Designation Under the Water Quality Act of 1987 (Oct. 20, 1987). In designating the Albemarle-Pamlico estuary, the state and EPA identified wetland loss, excessive nutrients, decline in fisheries productivity, and fish diseases as major sources of environmental stress.

PCS applied to expand its strip-mining operation along the Pamlico River in Beaufort County in November 2000 and modified that permit application the following August to request a mine expansion into 3,500 acres, including 2,400 acres of wetlands and 7 miles of streams, as well as 3 creeks identified as primary nursery areas for juvenile finfish and shellfish. The site of the proposed expansion is immediately adjacent to the Pamlico River and South Creek, a special secondary nursery area. Because of the project's proposed impacts to wetlands and streams, the U.S. Army Corps of Engineers initiated the development of an environmental impact statement in early 2001. That evaluation compared PCS's preferred 15-year mine expansion to other alternatives in a draft EIS released in October 2006. That draft was supplemented in November 2007 to

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add two new alternatives, including Alternative L. The Corps released the final EIS ("FEIS") on May 23, 2008.

One month before the final EIS was released, in April 2008, PCS abandoned its 15-year preferred alternative and requested a 37-year permit for mine expansion from the Corps. That 37-year mine expansion alternative, Alternative L, was also the subject of the company's 401 Water Quality Certification application to DWQ. In it, the company requested authorization to mine more than 11,000 acres, including 4,135 acres of wetlands and approximately 5 miles of streams.

DWQ granted PCS's 401 Certification request on December 5, 2008, authorizing the destruction of 3,789 acres of wetlands, 3.5 miles of streams, and 28 acres of streamside, riparian buffers. That Certification is attached as Exhibit 2. PCS objected to that Certification, requesting that DWQ relax its terms to allow additional mining. DWQ issued a modified 401 Certification on January 15, 2009 incorporating PCS's requested modifications.

That Certification, which Citizen Groups challenge in this petition, authorizes PCS to destroy 3,953 acres of wetlands, 4.9 miles of streams, and 48 acres of riparian buffers that are protected under the Tar-Pamlico Riparian Buffer Rules. Within those wetland acres, the 401 Certification approves the destruction of more than 50 acres of a hardwood wetlands forest that is a nationally significant natural heritage area as defined by the N.C. Natural Heritage Program. The remaining parts of the forest would be bisected by a 1,200 foot wide corridor as part of a plan that includes mining on three sides of both of the remaining forest segments.

B. Legal Framework

1. Water Quality Certification Requirements

This case arises under Clean Water Act § 401 and North Carolina's water quality and pollution control regulations. Under § 401 of the Clean Water Act, the Corps cannot issue a § 404 permit for impacts to surface waters and wetlands unless DWQ first certifies that the project will comply with all applicable water quality standards. Section 401(a)(1) provides:

Any applicant for a Federal license or permit to conduct any activity . . . which may result in any discharge into the navigable waters, shall provide the licensing or permitting agency a certification from the State in which the discharge originates or will originate . . . that any such discharge will comply with the applicable provisions of [the Clean Water Act].

33 U.S.C. § 1341(a)(1).

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According to the federal Clean Water Act and North Carolina law, DWQ must ensure compliance with all applicable state water quality standards before issuing a § 401 water quality certification. If expansion of PCS's strip-mine would violate water quality standards and cannot reasonably be expected to meet water quality standards through remedial actions, DWQ must deny certification. See 33 U.S.C. § 1341(a)(1), (3). The federal Clean Water Act also authorizes DWQ to conditionally approve a § 401 certification by imposing any conditions or "any other appropriate requirement of State law" necessary to ensure compliance with water quality standards. See 33 U.S.C. § 1341(d).

The North Carolina Environmental Management Commission has adopted rules that control DWQ's issuance of 401 certifications. Those procedures require DWQ to evaluate specific factors before issuing a 401 certification for wetland and stream impacts. Before issuing the certification, the state must find that the project:

- 1) has no practical alternatives;
- 2) will minimize adverse impacts to surface waters;
- 3) does not result in the degradation of groundwaters and surface waters;
- 4) does not result in cumulative impacts that will cause a violation of water quality standards;
- 5) protects downstream water quality standards with on-site stormwater control measures; and
- 6) provides for replacement of existing uses through wetland or stream mitigation.

15A N.C. Admin. Code 02H .0506(b), (c). In addition to these factors, if the applicant proposes impacts to wetlands of exceptional state or national significance, the state must find that those impacts are necessary to meet a demonstrated public need before a 401 certification can issue. 15A N.C. Admin. Code 02H .0506(e).

Because of the location of PCS's proposed project, the Tar-Pamlico Buffer Rules also apply to this 401 Certification. Those rules, implemented to protect water quality in the Tar-Pamlico River, provide protection for 50-foot streamside, riparian buffers within the Tar-Pamlico watershed. See 15A N.C. Admin. Code 02B .0259. Under those rules, PCS's proposed mine plan requires buffer mitigation for every acre of buffer impacted according to established ratios. Buffers that are destroyed within the 30 feet closest to the surface water must be mitigated at a 3:1 ratio. When the section of buffer from 30 to 50 feet from the surface water is impacted, it must be mitigated at a 1.5:1 ratio. 15A N.C. Admin. Code 02B .0259(4). Further, the rules specify that mitigation must be done at least as close to the Pamlico estuary as the proposed impact and as close to the impact as feasible. 15A N.C. Admin. Code 02B .0260(4).

2. Federal and North Carolina Law Require Restoration and Protection of Water Quality and Existing and Designated Uses

Congress enacted the Clean Water Act not merely to preserve existing water quality, no matter how degraded, but to “restore and maintain the chemical, physical, and biological integrity of the Nation’s waters.” 33 U.S.C. § 1251(a). One of the goals of the Act is to achieve, “wherever attainable . . . water quality which provides for the protection and propagation of fish, shellfish, and wildlife and provides for recreation in and on the water.” *Id.* at § 1251(a)(2).

The Act further requires states to develop standards and measures to meet these goals. Under § 303 of the Clean Water Act, state water quality standards must “consist of the designated uses of the navigable waters involved and the water quality criteria for such waters based on such uses.” 33 U.S.C. § 1313(c)(2)(A). The U.S. Supreme Court has made clear that “§ 303 is most naturally read to require that a project be consistent with *both* components, namely the designated use *and* the water quality criteria.” PUD No. 1 of Jefferson County v. Washington Dept. of Ecology, 511 U.S. 700, 715 (1994) (emphasis in original). Thus, “a project that does not comply with a designated use of the water does not comply with the applicable water quality standards.” *Id.* It is therefore beyond question that DWQ is prohibited from approving a water quality certification for a project that will not protect water quality and designated uses.

North Carolina’s General Assembly has acted to protect the water quality and beneficial uses of the State’s waters by declaring “the public policy of this State to provide for the conservation of its water and air resources.” N.C. Gen. Stat. § 143-211(a). Further, “[i]t is the public policy of the State to maintain, protect, and *enhance* water quality within North Carolina.” N.C. Gen. Stat. § 143-211(b) (emphasis added). The EMC has promulgated regulations to implement the General Assembly’s mandate to develop “[s]tandards of water and air purity . . . designed to protect human health, to prevent injury to plant and animal life, to prevent damage to public and private property, to insure the continued enjoyment of the natural attractions of the State . . . and to secure for the people of North Carolina, now and in the future, the beneficial uses of these great natural resources.” N.C. Gen. Stat. § 143-211(c).

To ensure protection of the existing uses as well as designated uses based on a water’s classification, the regulations further provide that any “sources of water pollution which preclude any of these uses on either a short-term or long-term basis shall be considered to be violating a water quality standard.” 15A N.C. Admin. Code 02B .0211(2). In the 401 certification process, DWQ must ensure that “existing uses are not removed or degraded” for waters and wetlands. 15A N.C. Admin. Code 02B .0506(b), (c), (e).

C. Practical Alternatives Exist to the 35-Year Mine Expansion Plan Authorized by the Water Quality Certification

The Division of Water Quality can only approve a 401 certification if it finds there are no practical alternatives to the proposed project, yet issued this 401 Certification for a 35-year project that has practical alternatives. Because the 401 Certification issued to PCS relies on the fundamentally flawed economic analysis presented in the Corps' FEIS, DWQ's analysis of practical alternatives is both incomplete and erroneous.

It is undisputed that DWQ did not conduct a practical alternatives analysis for the last 20 years of mining that is authorized by the 401 Certification. Because DWQ must find that no practical alternatives with less adverse impact to surface waters or wetlands exist for the entire project, DWQ cannot approve a project based on a practical alternatives analysis of only part of that project. But in issuing this 401 Certification, DWQ relied on the practicability analysis in the FEIS, an analysis that only considered potential reconfiguration of the first 15 years of PCS's mine expansion. Based on that analysis – and absent any evaluation of alternative mine plans in years 16 through 35 – the 401 Certification authorizes 35 years of mine expansion. Moreover, when compared to the original 401 Certification, the modified 401 Certification approved additional wetland and stream impacts during this time period without any evaluation of the practical alternatives to that expanded impact.

DWQ's reliance on the FEIS's analysis of practical alternatives over the first 15 years is also erroneous. The Corps's economic analysis that is at the heart of the FEIS's practicability analysis is arbitrarily limited to 15 years, relies on erroneous analyses, and omits important factors. Because of these flaws, the analysis favors more environmentally destructive mine plans at the expense of reasonable alternatives. DWQ's reliance on the fundamentally flawed analysis in the FEIS is misplaced.

Indeed, practical alternatives to the 35-year mine expansion exist. Economic analyses submitted during the EIS process both identified the flaws of the FEIS's practicability analysis and demonstrated that PCS can economically mine substantially fewer acres of waters and wetlands by implementing alternative mine plans to avoid the most sensitive environmental areas.

D. The 401 Certification Approves Buffer Impacts That Are Not Mitigated as Required by the Tar-Pamlico Buffer Rules

The 401 Certification must, but does not, provide reasonable assurance that PCS's mine expansion complies with state water quality standards, including the Tar-Pamlico Buffer Rules. See 15A N.C. Admin. Code 02B .0259, et seq. The 401 Certification authorizes 48 acres of riparian buffer impacts, which require more than 100 acres of mitigation, yet does not include any mitigation that complies with the state water quality standards established by the rules.

It is undisputed that PCS cannot provide adequate mitigation to offset the buffer impacts authorized by the 401 Certification under existing mitigation rules. The Certification fails to disclose the amount of mitigation required under existing rules, but PCS has conceded that it cannot comply with existing riparian buffer mitigation requirements by twice requesting a variance from the Environmental Management Commission that would allow the company to bypass the requirements. PCS's initial request was denied and the second request was withdrawn. The 401 Certification acknowledges this violation, conditioning the approved impacts on anticipated rulemaking by the EMC and PCS's future compliance with these currently nonexistent rules through the eventual submission of plans and DWQ's approval of those plans under authority that will presumably be granted by the to-be-developed rules. DWQ's conditioning of the 401 Certification on compliance with standards that do not yet exist violates the basic purpose of the certification process, to assure federal permitting agencies that the project complies with state water quality standards, and in fact confirms that the project does not comply with state law.

Even the buffer mitigation DWQ approved fails to meet the requirements of the Tar-Pamlico Buffer Rules. Those rules require all buffer mitigation to be done at least as close to the estuary as the proposed impacts. Despite this requirement, DWQ did not assess the proximity of the 24.4 acres of buffer mitigation accepted in the 401 Certification or determine whether the proposed buffer mitigation is at least as close to the estuary as the impact as required by the rules. Instead, DWQ relied on a new draft interpretation of the buffer mitigation rules released for public comment one day before the original 401 Certification was issued. That draft interpretation, however, conflicts with both the enabling legislation for riparian buffer mitigation and the history of the Tar-Pamlico Buffer Rules. Without this unlawful interpretation, none of PCS's proposed buffer mitigation meets the rule's location requirements.

E. The 401 Certification Authorizes the Destruction of Wetlands of Exceptional National Significance Without the Required Determination of Public Need

The Division of Water Quality failed to make the mandatory public need determination before authorizing impacts to wetlands of exceptional national ecological significance in the 401 Certification. The nonriverine wet hardwood forest that is within the proposed mine expansion represents one of the top five examples of nonriverine wet hardwood forests that remain in the nation. The N.C. Natural Heritage Program has designated the forest a nationally significant natural heritage area. Thus, under the elevated standards for wetlands of exceptional national ecological significance, DWQ must conduct an analysis of the public need for mining impacts to the wet hardwood forest. DWQ did not conduct that analysis. There is no public need for the impact to these wetlands of exceptional ecological significance and authorizing these impacts therefore violated water quality standards.

F. The 401 Certification Would Impair Existing Uses of Surface Waters and Wetlands

The impacts approved by the 401 Certification will degrade existing uses of surface waters and wetlands in violation of water quality standards. As described above, the Pamlico River plays an important role in the entire coastal ecosystem of North Carolina. The tributaries to the Pamlico River are integral to the river's natural and economic value. The mine expansion authorized by the 401 Certification will reduce the drainage basins of nine creeks within the project area by at least half of their existing basins, including four creeks that the N.C. Wildlife Resources Commission has identified as primary nursery areas because of the habitat they provide for juvenile finfish and shellfish. Three of those primary nursery areas, as well as other creeks that will be affected by mining, flow into a special secondary nursery area, South Creek.

Impacts to these sensitive areas will affect food webs within the estuarine ecosystem, alter the rate of nutrient loading into the estuary, and reduce important freshwater inputs from the drainage basins. The mine expansion will have significant adverse impacts to public trust waters, fish habitat, and water quality. The indirect effects of the project include negative impacts associated with heavy metal contamination, drainage basin reductions, long-term water quality impacts from mining, and loss of wetland functions. Because of these significant adverse impacts to natural resources, the N.C. Division of Marine Fisheries, N.C. Wildlife Resources Commission, U.S. Fish and Wildlife Service, National Marine Fisheries Service, and South Atlantic Fisheries Management Council recommended denial of a permit for the mine expansion authorized by the 401 Certification.

Further, the authorized mine expansion would degrade existing uses within the nationally significant nonriverine wet hardwood forest. The 401 Certification approves mining on three sides of the remnant segments of this forest, an excavation scheme that will disturb the existing hydrological structure that supports this rare forest.

Rather than modifying the mine plan to avoid these impacts, the 401 Certification requires monitoring to confirm these adverse effects. But monitoring for the loss of existing uses, and therefore violations of water quality standards, does not fulfill DWQ's obligation to provide reasonable assurance that the project will not violate water quality standards.

In addition, the proposed mitigation will not replace existing uses that will be eliminated by the mine expansion. A substantial portion of the proposed mining impacts will occur adjacent to the Pamlico River, eliminating wetlands and surface waters that currently buffer the river from the impacts of PCS's mine operation. The location of these wetlands and tidal creeks is important in determining the uses they provide. PCS's proposed mitigation sites are not near the estuary, will not perform the same functions as the existing streams and wetlands, and cannot replace the existing uses that will be lost under this 401 Certification.

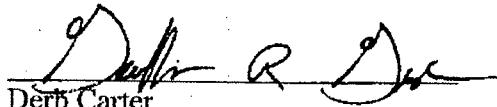
**G. The Modified 401 Certification Was Issued Without Public Notice
Required by the Original 401 Certification**

The 401 Certification that DWQ issued on December 5, 2008 required DWQ to provide public notice under the standards established in 15A N.C. Admin. Code 02H .0503. That rule requires that the agency follow established procedures before taking action on a 401 certification. Those procedures require DWQ to inform the public of the specific plan under consideration and provide a minimum of 15 days of notice before taking agency action. Despite this requirement, the agency issued the modified 401 Certification on January 15, 2009 without public notice.

IV. CONCLUSION

For the foregoing reasons, DWQ exceeded its authority, acted erroneously, failed to use proper procedure, acted arbitrarily and capriciously, and failed to act as required by law or rule in approving and issuing the Water Quality Certification. Accordingly, the Water Quality Certification for PCS Phosphate's mine expansion must be vacated and remanded to DWQ.

Respectfully submitted this 12th day of March, 2009.



Derb Carter

Geoff Gisler

SOUTHERN ENVIRONMENTAL LAW CENTER

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Attorneys for the PAMLICO-TAR RIVER FOUNDATION,
NORTH CAROLINA COASTAL FEDERATION,
ENVIRONMENTAL DEFENSE FUND, and SIERRA CLUB



Beverly Hayes Perdue, Governor

Dee Freeman, Secretary
North Carolina Department of Environment and Natural Resources

Coleen H. Sullins, Director
Division of Water Quality

January 15, 2009

Mr. Ross M. Smith, Manager
Environmental Affairs
PCS Phosphate Company, Inc.
P.O. Box 48
Aurora, NC 27808

Re: PCS Phosphate Mine Expansion, Beaufort County
DWQ #2008-0868, version 2.0; USACE Action ID. No. 200110096
MODIFIED APPROVAL of 401 Water Quality Certification with Additional Conditions

Dear Mr. Smith:

Attached hereto is a copy of Certification No. 3771 issued to PCS Phosphate Company, Inc. of Aurora, NC, dated January 15, 2009. In addition, you must get any other federal, state or local permits before you proceed with your project including (but not limited to) Solid Waste, Sediment and Erosion Control, Stormwater, Dam Safety, Mining, Non-discharge and Water Supply Watershed regulations. This Certification completely replaces one issued to you on December 6, 2008.

If we can be of further assistance, do not hesitate to contact us.

