

# Savannah River Maritime Commission

In Re: Application of the U.S. Army Corps )  
of Engineers, Savannah District, For )  
Certification and Permitting of the )  
Savannah Harbor Expansion Project. )  
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## NOTICE OF PROPOSED DECISION

The U.S. Army Corps of Engineers, Savannah District (Corps), proposes to undertake a civil works project to deepen the federal navigation channel in the Savannah Harbor and up the Savannah River. Specifically, the Corps evaluated alternative project depths of -44, -45, -46, -47, and -48 feet mean low water (MLW),<sup>1</sup> as well as a “no action” alternative, selecting a “preferred” depth of -47 feet MLW within the inner harbor navigation channel (Stations 000+000 to 103+000) (Inner Harbor) and a slightly deeper channel in the entrance channel and outer harbor of -49 feet MLW (Stations 000+000 to -97+680) (Outer Harbor). Corps, Final Environmental Impact Statement, dated January 2012, Revised July 2012 (Final EIS). Specifically, the “Project” the Corps proposes is to deepen the existing channel to -49 feet MLW in the Outer Harbor and -47 feet MLW in the Inner Harbor. This plan would involve dredging the Inner Harbor (as described in Section 3.01.1 of the Final EIS) to -47 feet MLW (5 feet deeper) from the mouth of the harbor (Station 0+000) to the end of the project Station 103+000. Dredging improvements in the Inner Harbor would also include deepening and expanding the Kings Island Turning Basin and deepening of the eight container vessel berths at Garden City Terminal (Berths 2, 3, 4, 5, 6, 7, 8, and 9). Inner Harbor

<sup>1</sup> The Corps utilizes two different measurements in the draft and final environmental impact statements and general re-evaluation reports. The Corps uses mean low water (MLW) and mean lower low water (MLLW) interchangeably, although MLLW would be slightly deeper than MLW. Because the Corps uses MLW in its environmental impact statements as the level of analysis conducted for the environmental impacts and description of the project, the Commission will similarly utilize MLW as the operative unit of measurement.

channel deepening would also require the construction of two meeting areas (see Table 3-5 of the Final EIS) and two bend wideners (see Table 3-6 of the Final EIS). Improvements in the entrance channel would involve deepening the existing channel to -49 feet MLW from Stations 0+000B to -60+000B and construction of a bend widener. The depth of -49 feet MLW would extend an additional 37,675 feet for the ocean bar channel extension (from Stations -60+000B to -97+680B). The depth of the entrance channel would be -47 feet from Station -14+000B to Station 0+000. The project is colloquially known as the Savannah Harbor Expansion Project (SHEP).

This matter is before the Savannah River Maritime Commission (Commission) pursuant to its statutory authority under S.C. Code Ann. § 54-6-10, which established the Commission to represent the State of South Carolina “in all matters pertaining to the navigability, depth, dredging, wastewater and sludge disposal, and related collateral issues in regard to the use of the Savannah River as a waterway for ocean-going container or commerce vessels.” Moreover, the Commission is “empowered to negotiate on behalf of the State of South Carolina and enter into agreements with the State of Georgia [and] U.S. Army Corps of Engineers.” *Id.* Further, the Commission’s responsibilities “supersede any other concurrent responsibilities of a particular state agency or department.” *Id.*

The Corps has applied for authorization from the State of South Carolina to proceed with the SHEP. This notice of proposed decision constitutes the Commission’s decision related to the Corps’ request for South Carolina’s authorization related to the SHEP.

### **Background and Facts**

The purpose of the SHEP is to deepen the harbor from its present depth of -42 feet MLW along the federal navigation channel in Savannah Harbor and up the Savannah River. The stated need and purpose is to improve navigation efficiency and safety; avoid, minimize, or compensate for adverse environmental impacts associated with the project; and provide adequate dredge material

disposal capacity for 50 years. Corps, Final EIS at 2-5. The stated purpose is, in short, to increase transportation efficiency, not to accommodate or provide for an increase in cargo volumes at the Georgia Ports Authority (GPA) terminals located within the project area. Corps, Final General Re-evaluation Report, dated January 2012, Revised July 2012 (Final GRR) Appx. A at 30 (“Under future project conditions, the same volume of cargo is assumed to move through Savannah Harbor, however, a deepening project will allow shippers to load their vessels more efficiently or take advantage of larger vessels. This is the main driver of the [National Economic Development] benefits.”); see GPA Resp. to Requests for Admission at 5, dated April 3, 2012 (Savannah Riverkeeper v. S.C. Dep’t of Health and Envtl. Control, Docket No. 11-ALJ-07-0618-CC (ALC)) (“GPA admits that the throughput capacity of the Garden City terminal is determined by its landside facilities and ship berths and not the depth of the Savannah River navigation channel.”). This “transportation efficiency” thus derives from vessels, but, notably, neither the Corps nor GPA has (thus far) claimed to try and accommodate most Post-Panamax<sup>2</sup> vessels, but instead the Corps and GPA are targeting the 6,000-8,200 TEU<sup>3</sup> classes of ships for commerce in Savannah.

In its 1998 initial Tier I EIS with regard to the SHEP, the GPA and Corps studied a depth for the SHEP of -50 feet MLW. GPA and Corps, Tier I Environmental Impact Statement (1998). The Corps and the GPA conducted a number of studies and reports from 1999 through issuance of the draft environmental impact statement (Draft EIS) and draft general re-evaluation report (Draft GRR) released in November 2010. On November 15, 2010, the Corps filed an application for a

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<sup>2</sup> A “Panamax” vessel is the largest size that the Panama Canal can accommodate, and a “Post-Panamax” vessel is larger than the current Panama Canal dimensions. However, many of these vessels will be able to traverse the Panama Canal upon completion of the Panama Canal expansion project. The Corps of Engineers categorizes Post-Panamax vessels into three generations and four classes based on approximate capacity: Generation 1, Class K; Generation 2, Classes S and G; and Generation 3, Class E. U.S. Army Corps of Eng’rs, The Implications of Panama Canal Expansion to U.S. Ports and Coastal Navigation Economic Analysis at 6 (Dec. 2008).

<sup>3</sup> A TEU is a twenty-foot equivalent unit, a common unit used to describe containers.

