April 22, 2011

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Re: Scoping Comments to Corps of Engineers (Corps) for

Area-Wide Environmental Impact Statement (AEIS) on Phosphate Mining

Dear Ladies and Gentlemen:

I am submitting my electronic comments to you directly because the format for submitting comments on the Corps' web site (http://www.phosphateaeis.org/pi_comments.html) did not facilitate submitting my attachments. I am also submitting a copy of my comment letter by mail to the "Team AEIS"

Tampa address provided at the bottom of the "Public Comment Form," with a CD copy of my electronic attachment with a file size too large to forward via email.

A copy of your Public Comment Form is included as **Attachment A**, but all of my comments are included in this letter and the other attachments referenced in this letter. The "Commenter Type" is "Private Citizen," "Academia" and "Community Organization." I am an Associate Professor of Biology and Interdisciplinary Studies. My comments regarding adverse impacts on the ability of local government to control environmental impacts, permanently preserve public space, and provide a safe and accessible lifestyle in southwest Florida are made on my behalf as a resident of southwest Florida and on behalf of the Community Organization Responsible Growth Management Coalition, Inc. (RGMC), of which I am a member.

The "issues" included in my comment letter include: "Surface water hydrology," "Groundwater resources," "Water supply and conservation," "Water quality," "Wetlands," "Loss of wetland functions and value, and mitigation of such losses," "Fish and wildlife habitats," "Federally listed threatened and endangered species," "Mines reclamation," "Land use," "Historic properties," "Cultural resources," "Aesthetics," "Socioeconomics," "Public health and safety," "Recreation," "Energy needs," "Consideration of Property ownership," "Agriculture" and "Cumulative effects."

CONTRACTOR CONFLICT OF INTEREST

- 1. In my opinion, there is a serious conflict of interest with CH2M Hill, the contractor you hired to prepare the AEIS. This company benefits financially from promoting and constructing aquifer injection wells commonly known as "aquifer storage and recovery" wells and from designing, constructing and/or monitoring excavations into the aquifer system, commonly known as "reservoirs" and related groundwater modeling in areas of southern Florida. These aquifer injection wells and excavations known as "reservoirs," whether bermed or un-bermed, are promoted, constructed and monitored under the premise that these engineered projects create alternate sources of water where the water supply has been depleted by unsustainable groundwater pumping and/or mining, as would occur from the proposed expansion of phosphate mining evaluated in the AEIS. Therefore, CH2M Hill can be unjustly enriched through future opportunities to design, construct and/or monitor additional aquifer injection wells and excavations promoted as "reservoirs" and to model ground water by ensuring that the AEIS process is skewed in favor of continued phosphate mining.
- 2. An example of one of these types of projects done by CH2M Hill is provided in **Attachment B**. In my opinion, the Corps must select another contractor to conduct the AEIS. The Corps should ensure that the replacement contractor cannot benefit financially, directly or indirectly, in any way from phosphate mining to ensure that there is no conflict of interest.

BOUNDARIES OF AEIS AND PHOSPHATE MINES CONSIDERED IN THE AEIS

- 1. The implied boundaries for the AEIS are shown in the announcement for the State of the Science on Phosphate Mining and the Environment Conference held 3/28-29/11 in Punta Gorda, FL; the AEIS Phosphate Mining Background information document; the AEIS NEPA Processes information document; the AEIS Water Resources information document; the AEIS Ecological Resources information document and the AEIS Human Environment information document included in my comment letter as **Attachments C-H**, respectively. **Attachments D-H** were downloaded from your web site at: http://www.phosphateaeis.org/public_scoping_materials.html.
- 2. Those documents also imply that adverse impacts from phosphate mining that occur beyond those boundaries will not be considered in the AEIS. Significant adverse affects have occurred beyond the

implied boundaries of the AEIS. For example, water pirating from adjacent watersheds in Florida has been documented when large volumes of ground water are withdrawn, similar to the diversion of water from the greater Everglades watershed by phosphate mining in the Peace River watershed.