Sincerely,

Coleen H. Sullins

CHS/jrd

Attachments: Certificate of Completion

cc: Mr. Tom Walker, U.S. Army Corps of Engineers, Asheville Regulatory Field Office
Dave Lekson, US Army Corps of Engineers, Washington Regulatory Field Office
Scott McLendon, Wilmington District, USACOE
Kyle Barnes, DWQ, Washington Regional Office
Al Hodge, DWQ, Washington Regional Office
DLR Washington Regional Office
File Copy
Matt Matthews, DWQ Wetlands and Stormwater Branch
Cyndi Karoly, DWQ
John Payne, NC Attorney General's Office, Environmental Division
Mike Schafele, NC Natural Heritage Program

Linda Pearsall, NC Natural Heritage Program
Jimmie Overton, DWQ
Jeff Fumess, PCS Phosphate
Stephen Rynas, NC Division of Coastal Management
Shannon Deaton, NC Wildlife Resources Commission
Derb Carter, Southern Environmental Law Center
Geoffrey Gisler, Southern Environmental Law Center
Heather Jacobs, Pamlico Tar River Foundation
Sean McKenna, NC Division of Marine Fisheries
Eric Kulz, DWQ
Tammy Hill, DWQ
Becky Fox, US Environmental Protection Agency
Tom Welborn, US Environmental Protection Agency – Region 4 Atlanta
Melba McGee, DENR
Dee Freeman, DENR
Coleen Sullins, DWQ
Chuck Wakild, DWQ
Paul Rawls, DWQ
Ted Strong, Washington Daily News
Susan Massengale, DWQ
Julia Berger, CZR
George House, Brooks, Pierce, McLendon, Humphrey and Leonard, LLP
Jim Stanfill, EEP
Mary Penny Thompson, DENR
Susan Massengale, DWQ
Ann Deaton, NC Division of Marine Fisheries
John Hennessy, DWQ
Ted Strong, Washington Daily News
Wade Rawlins, News and Observer

Filename: 20080868v2PCSPhosphate(Beaufort) 401 modified

NORTH CAROLINA 401 WATER QUALITY CERTIFICATION

THIS CERTIFICATION is issued in conformity with the requirements of Section 401 Public Laws 92-500 and 95-217 of the United States and subject to the North Carolina Division of Water Quality (DWQ) Regulations in 15 NCAC 2H, Section .0500 to PCS Phosphate Company, Inc. of Aurora, NC based on an application to fill 4,124 acres of jurisdictional wetlands, 29,288 linear feet of streams, 19 acres of ponds and 55.14 acres of stream buffers in the Pamlico River Basin, associated with the expansion of PCS Phosphate's mining operation including the relocation of Highway 306 and Sandy Landing Road in Beaufort County, North Carolina, pursuant to an application filed on the 22nd day of May of 2008 through the published Public Notice by the US Army Corps of Engineers, and in additional correspondence received September 5, 2008 (dated September 4, 2008), November 3, 2008 (received November 5, 2008), December 19, 2008 (received December 22, 2008) and proposed impact maps dated January 6, 2009.

The application and supporting documentation provide adequate assurance that the proposed work will not result in a violation of applicable Water Quality Standards and discharge guidelines. Therefore, the State of North Carolina certifies that this activity will not violate the applicable portions of Sections 301, 302, 303, 306, 307 of PL 92-500 and PL 95-217 if conducted in accordance with the application, the supporting documentation, the additional correspondence noted above and conditions hereinafter set forth.

This approval is only valid for the purpose and design submitted in the application materials, additional correspondence and as described in the Public Notice. If the property is sold after the Certification is granted, the new owner must be given a copy of the Certification and approval letter and is thereby responsible for complying with all conditions of this Certification. Any new owner must notify the Division and request the Certification be issued in their name. Should wetland, buffer or stream fill be requested in the future, additional compensatory mitigation may be required as described in 15A NCAC 2H .0506 (h) (6) and (7). If any plan revisions from the approved site plan result in a change in stream, buffer or wetland impact or an increase in impervious surfaces, the DWQ shall be notified in writing and a new application for 401 Certification may be required and a modified 401 Certification may be required. For this approval to be valid, compliance with all the conditions listed below is required.

Conditions of Certification:

1. Impacts Approved

The following impacts are hereby approved as long as all of the other specific and general conditions of this Certification are met. No other impacts are approved including incidental impacts other than listed in this table. Also, please note that these impacts are those approved by DWQ and are only a portion of the impacts that were originally applied for and listed in the Public Notice. These impacts are depicted on maps entitled "PCS Phosphate Mine Continuation - Modified Alt. L - NPCS, Bonneron and South of 33 Proposed Impact" dated January 6, 2009.

	Amount Approved (Units)	Plan Location or Reference
Streams	25,727 feet	Final EIS, page e as well as June 6, 2008 and December 19, 2008 submittals to DWQ
404/CAMA Wetlands	3,953 acres	Final EIS, page e as well as June 6, 2008 and December 19, 2008 submittals to DWQ
Waters	19 acres	Final EIS, page e as well as June 6, 2008 and December 19, 2008 submittals to DWQ
Buffers	47.87 acres	Final EIS, page e as well as June 6, 2008 and December 19, 2008 submittals to DWQ

Sediment and Erosion Control:

2. Erosion and sediment control practices must be in full compliance with all specifications governing the proper design, installation and operation and maintenance of such Best Management Practices in order to protect surface waters standards:
 - a. The erosion and sediment control measures for the project must be designed, installed, operated, and maintained in accordance with the most recent version of the *North Carolina Sediment and Erosion Control Planning and Design Manual*.
 - b. The design, installation, operation, and maintenance of the sediment and erosion control measures must be such that they equal, or exceed, the requirements specified in the most recent version of the *North Carolina Sediment and Erosion Control Manual*. The devices shall be maintained on all construction sites, borrow sites, and waste pile (spoil) projects, including contractor-owned or leased borrow pits associated with the project.
 - c. For borrow pit sites, the erosion and sediment control measures must be designed, installed, operated, and maintained in accordance with the most recent version of the *North Carolina Surface Mining Manual*.
 - d. The reclamation measures and implementation must comply with the reclamation in accordance with the requirements of the Sedimentation Pollution Control Act or Mining Act of 1971 (as amended).
3. No waste, spoil, solids, or fill of any kind shall occur in wetlands, waters, or riparian areas beyond the footprint of the impacts depicted in the 404/401 Permit Application. All construction activities, including the design, installation, operation, and maintenance of sediment and erosion control Best Management Practices, shall be performed so that no violations of state water quality standards, statutes, or rules occur.
4. Sediment and erosion control measures shall not be placed in wetlands or waters without prior approval by the Division. If placement of sediment and erosion control devices in wetlands and waters is unavoidable, design and placement of temporary erosion control measures shall not be conducted in a manner that may result in disequilibrium of wetlands or stream beds or banks, adjacent to or upstream and down stream of the above structures. All sediment and erosion control devices shall be removed and the natural

grade restored within two (2) months of the date that the Division of Land Resources or locally delegated program has released the project.

Continuing Compliance:

5. PCS Phosphate Company, Inc. shall conduct construction activities in a manner consistent with State water quality standards (including any requirements resulting from compliance with section 303(d) of the Clean Water Act), the 401 Water Quality Certification rules (15A NCAC 2H .0500) and any other appropriate requirements of State law and federal law. If the Division determines that such standards or laws are not being met (including the failure to sustain a designated or achieved use) or that State or federal law is being violated, or that further conditions are necessary to assure compliance, the Division may reevaluate and modify this Certification to include conditions appropriate to assure compliance with such standards and requirements in accordance with 15A NCAC 2H .0507(d). Before modifying the Certification, the Division shall notify PCS Phosphate Company, Inc. and the US Army Corps of Engineers, provide public notice in accordance with 15A NCAC 2H.0503 and provide opportunity for public hearing in accordance with 15A NCAC 2H.0504. Any new or revised conditions shall be provided to PCS Phosphate Company, Inc. in writing, shall be provided to the United States Army Corps of Engineers for reference in any Permit issued pursuant to Section 404 of the Clean Water Act, and shall also become conditions of the 404 Permit for the project. This condition is intended to conform with the provisions of 15A NCAC 2H .0507 (d).

Mitigation:

6. Wetland and stream mitigation shall be done as follows and in accordance with mitigation as approved by the US Army Corps of Engineers. DWQ shall be copied on all draft mitigation plans and copied on all annual reporting on mitigation success. In addition, buffer mitigation shall be done in accordance with condition 7 below. In addition, DWQ shall be copied on a final accounting of the amount and type of proposed wetland, stream and buffer mitigation within 60 days of the issuance of the 404 Permit from the US Army Corps of Engineers. Any mitigation done outside the 8-digit HUC where PCS is located should follow the guidance for out of HUC mitigation as described in "Guidance on the Use of Compensatory Mitigation in Adjacent Cataloging Units" dated May 20, 2005 or its update by DWQ. Conservation easements or similar mechanisms to protect these mitigation sites shall be recorded on all mitigation sites to the written satisfaction of the US Army Corps of Engineers.
7. Buffer mitigation shall be conducted by PCS Phosphate at those mitigation sites with riparian buffer credit which total about 24.4 acres of buffer credit. If the Environmental Management Commission approves a flexible buffer mitigation program, then PCS Phosphate may submit a list and description of those sites to DWQ for written approval. If no additional riparian buffer mitigation sites and no flexible buffer mitigation sites are approved by DWQ and/or the NC Environmental Management Commission, then disturbance of buffers in the NCPC, Bonnerton or South of 33 tracts shall not be done beyond the limits of the 2014 impact area shown on PCS' Project Impact Schedule Year 2008-2016 (generally south of Drinkwater Creek) (see Attachment One). DWQ shall be copied on all buffer mitigation site plans and written approval from DWQ is required for these plans before planting or land grading occurs.

8. Porter Creek enhancement – Additional written approval is required from DWQ for a wetland enhancement and stream restoration plan as well as a monitoring plan for the stream, headwater forest and hardwood flat at the upper end of Porter Creek. This plan shall include plugging or filling the existing ditch in order to reestablish surface flow into the wetland and stream channel. DWQ acknowledges wetland functional uplift for the 3.4 acre hardwood flat that is located between the stream and existing ditch and will count 1.7 acres of functional uplift of these non-riparian wetlands in order to account for DWQ's mitigation requirement in 15A NCAC 2H .0506 (h)(6). Stream mitigation credits are also available for the restoration of flow into the existing channel with appropriate monitoring and wetland mitigation for the functional uplift of the headwater forest if additional analysis documents that uplift.

Additional Minimization of impact:

9. Hardwood Flat Avoidance and Minimization – Impact to the 135 acre ("135 A" on Attachment Two) portion, the 58 acre ("58 A" on Attachment Two) portion and the 20 acre secondary connection between these two locations ("20 acre connect" on Attachment Two) of the Bonnerton Road Non-Riverine Wet Hardwood Forest as depicted on Exhibit A of the letter dated October 20, 2008 from George House of Brooks, Pierce, McLendon, Humphrey and Leonard, LLP to Paul Rawls of the NC Division of Water Quality shall be avoided and the area not mined or cleared since this wetland is a "wetland of exceptional state or national ecological significance" in accordance with 15A NCAC 2H .0506(e) except that a 1,145 foot wide mining and utility corridor is allowed in the narrowest part of the Bonnerton Road Non-Riverine Wet Hardwood Forest. Mining is also allowed in the northeast triangle of "58A" WHR area as outlined in exhibit 14 of PCS's December 19, 2008 letter. In order to protect the uses of this Non-Riverine Wet Hardwood Forest wetland that will not be mined, a conservation easement shall be placed on the wetland and restored mining and utility corridor to preclude impacts including mining, logging and any other disturbance of the vegetation or soils that would result in its delisting as a state or nationally significant wetland area. This conservation easement shall be sent to DWQ within 60 days of the issuance of the 404 Permit and the Division must review and approve this easement before it is recorded. Eventual donation to a local land trust or similar organization is acceptable to DWQ with DWQ's written approval.

The exact location of this 1,145 foot wide mining corridor shall be submitted to DWQ and the Corps of Engineers for written approval. A detailed stratigraphy study shall be done on both sides and throughout the area to be mined in order to determine the presence, extent and permeability of any aquitards and aquicludes (mainly clay-based) within the mining corridor. A plan for restoration of each of these aquitards and aquicludes shall be included with the revegetation plan in order to ensure that pre-mining hydrology is reestablished in the mining corridor. Additional written approval is needed from DWQ before this stratigraphic study is done or restoration is initiated. Groundwater monitoring shall be done before, during and after mining and restoration for at least 10 years post-mining in order to ensure that restoration has established reference hydrology for this site. In addition, a reclamation and revegetation plan for the mining corridor shall be submitted to DWQ for written approval. The reclamation plan for the mining corridor shall include the installation of appropriate topsoil on the site within the rooting zone of the restored hardwood flat. The width of the reclamation zone shall ensure that a continuous hardwood flat is restored to reconnect the two undisturbed hardwood flats with a width similar to the width of the remnant, undisturbed hardwood flats. Revegetation shall be done with native tree species. The mining corridor shall be restored and replanted within ten (10) years of the initiation of mining preparation.

for the area. DWQ shall be copied on a letter once that mining preparation begins on the mining corridor in order to establish this ten year clock.

10. Additional minimization of appx. 3 acres of wetland impact shall be provided for the NCPC tract as depicted on the letter from PCS Phosphate dated November 3, 2008 to John Dorney of the NC Division of Water Quality.
11. South of 33 tract – The impact boundaries for the South of 33 tract shall be as outlined in an email from Mr. Tom Walker of the US Army Corps of Engineers dated August 19, 2008 (forwarded to Mr. John Dorney of the Division of Water Quality on December 13, 2008).

Monitoring

12. Groundwater monitoring – Additional written approval is required from DWQ for a final groundwater monitoring plan that supplements and complements the existing groundwater monitoring that is being conducted by PCS for various state and federal agencies. In addition to other parameters subject to groundwater standards, cadmium and fluoride shall be monitored in the final groundwater monitoring plan. This plan shall include groundwater monitoring of the protected portion of the Bonnerston Road Non-Riverine Wet Hardwood Forest as noted in condition 9 above in order to ensure that the existing hydrology of this site is maintained. This monitoring shall focus on the "58A" area of the Bonnerston Road Non-Riverine Wet Hardwood Forest to ensure that its groundwater hydrology is maintained.
13. Stream and watershed monitoring – The existing water management and stream monitoring plan for water quality, water quantity and biology (macroinvertebrates and fish) shall be continued for the life of the Permit by the applicant. Additional monitoring shall be proposed by the applicant and approved by DWQ for tributaries in the Bonnerston and South of 33 tracts before land clearing or impacts occur to those locations. This additional monitoring plan shall collect data from a representative number of streams in each tract and be designed to assure the protection of downstream water quality standards including Primary and Secondary Nursery Area functions in tributaries to South Creek, Porter Creek, Durham Creek and the Pamlico River adjacent to the mine site. Monitoring locations shall include the upper end of Porter Creek in the "58A" portion of the Bonnerston Road Non-Riverine Wet Hardwood Forest in order to ensure that hydrology of this wet hardwood forest is maintained.

The plan shall identify any deleterious effects to riparian wetland functions including by not limited to water storage, pollutant removal, streambank stabilization, as well as resident wetland-dependent aquatic life and resident wetland-dependent wildlife and aquatic life in wetlands and streams tributary to the Pamlico River in the NCPC, Bonnerston and South of 33 tracts. If necessary, management activities to protect or restore these uses will be required for all the tributaries of these three tracts.

PCS shall notify DWQ in writing at least one month in advance of any biological sampling so DWQ biologists can accompany PCS biologists as needed. Also a certified lab is required for the identification of freshwater benthic macroinvertebrate samples. For estuarine samples, a knowledgeable lab shall be used until such time as DWQ certifies laboratories for estuarine analysis and after that time, only suitably certified labs shall be used. Finally a fish monitoring plan shall be included in the final monitoring plan submitted to DWQ for written approval.

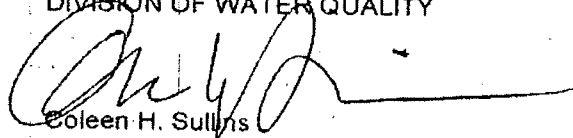
January 15, 2009

This stream and watershed monitoring plan shall be submitted to DWQ for written approval within six months of the issuance of the 404 Permit. Seven copies (two hard copies and five CD's) of the draft plan and annual reports shall be submitted to DWQ for circulation and review by the public and other federal and state agencies.

Expiration of Certification – This approval to proceed with your approved impacts or to conduct impacts to waters as depicted in your application shall expire upon expiration of the 404 Permit with the proviso that changes to this Certification may be made in accordance with condition 5 (Continuing Compliance) above.

If this Certification is unacceptable to you, you have the right to an adjudicatory hearing upon written request within sixty (60) days following receipt of this modified Certification. Since as noted above, this Certification completely replaces the one issued to you on December 6, 2008, the sixty (60) day appeal period is for all the conditions of this modified Certification. Any request for adjudicatory hearing must be in the form of a written petition conforming to Chapter 150B of the North Carolina General Statutes and filed with the Office of Administrative Hearings, 6714 Mail Service Center, Raleigh, N.C. 27699-6714. If modifications are made to an original Certification, you have the right to an adjudicatory hearing on the modifications upon written request within sixty (60) days following receipt of the Certification. Unless such demands are made, this Certification shall be final and binding.

This the 15th day of January 2009
DIVISION OF WATER QUALITY



Coleen H. Sullins

CHS/jrd



Michael F. Easley, Governor
William G. Ross Jr., Secretary
North Carolina Department of Environment and Natural Resources
Coleen H. Sullins, Director
Division of Water Quality

December 5, 2008

Mr. Ross M. Smith, Manager
Environmental Affairs
PCS Phosphate Company, Inc.
P.O. Box 48
Aurora, NC 27808

Re: PCS Phosphate Mine Expansion, Beaufort County
DWQ #2008-0868, version 2.0; USACE Action ID. No. 200110096
APPROVAL of 401 Water Quality Certification with Additional Conditions

Dear Mr. Smith:

Attached hereto is a copy of Certification No. 3771 issued to PCS Phosphate Company, Inc. of Aurora, NC, dated December 5, 2008. In addition, you must get any other federal, state or local permits before you proceed with your project including (but not limited to) Solid Waste, Sediment and Erosion Control, Stormwater, Dam Safety, Mining, Non-discharge and Water Supply Watershed regulations.

If we can be of further assistance, do not hesitate to contact us.