Clean Water Act Section 401 Water Quality Certification (401 Certification),<sup>4</sup> Construction in Navigable Waters Permit (Navigable Waters Permit),<sup>5</sup> and a Coastal Zone Consistency Determination (CZCD). The Corps received a number of adverse comments. On or about January 25 and 31, 2011, the South Carolina Department of Health & Environmental Control's (DHEC) Office of Ocean and Coastal Resource Management (OCRM) issued letters determining that the SHEP was inconsistent with the South Carolina Coastal Zone Management Program (CZMP), thus denying the CZCD. On or about January 21 and 25, the Commission also commented by letters opposing the SHEP, and the South Carolina Department of Natural Resources (DNR) similarly commented by letter dated January 25, 2011.

Discussions between DHEC and the Corps continued, with DHEC continuing to express reservations about the SHEP in general and the lack adequate mitigation in particular. On September 30, 2011, DHEC issued a notice of proposed decision denying the 401 Certification and Navigable Waters Permit (NOPD)<sup>6</sup> and OCRM sent another letter "standing by" its prior finding of inconsistency. The September 30, 2011 staff decision by DHEC recommended denial of the 401 Certification and the Navigable Waters Permit and specifically referenced the comments from the Commission. DHEC, Staff Assessment at 3, 7 (Sept. 30, 2010) (referencing the need for a Navigable Waters Permit, recommending denial based on the Navigable Waters Permit criteria, and noting that the Commission objected to the SHEP).

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<sup>4</sup> Corps, Draft EIS at 6-1 ("Channel deepening would require a Section 401 Water Quality Certificate from ... South Carolina DHEC.").

<sup>5</sup> The submission of the request for the 401 Certification simultaneously serves as the request for a Navigable Waters Permit, and no separate application is required. See S.C. Code Ann. Regs. 19-450.D.1. This is because the criteria for the Navigable Waters Permit and its subsequent terms and conditions are enforceable components of and a part of the 401 Certification.

<sup>6</sup> See Construction in Navigable Waters Permit Document Mailing, dated Sept. 30, 2011 (reflecting that the Corps' application was treated as a Navigable Waters Permit application, with the Corps named as the applicant).

By separate letters dated October 7, 2011, the Corps and the GPA filed requests for final review with the DHEC Board of the 401 Certification and CZCD. The DHEC Board agreed to conduct a final review conference, scheduled for November 10, 2011. In the late afternoon of November 9, the Corps and the GPA approached the DHEC staff with a proposal for a final resolution to the outstanding issues. At the November 10, 2011 DHEC Board meeting, DHEC staff presented a proposed resolution to the Board. The DHEC Board adopted and approved the proposal, granting the 401 Certification (and ostensibly the Navigable Waters Permit) for the SHEP and certifying the SHEP as consistent with the CZMP, as reflected in the DHEC Board's five-page Final Agency Decision dated November 15, 2011<sup>7</sup> (DHEC Decision). The Corps and GPA were signatories to the DHEC Decision.

The DHEC Decision was challenged by the Commission before the South Carolina Administrative Law Court (ALC) through the Commission's Request for Contested Case filed December 12, 2011, which was consolidated with other challenges filed by the Savannah Riverkeeper, South Carolina Coastal Conservation League, and South Carolina Wildlife Federation (Conservation Groups) and docketed as Savannah Riverkeeper v. DHEC, Docket No. 11-ALJ-07-0618-CC. The Commission evaluated the Corps' application and on May 8, 2012, issued a Navigable Waters Permit and authorization allowing the SHEP to proceed to a depth of -45 feet MLW with additional mitigation. The Corps and GPA filed multiple challenges to the Commission's Permit. See U.S. Army Corps of Eng'rs v. Savannah River Maritime Comm'n, Docket No. 12-ALJ-30-0254-CC; Georgia Ports Authority v. Savannah River Maritime Comm'n, Docket No. 12-ALJ-30-0255-CC; Georgia Ports Authority v. S.C. Dep't of Health and Envtl.

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<sup>7</sup> The Corps previously acknowledged and agreed that the time period for DHEC to render a decision on the 401 Certification expired on November 15, 2011. Ltr. of Hall to Hightower, dated Jan. 13, 2011 (acknowledging and consenting to the one-year period for a decision from South Carolina until November 2011).

Control, Docket No. 12-ALJ-07-0305-CC; U.S. Army Corps of Eng'rs v. S.C. Dep't of Health and Env'tl. Control, Docket No. 12-ALJ-07-0316-CC; Georgia Ports Authority v. S.C. Dep't of Health and Env'tl. Control, Docket No. 12-ALJ-07-0351-CC. Additionally, the Savannah Riverkeeper and others filed an action in the original jurisdiction of the South Carolina Supreme Court for declaration regarding the delineation of jurisdiction and authority between the Commission and DHEC and challenging the authority of DHEC to issue the DHEC Decision. Similarly, the Savannah Riverkeeper and others filed an action in the United States District Court for the District of South Carolina challenging the SHEP. Savannah Riverkeeper v. U.S. Army Corps of Eng'rs, C/A No. 9:12-cv-00610-RMG. The Commission joined both the Supreme Court and Federal District Court matters as a party.

On November 2, 2012, the Supreme Court ruled that DHEC did not have the authority to issue the DHEC Decision and reinstated the DHEC staff denials for the SHEP. Savannah Riverkeeper v. S.C. Dep't of Health & Env'tl. Control, 400 S.C. 196, 733 S.E.2d 903 (2012). Further, the Supreme Court mooted a pending contested case at the ALC, Docket No. 11-ALJ-07-0618-CC. The Corps and GPA filed challenges to State of South Carolina's denial of the 401 Certification. See U.S. Army Corps of Eng'rs v. S.C. Dep't of Health and Env'tl. Control, Docket No. 12-ALJ-07-0516-CC; Georgia Ports Authority v. S.C. Dep't of Health and Env'tl. Control, Docket No. 12-ALJ-07-0518-CC. The Federal District Court ordered that the parties engage in mediation. The Honorable John M. Spratt, Jr. and the Honorable Bruce H. Hendricks mediated the disputes between the parties over the SHEP. As part of the settlement of the disputes and to resolve the pending litigation, an agreement was reached through which the Commission and DHEC, on behalf of the State of South Carolina, issues conditional approvals. These conditional approvals allow the SHEP to move forward with the preferred alternative identified in the Final EIS and the Corps and

GPA must comply with certain terms and conditions in addition to what is provided for in the Final EIS for the adverse environmental impacts from the SHEP.