- 3. Other examples of adverse impacts beyond the implied boundaries of the AEIS are provided in my presentation at the USEPA's State of the Science on Phosphate Mining and the Environment Conference held 3/28-29/11 in Punta Gorda, Florida. I assume that the USEPA has provided those presentations to you, but have included a copy of my presentation as **Attachment I** for your convenience. **Please ensure that all of the issues in my presentation are addressed in the draft AEIS, including all of the variances, noncompliance and modifications.** Comments following my presentation confirmed the misconception that impacts beyond the implied boundaries of the AEIS would not be considered in the AEIS.
- 4. In simple terms, the affected area of the proposed mine expansion is much greater than the boundaries of the proposed mine expansion and the watershed where the proposed expansion would occur. The Corps must delineate the area of adverse direct, indirect and cumulative impacts from phosphate mining, including, but not limited to the impacts described in my presentation and water pirating from adjacent watersheds and fully address those adverse impacts in the AEIS. For example, the AEIS must address the adverse impacts of water pirating from the greater Everglades watershed on the proposed Everglades restoration efforts being funded with approximately \$12 billion in federal funds and additional public funds from state and local sources.
- 5. Your AEIS web page (http://www.phosphateaeis.org/) includes the following statement: The Project Overview provides specific information on the three currently pending applications that are considered to be similar major federal actions under NEPA, and are the focus of the areawide EIS.
- 6. In my opinion, restricting the AEIS to those three pending phosphate mining applications fails to comply with the intent of the National Environmental Policy Act (NEPA). Please refer to the U. S. Council On Environmental Quality's 1997 Cumulative Effects Report and the following definition of cumulative impacts included in 40 CFR § 1508.7:
 - "the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions."
- 7. In my opinion, the AEIS must include all of the past, current and proposed phosphate mines. The AEIS also must include all of the direct, indirect and cumulative adverse impacts of those mines.

EVIDENCE OF BIAS FOR CONTINUED MINING

- 1. In my opinion, the scoping documents on your web site suggest a bias against considering obvious adverse direct, indirect and cumulative impacts of phosphate mining in addition to the "affected-area" bias described above. Is this bias the sole result of your selection of a contractor with a conflict of interest or your agency's intent to produce an AEIS that does not address obvious adverse impacts or a combination of both?
- 2. For example, the second page of your "NEPA Processes and AES Overview" document (**Attachment E**) suggests the purpose of the Scoping process is to "Understand problems and issues," yet you selected a contractor that, in my opinion, clearly does not understand even the basic problems and issues of phosphate mining in Florida. Additionally, in my opinion, the contractor's conflict of interest will ensure that they will not "ID most promising alternatives to address problems and issues" as indicated as the second step of the decision process shown on that page. This is because the "most promising alternatives" large-scale composting of organic material rather than consuming vast amounts of fossil fuel and water to create giant phosphate mine pits would not be financially beneficial to your contractor.