Sincerely,

Coleen H. Sullins

CHS/jrd

Attachments: Certificate of Completion

cc: Mr. Tom Walker, U.S. Army Corps of Engineers, Asheville Regulatory Field Office
Dave Lekson, US Army Corps of Engineers, Washington Regulatory Field Office
Scott McLendon, Wilmington District, USACE
Kyle Barnes, DWQ, Washington Regional Office
Al Hodge, DWQ, Washington Regional Office
DLR Washington Regional Office
File Copy
Matt Matthews, DWQ Wetlands and Stormwater Branch
Cyndi Karoly, DWQ
John Payne, NC Attorney General's Office, Environmental Division
Mike Schafele, NC Natural Heritage Program
Linda Pearsall, NC Natural Heritage Program

401 Oversight/Express Review Permitting Unit
1650 Mail Service Center, Raleigh, North Carolina 27699-1650
2321 Crabtree Boulevard, Suite 250, Raleigh, North Carolina 27604
Phone: 919-733-1786 / FAX 919-733-6893 / Internet: <http://h2o.enr.state.nc.us/newwetlands>

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EXHIBIT 2

Jimmie Overton, DWQ
Jeff Furness, PCS Phosphate
Stephen Rynas, NC Division of Coastal Management
Shannon Deaton, NC Wildlife Resources Commission
Derb Carter, Southern Environmental Law Center
Geoffrey Gisler, Southern Environmental Law Center
Heather Jacobs, Pamlico Tar River Foundation
Sean McKenna, NC Division of Marine Fisheries
Eric Kulz, DWQ
Tammy Hill, DWQ
Becky Fox, US Environmental Protection Agency
Tom Welborn, US Environmental Protection Agency – Region 4 Atlanta
Melba McGee, DENR
Bill Ross, DENR
Coleen Sullins, DWQ
Chuck Wakild, DWQ
Paul Rawls, DWQ
Ted Strong, Washington Daily News
Susan Massengale, DWQ
Julia Berger, CZR
George House, Brooks, Pierce, McLendon, Humphrey and Leonard, LLP
Jim Stanfill, EEP
Mary Penny Thompson, DENR
Susan Massengale, DWQ
Ann Deaton, NC Division of Marine Fisheries
John Hennessy, DWQ

Filename: 20080868v2PCSPhosphate(Beaufort) 401

NORTH CAROLINA 401 WATER QUALITY CERTIFICATION

THIS CERTIFICATION is issued in conformity with the requirements of Section 401 Public Laws 92-500 and 95-217 of the United States and subject to the North Carolina Division of Water Quality (DWQ) Regulations in 15 NCAC 2H, Section .0500 to PCS Phosphate Company, Inc. of Aurora, NC based on an application to fill 4,124 acres of jurisdictional wetlands, 29,288 linear feet of streams and 55.14 acres of stream buffers in the Pamlico River Basin, associated with the expansion of PCS Phosphate's mining operation in Beaufort County, North Carolina, pursuant to an application filed on the 22nd day of May of 2008 through the published Public Notice by the US Army Corps of Engineers, and in additional correspondence received September 5, 2008 (dated September 4, 2008) and November 3, 2008 (received November 5, 2008).

The application and supporting documentation provide adequate assurance that the proposed work will not result in a violation of applicable Water Quality Standards and discharge guidelines. Therefore, the State of North Carolina certifies that this activity will not violate the applicable portions of Sections 301, 302, 303, 306, 307 of PL 92-500 and PL 95-217 if conducted in accordance with the application, the supporting documentation, the additional correspondence noted above and conditions hereinafter set forth.

This approval is only valid for the purpose and design submitted in the application materials, additional correspondence and as described in the Public Notice. If the property is sold after the Certification is granted, the new owner must be given a copy of the Certification and approval letter and is thereby responsible for complying with all conditions of this Certification. Any new owner must notify the Division and request the Certification be issued in their name. Should wetland, buffer or stream fill be requested in the future, additional compensatory mitigation may be required as described in 15A NCAC 2H .0506 (h) (6) and (7). If any plan revisions from the approved site plan result in a change in stream, buffer or wetland impact or an increase in impervious surfaces, the DWQ shall be notified in writing and a new application for 401 Certification may be required and a modified 401 Certification may be required. For this approval to be valid, compliance with all the conditions listed below is required.

Conditions of Certification:

1. Impacts Approved

The following impacts are hereby approved as long as all of the other specific and general conditions of this Certification are met. No other impacts are approved including incidental impacts other than listed in this table. Also, please note that these impacts are those approved by DWQ and are only a portion of the impacts that were originally applied for and listed in the Public Notice.

	Amount Approved (Units)	Plan Location or Reference
Streams	18,621 feet	Final EIS, page e and June 6, 2008 submittal to DWQ
404/CAMA Wetlands	3,789 acres	Final EIS, page e and June 6, 2008 submittal to DWQ
Waters	19 acres	Final EIS, page e and June 6, 2008 submittal to DWQ
Buffers	28.14 acres	Final EIS, page e and June 6, 2008 submittal to DWQ

Sediment and Erosion Control:

2. Erosion and sediment control practices must be in full compliance with all specifications governing the proper design, installation and operation and maintenance of such Best Management Practices in order to protect surface waters standards:
 - a. The erosion and sediment control measures for the project must be designed, installed, operated, and maintained in accordance with the most recent version of the *North Carolina Sediment and Erosion Control Planning and Design Manual*.
 - b. The design, installation, operation, and maintenance of the sediment and erosion control measures must be such that they equal, or exceed, the requirements specified in the most recent version of the *North Carolina Sediment and Erosion Control Manual*. The devices shall be maintained on all construction sites, borrow sites, and waste pile (spoil) projects, including contractor-owned or leased borrow pits associated with the project.
 - c. For borrow pit sites, the erosion and sediment control measures must be designed, installed, operated, and maintained in accordance with the most recent version of the *North Carolina Surface Mining Manual*.
 - d. The reclamation measures and implementation must comply with the reclamation in accordance with the requirements of the Sedimentation Pollution Control Act or Mining Act of 1971 (as amended).
3. No waste, spoil, solids, or fill of any kind shall occur in wetlands, waters, or riparian areas beyond the footprint of the impacts depicted in the 404/401 Permit Application. All construction activities, including the design, installation, operation, and maintenance of sediment and erosion control Best Management Practices, shall be performed so that no violations of state water quality standards, statutes, or rules occur.
4. Sediment and erosion control measures shall not be placed in wetlands or waters without prior approval by the Division. If placement of sediment and erosion control devices in wetlands and waters is unavoidable, design and placement of temporary erosion control measures shall not be conducted in a manner that may result in disequilibrium of wetlands or stream beds or banks, adjacent to or upstream and down stream of the above structures. All sediment and erosion control devices shall be removed and the natural grade restored within two (2) months of the date that the Division of Land Resources or locally delegated program has released the project.

Continuing Compliance:

5. PCS Phosphate Company, Inc. shall conduct construction activities in a manner consistent with State water quality standards (including any requirements resulting from compliance with section 303(d) of the Clean Water Act), the 401 Water Quality Certification rules (15A NCAC 2H .0500) and any other appropriate requirements of State law and federal law. If the Division determines that such standards or laws are not being met (including the failure to sustain a designated or achieved use) or that State or federal law is being violated, or that further conditions are necessary to assure compliance, the Division may reevaluate and modify this Certification to include conditions appropriate to assure compliance with such standards and requirements in accordance with 15A NCAC 2H .0507(d). Before modifying the Certification, the Division shall notify PCS Phosphate Company, Inc. and the US Army Corps of Engineers,

provide public notice in accordance with 15A NCAC 2H.0503 and provide opportunity for public hearing in accordance with 15A NCAC 2H.0504. Any new or revised conditions shall be provided to PCS Phosphate Company, Inc. in writing, shall be provided to the United States Army Corps of Engineers for reference in any Permit issued pursuant to Section 404 of the Clean Water Act, and shall also become conditions of the 404 Permit for the project. This condition is intended to conform with the provisions of 15A NCAC 2H.0507 (d).

Mitigation:

6. Wetland and stream mitigation shall be done as follows and in accordance with mitigation as approved by the US Army Corps of Engineers. DWQ shall be copied on all draft mitigation plans and copied on all annual reporting on mitigation success. In addition, buffer mitigation shall be done in accordance with condition 7 below. In addition, DWQ shall be copied on a final accounting of the amount and type of proposed wetland, stream and buffer mitigation within 60 days of the issuance of the 404 Permit from the US Army Corps of Engineers. Any mitigation done outside the 8-digit HUC where PCS is located should follow the guidance for out of HUC mitigation as described in "Guidance on the Use of Compensatory Mitigation in Adjacent Cataloging Units" dated May 20, 2005 or its update by DWQ. Conservation easements or similar mechanisms to protect these mitigation sites shall be recorded on all mitigation sites to the written satisfaction of the US Army Corps of Engineers.
7. Buffer mitigation shall be conducted by PCS Phosphate at those mitigation sites with riparian buffer credit which total about 23.2 acres of buffer credit. If the Environmental Management Commission approves a flexible buffer mitigation program, then PCS Phosphate may submit a list and description of those sites to DWQ for written approval. If no additional riparian buffer mitigation sites and no flexible buffer mitigation sites are approved by DWQ, then disturbance of buffers in the NCPC, Bonnerton or South of 33 tracts shall not be done beyond the limits of the 2014 mining tract shown on PCS' Project Impact Schedule Year 2008-2016 (generally south of Drinkwater Creek) (see Attachment One). DWQ shall be copied on all buffer mitigation site plans and written approval from DWQ is required for these plans before planting or land grading occurs.
8. Porter Creek enhancement – Additional written approval is required from DWQ for a wetland enhancement and stream restoration plan as well as a monitoring plan for the stream, headwater forest and hardwood flat at the upper end of Porter Creek. This plan shall include plugging or filling the existing ditch in order to reestablish surface flow into the wetland and stream channel. DWQ acknowledges wetland functional uplift for the 3.4 acre hardwood flat that is located between the stream and existing ditch and will count 1.7 acres of functional uplift of these non-riparian wetlands in order to account for DWQ's mitigation requirement in 15A NCAC 2H.0506 (h)(6). Stream mitigation credits are also available for the restoration of flow into the existing channel with appropriate monitoring.

Additional Minimization of impact:

9. Hardwood Flat Avoidance – Impact to the 135 acre ("135 A" on Attachment Two) portion, the 58 acre ("58 A" on Attachment Two) portion and the 20 acre secondary connection between these two locations ("20 acre connect" on Attachment Two) of the Bonnerton Road Non-Riverine Wet Hardwood Forest as depicted on Exhibit A of the letter dated October 20, 2008 from George House of Brooks, Pierce, McLendon, Humphrey and Leonard, LLP to Paul Rawls of the NC Division of Water Quality shall be avoided and the area not mined or

cleared since this wetland is a "wetland of exceptional state or national ecological significance" in accordance with 15A NCAC 2H .0506(e). In order to protect the uses of this wetland, a conservation easement shall be placed on the wetland to preclude impacts including mining, logging and any other disturbance of the vegetation or soils that would result in its delisting as a state or nationally significant wetland area. This conservation easement shall be sent to DWQ within 60 days of the issuance of the 404 Permit and the Division must review and approve this easement before it is recorded. The only exception to this avoidance is that a dragline walkpath with a width of no more than 250 feet shall be allowed in order to allow equipment to travel from the northern part of the Bonnerton tract to the southern part of the Bonnerton tract. The exact location of this walkpath shall be submitted to DWQ for written approval. In addition, a revegetation plan for the walkpath shall be submitted to DWQ for written approval and revegetation shall be done with native tree species once the walkpath has been accessed and is no longer needed for equipment access.

10. Additional minimization of appx. 3 acres of wetland impact shall be provided for the NCPC tract as depicted on the letter from PCS Phosphate dated November 3, 2008 to John Dorney of the NC Division of Water Quality.
11. South of 33 tract – The boundaries for the SCR alternative shall be followed for the South of 33 tract.

Monitoring

12. Groundwater monitoring – Additional written approval is required from DWQ for a final groundwater monitoring plan that supplements and compliments the existing groundwater monitoring that is being conducted by PCS for various state and federal agencies. In addition to other parameters, cadmium and fluoride shall be monitored in the final groundwater monitoring plan. This plan shall include groundwater monitoring of the protected portion of the Bonnerton Road Non-Riverline Wet Hardwood Forest in order to ensure that the existing hydrology of this site is maintained.
13. Stream and watershed monitoring – The existing water management and stream monitoring plan for water quality, water quantity and biology (macrobenthos and fish) shall be continued for the life of the Permit by the applicant. This plan shall be designed to assure the protection of downstream water quality standards including Primary and Secondary Nursery Area functions in all tributaries to South Creek, Porter Creek, Durham Creek and the Pamlico River adjacent to the mine site. Additional monitoring shall be proposed by the applicant and approved by DWQ for tributaries in the Bonnerton and South of 33 tracts before land clearing or impacts occur to those locations.

The plan shall identify any deleterious effects to riparian wetland functions including by not limited to water storage, pollutant removal, streambank stabilization, as well as resident wetland-dependent aquatic life and resident wetland-dependent wildlife and aquatic life in streams tributary to the Pamlico River in the NCPC, Bonnerton and South of 33 tracts. If necessary, management activities to protect or restore these uses will be required for all the tributaries of these three tracts.

PCS shall notify DWQ in writing at least one month in advance of any biological sampling so DWQ biologists can accompany PCS biologists as needed. Also a certified lab is required for the identification of freshwater biological samples. For estuarine samples, a

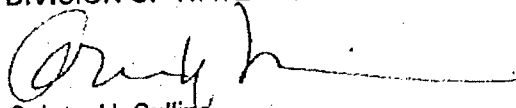
knowledgeable lab shall be used until such time as DWQ certifies laboratories for estuarine analysis and after that time, only suitably certified labs shall be used. Finally a fish monitoring plan shall be included in the final monitoring plan submitted to DWQ for written approval.

This stream and watershed monitoring plan shall be submitted to DWQ for written approval within six months of the issuance of the 404 Permit. Seven copies (two hard copies and five CD's) of the draft plan and annual reports shall be submitted to DWQ for circulation and review by the public and other federal and state agencies.

Expiration of Certification – This approval to proceed with your proposed impacts or to conduct impacts to waters as depicted in your application shall expire upon expiration of the 404 Permit with the proviso that changes to this Certification may be made in accordance with condition 5 (Continuing Compliance) above.

If this Certification is unacceptable to you, you have the right to an adjudicatory hearing upon written request within sixty (60) days following receipt of this Certification. This request must be in the form of a written petition conforming to Chapter 150B of the North Carolina General Statutes and filed with the Office of Administrative Hearings, 6714 Mail Service Center, Raleigh, N.C. 27699-6714. If modifications are made to an original Certification, you have the right to an adjudicatory hearing on the modifications upon written request within sixty (60) days following receipt of the Certification. Unless such demands are made, this Certification shall be final and binding.

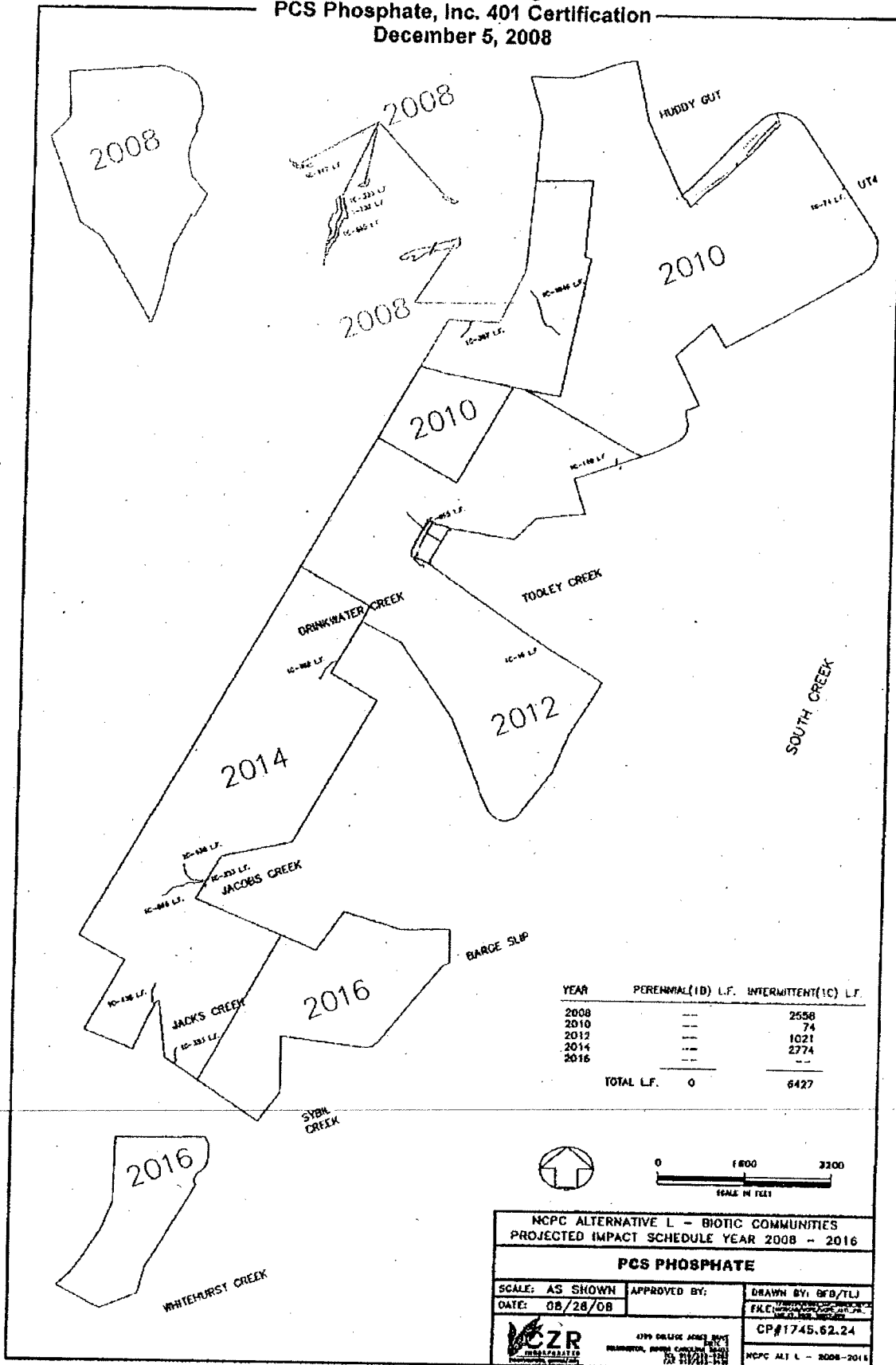
This the 5th day of December 2008
DIVISION OF WATER QUALITY