### Jurisdiction

The SHEP involves the dredging, filling, and construction or alteration activity in, on, and over a navigable water and the bed under navigable waters and also lands or waters subject to a public navigational servitude under Article 14, Section 4 of the South Carolina Constitution and S.C. Code Ann. § 49-1-10 (including submerged lands under the navigable waters of the State) and is an activity significantly affecting the flow of any navigable water. As a result, the SHEP will adversely impact the water quality and environment of South Carolina.<sup>8</sup> The SHEP requires a Clean Water Act Section 401 certification from the State of South Carolina (the 401 Certification) under 33 U.S.C.A. § 1341, S.C. Code Ann. Regs. 61-101, and also must satisfy the South Carolina Pollution Control Act, S.C. Code Ann. §§ 48-1-10 et seq., and Navigable Waters Permit criteria under S.C. Code Ann. Regs. 19-450 from the State of South Carolina. See Ltr. of Foltz to Hightower, dated Jan. 14, 2011 (referencing Regulation 19-450 as part of the project analysis by DHEC). Because the SHEP's adverse impacts occur in the coastal zone, the SHEP also requires a CZCD for the CZMP. All of these requirements under the 401 Certification, Navigable Waters Permit, and CZCD are premised and founded upon protecting the environment of the State of South Carolina and imposing reasonable terms and conditions to protect water quality, natural resources, fish and wildlife species, populations, and habitats, and limit pollution to acceptable levels.

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<sup>8</sup> Dredging constitutes a discharge under the Clean Water Act triggering DHEC's and the Commission's respective jurisdiction. See S.D. Warren Co. v. Maine Bd. of Env'tl. Protection, 547 U.S. 370, 376 (2006); AES Sparrow Point LNG v. Wilson, 589 F.3d 721, 731 (4th Cir. 2009) (dredging constitutes pollutant discharge through lowering of dissolved oxygen levels); Alabama Rivers Alliance v. Federal Energy Regulatory Comm'n, 325 F.3d 290, 293 (D.C. Cir. 2003) (consideration of discharges into navigable waters an appropriate component of state law considerations under 33 U.S.C.A. § 1341(d)).

Generally, DHEC is the state agency charged with issuing a Navigable Waters Permit. When a Navigable Waters Permit and a 401 Certification are both necessary for the same activity, DHEC typically will issue a 401 Certification which also constitutes the issuance of the Navigable Waters Permit. See S.C. Code Ann. Regs. 19-450.3.G; 61-101.A.9 (“If an activity also requires a permit for construction in State navigable waters pursuant to applicable laws and regulations, the review for the water quality certification will consider issues of that permit and the Department will not issue a separate permit for construction in State navigable waters. The certification will serve as the permit.”). This makes sense because the requisite analysis under both is to protect water quality and the environment. Additionally, regulations applicable to Navigable Waters Permits provide that “[n]o permit is required for any activity which requires another Department permit or certification, including but not limited to 401 Water Quality Certifications.... These permitting/certification areas will be required to coordinate with the Construction in Navigable Waters Permitting staff to insure the provisions of this regulation are adhered to.” S.C. Code Ann. Regs. 19-450.3.G. Accordingly, the 401 Certification is required to ensure consideration of the issues pertaining to the Navigable Waters Permit and inclusion of its requisite terms and conditions within the 401 Certification. Id.

In this instance, pursuant to S.C. Code Ann. § 54-6-10, the “construction in navigable waters permitting staff” referenced in S.C. Code Ann. Regs. 19-450.3.G is the Commission. S.C. Code Ann. § 54-6-10(A) provides in pertinent part that the Commission “is hereby established to represent the State in all matters pertaining to the navigability, depth, dredging, wastewater and sludge disposal, and related collateral issues in regard to the use of the Savannah River as a waterway for ocean-going container or commerce vessels....” Moreover, “on an interstate basis and specifically in regard to the State of Georgia, the responsibilities granted to the Savannah River Maritime Commission in this joint resolution supersede any other concurrent responsibilities of a particular state agency or department.” S.C. Code Ann. § 54-6-10(F) (emphasis added). Therefore,



pursuant to the plain language of the statute, the Commission acquired any and all responsibilities of the DHEC navigable waters permitting staff with regard to SHEP, and the 401 Certification staff was required to coordinate with the Commission in order to ensure that the environment is adequately protected. The General Assembly affirmed this bifurcation of responsibilities between DHEC and the Commission in Act No. 125 of 2012, R. 133, H. 4627. Specifically, Act No. 125 of 2012 states in pertinent part:

The General Assembly, pursuant to Section 7, Article I of the South Carolina Constitution, suspends the authority of the South Carolina Department of Health and Environmental Control, hereinafter the department, for all decisions subsequent to 2007 related to all matters pertaining to the navigability, depth, dredging, wastewater and sludge disposal, and related collateral issues in regard to the use of the Savannah River as a waterway for ocean-going container or commerce vessels, in particular the approval by the department of the application of the United States Army Corps of Engineers for a Construction in Navigable Waters Permit for the dredging of the South Carolina portion of the Savannah River, because the authority of the Savannah River Maritime Commission, hereinafter the Maritime Commission, superseded the responsibilities of the department for such approval, as established by Act 56 of 2007, and the approval by the department could present imminent and irreversible public health and environmental concerns for the South Carolina portion of the Savannah River.

Act No. 125 of 2012 § 1.

