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March 3, 2011

William Bailey
US Army Corps of Engineers, Savannah District
100 West Oglethorpe Avenue
Savannah, Georgia 31401

Re: P/N 2010 SHEP; Savannah Harbor Expansion Project (SHEP); Water Quality Certification

Dear Mr. Bailey:

The South Carolina Department of Health and Environmental Control (Department) received your application on November 15, 2010, for a 401 Water Quality Certification to deepen the navigation channel in the Savannah River. After reviewing the General Re-Evaluation Report (GRR) and the draft Tier II Environmental Impact Statement (EIS) submitted with the permit application, the Department is concerned that the project, as proposed, does not meet the requirements for issuance of a Water Quality Certification pursuant to Section 401 of the Clean Water Act and the requirements of State Regulation 61-101, Water Quality Certification.

In assessing the water quality impacts of this project, Regulation 61-101 requires that the Department address and consider whether there are feasible alternatives to the activity. Section F.(5)(b) of this regulation states that certification will be denied if there is a feasible alternative to the activity which reduces adverse consequences on water quality and classified water uses. The GRR and the EIS mentioned several alternatives that would alter the project impacts. Some of these alternatives include dredging to various project depths, various mitigation plans, and several alternative sites. Although the documents consider some alternatives, the analysis does not thoroughly evaluate all feasible alternatives for a project of this magnitude. For example, it seems reasonable to consider alternatives on a regional basis for such a large-scale project involving significant environmental impacts. The GRR and EIS do not consider whether or not other southeastern ports could be expanded with less cost or environmental impacts.

The Savannah River Maritime Commission, the South Carolina Department of Natural Resources, and the Southern Environmental Law Center each submitted comments on the GRR and EIS. These letters suggest that the Jasper Port Terminal alternative is viable and may have less environmental impacts than the proposed deepening. For these reasons, the establishment of a Jasper Port Terminal should be given detailed consideration as an option to the extensive cost and environmental impacts associated with the proposed expansion of the Garden City Terminal. The Department cannot meet its obligation under Regulation 61-101 by issuing a certification without a thorough investigation of all feasible alternatives. It is recommended that the

alternatives analysis for the project be amended to include the evaluation of all feasible alternatives to the proposed project.

In evaluating any project pursuant to Regulation 61-101, the Department must certify that there is reasonable assurance that the activity will be conducted in a manner that will not violate applicable water quality standards. The Water Classifications and Standards listed in Regulation 61-68 were promulgated in accordance with Section 303 of the Clean Water Act. This regulation also contains antidegradation rules that were established to ensure the protection of existing uses and water quality regardless of the water classification.

Existing conditions in the Savannah River have resulted in contraventions of the dissolved oxygen (DO) standard, particularly in the river estuaries during the warm summer months. The studies conducted for the SHEP indicate that the project will cause additional impacts to DO levels in the river system. Adding DO impacts to a waterbody that is currently experiencing low DO at certain times of the year is not consistent with the antidegradation rules of Regulation 61-68. The Corps plans to use Speece Cones to inject oxygen into the river to mitigate for the DO impacts resulting from the proposed deepening.

After evaluating the DO modeling data, and the mitigation proposal outlined in the GRR and EIS, the Department is concerned with the uncertainty relating to the use of mechanical injection as mitigation for the DO impacts, especially in the shallow water areas of the Back River. The Corps is relying entirely on modeling data to support the conclusion that the Speece Cones will adequately restore DO in the river system to pre-project conditions. Furthermore, the oxygen injection system is a very costly method to mitigate for the projected impacts, and the funding for the long-term operational costs depends on unpredictable annual appropriations. Until the uncertainty from the DO impacts and mitigation has been thoroughly investigated, and reasonable assurance is provided that the project will protect existing uses and water quality standards for the life of the project, the Department cannot find the project consistent with the requirements of Regulation 61-101.

In addition to the impacts from DO, the ecosystem will also sustain significant wetland impacts. The project will impact 14.08 acres of salt marsh wetlands from excavation and indirectly impact 1,212 acres of freshwater wetlands due to increased salinity at the maximum project depth. The Corps has proposed a mitigation plan to offset these impacts. This plan includes the preservation of various properties that will become part of the Savannah National Wildlife Refuge (SNWR), the restoration of wetlands through flow altering structures, and the creation of salt marsh by grading down an area of high ground that was previously used as a dredge disposal area.