- 3. Additional bias is evident on pages 2 and 3 of your "Water Resources" document (**Attachment F**), which shows the boundaries of the "AEIS Study Area Key Watersheds." These boundaries not only exclude adjacent watersheds where the mining would continue pirating water, such as the greater Everglades watershed, the boundaries also exclude all of the watersheds where municipal water contaminated with hazardous waste products from phosphate mining as "fluoridation" is being discharged into surface waters or injected into the aquifer. It is important to re-emphasize that your AEIS contractor benefits financially from aquifer injections and contracting with water treatment facilities. Therefore, in my opinion, it is unlikely that CH2M Hill will adequately address the adverse human and environmental impacts of dumping hazardous phosphate mining waste into municipal waters ("fluoridation") either in the AEIS Study Area they have designated arbitrarily or in all of the other watersheds where fluoridated water is discharged.
- 4. Fluoridated water is discharged throughout southwest Florida where I live, as well as throughout the remaining US. The AEIS must address all of the adverse human, environmental and economic impacts of municipalities being forced to discharge hazardous phosphate mining waste into our waters, where countless federally endangered and threatened species are exposed to this hazardous mining waste. The AEIS also must address all of the adverse human, environmental and economic impacts of humans and animals being forced consume hazardous mine wasted in "fluoridated" water and food/beverages made with fluoridated water. For example, at least 24 published studies have documented lower IQs in children forced to consume fluoridated water, other beverages and food, similar to the lower IQs documented in a recent publication about children exposed to organo-phosphate pesticides on food their mothers ate while pregnant. In both cases lowered IQs in people require increased "special services" which is an undue cost to the public, just as the increased health problems from consumption of fluoridated products increased costs to individuals and the public.
- 5. The Human Environment/Economic Considerations document (page 1 of **Attachment H**) provides further evidence of bias for continued mining because it fails to identify adverse health effects and economic burden from phosphate mining, including but not limited to the fluoridation related impacts referenced above and the increased incident and severity of respiratory and other diseases from the use of diesel fuel by mining equipment and transport trucks and from the particulate matter (e.g. dust) produced from the mining.
- 6. The bias also is evident considering that the arbitrary AEIS Study Area boundaries don't include the Gulf "dead zone" which is well-established as resulting from runoff of agricultural fertilizers produced by existing phosphate mines and would continue if phosphate mining continues. The AEIS must address all of the adverse human and environmental impacts of the use of commercial fertilizers because they contain phosphate products that are mined.
- 7. Because of the obvious conflict of interest and bias involved in this AEIS process it is important that all of the comments from the scoping process and remaining AEIS process be posted on line so that they are readily accessible to the public.

FULL CONSULTATION WITH USFWS NEEDED

1. Considering solely the issue of discharging fluoridated municipal water, the AEIS must include the results of a comprehensive "consultation" with the USFWS and biological assessment fulfilling the Endangered Species Act (ESA) regarding the impacts of those discharges on each federally endangered and threatened species exposed to those discharges. Examples of species that must be evaluated in the consultation include, but aren't limited to, manatees and all marine, estuarine, riverine and aquatic species.

ADVERSE IMPACTS ON LOCAL GOVERNMENTS' ABILITY TO CONTROL ENVIRONMENTAL IMPACTS, PERMANENTLY PRESERVE PUBLIC SPACE AND PROVIDE A SAFE AND ACCESSIBLE LIFESTYLE

- 1. The AEIS must address the adverse direct, indirect and cumulative impacts from phosphate mining, including, but not limited to the impacts described in my presentation and water pirating on the ability of local governments to control environmental impacts, permanently preserve public space, and provide a safe and accessible lifestyle in southwest Florida.
- 2. The adverse human and environmental impacts of fluoridation of municipal water with hazardous waste products from phosphate mining is one example of these adverse impacts on local governments' ability to control environmental impacts, permanently preserve public space and provide a safe and accessible lifestyle in southwest Florida and throughout the US.
- 3. Examples of the proposed mining's impact on local government's ability to control environmental impacts, permanently preserve public space and provide a safe and accessible lifestyle in Lee County, where I live, includes, but isn't limited to preventing our county from being able to:
- a. maintain and enforce our future land use to protect natural resources (Chapter II, Lee County Comprehensive Plan);
- b. protect life and property, to protect or improve the quality of receiving waters and surrounding natural areas and to prevent other environmental damage (Chapter IV, Lee County Comprehensive Plan);
- c. maintain and enhance native habitats, water quality, and natural surface water characteristics (Chapter VII-5, Lee County Comprehensive Plan);
 - d. preserve and protect natural resources (Chapter VII-6, Lee County Comprehensive Plan);
 - e. maintain and restore water quality (Chapter VII-6, Lee County Comprehensive Plan);
- f. not alter or disrupt the natural function of significant natural systems (Chapter VII-7, Lee County Comprehensive Plan);
- g. promote the long-term maintenance of natural systems (Chapter VII-7, Lee County Comprehensive Plan);
- h. protect the citizens of Lee County and their property (Chapter XI-1, Lee County Comprehensive Plan);
- i. preserve sensitive natural resources, including beaches, wetlands, estuaries, clean air and water, historic resources, scenic vistas and other unique natural resources (Chapter XI-1, Lee County Comprehensive Plan);