The Corps is required to comply with South Carolina law for water pollution control requirements to protect the environment of the State. See 33 U.S.C.A. §§ 1323(a) (all federal agencies “shall be subject to, and comply with, all Federal, State, interstate, and local requirements ... respecting the control and abatement of water pollution.”), 1370 (Clean Water Act does not preclude a State from adopting or enforcing standards or limitations or pollution control requirements or impair any rights of the States); 33 C.F.R. § 336.1(a)(1), (b)(8) (requiring the Corps to acquire the 401 Certification); Executive Order 12088, Federal Compliance With Pollution Control Standards, dated Oct. 13, 1978 (requiring compliance of federal activities with applicable

pollution control standards in the same manner as any non-federal entity); U.S. Army Corps of Eng'rs, Water Quality and Env'tl. Management For Corps Civil Works Projects, ER 1110-2-8154 at 1, 2 (federal activities must comply with all Federal, state, interstate, and local requirements in the same manner and extent as other entities). In fact, the Corps has characterized the 401 Certification, which by law necessarily includes the terms and conditions of a Navigable Waters Permit, as an "authorization **required** from the State of South Carolina."<sup>9</sup> Joint Public Notice, dated Nov. 15, 2010, at 8 (emphasis added); see 33 C.F.R. § 336.1(a)(1), (b)(8) (requiring the Corps to acquire the 401 Certification).

Because DHEC only has authority to issue a 401 Certification under Regulation 61-101 (but not perform the analysis under Regulation 19-450) and lacks authority to negotiate with GPA or the Corps, a 401 Certification necessarily is issued with the implied condition that it is subject to completion of analysis and review under the Navigable Waters Permit criteria by the Commission.

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<sup>9</sup> In addition to law, policy guiding the Corps' conduct also requires the Corps to obtain a 401 Certification from the State of South Carolina.

State water quality certification requires the District Commander to accomplish the following three tasks:

- (1) Complete an evaluation of the effects of the proposed discharge consistent with the Section 404(b)(1) Guidelines;
- (2) Issue a public notice, with opportunity for public hearings for the proposed discharge, including or referencing the preliminary Section 404(b)(1) evaluation; and
- (3) **Obtain certification, including any required conditions, from the State or interstate water pollution control agency that the proposed action is in compliance with established effluent limitations and water quality standards.** If the State in question has assumed responsibilities for the 404 regulatory program, a State 404 permit shall be obtained, if applicable, which will serve as the certification of compliance. District commanders shall provide the State with necessary detailed information it may need to issue the water quality certification.

U.S. Army Corps of Eng'rs, Planning and Guidance Appx. C, ER 1105-2-100 at C-42 (emphasis added).

See S.C. Code Ann. § 54-6-10; Op. Att’y Gen., dated Oct. 25, 2010.<sup>10</sup> Thus, the terms and conditions of this decision stand alone as a Navigable Waters Permit and also are incorporated into the 401 Certification as a matter of law. See S.C. Code Ann. Regs. 19-450.3.G; 61-101.A.9; see also 33 U.S.C.A. § 1341(d) (water quality certification shall set forth any conditions necessary to comply with other State law); Act No. 125 of 2012, R. 133, H. 4627; Savannah Riverkeeper v. S.C. Dep’t of Health & Env’tl. Control, 400 S.C. 196, 733 S.E.2d 903 (2012).

### **Discussion of Findings and Conclusions**

In considering and examining the Corps’ application and request for authorization, the Commission reviewed documents of the Corps, including the draft and final environmental impact statements and draft and final general re-evaluation reports and other documents submitted to DHEC;<sup>11</sup> DHEC’s file and staff analysis of the SHEP; DNR’s file and staff analysis of the SHEP; information supplied by GPA and the Corps; and the reports and analysis of the Commission’s staff and independently retained experts and consultants. See S.C. Code Ann. § 54-6-10(D). Based on the information presently available, the Commission makes the following findings, conclusions, and decision.

(A) *Analytical Framework*

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<sup>10</sup> Note that the 401 Certification is a decision by the State of South Carolina, and the General Assembly may delegate or bifurcate or set forth the requirements it deems appropriate for the consideration of water quality impacts under Section 401 of the Clean Water Act. 33 U.S.C.A. § 1341(a)(1) (requiring a certification from the “State”). This is solely a question of and matter for state law. See generally Alcoa Power Generating, Inc. v. Federal Energy Regulatory Comm’n, 643 F.3d 963 (D.C. Cir. 2011); Michael A. Rosenhouse, Construction and Application of § 401 Water Quality Certification Requirement Under Federal Clean Water Act, 33 U.S.C.A. § 1341, 17 A.L.R. Fed. 2d 309 (2011).

<sup>11</sup> “Information (environmental impacts, economic benefits, and costs) is provided in the EIS for all five channel depths evaluated so decision makers can have the data to decide if the benefits of a particular alternative outweigh the associated environmental impacts and costs to minimize and mitigate those impacts.” Corps, Final EIS Appx. A at 488.

By statute, the Commission is charged with evaluating the navigability, depth, dredging, wastewater and sludge disposal, and collateral issues related to the use of the Savannah River as a waterway for ocean-going container or commerce vessels. S.C. Code Ann. § 54-6-10(A). Additionally, as the permitting staff for a navigable waters permit, the Commission is responsible for assessing the total impact of the projected activity on the navigable waters and lands subject to the jurisdiction of this regulation, including the impact on the economy, environment, and natural resources of the State. The Commission is concerned with the utilization and protection of important State resources and balancing the extent and permanence of reasonably foreseeable benefits and detriments of the projected activity, including its impact on conservation, economics, aesthetics, general environmental concerns, cultural values, fish and wildlife, navigation, erosion and accretion, recreation, water quality, water supply, and conservation. The Commission also is tasked with determining whether the projected activity is consistent with the needs and welfare of the public. In particular, the Commission must consider the extent to which, among other things:

- the activity requires construction in, on, or over a navigable waterway, and the economic benefits to the State and public from construction in such location;
- the activity would impact fish and wildlife, water quality, and other natural resource values or could affect the habitats of rare and endangered species of wildlife and irreplaceable historic and archaeological sites associated with public lands and waters;
- the economic benefits to the State and public from the authorized use of lands and waters meets or exceeds the benefits from preservation of the area in its unaltered state;
- there is any adverse environmental impact which cannot be avoided by reasonable safeguards;
- all feasible alternatives are taken to avoid adverse environmental impact resulting from the project; and,

- the long-range, cumulative effects of the project, including the cumulative effects of similar projects, may affect navigable waters.

S.C. Code Ann. Regs. 19-450.9.A.