Coleen H. Sullins

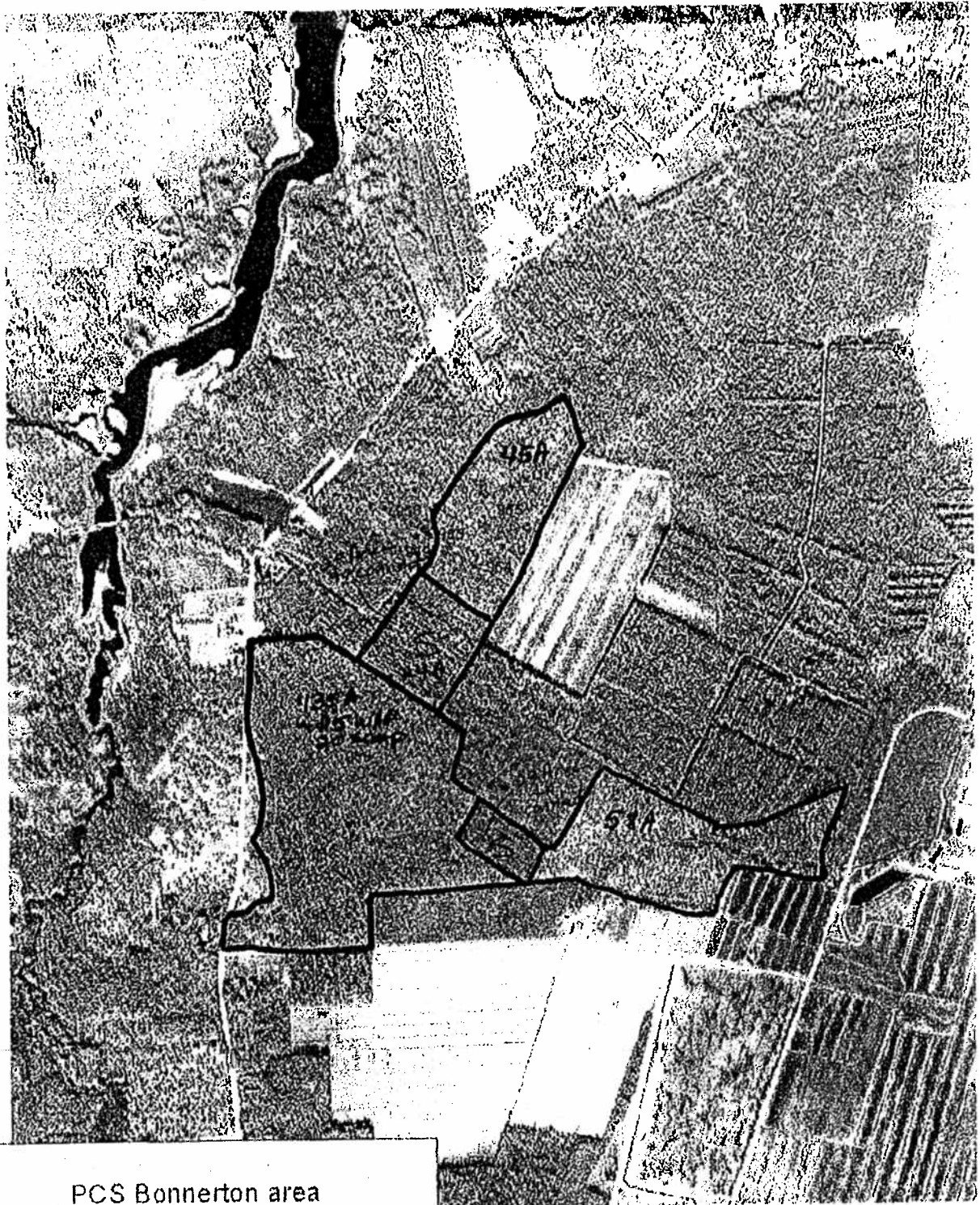
CHS/jrd

**Attachment One
Riparian Buffer Mitigation
PCS Phosphate, Inc. 401 Certification
December 5, 2008**



YEAR	PERENNIAL (10) L.F.	INTERMITTENT (IC) L.F.
2008	---	2558
2010	---	74
2012	---	1021
2014	---	2774
2016	---	---
TOTAL L.F.	0	6427

Attachment Two
Hardwood Flat Avoidance
PCS Phosphate, Inc. 401 Certification
December 5, 2008



PCS Bonnerton area

S = Secondary areas for connection
Heavy black line = SNHA (Sign. nat. heritage area)

CERTIFICATE OF SERVICE

I hereby certify that I delivered the foregoing Petition for a Contested Case Hearing, with attachments, by electronic mail and by U.S. mail, first-class postage prepaid, to the following:

Office of Administrative Hearings
6714 Mail Service Center
Raleigh, NC 27699-6714
oah.clerks@oah.nc.gov

I further certify that I served the foregoing Petition for a Contested Case Hearing, with attachments, on the following in the manner indicated:

Mary Penny Thompson.
General Counsel and Registered Agent
N.C. Department of Environment and
Natural Resources
512 North Salisbury St.
14th Floor
Raleigh, NC 27604
Via certified mail

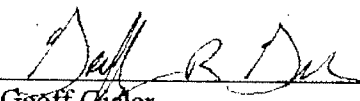
PCS Phosphate Company, Inc.
c/o Corporation Service Company,
Registered Agent
327 Hillsborough Street
Raleigh, NC 27603
Via certified mail

Ross Smith
PCS Phosphate Company, Inc.
PO Box 48
Aurora, NC 27808
Via first-class mail

George W. House
Brooks, Pierce, McLendon, Humphrey
& Leonard
2000 Renaissance Plaza
230 North Elm Street
Greensboro, NC 27401
Via first-class mail

John A. Payne
Assistant Attorney General
State of North Carolina
Dept. Of Justice
PO Box 629
Raleigh, NC 27602
Via first-class mail

This the 12th day of March, 2009.



Geoff Gisler
Southern Environmental Law Center



Tom Welborn/R4/USEPA/US

03/13/2009 05:41 AM

To "Ken Jolly" <samuel.k.jolly@usace.army.mil>, "Tom Walker" <William.t.walker@usace.army.mil>

cc Rebecca Fox/R4/USEPA/US@EPA, Jennifer Derby/R4/USEPA/US@EPA

bcc

Subject Conf call on PCS

History:

☞ This message has been replied to.

Ken, as we discussed yesterday, we are still briefing EPA management on the potential elevation of the PCS permit but would like to discuss some options and regional management have asked me to talk with you and your staff next week when you are back in the office. Tom, Ken indicated he would be out today but if you could give me some times that Ken and yourself may be available on Monday or Tuesday for a call I would appreciate hearing back as soon as possible so we can let EPA staff know. Thanks.
Sent by EPA Wireless E-Mail Services



"Heather"
<riverkeeper@ptrf.org>
03/13/2009 09:36 AM

To Rebecca Fox/R4/USEPA/US@EPA
cc
bcc

Subject RE: FW: Petition has been filed, release is pending

History: This message has been replied to.

Absolutely, it's public now.

Thanks.

Heather Jacobs Deck
Pamlico-Tar Riverkeeper
Pamlico-Tar River Foundation
Phone: (252) 946-7211
Cell: (252) 402-5644
Fax: (252) 946-9492
www.ptrf.org
Waterkeeper Alliance Member

-----Original Message-----

From: Fox.Rebecca@epamail.epa.gov [mailto:Fox.Rebecca@epamail.epa.gov]
Sent: Thursday, March 12, 2009 7:38 PM
To: Heather
Subject: Re: FW: Petition has been filed, release is pending

Can I share this with FWS and NMFS?

Becky Fox
Wetland Regulatory Section
USEPA
Phone: 828-497-3531
Email: fox.rebecca@epa.gov

"Heather"
<riverkeeper@ptrf.org>

03/12/2009 12:53 PM

To Rebecca Fox/R4/USEPA/US@EPA
cc
Subject
FW: Petition has been filed,
release is pending

FYI

Heather Jacobs Deck
Pamlico-Tar Riverkeeper
Pamlico-Tar River Foundation
Phone: (252) 946-7211
Cell: (252) 402-5644
Fax: (252) 946-9492
www.ptrf.org.
Waterkeeper Alliance Member

From: Geoff Gisler [mailto:ggisler@selcnc.org]
Sent: Thursday, March 12, 2009 12:51 PM
To: 'Heather'; 'David Emmerling'; David McNaught; 'Sam Pearsall';
toddm@nccoast.org; 'Jim Stephenson'; 'Molly Diggins'
Cc: Derb Carter; Kathleen Sullivan
Subject: Petition has been filed, release is pending

All,
The petition was just filed. I have attached a copy. The press release
will go out shortly.
Geoff

Geoff Gisler
Staff Attorney
Southern Environmental Law Center
200 W. Franklin St. Suite 330
Chapel Hill, NC 27516
Ph: (919) 967-1450
Fax: (919) 929-9421
www.southernenvironment.org

[attachment "03-12-09 - Petition for Contested Case Hearing.pdf"
deleted by Rebecca Fox/R4/USEPA/US]

>
> Becky Fox
> Wetland Regulatory Section
> USEPA
> Phone: 828-497-3531
> Email: fox.rebecca@epa.gov

--

Pace Wilber, Ph.D.
Atlantic Branch Chief, Charleston (F/SER47)
Southeast Regional Office, NOAA Fisheries
PO Box 12559
Charleston, SC 29422-2559

843-953-7200
FAX 843-953-7205
pace.wilber@noaa.gov

<http://sero.nmfs.noaa.gov/dhc/habitat.htm>



"Heather"
<riverkeeper@ptrf.org>
03/13/2009 10:51 AM

To: Rebecca Fox/R4/USEPA/US@EPA
cc
bcc
Subject: RE: FW: Petition has been filed, release is pending

History: This message has been replied to.

When I asked Geoff before, his first response was that it really does nothing-- there is no automatic stay. I've asked for him to confirm and will let you know if any different.

I guess the only thing is that if the 401 is overturned or thrown out, then any 404 that would be issued would then be invalid.

Heather Jacobs Deck
Pamlico-Tar Riverkeeper
Pamlico-Tar River Foundation
Phone: (252) 946-7211
Cell: (252) 402-5644
Fax: (252) 946-9492
www.ptrf.org
Waterkeeper Alliance Member

-----Original Message-----

From: Fox.Rebecca@epamail.epa.gov [mailto:Fox.Rebecca@epamail.epa.gov]
Sent: Friday, March 13, 2009 10:26 AM
To: Heather
Subject: RE: FW: Petition has been filed, release is pending

Thanks, that's what I thought. I sent it on. NMFS and FWS both thought it would help them with their upper mgmts. Do you know what this does to 404 process while this is being resolved???

Still no definite from our RA... b

Becky Fox
Wetland Regulatory Section
USEPA
Phone: 828-497-3531
Email: fox.rebecca@epa.gov

"Heather"

<riverkeeper@ptrf.org>

03/13/2009 09:36 AM

To
Rebecca Fox/R4/USEPA/US@EPA
cc
Subject
RE: FW: Petition has been filed,
release is pending

Absolutely, it's public now.

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Heather Jacobs Deck
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Sent: Thursday, March 12, 2009 7:38 PM
To: Heather
Subject: Re: FW: Petition has been filed, release is pending

Can I share this with FWS and NMFS?

Becky Fox
Wetland Regulatory Section
USEPA
Phone: 828-497-3531
Email: fox.rebecca@epa.gov

"Heather"
<riverkeeper@ptrf.org>

03/12/2009 12:53 PM

Rebecca Fox/R4/USEPA/US@EPA

To

cc

Subject

FW: Petition has been filed,
release is pending

FYI

Heather Jacobs Deck
Pamlico-Tar Riverkeeper
Pamlico-Tar River Foundation

Phone: (252) 946-7211
Cell: (252) 402-5644
Fax: (252) 946-9492
www.ptrf.org.
Waterkeeper Alliance Member

From: Geoff Gisler [mailto:ggisler@selcnc.org]
Sent: Thursday, March 12, 2009 12:51 PM
To: 'Heather'; 'David Emmerling'; David McNaught; 'Sam Pearsall';
toddm@nccoast.org; 'Jim Stephenson'; 'Molly Diggins'
Cc: Derb Carter; Kathleen Sullivan
Subject: Petition has been filed, release is pending

All,
The petition was just filed. I have attached a copy. The press release
will go out shortly.
Geoff

Geoff Gisler
Staff Attorney
Southern Environmental Law Center
200 W. Franklin St. Suite 330
Chapel Hill, NC 27516
Ph: (919) 967-1450
Fax: (919) 929-9421
www.southernenvironment.org

[attachment "03-12-09 - Petition for Contested Case Hearing.pdf"
deleted by Rebecca Fox/R4/USEPA/US]




"Walker, William T SAW"
<William.T.Walker@usace.army.mil>

03/13/2009 12:16 PM

To "Pace.Wilber" <Pace.Wilber@noaa.gov>, "Ron Sechler" <ron.sechler@noaa.gov>, <Pete_Benjamin@fws.gov>, <Mike_Wicker@fws.gov>, Tom
cc "Jolly, Samuel K SAW" <Samuel.K.Jolly@usace.army.mil>, "Lamson, Brooke SAW" <Brooke.Lamson@saw02.usace.army.mil>

bcc

Subject

History:  This message has been forwarded.

All,

Thanks for talking with us yesterday. I think we decided to forego our call this morning in lieu of talking by phone next Monday (3/16) and meeting in person next Friday (3/20). Ron, Pace said he would give you a call this morning to brief our discussion yesterday. As always, if you guys have any questions or need anything, please give me a call.

To sum up yesterday, I believe we decided to talk next week about overall agency concerns and potential measures that could reasonably/practicably be taken at this point to further minimize project impacts. A couple of key points discussed were:

- 1) Need for biological monitoring to ensure that avoidance efforts incorporated are successful in mitigating the long term impacts to the estuarine creek communities.
 - Need to better define targets
 - Need to look at NCDWQ requirements (attached is pertinent part of monitoring plan from last permit) and potentially build on them to provide adequate sampling, analysis and reporting protocol.
- 2) Assurance that reclamation efforts are completed and successful.
 - Vegetation monitoring
 - Sampling / monitoring of current reclamation areas
 - Techniques and management for future reclamation (i.e. capping and/or planting requirements)

I have set up a conference call in line, the number is 1-866-717-3308 and the pass code is 1227026. I have reserved the line from 1300 - 1600 Monday afternoon. I would suggest we try to get on-line at 1330. Please let me know if this works within your schedule.

thanks
Tom Walker
(910) 251-4631

State of North Carolina
Department of Environment
and Natural Resources
Division of Water Quality



James B. Hunt, Jr., Governor
Wayne McDevitt, Secretary
A. Preston Howard, Jr., P.E., Director

October 28, 1998

MEMORANDUM

To: Deborah Sawyer; DWQ Washington Regional Office
Larry Eaton; DWQ
Doug Rader; Environmental Defense Fund
Katy West; NC Division Marine Fisheries
Frank McBride; NC Wildlife Resources Commission
Jim Stephenson; Tar-Pamlico River Foundation
Steve Benton; NC Division of Coastal Management

From: John R. Dorney *JRD*
Re: Final approved Stream Monitoring Plan
PCS Phosphate mine expansion
Beaufort County
DWQ # 961120

NOV 2 1998
File 12-01-004-27
pc: WAS
WTC
SRP/00-14-000
TJR
TCY

Enclosed for your future reference is the final stream monitoring plan as required by condition #4 of Water Quality Certification No. 3092 issued to PCS Phosphate Company, Inc.

As we discussed, PCS will prepare annual reports of the data collected by this plan and send them to DWQ by March 1st of each year. These plans will then be sent to (1) the NC Science Advisory Committee, (2) several state agencies (DMF, WRC, DCM), (3) several federal agencies (COE, EPA, NMFS, and USFWS), (4) DWQ internal review and (5) private groups (EDF, PTRF) for a one month review. DWQ will then determine whether the comments warrant a meeting of all review parties of changes in the water management plan.

Thank you for your past assistance in this effort and we look forward to continue working with you in the future. Please call me at 919-733-1786 if you have any questions.

cc: Jeff Furness, PCS Phosphate
Bruce Bolick; CZR
Central Files
David Franklin; Wilmington COE
Dennis Ramsey

NCPC TRACT STREAM MONITORING PROGRAM FOR PCS PHOSPHATE COMPANY, INC.