CORPS FAILING TO REGULATE NATURAL DEPRESSIONAL WETLANDS

- 1. The Corps routinely fails to regulate natural depressional wetlands in areas being mined throughout southwest Florida and throughout the boundaries you have designated for the AEIS. See the publication included as **Attachment J** describing why these wetlands do not fall under the SWANCC and Rapanos ruling and are within the regulatory jurisdiction of the Clean Water Act.
- 2. Recently Mosaic released the following news announcement suggesting they can proceed without mining wetlands and avoid federal regulation by your agencies and consideration under this AEIS:

PLYMOUTH, Minn., April 19, 2011 /PRNewswire via COMTEX/ --

The Mosaic Company (NYSE: MOS) announced that it has notified the United States District Court for the Middle District of Florida that it plans to conduct uplands-only mining (i.e., non-wetlands) in an area at its South Fort Meade, Florida, phosphate rock mine in Hardee County. This upland area is accessible from the approximately 200-acre area where the Company is currently mining. Mosaic plans to begin transitioning its mining operations into these uplands over the next

30 to 60 days. The South Fort Meade permit for mining wetlands issued by the U.S. Army Corps of Engineers is under review by the District Court, as recently ordered by the Eleventh Circuit Court of Appeals. The Company estimates approximately one to two years of mining potential in this upland area. Although the uplands-only mining will be less efficient than if the Company could also mine the wetlands, this transition will allow the Company to continue to produce phosphate rock and keep its workforce employed while it addresses the merits of the litigation concerning the permit for mining wetlands in the extension of the Company's South Fort Meade mine into Hardee County. A ruling by the District Court is expected by July 2011.

3. In my opinion, Mosaic's claims are not supported by reality. The AEIS should identify all of the natural depressional wetlands that occurred within the area currently being mined and proposed for mining, including Mosaic's South Fort Meade phosphate mine. After identifying all of those wetlands, the AEIS must address the environmental impacts of phosphate mining on those wetlands.

PRACTICTICABLE ALTERNATIVES

- 1. Your regulation **40 C.F.R. 230.10(3)** requires that, unless there is no "practicable alternative to the proposed discharge that would occur from the proposed phosphate mining which would have less adverse impact on the aquatic ecosystem..." the discharge of dredge and fill material is not permitted for an activity that is not water dependent. The rule further establishes that "practicable alternatives that do not involve special aquatic sites are presumed to be available, unless clearly demonstrated otherwise." The rule also indicates, "In addition, where a discharge is proposed for a special aquatic site, all practicable alternatives to the proposed discharge which do not involve a discharge into a special aquatic site are presumed to have less adverse impact on the aquatic ecosystem, unless clearly demonstrated otherwise.").
- 2. In this case, "practicable alternatives" clearly are available. For example, composting and no-till farming are practicable alternatives that are available.

Thank you for providing an opportunity for public comments on the proposed mining. I look forward to your correction of the inadequacies described above.

Sincerely,

Nora Egan Demers, Ph. D. roynora@comcast.net

Attachments:

- A. AEIS Public Comment Form
- B. CH2M Hill Hillsboro Reservoir Siting Study
- C. Announcement for the State of the Science on Phosphate Mining and the Environment Conference held 3/28-29/11
- D. AEIS Phosphate Mining Background information document
- E. AEIS NEPA Processes information document
- F. AEIS Water Resources information document
- G. AEIS Ecological Resources information document
- H. AEIS Human Environment information document
- I. Copy of my presentation from USEPA's State of the Science on Phosphate Mining and the Environment Conference held 3/28-29/11 in Punta Gorda, FL
- J. Bacchus publication on depressional wetlands, SWANCC and Rapanos

cc:

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