The public notice issued by the Corps and DHEC for the SHEP dated November 15, 2010, which was the trigger for the 401 Certification, Navigable Waters Permit, and CZCD evaluation, specifically identifies and acknowledges the following adverse environmental impacts associated with the SHEP:

- direct impacts to wetlands;
- indirect impacts to wetlands;
- water quality in the Savannah Harbor;
- sediment quality;
- confined disposal site effluent water quality;
- fisheries impacts;
- cultural resources;
- threatened and endangered species; and
- groundwater impacts.

Joint Public Notice, dated Nov. 15, 2010, at 4-5. Thus, these adverse environmental impacts are appropriate for consideration and evaluation by the Commission as part of its duties and obligations to ensure water quality and pollution control requirements are complied with in the State of South Carolina.

(B) *Environmental Impacts and Pollution Control Analysis*

The Commission is charged with the duty of evaluating environmental impacts and balancing those impacts with benefits to the State, and undertaking an analysis of appropriate

pollution control requirements under the rubric established by statute and regulation. See S.C. Code Ann. §§ 48-1-10 et seq., 54-6-10; S.C. Code Ann. Regs. 19-450, 61-101. As the SHEP is a water resource project, the U.S. Army Corps of Engineers has a similar duty. Specifically, federal law provides:

Enhancement of the environment is an objective of Federal water resource programs to be considered in the planning, design, construction, and operation and maintenance of projects.... Specific considerations may include, but are not limited to, actions to preserve or enhance critical habitat for fish and wildlife; maintain or enhance water quality; improve streamflow; preservation and restoration of certain cultural resources; and the preservation or creation of wetlands.

33 C.F.R. § 236.4(b); see U.S. Army Corps of Eng'rs, Water Quality and Environmental Management For Corps Civil Works Projects, ER 1110-2-8154 at 2 (The “environment will be addressed as equal in value and importance to other project purposes when developing or carrying out management strategies. **The Corps will, at least, manage its projects in accordance with all applicable Federal and state environmental laws, criteria, and standards.**”) (emphasis added).

In analyzing the environmental impacts from the SHEP, the Corps acknowledged the potential environmental impacts of the SHEP at various project depths without mitigation. Corps, Final EIS at 3-20, tbl. 3-7. These adverse impacts must be addressed and mitigated. “As stewards of a significant percentage of the nation’s aquatic environment, **the Corps has a responsibility to preserve, protect, and where necessary restore that portion of the environment altered by Corps projects**. The Corps is fully committed to environmentally sound project management and operation. **It is the policy of the Corps that the environment be given equal standing not simply consideration** in all aspects of project management and the operational decision-making process.” U.S. Army Corps of Eng'rs, Water Quality and Environmental Management For Corps Civil Works Projects, ER 1110-2-8154 at 3 (emphasis added); U.S. Army Corps of Eng'rs, Planning and Guidance Appx. C, ER 1105-2-100 at C-5,-6 (emphasis added); see Corps, Final EIS Appx. C at

1. The Corps has proffered a mitigation plan in an attempt to offset impacts from the SHEP. See Corps, Final EIS at 3-21 tbl. 3-8. With these guiding principles and environmental impacts in mind, the Commission turns to an analysis of the pertinent environmental considerations and aspects of the SHEP. In short, the Commission believes the Corps' proposed mitigation plan insufficient to address the Commission's concerns regarding the environmental impacts of the SHEP. However, through a settlement agreement with the Corps, GPA, DHEC, and the Conservation Groups, commitments have been made to allow the project to move forward as reflected through the terms and conditions that provide the adequate amount of mitigation required to offset the environmental impact concerns of the Commission and satisfy South Carolina's environmental permitting requirements.

#### **Terms and Conditions**

The Commission must balance economic development with the protection of the environment to ensure the responsible implementation of the SHEP. The Commission represents the State of South Carolina "in all matters pertaining to the navigability, depth, dredging, wastewater and sludge disposal, and related collateral issues in regard to the use of the Savannah River as a waterway for ocean-going container or commerce vessels," which includes the SHEP. S.C. Code Ann. § 54-6-10(A). The DHEC and Commission approvals and authorizations satisfy any and all South Carolina permitting requirements applicable to the Project. Based upon and to implement and achieve the goal of fully mitigating for the impacts from the SHEP and in furtherance of the analysis and evaluation undertaken by the Commission, and in satisfaction of all authority and jurisdiction conferred upon the Commission to permit, regulate, authorize, and approve construction of the SHEP on behalf of the State of Carolina, including but not limited to compliance with the S.C. Pollution Control Act, S.C. Code Ann. § 48-1-10 et seq., the Maritime Commission Act, S.C. Code Ann. § 54-6-10, and the Navigable Waters Permit requirements, S.C.

Code Ann. Regs. 19-450, the Commission imposes the following terms and conditions to protect the environment and natural resources of the State of South Carolina, mitigate for all of the environmental impacts of the SHEP, and provide reasonable assurance that the SHEP will not cause a violation of water quality or other applicable environmental standards, which are incorporated herein by reference.

These specific terms and conditions are in addition to those general terms and conditions set forth in South Carolina law pursuant to S.C. Code Ann. Regs. 19-450.4, which are incorporated herein by reference.

1. The Corps may construct the Project as described in the Final EIS dated January 2012 and revised in July 2012 and approved by the Chief of Engineers Report dated August 17, 2012, and Record of Decision dated October 26, 2012.
2. All hopper dredging activities will only take place from December 1 through March 31.
3. All dredging in the Inner Harbor upstream of Station 63+000 is prohibited during the striped bass spawning period of April 1 to May 15.
4. The Commission may make periodic inspections of the Project construction and mitigation implementation sites that are reasonable in scope on no less than one week's advance notice and subject to adherence to personal protective equipment requirements contained in the Corps Safety Manual (EM 385-1-1).
5. In addition to the water quality monitoring set forth in or required by the Final EIS and other governmental approvals, the Corps will provide continuous daily water quality monitoring with two additional monitors at locations to be jointly agreed-upon by the Corps, Commission, and DHEC, to be installed simultaneously with the eight continuous water quality monitoring stations proposed in Appendix D of the Final EIS. These two additional continuous water quality monitoring stations are intended to supplement the eight continuous water quality monitoring stations proposed in Appendix D of the Final EIS and will be subject to the same criteria for Pre-Construction Monitoring, Monitoring During Construction and Post Construction Monitoring as specified in Appendix D to the Final EIS. A copy of the monthly monitoring reports will be provided to the Commission and will be publicly available through the project's website within 30 days after the Corps' receipt of the monitoring report. Should adverse conditions, such as weather or vandalism, impair operations of a water quality monitor, the Corps will undertake reasonable efforts to restore operation of the monitor as soon as possible. This provision will terminate at the end of the 10-year Post Construction Monitoring Period.
6. The Corps shall provide a comprehensive report at: (a) the end of pre-construction; (b) the end of construction; and (c) the end of the 10-year monitoring program, as



such periods are described in Appendix D of the Final EIS. Each comprehensive report shall be provided to DHEC and the Commission and made available on the Project's public website and as provided in Appendix D to the Final EIS.