Prepared by:

**CZR Incorporated, Wilmington, North Carolina
Dr. Wayne Skaggs, P.E.**

Prepared for:

**PCS Phosphate Company, Inc.
Aurora, North Carolina**

Prepared for review by:

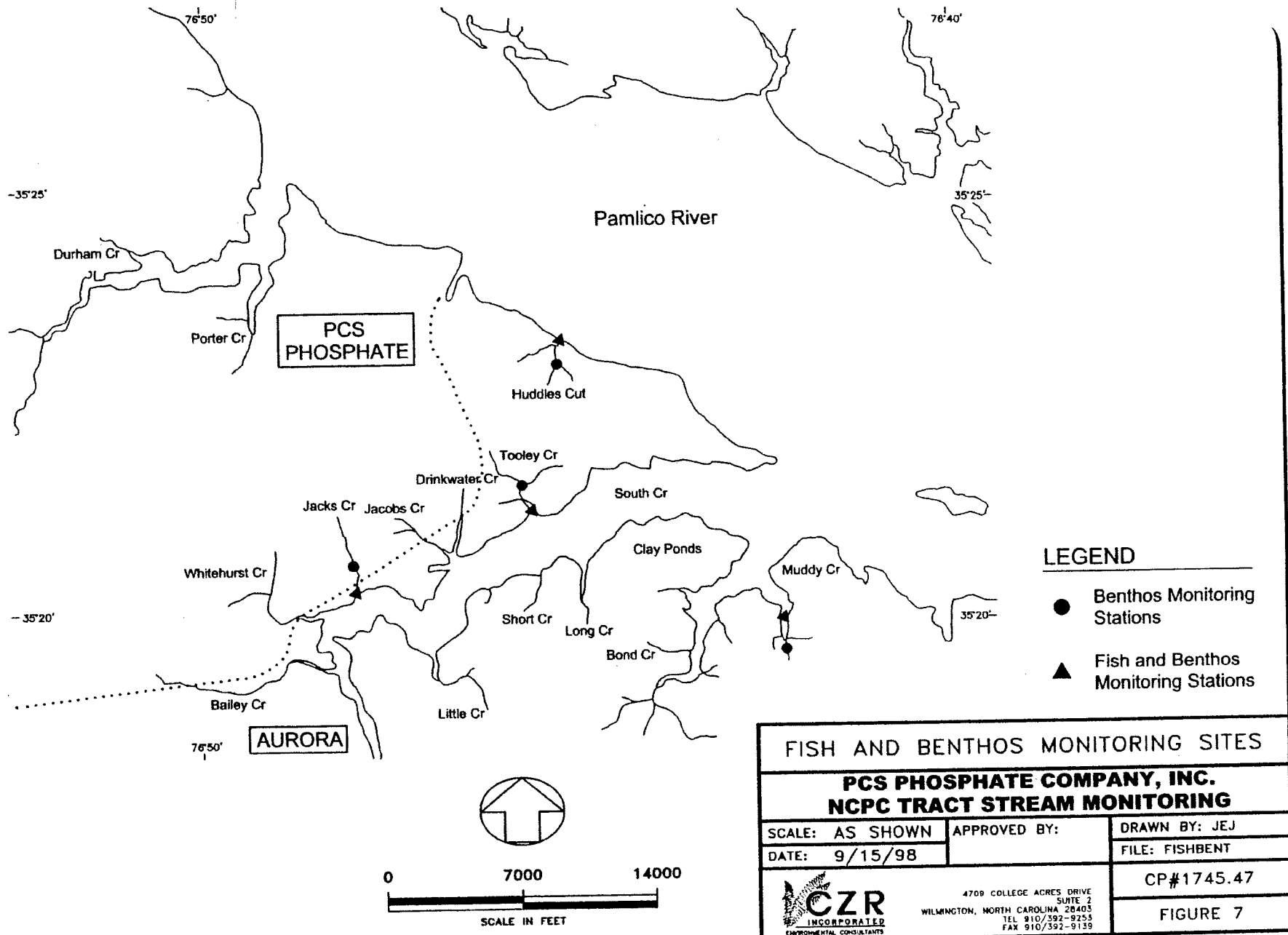
**U.S. Army Corps of Engineers
North Carolina Division of Water Quality
North Carolina Division of Land Resources**

**As revised per agency reviews
October 1998**



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- Particulate phosphorus
- Nitrogen
 - Nitrate nitrogen
 - Ammonia nitrogen
 - Particulate nitrogen
 - Dissolved Kjeldahl nitrogen

The chlorophyll a and nutrient analyses will be done under Dr. Donald W. Stanley's direction at the laboratories of East Carolina University. Dr. Stanley will assist CZR with water quality data analyses and reporting.

In addition to the water quality monitoring above, a sediment sample will be collected from near the mouths of Jacks Creek, Tooley Creek, and Huddles Cut in August of each baseline year. The samples will be analyzed for cadmium and other metals.

D. Salinity Monitoring.

Data from the salinity monitors will be downloaded every two weeks in conjunction with the downloading of data from the flow monitors. The data will be retrieved using YSI 610-DM handheld computers. Maintenance (e.g., changing batteries, cleaning probes) will be performed on the salinity monitors as needed during the data retrieval visits.

The salinity data will be displayed graphically with the flow data, estuarine water level data, and USGS stream gauge data from the Tar River. This will allow analysis of the relative influence of these factors on salinity in the creeks. This analysis will be used to make qualitative predictions of the effects of drainage basin reduction on salinity.

E. Vegetation Monitoring.

Vegetation monitoring will be conducted during August of each monitoring year. Shrubs, defined as woody plants greater than 3.2 feet in height but less than 3 inches in diameter at breast height (DBH), will be inventoried in each of the ten 4-by-4 meter plots located in the vicinity of each WL-80 in the riparian wetlands. For each species, the number of stems present will be counted and percent cover will be estimated. Herbs, defined as all herbaceous vascular plants regardless of height and woody plants less than 3.2 feet in height, will be inventoried in each of the 1-square meter plots nested within the 4-by-4 meter plots. For each species, the number of stems present will be counted and percent cover will be estimated. Qualitative descriptions of the overstory will be made in the vicinity of each WL-80. For shrubs and herbs, the cover data, density data, and importance values calculated will be used to assess changes in vegetation structure and composition over time.

F. Fish and Benthos Monitoring.

Because of the timing of the beginning of the study, fish trawl sampling on Jacks Creek, Tooley Creek, and a control creek (Muddy Creek) was limited to May and June in 1998. In other monitoring years, fish trawl sampling will be conducted weekly on Jacks Creek, Tooley Creek, and Muddy Creek during the months of April, May, and June.

Each fish trawl sample will be conducted with a two-seam 10.5-foot otter trawl. The trawl is constructed with a 10.5-foot headrope, and 1/4-inch bar mesh wings and body, and an 1/8-inch bar mesh cod end. The trawl will be towed at 3.6 feet/second for a distance of 75 yards. Trawling will be conducted during daylight hours with a tow direction toward the creek mouth. This trawl and technique is the same design and methodology used by the DMF. Data will be reported in catch-per-unit-effort (CPUE) as number per minute trawl.

Because Huddles Cut is too shallow and narrow for trawling, an alternative methodology must be used there. A fyke net will be set at the station in Huddles Cut for one night per week during April, May, and June of each monitoring year, beginning in 1999. Data will be reported in CPUE as number per trap-night.

Submerged aquatic vegetation (SAV) provides habitat for fish and can reduce the capture efficiency of the trawl. Therefore, the species of SAV present and the approximate percent coverage of SAV at the surface of the water will be noted during each fish sampling visit.

Benthos will be collected at each station in May of each sampling year. Five replicate samples will be collected at each station with a standard ponar grab. Collected sediments will be placed in one-gallon plastic bags, and a full bag will constitute a replicate. Samples will be placed in coolers and transported to the laboratory to be sieved through a 0.5 mm mesh screen. All organisms retained on the screen will be preserved for sorting, enumeration, and identification (to the species level when practical).

In addition to the mid-stream benthic sampling using the ponar, the shoreline and near-shore habitats will be sampled using DWQ's estuarine sweep sample method. The timed sweep samples will consist of 10-minute collections with a D-frame net in representative shoreline and near-shore habitats near each of the grab sampling stations. Three replicate collections will be taken at each sample station. Organisms obtained will be preserved and returned to the laboratory for sorting, enumeration, and identification. One full replicate sample will be enumerated for each sampling station. A 25 percent subsample of the other two replicates will be enumerated to check for any major variation in benthic fauna among replicates. The data will be used to classify the sites according to DWQ's estuarine biocriteria. The biocriteria produce a rating of a site based on three indices produced by the sweep sample: Estuarine Biotic Index, Amphipoda and Caridian shrimp taxa, and total taxa. The estuarine biocriteria rating will be used to track changes in benthic macroinvertebrate diversity and abundance.

G. Photo Documentation of Monitoring Sites and Conditions.

During the vegetation sampling, two photographs will be taken at each WL-80 location in the riparian wetlands. Each photograph will feature a 10-foot range pole located at a fixed distance from the camera. The camera will be situated at the WL-80 location, and a picture will be taken facing upstream and downstream. Camera and range pole locations will remain constant throughout the duration of the monitoring program. The photographs will be included in the annual report, and will be used to provide visual documentation of changes over time.

During the fish and benthos sampling, a representative photograph will be taken of each sample station. The photograph locations will remain constant throughout the duration of the monitoring program. The photographs will be included in the annual report, and will be used to provide visual documentation of changes over time.

H. Soil Property Measurements.

Measurements of the soil properties, the soil water characteristics, and the saturated hydraulic conductivity in each of the three study drainages will be done by Skaggs in 1998. These data will be used in the hydrologic modeling of the three drainage areas. Measurements will be made at an estimated 12 locations (with three depths and three replications at each location). Hydraulic conductivity tests will be conducted at 75 to 100 locations. Soil property, site parameter, and vegetation data will be assembled into data sets for modeling the hydrology of the watersheds. Preliminary model simulations will be conducted in 1998 to make sure that all needed data are being collected.



"Heather"
<riverkeeper@ptrf.org>
03/13/2009 12:19 PM

To Rebecca Fox/R4/USEPA/US@EPA
cc
bcc

Subject RE: FW: Petition has been filed, release is pending

From Geoff:

No. There are timelines along the way for different actions (filing papers, decision of ALJ, etc), but no timeline that says the contested case has to be resolved in x days.

Heather Jacobs Deck
Pamlico-Tar Riverkeeper
Pamlico-Tar River Foundation
Phone: (252) 946-7211
Cell: (252) 402-5644
Fax: (252) 946-9492
www.ptrf.org
Waterkeeper Alliance Member

-----Original Message-----

From: Fox.Rebecca@epamail.epa.gov [mailto:Fox.Rebecca@epamail.epa.gov]
Sent: Friday, March 13, 2009 11:58 AM
To: Heather
Subject: RE: FW: Petition has been filed, release is pending

Is there a timeline specified in DWQ regs for resolution of the petition?

Becky Fox
Wetland Regulatory Section
USEPA
Phone: 828-497-3531
Email: fox.rebecca@epa.gov

"Heather"
<riverkeeper@ptrf.org>

03/13/2009 10:51 AM

Rebecca Fox/R4/USEPA/US@EPA

To
cc

Subject
RE: FW: Petition has been filed,
release is pending

When I asked Geoff before, his first response was that it really does nothing-- there is no automatic stay. I've asked for him to confirm and will let you know if any different.

I guess the only thing is that if the 401 is overturned or thrown out, then any 404 that would be issued would then be invalid.

Heather Jacobs Deck
Pamlico-Tar Riverkeeper
Pamlico-Tar River Foundation
Phone: (252) 946-7211
Cell: (252) 402-5644
Fax: (252) 946-9492
www.ptrf.org
Waterkeeper Alliance Member

-----Original Message-----

From: Fox.Rebecca@epamail.epa.gov [mailto:Fox.Rebecca@epamail.epa.gov]
Sent: Friday, March 13, 2009 10:26 AM
To: Heather
Subject: RE: FW: Petition has been filed, release is pending

Thanks, that's what I thought. I sent it on. NMFS and FWS both thought it would help them with their upper mgmts. Do you know what this does to 404 process while this is being resolved???

Still no definite from our RA... b

Becky Fox
Wetland Regulatory Section
USEPA
Phone: 828-497-3531
Email: fox.rebecca@epa.gov

"Heather"
<riverkeeper@ptrf.org>

03/13/2009 09:36 AM

Rebecca Fox/R4/USEPA/US@EPA

To

cc

Subject

RE: FW: Petition has been filed,
release is pending

Absolutely, it's public now.

Thanks.

Heather Jacobs Deck
Pamlico-Tar Riverkeeper
Pamlico-Tar River Foundation
Phone: (252) 946-7211
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Fax: (252) 946-9492
www.ptrf.org
Waterkeeper Alliance Member

-----Original Message-----

From: Fox.Rebecca@epamail.epa.gov [mailto:Fox.Rebecca@epamail.epa.gov]
Sent: Thursday, March 12, 2009 7:38 PM
To: Heather
Subject: Re: FW: Petition has been filed, release is pending

Can I share this with FWS and NMFS?

Becky Fox
Wetland Regulatory Section
USEPA
Phone: 828-497-3531
Email: fox.rebecca@epa.gov

"Heather"
<riverkeeper@ptrf.org>

03/12/2009 12:53 PM

Rebecca Fox/R4/USEPA/US@EPA

To

cc

Subject
FW: Petition has been filed,
release is pending

FYI

Heather Jacobs Deck
Pamlico-Tar Riverkeeper
Pamlico-Tar River Foundation
Phone: (252) 946-7211
Cell: (252) 402-5644
Fax: (252) 946-9492
www.ptrf.org
Waterkeeper Alliance Member

From: Geoff Gisler [mailto:ggisler@selcnc.org]
Sent: Thursday, March 12, 2009 12:51 PM
To: 'Heather'; 'David Emmerling'; David McNaught; 'Sam Pearsall';
toddm@ccoast.org; 'Jim Stephenson'; 'Molly Diggins'
Cc: Derb Carter; Kathleen Sullivan
Subject: Petition has been filed, release is pending

All,
The petition was just filed. I have attached a copy. The press release
will go out shortly.
Geoff

Geoff Gisler
Staff Attorney
Southern Environmental Law Center
200 W. Franklin St. Suite 330
Chapel Hill, NC 27516
Ph: (919) 967-1450
Fax: (919) 929-9421
www.southernenvironment.org

[attachment "03-12-09 - Petition for Contested Case Hearing.pdf"
deleted by Rebecca Fox/R4/USEPA/US]

 Chris Hoberg /R4/USEPA/US

03/13/2009 12:52 PM

To Tressa Turner/R4/USEPA/US@EPA



cc Scott Gordon/R4/USEPA/US@EPA, Tom
Welborn/R4/USEPA/US@EPA, Rebecca
Fox/R4/USEPA/US@EPA, Duncan

bcc

Subject Fw: Memo - Request for Higher Level Review of Wilmington
District Permit

Tressa - Attached is a pdf copy of our NEPA letter on the FEIS. I am also enclosing an internal project summary sheet. THX

Chris..... for Heinz

 
COE-PCS.Final.FEIS.pdf COE-PCS.FEIS.Sum.doc

Christian M. Hoberg
Life Scientist
EPA Region 4
NEPA Program Office
Office of Policy and Management
Atlanta, Georgia 30303-8909
404/562-9619
hoberg.chris@epa.gov

----- Forwarded by Chris Hoberg/R4/USEPA/US on 03/13/2009 12:46 PM -----

Heinz Mueller /R4/USEPA/US

03/13/2009 12:44 PM


To Chris Hoberg/R4/USEPA/US@EPA

cc

Subject Fw: Memo - Request for Higher Level Review of Wilmington
District Permit

----- Forwarded by Heinz Mueller/R4/USEPA/US on 03/13/2009 12:44 PM -----

Tressa Turner /R4/USEPA/US

 03/13/2009 11:47 AM

To Rebecca Fox/R4/USEPA/US@EPA, Heinz
Mueller/R4/USEPA/US@EPA

cc Tom Welborn/R4/USEPA/US@EPA, Duncan
Powell/R4/USEPA/US@EPA, Scott
Gordon/R4/USEPA/US@EPA

Subject Memo - Request for Higher Level Review of Wilmington
District Permit
Permit AID 200110096, Potash Corporation of
Saskatchewan,
Phosphate Division, Aurora Operation Mine Continuation

Becky/Heinz,

Scott Gordon is requesting a copy of the July 23, 2008, letter that was sent to Colonel Ryscavage regarding this project's FEIS, which was reference in the memo sent down to the front office yesterday. I have not been able to locate a copy of the letter here in our reading files or a electronic copy under Becky's files under the PCS folder. Who generated the letter? Tom stated that it was possibly generated in Heniz's group. I have also telephones messages for the both of you just in case you do not have access to your emails. Please let me know where I can obtain a copy so that I can take it down to Scott who is waiting on the letter.

Thanks,

Tressa Turner

U.S. Environmental Protection Agency, Region 4

Wetlands Regulatory Section

61 Forsyth Street, SW

Atlanta, GA 30303

Telephone: 404-562-9366

Fax: 404-562-9343



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 4
ATLANTA FEDERAL CENTER
61 FORSYTH STREET
ATLANTA, GEORGIA 30303-8960

July 23, 2008

Colonel Jefferson Ryscavage
District Engineer
U.S. Army Corps of Engineers
Wilmington District
P.O. Box 1890
Wilmington, NC 28402-1890

Attn: Tom Walker
Project Manager
File Number 2001-10096

Subject: COE Regulatory Final Environmental Impact Statement (FEIS) for
"PCS Phosphate Mine Continuation"; Aurora, Beaufort County, NC;
CEQ# 20080213; ERP# COE-E67005-NC

Dear Colonel Ryscavage:

Pursuant to Section 102(2)(C) of the National Environmental Policy Act (NEPA) and Section 309 of the Clean Air Act, EPA Region 4 has reviewed the above-referenced U.S. Army Corps of Engineers (COE) regulatory Final Environmental Impact Statement (FEIS). This FEIS evaluates the environmental consequences of the Applicant's (Potash Corporation of Saskatchewan Phosphate Division: PCS) proposed expansion of its phosphate mining operations adjacent to the Pamlico River, South Creek and associated tributaries, north of Aurora in Beaufort County, North Carolina.

EPA has previously provided NEPA comment letters on the Draft EIS (DEIS) and its Draft Supplement (DSEIS). Our December 28, 2007, DSEIS letter continued to describe our environmental objections to this mine continuation project, as proposed. Similarly, from a Clean Water Act (CWA) section 404 permitting standpoint, the EPA Region 4 Wetlands Regulatory Section also objected to this proposal pursuant to CWA Section 404(q), Part IV, paragraphs 3(a) and 3(b), in letters dated February 9 and March 6, 2007, respectively. The Wetlands Regulatory Section also provided pre-FEIS comments in a April 30, 2008, letter regarding the significant natural heritage area on the Bonnerton tract, the scope of the section 404 silviculture exemption, and the economic evaluation/Least Environmentally Damaging Practicable Alternative (LEDPA) determination. We offer the following comments on our current review of the FEIS.

Background

In November 2000, PCS submitted to the COE Wilmington District an application for the mine continuation project in the Aurora area. PCS modified the original permit application in response to public notice comments to further reduce impacts to federal waters of the U.S. This modified application was the subject of the COE's regulatory DEIS (10/2006), which described the No Action Alternative and nine action alternatives. PCS's application evaluated in the DEIS was for mining of the NCPC tract involving 2,408 acres of mining impacts to waters of the U.S. (*i.e.*, Applicant Preferred or AP alternative). Among the alternatives, the DEIS included three basic tracts (NCPC, S33 and Bonnerton tracts) with varying impacts to waters of the U.S. as holistic mining plans, including the Applicant's expanded AP alternative (EAP) with 5,667 acres of mining impacts to waters of the U.S. The public review of the DEIS and further discussions with the Applicant concerning economic practicability lead to the development of the DSEIS (11/2007), which introduced new Alternatives L and M. Alternative L follows the SCR boundary (see section 2.4.1.2) on the NCPC tract and defines a new boundary on the Bonnerton and S33 tracts. Alternative M was developed by the Applicant and consists of a boundary with three more years of mining on the NCPC tract than the L alternative and is identical to the L alternative on the Bonnerton and S33 tracts. In an April 25, 2008, letter, the Applicant requested its application be modified to request a permit for Alternative L.