Section F.(5)(a) of Regulation 61-101 states that certification will be denied if the proposed activity alters the ecosystem in the vicinity of the project such that its functions and values are eliminated or impaired. The mitigation proposal submitted in the GRR and EIS fails to give reasonable assurance that the ecosystem will not be permanently impaired by the extensive wetland impacts from salinity intrusion. The preservation component of the mitigation plan lists several properties that would be acquired and subsequently placed under control of the SNWR. Although the EIS states that these properties contain desirable ecological resources, the

amount of wetland acreage or type of wetlands contained in these properties was not included in the EIS. In addition, the mitigation credit taken by the Corps for restoration includes the creation of 1,068 acres of brackish marsh for the 48 ft depth alternative. The flow altering structures will reduce salinity in some of the marsh areas; however, these structures will cause the conversion of salt and freshwater marsh to brackish marsh. The loss of any type of marsh should be considered an impact. Given the extensive loss of existing freshwater marsh within the ecosystem and the lack of an appropriate mitigation plan, the Department cannot certify that this project complies with the mandates in Regulations 61-101 and 61-68.

Much of the marsh areas that will be impacted by this project are located in the SNWR. Much of these impacts are to freshwater tidally influenced wetlands. These areas have been in decline for many years due to salinity intrusion from natural causes and from past harbor deepening activities. The proposed project poses a significant threat to these unique areas. The mitigation plan includes preservation of land that will be acquired by the refuge. As stated previously, the Department is concerned that the out-of-kind preservation of land does not adequately offset the significant loss of ecological resources due to this project. Regulation 61-101 states that certification will be denied if the proposed activity impacts special or unique habitats. The SNWR is considered a unique area, as such, the Department cannot issue a certification for the proposed activity unless the United States Fish and Wildlife Service (USFWS) gives concurrence that this project will not cause adverse impacts to the SNWR.

The proposed deepening will occur in waters containing Federally recognized threatened or endangered species. Species such as Shortnosed sturgeon, Atlantic sturgeon, various sea turtles, and West Indian manatees may all be impacted by the project. The loss of a significant portion of Shortnose sturgeon habitat due to lower DO levels and salinity intrusion is of particular concern. Regulation 61-101 states in Section 5(c) that certification will be denied if the project adversely impacts waters containing State or Federally recognized rare, threatened, or endangered species. Although the Corps proposes to mitigate for the loss of Shortnose sturgeon habitat by installing fish passage at the Savannah Bluff Lock and Dam, it is not known if this measure will adequately mitigate for the impacts to sturgeon. Endangered species impacts are typically evaluated by resource agencies such as the USFWS and the National Marine Fisheries Service (NMFS). Without concurrence from these agencies that the project will not cause adverse impacts to threatened or endangered species, the Department cannot certify this project.

In addition to the above list of concerns about the proposed project, the Department has not received a complete response to our previous request for information. On November 23, 2010, the Department sent a letter requesting an affidavit of public notice for the project, a list of adjacent property owners, and the application fee of \$1,000. We received the affidavit and list of property owners, but we have not received the requested fee. Pursuant to Regulation 61-30, Environmental Protection Fees, the Department is authorized to collect application fees for Water Quality Certification.

In conclusion, the Department has several concerns about issuing a certification for this project. As currently proposed, this project does not meet the requirements for issuance of a Water Quality Certification pursuant to Section 401 of the Clean Water Act, 33 U.S.C. Section 1341, and the requirements of State Regulation 61-101, Water Quality Certification. It is

strongly recommended that the Corps withdraw the current application and address the issues outlined in this letter before continuing the 401 Certification process. If the Corps determines that it is necessary to move forward with a certification decision at this time, the fee should be submitted as soon as possible. Pursuant to Regulation 61-30, and Regulation 61-101, the Department has 180 days to complete action on an application for 401 Water Quality Certification or the assessed fee must be returned. These 180 days include only those days in which the Department is actively reviewing the application; the clock stops when information is requested and the Department is waiting on a response. Accordingly, the 180-day clock for this project will not start until the Department receives the requested fee and subsequent information. Should you have any questions, you may call me at (803) 898-4261 or you may e-mail beckhajc@dhec.sc.gov.

Sincerely,

A handwritten signature in black ink, appearing to read "Chris Beckham", with a long horizontal flourish extending to the right.

Chris Beckham, Project Manager
Water Quality Certification & Wetlands Section