7. The Corps will refine and update the SHEP hydrodynamic (EFDC) and water quality (WASP) models specifically for DO. The updated model will take advantage of previous modeling efforts, including U.S. Environmental Protection Agency's TMDL model, and the most current information collected in the Savannah River harbor and estuary. The product will be complete DO model scenarios comparing instream DO concentrations with and without operation of the Oxygen Injection System.

The purpose of the modeling and monitoring is to confirm that the Oxygen Injection System will mitigate for the DO impacts of the Project as shown by comparing actual DO levels in the modeled area, from Station 0+000 upstream to River Mile 27.8, to DO levels in the without-Project scenario (the "Success Criteria").

8. Prior to commencement of any Inner Harbor Channel Dredging, the Corps will test and evaluate the downriver Oxygen Injection System that is to be located at the Hutchinson Island location to demonstrate its ability to mitigate dissolved oxygen impacts of the SHEP. Dredging of the Outer Harbor can occur prior to this testing.
  - a) The Oxygen Injection System at the downriver Hutchinson Island location must be operated and instream DO must be monitored continuously for a period of 59 days (2 lunar cycles). Continuous daily water quality monitoring must be conducted during this period at locations specified in and pursuant to the monitoring plan. This 59-day period of operation is referred to herein as the "Test Run."
  - b) Following the Test Run and analysis of the modeling results and monitoring data, the Corps will provide a report to the Conservation Groups, Commission and DHEC comparing the monitoring data collected during the Test Run to the modeling results.
  - c) The Conservation Groups, Commission and DHEC will have thirty (30) days to evaluate and review the Test Run report and to provide comments and feedback to the Corps and the Adaptive Management Team. The Corps, Conservation Groups, Commission and DHEC each will independently evaluate the Test Run report and other relevant information to assess achievement of the Success Criteria.
  - d) If the Corps determines that the Oxygen Injection System test meets the Success Criteria, it will commence Inner Harbor Channel Dredging no sooner than fourteen (14) days after the 30-day comment period in subsection (c) has ended. DHEC, the Commission, and the Conservation Groups each reserves the right to take any appropriate action if its independent determination is that the Success Criteria has not been met, including but not limited to suspension, rescission, and revocation of this permit, initiation of an enforcement or other legal action, and/or termination of this Agreement. The Corps does not waive any objection or defense to

- such actions, including any objection or defense based on federal preemption, sovereign immunity, or immunity from state regulation.
- e) Copies of the data, modeling inputs, modeling results, monitoring data, and reports will be provided to all Parties by the Corps as soon as available to allow the Conservation Groups, Commission and DHEC to review the information simultaneously with the Corps and Adaptive Management Team.
9. Following the installation of the entire Oxygen Injection System, the monitoring and testing procedure will be conducted as set forth below.
    - a) The entire Oxygen Injection System must be operated, and instream DO must be monitored continuously for a period of 59 days (2 lunar cycles), of which at least one 29.5 day testing (one lunar cycle) must occur in July, August, or September immediately following the installation of the Oxygen Injection System. Continuous daily water quality monitoring must be conducted during this period at locations specified in and pursuant to the monitoring plan. This 59-day period of operation is referred to herein as the "Start-up Run."
    - b) Following the Start-up Run and analysis of the modeling results and monitoring data, the Corps will provide a report comparing the monitoring data collected during the Start-up Run to the modeling results to the Conservation Groups, Commission and DHEC.
    - c) The Conservation Groups, Commission and DHEC will have sixty (60) days to evaluate and review the Start-up Run report and to provide comments and feedback to the Corps and the Adaptive Management Team. The Corps, Conservation Groups, Commission, and DHEC each will independently evaluate the Start-up Run report and other relevant information to assess achievement of the Success Criteria.
    - d) If the Corps determines that the Oxygen Injection System test meets the Success Criteria, Inner Harbor Channel Dredging will continue. DHEC, the Commission, and the Conservation Groups each reserves the right to take any appropriate action if its independent determination is that the Success Criteria has not been met, including but not limited to suspension, rescission, and revocation of this permit, initiation of an enforcement or other legal action, and/or termination of this Agreement. The Corps does not waive any objection or defense to such actions, including any objection or defense based on federal preemption, sovereign immunity, or immunity from state regulation.
    - e) Copies of the data, modeling inputs, modeling results, monitoring data, and reports will be provided to all Parties by the Corps as soon as available to allow the Conservation Groups, Commission and DHEC to review the information simultaneously with the Corps and Adaptive Management Team.
  10. The Savannah District of the Corps will make the dissolved oxygen system a top priority for discretionary annual operations and maintenance funds appropriated and received for the Project above normal maintenance requirements.
  11. The Corps shall conduct the following monitoring:

- a) During the SHEP deepening activities, cadmium concentrations in the discharge shall be monitored weekly from those Confined Disposal Facilities (CDF) receiving sediments from the four known reaches within the Savannah Harbor having elevated cadmium concentration in the sediments. U.S. Environmental Protection Agency laboratory testing methodology must have a detection limit of at least 0.7 micrograms per liter (ug/l). Monitoring shall continue at these CDF discharge points as long as discharge is present and until all dredged sediments have been dewatered, stabilized and capped as per the Final EIS. Data shall be reported to DHEC and the Commission quarterly in micrograms per liter within thirty (30) days of the end of each calendar quarter.
  - b) Following the installation of a stable clean cap within the CDFs that receive cadmium-bearing sediments, cadmium shall be monitored weekly for a period of one year. Data shall be reported to DHEC and the Commission quarterly in micrograms per liter within thirty (30) days of the end of each calendar quarter.
  - c) Dewatering discharge from all CDFs shall be monitored by the Corps and reported to DHEC and the Commission monthly and due within thirty (30) days following the end of each reporting period. Monitoring reports shall include the location of the discharge point, sampling point, dates of discharge, total suspended solids, dissolved oxygen, pH, temperature, salinity, turbidity and conductivity. The Corps will monitor weekly when there is a discharge and provide monthly reports to DHEC and the Commission within thirty (30) days of the end of each reporting period.
  - d) The monitoring data will be evaluated as provided in Appendix D of the Final EIS.
12. The Corps will coordinate with the state resource agencies, including the Commission, in the implementation of the Monitoring and Adaptive Management Plan as provided in Appendix D of the Final EIS.
  13. The Corps will comply with the terms and conditions of the Final Biological Opinion issued by the National Marine Fisheries Service on or about November 4, 2011, which are incorporated herein by reference.
  14. The Corps will comply with the terms and conditions of the Section 401 Water Quality Certification issued by the Georgia Department of Natural Resources (Georgia DNR) on or about February 16, 2011, which are incorporated herein by reference.
  15. The Corps will comply with the terms and conditions of the Programmatic Agreement for Cultural Resources with the South Carolina State Historic Preservation Office on or about November 30, 2011, which are incorporated herein by reference.
  16. To the extent any conflict may arise or exist between the South Carolina-specific terms and conditions set forth herein and the terms and conditions of other governmental approvals incorporated by reference, the terms and conditions specifically set forth herein shall govern.

17. The Corps will comply with the Monitoring and Adaptive Management Plan provided as Appendix D of the Final EIS.
18. No later than six (6) months prior to the commencement of Inner Harbor Channel Dredging, GPA will establish a letter of credit or escrow account on commercially reasonable terms agreed-upon by GPA, DHEC and the Commission in the amount of Two Million Dollars (\$2,000,000). This amount will be adjusted annually for inflation based on the U.S. Bureau of Labor Statistics CPI-U, U.S. City Average for All Items representing the annual change. Any interest that accrues in an escrow account will be applied toward the CPI-U adjustment for the following year(s). This letter of credit or escrow account is to be held as a contingent fund to be drawn upon for operation and maintenance of the Oxygen Injection System should the Corps fail to provide for an annual appropriation for or otherwise fail to fund the operation and maintenance of the Oxygen Injection System. The letter of credit or escrow account will be maintained for a minimum of \$2,000,000 (as adjusted annually for inflation) at all times for fifty (50) years after completion of the Project.
19. GPA will contribute cash and land to address the Commission's concerns about the sufficiency of mitigation for the Project's potential environmental impacts as follows:
  - a) GPA will contribute Three Million Dollars (\$3,000,000) to DHEC to be used solely and exclusively for water quality monitoring and other initiatives in the Lower Savannah River Basin, payable in Seven Hundred Fifty Thousand Dollar (\$750,000) increments, with the first payment commencing ninety (90) days following execution of the Project Partnership Agreement and no earlier than July 1, 2013, and the remaining payments to be paid on the annual anniversary date of the initial payment for the following three (3) years.
  - b) GPA will contribute Three Million Dollars (\$3,000,000) to the South Carolina Department of Natural Resources (South Carolina DNR) to be used solely and exclusively for monitoring and research of Shortnose and Atlantic Sturgeon and their habitat in the estuaries of the Savannah River payable in Seven Hundred Fifty Thousand Dollar (\$750,000) increments, with the first payment commencing ninety (90) days following execution of the Project Partnership Agreement and no earlier than July 1, 2013, and the remaining payments to be paid on the annual anniversary date of the initial payment for the following three (3) years.
  - c) GPA will contribute Fifteen Million Dollars (\$15,000,000) for conservation efforts, as follows. GPA will pay these funds into an escrow account on commercially reasonable terms agreed-upon by GPA, DHEC, and the Commission, which will be disbursed to the relevant payees within ten (10) days of completion of the Project. Any interest that accrues in a given year will be applied toward GPA's next payment.
    - (1) Five Million Dollars (\$5,000,000) solely and exclusively for preservation of wetlands, acquisition of conservation easements, and/or upland buffers that directly benefit the Lower Savannah watershed to be paid to The South Carolina Conservation Bank, payable in increments of One Million Dollars (\$1,000,000), with the first payment commencing within sixty (60) days following initiation

- of Inner Harbor Channel Dredging and no earlier than July 1, 2014, and the remaining payments to be paid on the annual anniversary date of the initial payment for the following four (4) years.
- (2) Five Million Dollars (\$5,000,000) to South Carolina DNR, with the stipulation that South Carolina DNR must use such funds solely and exclusively for the creation, restoration, or enhancement of wetlands in the Lower Savannah watershed, payable in increments of One Million Dollars (\$1,000,000), with the first payment commencing within sixty (60) days following initiation of Inner Harbor Channel Dredging and no earlier than July 1, 2014, and the remaining payments to be paid on the annual anniversary date of the initial payment for the following four (4) years.
  - (3) Five Million Dollars (\$5,000,000) to Ducks Unlimited, Southern Region, Wetlands America Trust (DU), with the stipulation that DU must use such funds solely and exclusively for preservation of wetlands and/or upland buffers in either state that directly benefit the Lower Savannah watershed, payable in increments of One Million Dollars (\$1,000,000), with the first payment commencing within sixty (60) days following initiation of Inner Harbor Channel Dredging and no earlier than July 1, 2014, and the remaining payments to be paid on the annual anniversary date of the initial payment for the following four (4) years.
  - (4) If the Project is completed before the scheduled payments set forth in this Section (1)-(3) have been made, GPA will pay any remaining payments due within ten (10) days of completion of the Project.
  - (5) Recipients of GPA's Fifteen Million Dollar (\$15,000,000) funding contributions set forth in this Subsection (c) shall provide an annual summary to GPA regarding what projects or activities were completed with the funds within the previous year.
- d) GPA will contribute Twelve Million Five Hundred Thousand Dollars (\$12,500,000) to be used solely and exclusively for environmental and conservation projects in the Savannah River Basin to the Savannah River Restoration Board in increments of One Million Forty-One Thousand, Six Hundred Sixty-Six Dollars and Sixty-Seven Cents (\$1,041,666.67), with the first payment commencing sixty (60) days following initiation of Inner Harbor Channel Dredging and no earlier than July 1, 2014, and the remaining payments to be paid on the annual anniversary date of the initial payment for the following eleven years. Any interest that accrues in a given year will be applied toward GPA's next payment. GPA will pay these funds into an escrow account, which will be disbursed to the Savannah River Restoration Board upon completion of the Project. Any installment payments due after completion of the Project will be paid directly to the Savannah River Restoration Board. The Savannah River Restoration Board will be established and operated as a bi-state board comprised of representatives of the following agencies and organizations: Georgia DNR, Georgia