Impacts & Alternatives

EPA's primary concerns with the proposed continuation of phosphate mining at Aurora are the associated wetland and stream impacts to watersheds supporting the Albemarle Pamlico Estuary system over an extended timeframe, together with the cumulative impacts of ongoing mining. EPA understands the rationale behind the development of the new Alternatives L and M through the NEPA process, but has concerns over the level of impacts to waters of the U.S. associated with these alternatives.

EPA appreciates that several alternatives were considered by the Applicant and COE during the NEPA process and documented in the EIS. In the FEIS, these alternatives were the AP, EAP, SJA, SCR, DL1, S33AP, L and M alternatives. Of these, EPA has identified the S33AP Alternative, which the COE has determined to not be practical (see below), as the NEPA "environmentally preferable alternative," because it substantially reduces the wetland impacts for the proposed mining continuation. Although the acreage of impacted wetlands for S33AP is not insignificant (1,123 acres: ac), this action alternative impacts the fewest wetland acres. We believe that impacts to wetlands north of NC33 will have a potentially greater impact to the watersheds supporting the nationally significant Albemarle Pamlico Estuary system. Moreover, based on EPA's economic evaluation of practicability, we also find that S33AP is economically practicable (see *Economic Considerations* section and *Detailed Comments* enclosure of this letter). We also note that S33AP would nevertheless impact a high number of stream sections (33,486 linear feet: lf). Any implementation of S33AP should further avoid and minimize stream and wetland impacts.

The FEIS (5/2008) provided additional information on Alternatives L and M. The FEIS lists Alternatives SCRA¹, SCRB, SJAB, DL1B, S33AP and the No Action alternative as not being practicable, while finding that Alternatives AP, EAPA, EAPB, SJAA, L and M were practicable. The COE indicates that of the alternatives identified as practicable, the L alternative is the most restrictive and therefore avoids the most aquatic resources. Alternative L would impact approximately 4,135 acres of waters of the U.S. over a 37-year mining span. The 11 community types within the impacted waters of the U.S. include pocosin-bay forests (264 ac), bottomland hardwood forests (73 ac), hardwood forests (1,075 ac) as well as 29,288 linear feet of perennial and intermittent streams. These community types are located within an approximate 11,909-acre mine advance distributed throughout the project area. Impacts of Alternative M include 4,592 acres of waters of the U.S. and 36,990 linear feet of streams over a 41-year mining span.

The COE does not identify a NEPA “preferred alternative” or a LEDPA in the FEIS. However, Alternative L was considered the Applicant’s “Proposed Action” in the COE’s FEIS and Public Notice (pg. e). PCS’s previous mining application was for the AP (NCPC tract only).

“Modified Alternative L”

While we believe that S33AP is the “environmentally preferable alternative”, EPA prefers Alternative L (of the alternatives determined to be practicable by the COE in the FEIS) from a NEPA perspective since it avoids valuable wetland habitat, mainly on the NCPC tract. The COE’s economic analysis indicates Alternative L is the alternative which would allow the least environmental impacts and still be economically practicable (pg. 2-32). EPA agrees that Alternative L is economically practicable (see *Detailed Comments*); however, we also believe that it could be improved environmentally through further avoidance of waters of the U.S.

Nevertheless, we acknowledge that Alternative L does avoid a large portion of the important tidal creeks and some of their associated watersheds on the NCPC tract and an approximate 58-acre area of biocommunity type 7 (“wetland hardwood forest”) on the Bonnerton tract, as shown on Figure 4-7b (Vol. I). This is the eastern portion of an approximate 271-acre plot within the Bonnerton base tract that has been designated as a “nationally significant” Significant Natural Heritage Area (SNHA) by the North Carolina Natural Heritage Program (NHP).

While we appreciate the Applicant’s avoidance of this eastern portion of the SNHA, EPA strongly believes that the entire SNHA tract should be avoided. Therefore, in order for Alternative L to be improved environmentally, we recommend that Alternative L be further modified to also exclude the remaining approximate 213-acre component of the SNHA tract from the proposed mining. For convenience of reference, we have designated this modified alternative as “Modified Alternative L”. Overall, EPA considers “Modified Alternative L” to be an economically practicable and

¹ The ‘A’ and ‘B’ portions of ‘SCRA’ and ‘SCRB’ indicate a sequencing for the SCR Alternative. Other sequenced alternatives were also labeled this way.

environmentally reasonable alternative that is more environmentally preferable than Alternative L.

In addition to the exclusion of the remaining 213-acre portion of the SNHA from mining, EPA also recommends that "Modified Alternative L" follow the original SCR boundary on the S33 tract rather than the proposed Alternative L boundary (this would approximately reduce wetland impacts by an additional 38 acres and stream impacts by 10,167 lf). Since we understand that the main purpose for developing the L alternative was to allow 15 years of mining north of NC33, it remains unclear why the SCR avoidance boundary on the S33 tract was decreased for Alternative L. We find no information in the FEIS which would indicate the COE has determined that the use of the original SCR boundary in the S33 tract would fail to make Alternative L economically practicable. In addition, the COE's response to the EPA comment on this issue in our DSEIS letter (Response R6, Appendix J) did not clarify our understanding of the need for this mining expansion on S33.

Avoidance, Minimization & Mitigation

Even with the exclusion of the SNHA from Alternative L and a return to the SCR boundary on the S33 tract, it is nevertheless clear that significant impacts to wetlands (3,864 ac) and streams (19,121 lf) would still occur by mining the Alternative L area over an extended period of time. Therefore, for any implementation of "Modified Alternative L" to be successful, we strongly believe the following actions would need to occur: 1) the ongoing process of minimization and avoidance of waters of the U.S. and the implementation of acceptable mitigation and reclamation of mined areas would continue to be applied to the remaining acreage; 2) the Wilmington District would continue its commitment to oversight of the reclamation process in a timely manner; and 3) strict compliance with mining Best Management Practices (BMPs) would be used during the permitted mining. In addition, for the excluded SNHA, the permitted mining in the surrounding areas must also not be allowed to indirectly affect the SNHA. Such indirect impacts could include disruption of its hydrology, the routing of mining stormwater runoff into the SNHA area, and degradation of the SNHA connecting areas such that they are no longer providing the connectivity function. To ensure success, the COE should provide a commitment to continue successful implementation of the avoidance, minimization and mitigation processes required under section 404(b)(1) in its prospective Record of Decision (ROD) for this EIS.

Because the SNHA would be wholly excluded from mining under "Modified Alternative L," silvicultural practices should not occur in this area until a final project decision is made. Logging on the SNHA site should be avoided since timbering degrades the SNHA's wetland value and national significance. We provided additional comments on the related section 404 silviculture exemption in the *Detailed Comments* and in EPA's April 30, 2008 letter.

If the S33 tract is mined under the S33AP Alternative or as part of the "Modified Alternative L", EPA recommends the completion of a detailed mitigation plan for impacts to the S33 tract well in advance of any plans to mine this area. The potential economic reopener clause may be an appropriate means to address this issue, if this tract were to be mined under "Modified Alternative L". EPA also recommends that the reopener clause, or other suitable measures, remain an option for future adaptive management needs. We also believe compensation for impacts to mature, high quality wetlands would require greater than the 2:1 mitigation ratio specified in the current mitigation plan. We understand the overall stream mitigation ratio of 1.8:1 is based on the 2003 Stream Mitigation Guidelines ratio determination methodology utilizing stream quality ratings of "poor," "good," and "excellent". We support the use of this methodology to determine appropriate stream compensation, but recommend the stream quality ratings be confirmed by the COE.

Significance of the SNHA Resource

The need to preserve the entire SNHA tract is based on the NHP designation (*i.e.*, nationally significant SNHA), the community types represented, and the contiguous nature of the SNHA. The NHP rates SNHAs by significance as national, state, regional and county. The "nationally significant" rating of the Bonneron nonriverine wetland hardwood forest SNHA means the NHP considers this area to one of the five best examples of this community type in the nation. The size and maturity of this area are critical to the NHP rating.

Valuable biocommunity types are represented in the nationally significant SNHA. In addition to the eastern portion (58 ac) of the SNHA (within Porter Creek headwaters) already excluded from mining by Alternative L, the remaining 213 acres primarily consist of a western portion (135 ac) and a northwestern portion (45 ac). There are also two secondary connecting sections (totaling approximately 33 ac) for continuity of the wetland hardwood forest community. Of these, the most mature plots are the eastern portion within the Porter Creek headwaters and the western portion across from the Porter Creek area, which both have stands of mature (75-100 years old) "wetland hardwood forest" (biocommunity type 7). The two secondary areas of different biocommunity types serve to connect the main areas. Biocommunity type 5 ("wetland scrub-shrub") is found in the secondary area between Porter Creek and the western area and the biocommunity type 6 ("wetland pine plantation") is found in the portion between the western and northwestern areas. The northwestern area also contains biocommunity type 7, and was added to the SNHA after the recent NHP site visit. Although this area is not as mature as the other areas, the NHP concluded it should be added to the SNHA due to the rarity of the community type. The NHP considers this area to also be highly significant and to have good recovery potential over time. (We also note that if the biocommunity type 8 area ("wetland mixed pine-hardwood forest") located west of the northwestern portion of the SNHA was not mined due to logistical mining restrictions, it would provide an excellent opportunity for mitigation enhancement/rehabilitation, as recommended by the NHP.)

Beyond the functional significance of these biocommunities in terms of water quality and habitat value, the contiguous nature of the SNHA enhances its value. While not all of the SNHA acreage consists of wetland hardwood forested wetlands (e.g., the western portion includes 20 acres of Suffolk scarp and the two secondary connection areas include biocommunity types 5 and 6), the interconnection of the three primary plots by the secondary areas makes the SNHA a functional unit of sufficient size to be sustainable. As a contiguous unit, this refuge "island" surrounded by permitted mining impacts, would allow for wildlife movement, foraging, and reproduction. In order to ensure this continuity, we recommend that the two secondary connection areas be maintained (if used as temporary crossing sites for mining equipment) so as to allow them to retain their connectivity functions for the wetland hardwood forest areas. The mast-producing stands of this "island" could also serve as a future seed source for the surrounding areas during post-mining reclamation. We commend the Applicant for its appreciation of the importance of SNHAs as supported by the statements in its mitigation plan encouraging preservation that will protect or extend SNHA(s) along the South Creek corridor.

Economic Considerations

We appreciate the COE's considerable efforts to evaluate the economic practicability component of the LEDPA requirement. However, we continue to have concerns with some aspects of the approach discussed in Section 2.7 of the FEIS. As we have stated on numerous occasions, the decision by the COE to incorporate the Applicant's position on how to average the cost of the mine relocation to a new tract, has made it very difficult to avoid some of the important project wetland areas in the LEDPA process. We acknowledge that the avoidance of an additional 213 acres on the Bonnerton tract under the "Modified L Alternative" would reduce the Applicant's mining north of NC33 to less than 15 years. However, our review of the dragline plan layout map for Alternative L (Vol. II, App. D) indicates this would only reduce part of years 11 and 12 for a likely overall reduction of approximately one year of mining. We understand this would not satisfy the COE's LEDPA requirement of 15 years north of NC33, but we believe such a reduction would not be an unreasonable alternative modification – especially considering the remaining concerns we have over the economic evaluation approach used to determine the LEDPA (see below). With the adjustments in mining on Bonnerton and S33 incorporated in "Modified Alternative L," the overall timeframe for mining would likely still exceed 35 years (instead of 37 years for Alternative L).

EPA's review of the FEIS included our National Center for Environmental Economics (NCEE) in Washington, DC. NCEE and other EPA staff have been involved extensively in economic practicability discussions with the COE, including the most recent meeting (1/30/08) with the COE and the Pamlico Tar River Foundation and its economist, to further discuss PCS economic practicability issues. In general, EPA does not believe considering costs in isolation, i.e., without considering revenues, is a useful means to evaluate the economic practicability of the project alternatives. Comparing costs to revenues does not consider an applicant's financial standing or market share any

more than looking only at costs. As is pointed out numerous times in the FEIS, phosphate prices are determined by the global and national market (and not influenced by the Applicant's production levels). Comparing estimated costs (which the Applicant can control) to expected market prices (which the firm does not control) simply adds context to the cost numbers and allows for better decision making.

An appropriate method to evaluate practicability is by calculating the annual discounted net present value (NPV) of the stream of costs and revenues over the lifespan of each alternative. The NPV analysis is theoretically and empirically sound and EPA is legally required to use such analysis when evaluating all new regulations. Using the discounted NPV, projects of different lengths can be compared on equal terms. EPA (NCEE) has prepared an NPV table using OMB mandated discounted rates of 3 percent and 7 percent comparing the project alternatives. This summary table, with additional discussion on the economic practicability of the alternatives, is included in EPA's comments on the COE's responses to our DEIS comment letter provided in the enclosed *Detailed Comments*. We are available to discuss information concerning this summary table and how it was prepared.

Based on these calculations and as shown in our summary table, EPA believes that more alternatives appear to be practicable than those determined by the COE (*i.e.*, the COE believes that Alternatives AP, EAPA, EAPB, SJAA, L and M are practicable), including SCRA and SCRB, S33AP, SJAB and DL1. In fact, we find that all alternatives considered in the FEIS, except the No Action Alternative (*i.e.*, all the action alternatives), are economically practicable. Based on this analysis, the "Modified Alternative L" would also be an economically practicable alternative, despite its slightly shorter mining term. Since "Modified Alternative L" allows more mining than the SCR alternative (but less than the original Alternative L), we strongly believe that "Modified Alternative L" will be economically practicable and will have a positive NPV greater than the SCRA and SCRB Alternatives, but slightly less than the original Alternative L. With detailed cost and annual production estimates, it would be relatively straightforward to calculate a more precise value.

Other Comments

In addition to these primary concerns, EPA has also reviewed the COE's responses in the FEIS to our EPA NEPA letter on the DEIS (pg. J-111.A.1) and DSEIS (pg. J-111.B.1), as well as the EPA Wetlands Regulatory Section's letter pursuant to CWA Section 404(q), Part IV, paragraph 3(a) (pg. J-111.A.2) and the EPA Regional Administrator's letter pursuant to CWA Section 404(q), Part IV, paragraph 3(b) (pg. J-111.A.3). Copies of these letters and the COE's responses to comments are found in Appendix J of Volume IV. Our follow-up comments on selected responses, as well as other project topics, are provided in the enclosed *Detailed Comments*.

Summary

EPA finds that the proposed continuation of PCS mining at Aurora would have significant and long-term, direct and cumulative impacts to biocommunities in various waters of the U.S. which support the nationally significant Albemarle Pamlico Estuary System. Accordingly, we continue to have environmental objections to this project, as proposed, under Alternative L (Applicant's Proposed Action). However, we believe that S33AP is the NEPA "environmentally preferable alternative" and that Alternative L could be improved environmentally as "Modified Alternative L". EPA finds both to be economically practicable and, from an industry standpoint, both would allow the continuance of phosphate mining at Aurora for many years.

"Modified Alternative L" would avoid not only the eastern portion (58 ac) of the SNHA (Alternative L) but would also avoid the remaining acreage (approximately 213 ac) of the entire SNHA tract (approximately 271 ac). This alternative would also use the original SCR boundary for S33, as opposed to the additional wetland (38 ac) and stream (10,167 lf) impacts to this area proposed in Alternative L. EPA believes the SNHA to be an aquatic resource of national importance. The NHP-designated "nationally significant" SNHA includes nonriverine wetland hardwood forest and other functional community types and, if excluded from mining, would continue to be a contiguous and sustainable refuge "island" of one of the most threatened of North Carolina's natural communities. EPA considers "Modified Alternative L" to be an economically practicable and environmentally reasonable alternative that is more environmentally preferable than new Alternative L. However, for any implementation of "Modified Alternative L" to be successful, it should be understood that the ongoing processes, such as avoidance and minimization of impacts to waters of the U.S., implementation of acceptable mitigation and reclamation, and use of mining BMPs would need to continue for the permitted mining. The COE should commit to such process continuance with appropriate monitoring in its ROD.

Overall, EPA believes that our remaining project issues with the proposed mining continuation at Aurora can be successfully resolved within the brackets of these comments and the S33 and "Modified Alternative L" alternatives. We stand ready to further discuss these comments and alternatives. However, if our remaining issues are not adequately resolved, EPA reserves the right to take further action on this project in accordance with its authority under Section 404 of the CWA.

Thank you for the opportunity to comment on the FEIS. If we can be of further assistance, please do not hesitate to contact me at (404) 562-9611 or mueller.heinz@epa.gov. We request a copy of the COE's prospective ROD for our files. For technical questions on wetlands and economics, please contact Becky Fox at (828) 497-3531 or fox.rebecca@epa.gov.

Sincerely,

A handwritten signature in black ink, appearing to read "Heinz Mueller", followed by a horizontal line.

Heinz J. Mueller, Chief
NEPA Program Office
Office of Policy and Management

Enclosure: *Detailed Comments*

DETAILED COMMENTS

EPA offers the following comments on selected COE responses to our NEPA, Wetlands Regulatory Section and Regional Administrator letters on the proposed PCS mine continuation project. Additional comments on other topics are also provided.

COE RESPONSE TO COMMENTS

I. EPA NEPA Letter on DEIS – 2/9/07

*** R3 (Alternative AP and L Impacts)**

The EPA comment states that the AP alternative would represent the largest permitted loss of waters in North Carolina. This is still true for the Applicant's Proposed Action in the FEIS, Alternative L.

*** R5, 6, 7 and 13 (Economic Practicability Evaluation)**

An appropriate method to evaluate practicability is by calculating the annual discounted net present value (NPV) of the stream of costs and revenues over the lifespan of each alternative. Discounting renders costs and benefits that occur in different time periods comparable by expressing their values in present terms. In practice, discounting is accomplished by multiplying expected future monetary amounts by a discount factor. Such factor reflects time preferences, similar to an interest rate.²

For this project, NPV may be calculated very simply by first comparing the annual expected per unit (or ton) cost of phosphate production (mining, mitigation, reclamation, etc.) to the annual expected per unit (or ton) revenue (*i.e.*, the projected USGS value per phosphate ton estimates) for each year in the project. The annual differences between costs and revenues for each alternative may then be combined with estimates of annual

² For example, one would expect \$1 put in a savings account with a 5% interest rate today to be worth \$1.05 next year. Theoretically, knowing this, a person should be indifferent between being given \$1 today or \$1.05 in a year. The discounted or net present value of a \$1.05 a year from now in this example is therefore \$1.

The net present value of a projected stream of current and future benefits and costs is estimated by multiplying the benefits and costs in each year by a time-dependent weight, d_t , and adding all of the weighted values as shown in the following equation:

$$NPV = NB_0 + d_1NB_1 + d_2NB_2 + \dots + d_nNB_n$$

where NB_t is the net difference between benefits and costs ($B_t - C_t$) that accrue at the end of period (or year in this case) t . The discounting weights, d_t , are given by

$$d_t = 1/(1+r)^t$$

where r is the discount rate. The final period of the policy's future effects is designated as time n .

tons of phosphate produced for each alternative to determine the annual costs and revenues. Finally, using a standard discount rate, the discounted NPV of the streams of annual costs and revenues can be determined over the life of an alternative. Using the discounted NPV, projects of different lengths can be compared on equal terms.

EPA (NCEE) prepared the following summary table using OMB mandated discounted rates of 3 percent and 7 percent to demonstrate this method and NPVs for the FEIS alternatives. Because it allows for more total acres mined in similar locations, "Modified Alternative L" would almost certainly fall on this table above the SCRA alternative. EPA is available to discuss information concerning this summary table and how it was prepared.

NET PRESENT VALUE OF EACH ALT

	3%	7%
EAPA	\$537,695,130	\$359,773,753
EAPB	\$494,254,356	\$335,778,624
ALT M	\$457,571,214	\$328,592,452
ALT L	\$370,782,148	\$278,777,886
AP	\$370,653,570	\$282,757,722
SJAB	\$366,884,793	\$255,241,110
SJAA	\$359,076,889	\$274,240,083
SCRA	\$333,406,793	\$259,781,521
SCRB	\$304,200,087	\$238,057,997
DL1B	\$225,807,683	\$161,206,026
S33AP	\$130,534,890	\$128,544,556
No Action	-\$9,332,194	\$11,700,463

*** R8, R10 and R12 (Mitigation Costs)**

The mitigation costs used in the economic model described in the Summarized Comment Response 10 are somewhat confusing. In one place, it states mitigation costs were \$5,000/acre for non-brackish marsh wetlands and \$205/linear foot of stream with an average stream mitigation ratio of 1:1. Later in this section, the numbers cited are \$9,000/acre for wetland and \$245/linear foot for streams with a 1.5:1 stream ratio. The current fees (updated July 1, 2008) for the North Carolina Ecosystem Enhancement Program's (EEP) in lieu fee mitigation program are \$15,396 for nonriverine wetlands, \$30,790 for riverine wetlands and \$258/linear foot for streams. The average stream mitigation ratio proposed for project impacts is stated in the FEIS (Section 4.3.2.3.4.2 *Mitigation Ratios*) as 1.8:1. Although we understand the actual mitigation costs used may vary from EEP fees due to the factors discussed by the COE in Summarized Response 10, it is still unclear from the discussion as to which costs were used in the model. We recommend that the economic model be run again with the correct mitigation cost estimates.

*** R9 (Out of Cataloging Unit (CU) Mitigation Ratios)**

We acknowledge the information in the COE's response. However, the NC Interagency Review Team (IRT) is currently revising the out of CU guidance and the IRT will likely adopt some form of the referenced guidance in the near future. As "guidance," it allows for flexibility, including determining out of CU ratios on a case-by-case basis. However, we continue to recommend that this guidance be a starting point when determining mitigation ratios for compensation in a CU different from the CU where the impacts will occur.

*** R11 (Stream Mitigation Costs)**

We are aware that the costs of stream mitigation cannot be directly determined from the NC Stream Mitigation Guidelines (SMG). In our comment, we were not suggesting that to be the case. Instead, EPA intended to point out that the SMG document should be used to determine the amount of linear feet of stream compensation required based on the length and quality of stream being impacted, which then can be used to determine overall cost based on cost/linear foot.

*** R26 (Further Reduction of Environmental Impacts)**

We believe that project impacts can be further reduced by the "environmentally preferable" S33 Alternative and by the modification of Alternative L into "Modified Alternative L," as discussed in the cover letter. We also reference the discussion of the above EPA (NCEE) economic analysis of economic practicability (see EPA comments for R5, 6, 7 and 13).

II. EPA NEPA Letter on DSEIS – 12/28/07

*** R2, R4, R7 (Economic Practicability Evaluation Topic)**

See EPA's above comments to Section I for R5, R6, R7 and R13.

*** R6 (Alternative L – South 33 Impacts)**

The COE's response does not clarify why the mining boundary for S33 was expanded from the SCR boundary for mining in S33. The SCR boundary was developed with the goal of avoiding, to the maximum extent possible, important aquatic resources. We found no support in the FEIS for a determination that a more expansive mining boundary than SCR in the S33 tract is needed for Alternative L to be economically practicable.

*** R8, R9, R10, R16, R17, R18 (Bonnerton SNHA)**

As indicated in the cover letter and in EPA's April 30, 2008 letter, and as acknowledged by the COE in these responses, the NHP has designated the Bonnerton SNHA as "nationally significant." Such designation reinforces the need to preserve the entire SNHA tract, the community type represented, and the contiguous nature of the SNHA. The "nationally significant" designation of the Bonnerton nonriverine wetland hardwood forest SNHA means the NHP considers this area to one of the five best examples of this community type in the nation. The size and maturity of this area are critical to the NHP rating.

*** R11, R12 (Reopener Clause)**

EPA reiterates the concerns stated in our DSEIS letter for the potential economic reopener clause and recommends that the reopener clause, or other suitable measures, remain an option for future adaptive management needs. As you are aware, the FEIS did not include a detailed mitigation plan for S33 impacts. The Applicant would need to address unavoidable and unminimizable impacts well in advance of planned mining into this tract. The economic reopener clause may be the appropriate vehicle to effectuate this action.

**III. EPA Wetlands Regulatory Section Letter on CWA Section 404(q),
Part IV, Paragraph 3(a) – 2/9/07**

*** R1, R6, R8, R9, R12, R13, R16 and R17 (CWA Section 404 (q) and Compliance with 404 (b)(1) Guidelines)**

EPA supports the COE's position that there are less environmentally damaging practicable alternatives than the AP/EAP alternatives. We appreciate the Applicant for changing its request from these alternatives to the L alternative. However, as stated in the cover letter, we believe the S33AP Alternative is the NEPA "environmentally preferable alternative" and that Alternative L could be improved environmentally as "Modified Alternative L". Overall, EPA considers "Modified Alternative L" to be an economically practicable and environmentally reasonable alternative that is more environmentally preferable than Alternative L.

*** R5 (Impacts to Fisheries Habitats)**

EPA acknowledges the COE's response. We defer to the state and federal marine and wildlife agencies for more in depth comments on fisheries habitats impacted and avoided. However, we believe the COE's response could be misleading in its enumeration of bottomland hardwood wetland and stream impacts, as these refer to NCPC tract impacts and not project impacts as a whole which are greater.

**IV. EPA Regional Administrator Letter on CWA Section 404(q), Part IV,
Paragraph 3(b) – 3/6/07**

*** R3, R4 and R5 (CWA Section 404 (q) and Compliance with 404 (b)(1) Guidelines)**

See EPA's above comments to Section III for R1, R6, R8, R9, R12, R13, R16 and R17.

OTHER COMMENTS

*** Silviculture** – We hereby reiterate the following comments which were included in our April 30, 2008, pre-FEIS letter.

“EPA maintains that logging an area by a permit applicant where there is an intent to mine the same area after the completion of the logging operation, by the same applicant would remove the activity from the silviculture exemption. As the 404 regulations state (40 CFR 232.3 (b)), any discharge of dredged or fill material into waters of the U.S., must have a permit if it is part of an activity whose purpose is to convert an area of waters of the U.S. into a use which it was not previously subject and where the flow or circulation of waters may be impaired or the reach of such waters reduced. EPA maintains this applies to a logging and road construction operation in an area where the future proposed use is a phosphate mining operation. It is our position that it would be difficult to log this area without a discharge of fill material and thus would require a 404 permit for the site preparation and the future mining operation as one permitted action.”

*** TMDLs** – Segments of the Pamlico River in the vicinity of the PCS Phosphates facility are currently listed (or proposed for listing) as impaired waterbodies under Section 303(d) of CWA. The identified pollutant of concern is Chlorophyll-*a*, which triggers the need for development of Total Maximum Daily Loads (TMDLs) for the nutrients Total Phosphorus (TP) and Total Nitrogen (TN). These TMDLs, developed after comprehensive studies by the state, will be approved by EPA Region 4. The studies will include a detailed “source assessment” of existing and potential sources of TN and TP, and ultimately will set limits for both Point and Nonpoint sources, including all stormwater discharges.

These nutrients TMDLs thus have the potential to affect and possibly limit future mining related discharges into the impaired receiving waters. Besides the nutrient Phosphorus, Page 4-100 of the FEIS indicates that there are a limited number of other water quality parameters that will be of potential concern from reclaimed areas, including Fluoride, Suspended Solids and Metals. These other water quality parameters should be fully monitored to ensure continued compliance with the State of North Carolina's current Water Quality Standards (WQS). It is anticipated by EPA Region 4 that only Total Phosphorus (TP) and Total Nitrogen (TN) will actually be addressed by a TMDL in the near future. This is because the Pamlico River in this area is currently only listed for Chlorophyll-*a*, an indicator of nutrient enrichment, and is not listed as impaired for any

other pollutant. If the Pamlico River segments downstream of the PCS facility are ever listed for any other pollutants besides Chlorophyll-*a*, then TMDLs will need to be developed for each pollutant.

We are aware that monitoring is being conducted as part of the Applicant's existing National Pollutant Discharge Elimination (NPDES) permit and that pollutant concentrations in existing stormwater runoff appear to be relatively low for the ongoing mining, although the operation is not a zero-discharge facility. We understand that after on-site stormwater at PCS Phosphates meets a certain water quality, it will no longer enter the plant site recycle system, but instead will be directed either to the Pamlico River (through the NPDES permitted and monitored Outfalls 009 or 101) or allowed to re-enter the individual creek systems.

Therefore, while nutrient discharges are not currently a major concern, the Applicant should be advised that once the State develops nutrient TMDLs and EPA Region 4 approves those TMDLs, the existing and proposed mining activities will need to be compliant with those daily load limitations for the impaired segments of the Pamlico River and its tributaries.

* **EFH** – EPA will defer to the state and federal marine and wildlife agencies regarding mining impacts to Essential Fish Habitat (EFH). However, the Applicant should consider EFH in the avoidance and minimization process, as it relates to minimizing the loss of habitat that is essential to local fish species.

PROJECT SUMMARY

Project – *PCS Phosphate Mine Continuation at Aurora, North Carolina*

Agency – COE

Type – FEIS (previous documents were DEIS and DSEIS)

CEQ Number – 20080213

ERP Number – COE-E67005-NC

Reviewer - Chris Hoberg

Region – R4

State – NC

County – Beaufort

Preferred Alt – No COE NEPA preferred alternative identified in FEIS. PCS Applicant's "Proposed Action" was Alt. L in FEIS

Main Issues – Mining impacts to wetlands and streams (waters of U.S.)

Other Issues – Cumulative impacts from previous mining since this is a proposed mine Continuation; also alternatives (EPA offered "Modified Alternative L" as an environmental improvement to Alt. L but found S33AP to be the "environmentally preferable" alternative); also economics regarding the economic practicability of alternatives.

Wetlands Tracking – Alt L would impact 4,135 acres of waters of the U.S. including 4,115 acres of wetlands. The "Modified Alternative L" would impact 213 acres less.

Due Date – 7/9/08 (EPA requested a 2-week extension, *i.e.*, 7/23/08)

Completion Date – 7/23/08 (pdf copy emailed to Tom Walker and Ken Jolly)

Rating – EO-2

Key Words – Phosphate mining, PCS, Wilmington COE, Aurora (NC), Alternative L, Alternative S33AP, "Modified Alternative L", economically practicable, environmentally preferable, Albemarle Pamlico Estuary System, waters of the U.S.

Summary Paragraph – EPA continues to have environmental objections to this project as proposed under Alternative L (Applicant's "Proposed Action") due to significant impacts to waters of the U.S. However, we believe that Alternative S33AP is the NEPA "environmentally preferable alternative" and that Alternative L could be improved environmentally as "Modified Alternative L". EPA finds both to be economically practicable and, from an industry standpoint, both would allow the continuance of phosphate mining at Aurora for many years.



"Jolly, Samuel K SAW"
<Samuel.K.Jolly@usace.army.mil>

03/14/2009 02:36 PM

To Tom Welborn/R4/USEPA/US@EPA,
William.t.walker@usace.army.mil)
cc Rebecca Fox/R4/USEPA/US@EPA, Jennifer
Derby/R4/USEPA/US@EPA

bcc

Subject Re: Conf call on PCS

I believe Tom has already responded - we plan on talking Tuesday. And I hope EPA can attend Friday's meeting in person, ready to make decisions as appropriate. If you haven't heard from Tom on final details, please call him first thing Monday. Thanks.

Ken

Message sent via my BlackBerry Wireless Device

----- Original Message -----

From: Welborn.Tom@epamail.epa.gov <Welborn.Tom@epamail.epa.gov>
To: Jolly, Samuel K SAW; Tom Walker <William.t.walker@usace.army.mil>
Cc: Fox.Rebecca@epamail.epa.gov <Fox.Rebecca@epamail.epa.gov>; Derby.Jennifer@epamail.epa.gov
<Derby.Jennifer@epamail.epa.gov>
Sent: Fri Mar 13 03:41:09 2009
Subject: Conf call on PCS

Ken, as we discussed yesterday, we are still briefing EPA management on the potential elevation of the PCS permit but would like to discuss some options and regional management have asked me to talk with you and your staff next week when you are back in the office. Tom, Ken indicated he would be out today but if you could give me some times that Ken and yourself may be available on Monday or Tuesday for a call I would appreciate hearing back as soon as possible so we can let EPA staff know. Thanks.

Sent by EPA Wireless E-Mail Services



Mike_Wicker@fws.gov
03/16/2009 08:59 AM

To "Walker, William T SAW"
<William.T.Walker@usace.army.mil>
cc "Lamson, Brooke SAW"
<Brooke.Lamson@saw02.usace.army.mil>, Rebecca
Fox/R4/USEPA/US@EPA, "Pace.Wilber"
bcc

Subject Re:

History: ➡ This message has been replied to.

Tom,

I talked with Becky and she said that EPA would be talking with you tomorrow. I suggest we wait till after you talk with EPA before we talk so we will be more able to discuss all federal gency concerns. Let me know as soon as you can so I can schedule accordingly.

Thanks,

Mike

"Walker, William
T SAW"
<William.T.Walker
@usace.army.mil>

03/13/2009 12:16
PM

"Pace.Wilber"
<Pace.Wilber@noaa.gov>, "Ron
Sechler" <ron.sechler@noaa.gov>,
<Pete_Benjamin@fws.gov>,
<Mike_Wicker@fws.gov>,
<Welborn.Tom@epamail.epa.gov>,
<Fox.Rebecca@epamail.epa.gov>

To

cc

"Jolly, Samuel K SAW"
<Samuel.K.Jolly@usace.army.mil>,
"Lamson, Brooke SAW"
<Brooke.Lamson@saw02.usace.army.mil
>

Subject

All,

Thanks for talking with us yesterday. I think we decided to forego our call this morning in lieu of talking by phone next Monday (3/16) and meeting in person next Friday (3/20). Ron, Pace said he would give you a call this morning to brief our discussion yesterday. As always, if you guys have any questions or need anything, please give me a call.

To sum up yesterday, I believe we decided to talk next week about overall agency concerns and potential measures that could reasonably/practicably be taken at this point to further minimize project impacts. A couple of key points discussed were:

- 1) Need for biological monitoring to ensure that avoidance efforts incorporated are successful in mitigating the long term impacts to the estuarine creek communities.
 - Need to better define targets
 - Need to look at NCDWQ requirements (attached is pertinent part of monitoring plan from last permit) and potentially build on them to provide adequate sampling, analysis and reporting protocol.
- 2) Assurance that reclamation efforts are completed and successful.
 - Vegetation monitoring
 - Sampling / monitoring of current reclamation areas
 - Techniques and management for future reclamation (i.e. capping and/or planting requirements)

I have set up a conference call in line, the number is 1-866-717-3308 and the pass code is 1227026. I have reserved the line from 1300 - 1600 Monday afternoon. I would suggest we try to get on-line at 1330. Please let me know if this works within your schedule.

thanks
Tom Walker
(910) 251-4631



"Walker, William T SAW"
<William.T.Walker@usace.army.mil>

03/16/2009 12:14 PM

To <Mike_Wicker@fws.gov>

cc "Lamson, Brooke SAW"
<Brooke.Lamson@saw02.usace.army.mil>, Rebecca
Fox/R4/USEPA/US@EPA, "Pace.Wilber"

bcc

Subject RE:

History: ☐ This message has been replied to.

Mike & Ron,

I think this afternoon will only be the three of us. I have been discussing the reclamation schedule and methods in general with the applicant and was hoping to have some more discussion with them this morning and, as a result, further info to discuss this afternoon. I have not yet talked with PCS. I would still like to talk briefly at 1330 but would also like to schedule a second teleconference for Wednesday afternoon, hoping that by then we will get some input from EPA. We can coordinate this at 1330.

The call in number is 1-866-717-3308 and the pass code is 1227026.