Environmental Protection Division, South Carolina DNR, DHEC, Commission, Savannah Riverkeeper, S.C. Coastal Conservation League, the S.C. Wildlife Federation, Georgia Wildlife Federation and GPA. The mission of the Savannah River Restoration Board will be to fund projects in the Lower Savannah River watershed that improve the water quality and aquatic functioning of the Savannah River, with a priority on oxbow restoration projects.

20. GPA will contribute cash and land to address the Commission's concerns about the sufficiency of mitigation for the Project's potential environmental impacts as follows. Within ninety (90) days following execution of the Project Partnership Agreement, the GPA will cause to be transferred from the Georgia Department of Transportation, by quitclaim deed containing an automatic reversion provision, as set forth below, approximately 2,000 acres of salt marsh as generally reflected on the attached Exhibit A, exact boundaries and acreage of which to be determined by a survey to be obtained by GPA, to the Commission. If the Project is terminated prior to initiation of Inner Harbor Channel Dredging, the property will automatically revert to the Georgia Department of Transportation in as is condition. The deed shall contain the following reversion provision:

**TO HAVE AND TO HOLD** the said real property unto Grantee, Grantee's successors and assigns, provided, however, if the Project is terminated at any time prior to the initiation of Inner Harbor Channel Dredging the said real property shall automatically revert back to the Grantor without the necessity of reentry and without the necessity of notice, demand, any action brought or taken by Grantor, any instrument or conveyance executed or delivered by Grantee, any liability of Grantor to make or pay any compensation therefore to Grantee or Grantee's successors and assigns, it being intended hereby to create a determinable fee in Grantee with a possibility of reverter being retained by Grantor so that when an above-stated event shall occur the title of Grantee to said real property shall automatically be at an end and by operation of law the title to said real property shall immediately revert to and revest in Grantor in the same state of title as initially conveyed to Grantee without prejudice to any other right, claim, or interest Grantee may have or had prior to the date of recordation of this deed. After such reversion, upon Grantor's written request, Grantee will execute and delivery a quitclaim deed to Grantor conveying whatever right, title, and interest was conveyed by the Grantor within thirty days from receipt of Grantor's written request. The failure of Grantee to execute and deliver such quitclaim deed shall not prevent the automatic reversion of fee simple title in said real property to Grantor.

21. GPA commits to work with the City of Augusta and Georgia EPD as Augusta complies with applicable responsibilities arising from Federal Energy Regulatory Commission licensing of the Augusta Canal and Diversion project, such responsibilities to include support of the fisheries by providing adequate flows.
22. Prior to initiation of Inner Harbor Channel Dredging, GPA, at its sole expense, will retain the firm Moffatt & Nichol to evaluate the effects that cadmium disposal in

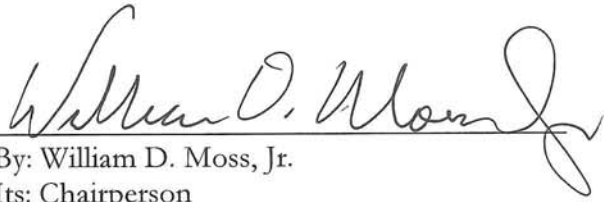
confined disposal facilities 14A and 14B may have on the construction of a terminal at those sites in the future and submit such report to DHEC and the Commission.

23. GPA's obligations in Terms and Conditions 19-22 will be suspended if (a) the Project is stayed or enjoined, (b) the State Approvals are revoked, rescinded, modified or stayed, or (c) after the initiation of Inner Harbor Channel Dredging, Inner Harbor Channel Dredging is suspended or ceased for any reason and after GPA provides written notice to the Commission of such suspension or cessation which shall state the reason for such suspension or cessation and the estimated time period of the length of such suspension or cessation. GPA's suspended obligations will resume once the suspended activity resumes and after notice to the Commission provided no later than ten (10) days prior to the resumption of dredging activities. If the Project is, or the dredging activities thereof are, suspended through the exercise of the rights under Terms and Conditions 8(d) or 9(d) by the Commission or DHEC, all of GPA's pending and future funding obligations set forth in Term and Condition 19(a)-(c) will be suspended, to resume once the Project resumes. If the Project is, or the dredging activities thereof are, suspended through the exercise of the rights under Terms and Conditions 8(d) or 9(d) by the Conservation Groups, all of GPA's pending and future funding obligations set forth in Term and Condition 19(d) will be suspended, to resume once the Project resumes.
24. The Corps must construct the Project in a manner that will not violate applicable law.
25. This authorization may be suspended, rescinded, revoked, modified, amended, or revised by further action of the Commission in its sole discretion after review of a request for such action by the applicant and the evaluation of appropriate supporting documentation or *sua sponte* on the Commission's own initiative based on a change of circumstances or conditions, including changes to the Project.

### Conclusion

IT IS THEREFORE DETERMINED that the SHEP may proceed only on the terms and conditions as set forth above to ensure compliance with South Carolina law, including but not limited to water quality standards. This Navigable Waters Permit and Commission approval and authorization is independently enforceable by the Commission pursuant to South Carolina law. S.C. Code Ann. §§ 48-1-10 et seq., 54-6-10; S.C. Code Ann. Regs. 19-450. Further, in accordance with applicable law, these terms and conditions are incorporated into and made enforceable terms and conditions of the 401 Certification issued by DHEC.

**ISSUED ON BEHALF OF THE COMMISSION:**

  
By: William D. Moss, Jr.  
Its: Chairperson

This 3<sup>rd</sup> day of June, 2013.  
Columbia, South Carolina



# **EXHIBIT A**