Thanks
Tom

-----Original Message-----

From: Mike_Wicker@fws.gov [mailto:Mike_Wicker@fws.gov]
Sent: Monday, March 16, 2009 8:59 AM
To: Walker, William T SAW
Cc: Lamson, Brooke SAW; Fox.Rebecca@epamail.epa.gov; Pace.Wilber;
Pete_Benjamin@fws.gov; smtp-Sechler, Ron; Jolly, Samuel K SAW;
Welborn.Tom@epamail.epa.gov
Subject: Re:

Tom,

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Thanks,

Mike

"Walker, William
T SAW"
<William.T.Walker
@usace.army.mil>

03/13/2009 12:16
PM

"Pace.Wilber"
<Pace.Wilber@noaa.gov>, "Ron
Sechler" <ron.sechler@noaa.gov>,
<Pete_Benjamin@fws.gov>,
<Mike_Wicker@fws.gov>,
<Welborn.Tom@epamail.epa.gov>,
<Fox.Rebecca@epamail.epa.gov>

To

"Jolly, Samuel K SAW"

cc

<Samuel.K.Jolly@usace.army.mil>,
"Lamson, Brooke SAW"
<Brooke.Lamson@saw02.usace.army.mil
>

Subject

All,

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To sum up yesterday, I believe we decided to talk next week about overall agency concerns and potential measures that could reasonably/practicably be taken at this point to further minimize project impacts. A couple of key points discussed were:

- 1) Need for biological monitoring to ensure that avoidance efforts incorporated are successful in mitigating the long term impacts to the estuarine creek communities.
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- 2) Assurance that reclamation efforts are completed and successful.
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 - Sampling / monitoring of current reclamation areas
 - Techniques and management for future reclamation (i.e. capping and/or planting requirements)

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thanks
Tom Walker
(910) 251-4631



"Pace.Wilber"
<Pace.Wilber@noaa.gov>
03/16/2009 02:13 PM

To "Walker, William T SAW"
<William.T.Walker@usace.army.mil>
cc Rebecca Fox/R4/USEPA/US@EPA, Mike_Wicker@fws.gov,
Pete_Benjamin@fws.gov, Ron Sechler
<ron.sechler@noaa.gov>, "Jolly, Samuel K SAW"
bcc

Subject NMFS PCS recommendations

History: This message has been forwarded.

Hi Tom.

As noted during the telephone call, NMFS is considered replacing its current EFH conservation recommendation (which states mining shall be prohibited within the Bonnerton and NCPC tracts) with the three below. If these are agreeable to PCS and CESA, we would likely withdraw our 404(q) elevation. The attachment referenced in the first bullet would be based on the ppt slides we sent you a few weeks ago (these are attached). In our view the latter two bullets echo in principle what is in the WQC, but NMFS envisions more elaborate versions of what was done previously. Working out the details remains to be done, and we are talking with our Beaufort Lab; we think the details could be finalized quickly via a team effort.

Potential New EFH Conservation Recommendations

- Further avoidance and minimization of impacts should be considered and the recommended focus areas for these considerations are identified in the attachment to this letter
- The applicant shall develop a plan of study to address the effects of a reduction in headwater wetlands on the utilization of Tooley Creek, Jacobs Creek, and Jacks Creek as nursery areas by resident fish and appropriate invertebrate species. This plan shall be submitted to NMFS for review and approval prior to initiation of land clearing activities in the headwater wetlands of PNAs within the NCPC tract.
- The applicant shall establish an independent panel of scientists and engineers to annually evaluate whether direct and indirect impacts and benefits from the project are in accordance with expectations at the time of permitting. The panel also shall annually provide the Wilmington District and applicant with recommended changes to the mining and mitigation that are necessary to bring the project into alignment with expectations.

Pace

--

Pace Wilber, Ph.D.
Atlantic Branch Chief, Charleston (F/SER47)
Southeast Regional Office, NOAA Fisheries
PO Box 12559

Charleston, SC 29422-2559

843-953-7200

FAX 843-953-7205

pace.wilber@noaa.gov

<http://sero.nmfs.noaa.gov/dhc/habitat.htm>



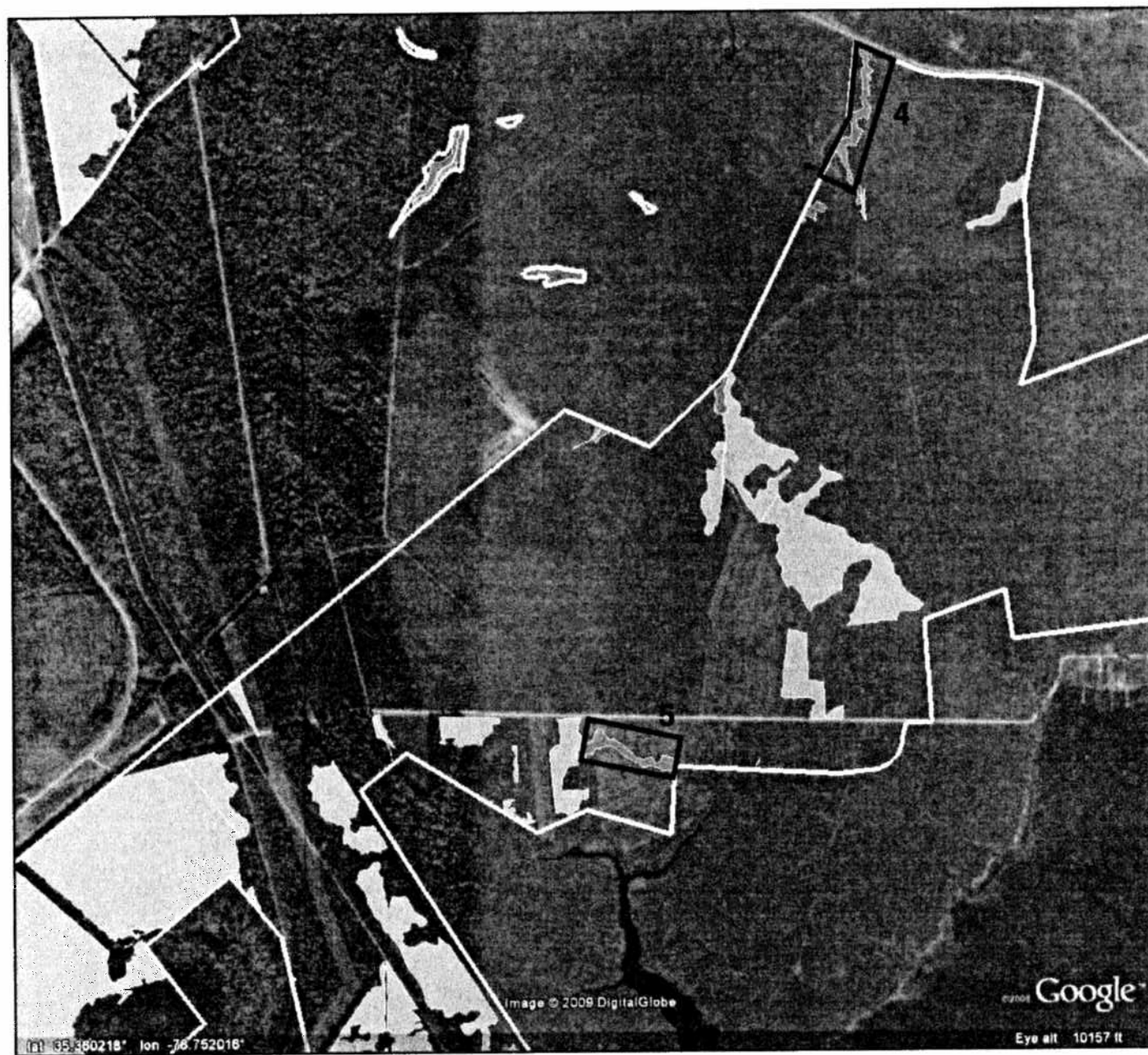
Heavy white lines show the footprint of the proposed mine expansion. Colored areas within the proposed footprint are the wetlands that would be mined. The "i"s show the approximate mining schedule; i.e., the mining of new areas would begin by extending from the current mine into the NCPD tract, then to the Bonnerton tract, and finally to the S33 tract.

While relatively minor details about the S33 tract remained to be addressed, the agencies have all said for some time that mining the S33 tract was acceptable.



Most of our concerns are with the plans for the NCPC tract. Inset shows all the wetlands. For clarity the main image shows only the streams, bottomland hardwoods, and mixed hardwood wetlands.

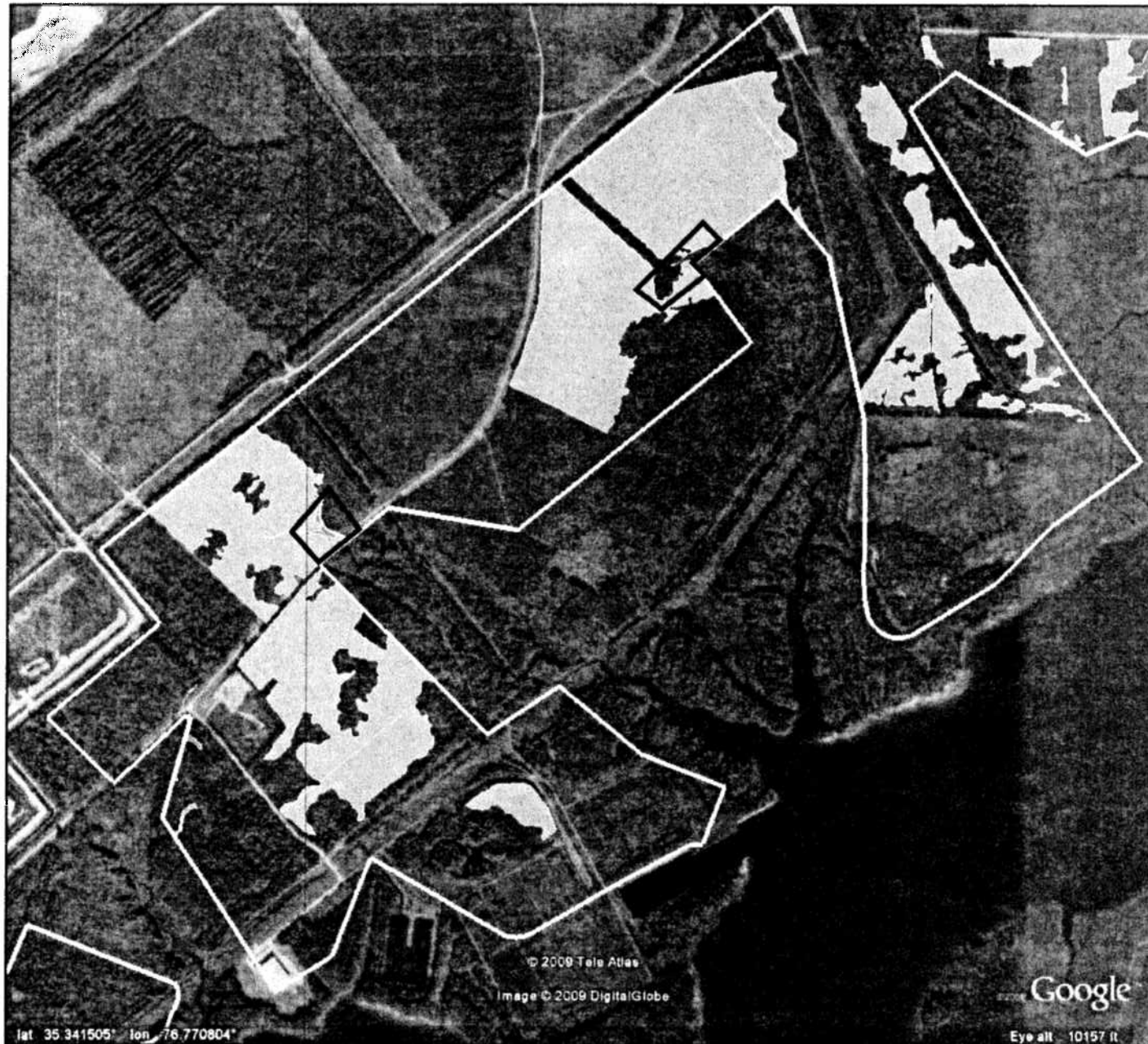
We are pleased the applicant plans to avoid many of the creeks that flow into South Creek and Pamlico River. Our contention is that minor adjustments to the proposed mine footprint could further reduce impacts to wetlands that serve as headwaters to these creeks. Specific areas of concern are highlighted and examined in more detail on next slides.



This is the northern portion of the NCPC tract. The two polygons with red outlines total 19 acres. The wetlands within these areas are headwater wetlands to intermittent streams, and we recommend these wetlands not be mined.

Numbers adjacent to each polygon indicate our overall priority for avoidance.

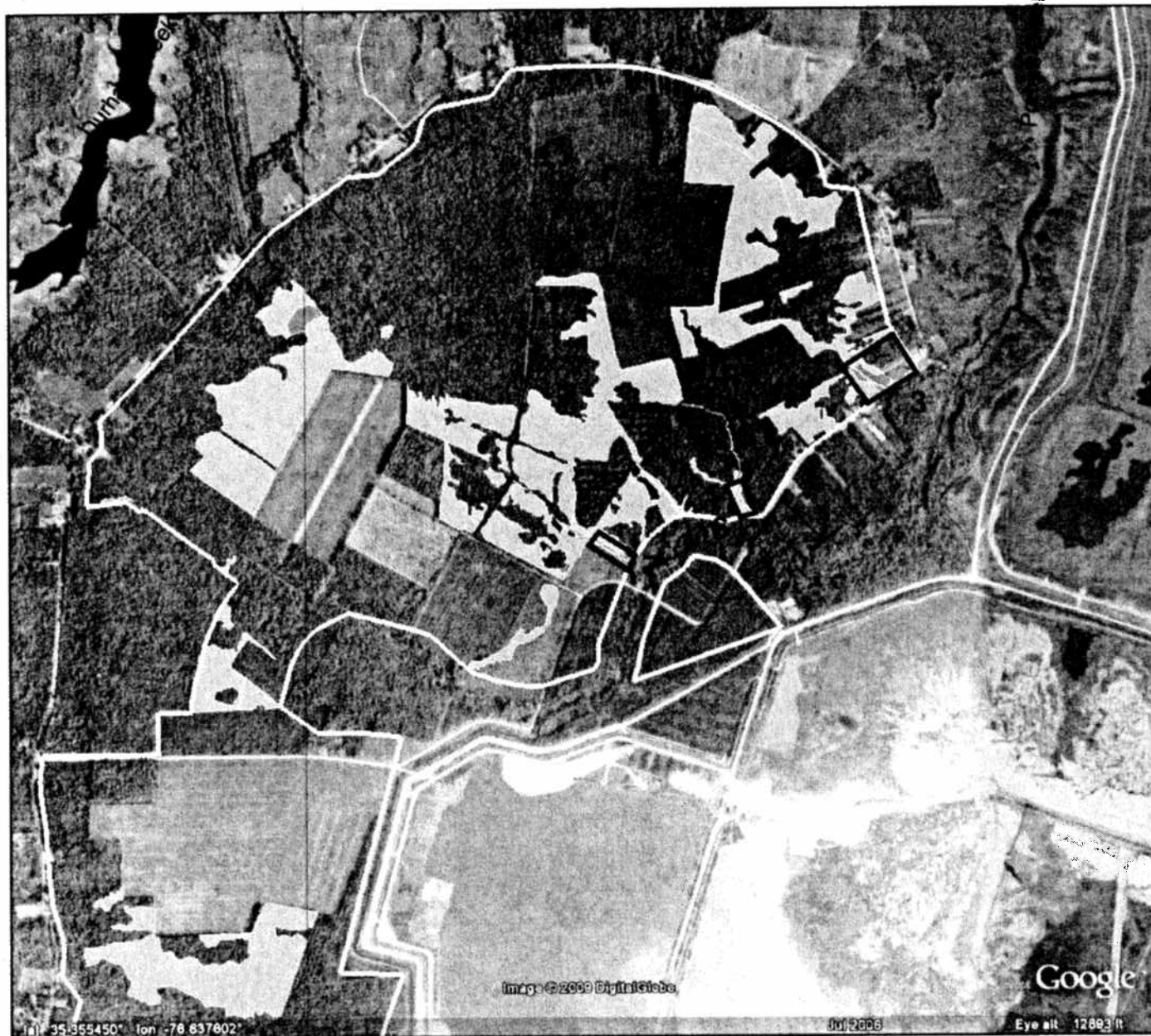




This is the southern portion of the NCPC tract. The two polygons with red outlines total 12 acres. The wetlands within these areas are headwater wetlands to intermittent streams, and we recommend these wetlands not be mined.

Numbers adjacent to each polygon indicate our overall priority for avoidance. In comparison to the previous slide, you'll note that "3" is missing; that is because our 3rd priority avoidance area





This is the northern portion of the Bonnerton tract. The three polygons with red outlines total 20 acres. The wetlands within these areas are headwater wetlands to intermittent streams, and we recommend these wetlands not be mined.

Numbers adjacent to each polygon indicate our overall priority for avoidance.

Summing across the three slides, we recommend 7 areas for






"Heather"
<riverkeeper@ptrf.org>
03/17/2009 09:38 AM

To Rebecca Fox/R4/USEPA/US@EPA
cc
bcc

Subject link to article

History:  This message has been replied to and forwarded.

<http://www.wdnweb.com/articles/2009/03/15/news/news01.txt>

Apparently there is some dispute over an air permit at PCS as well. It was noted in Wade Rawlins article. The Department of Interior was involved over air quality at Swan Quarter.

<http://www.newsobserver.com/news/story/1439452.html>

Thanks,

Heather Jacobs Deck
Pamlico-Tar Riverkeeper
Pamlico-Tar River Foundation
Phone: (252) 946-7211
Cell: (252) 402-5644
Fax: (252) 946-9492
www.ptrf.org
Waterkeeper Alliance Member



"Walker, William T SAW"
<William.T.Walker@usace.army.mil>

03/17/2009 09:59 AM

To Rebecca Fox/R4/USEPA/US@EPA

cc Tom Welborn/R4/USEPA/US@EPA, "Jolly, Samuel K SAW"
<Samuel.K.Jolly@usace.army.mil>

bcc

Subject RE: call today

History: This message has been forwarded.

Becky/Tom,

I have set up a conference call-in line. The number is 1-877-470-4867 and the passcode is 8007948. We'll talk at 1:30pm. If I can provide anything before then, I'll be here.

Thanks
Tom Walker
(910)251-4631

-----Original Message-----

From: Fox.Rebecca@epamail.epa.gov [mailto:Fox.Rebecca@epamail.epa.gov]
Sent: Tuesday, March 17, 2009 8:24 AM
To: Walker, William T SAW
Subject: call today

Hi Tom,

Do you want to set up call in or do you want us to? It's very easy for us to do and we can do it on the fly so just let us know. Look forward to talking to you this afternoon. bf

Becky Fox
Wetland Regulatory Section
USEPA
Phone: 828-497-3531
Email: fox.rebecca@epa.gov