Record of Decision
Department of the Army Permit Application
No. 2003-1T-016
South Carolina State Ports Authority's
Proposed Marine Container Terminal
at the Charleston Naval Complex
and
Permit Application No. 2005-1N-440
South Carolina Department of Transportation's
Proposed Port Access Roadway

1. Name and Address of Applicants

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2. Introduction and Background

On 24 January 2003, the South Carolina State Ports Authority (SCSPA) submitted an application for a Department of the Army (DA) permit to develop a marine container terminal on the Cooper River at the south end of the former Charleston Navy Base in North Charleston, Charleston County, South Carolina. Based on our review of the permit application, it was determined that the proposed project was likely to have a significant effect on the quality of the human environment and that an Environmental Impact Statement (EIS) was required. The Federal Highway Administration (FHWA) was invited to be a cooperating agency on the EIS because of the potential impact that the proposed port facility would have on existing transportation infrastructure. Applied Technology and Management was selected as a third party contractor to assist the U.S. Army Corps of Engineers (USACE) in preparing the EIS.

As discussed further in Section 1 of the FEIS, USACE is responsible for evaluating the SCSPA's application for a DA permit pursuant to Section 10 of the Rivers and Harbors Act and Section 404 of the Clean Water Act. The National Environmental Policy Act (NEPA) requires Federal agencies to prepare an EIS for every major Federal action that "significantly" affects the quality of the human environment. The preparation of an EIS in accordance with NEPA is intended to disclose the potential environmental consequences of the proposed project and to provide interested parties with an opportunity to participate in the environmental evaluation process. NEPA requires Federal agencies to consider the environment during their decision-making processes

and to treat environmental impact as a primary criterion in evaluating a proposed project. It also requires Federal agencies to analyze and consider alternatives to the proposed action, including the No-Action alternative and other activities that may result in less environmental impacts.

In this particular case, USACE is evaluating two permit applications to determine whether the SCSPA and the SCDOT should be allowed to place fill material in waters of the United States and to construct structures and dredge in navigable waters of the United States for the development of a marine container terminal and an access roadway on and adjacent to the Cooper River. The EIS includes information on a broad range of issues that may be regulated by other Federal, state, or local authorities. NEPA requires Federal agencies to consider the proposed action's environmental consequences and to balance them with the agency's statutory mission and responsibilities and technical and economic factors. As the lead agency for this EIS, USACE is responsible for evaluating a range of reasonable alternatives to the proposed action and identifying the least environmentally damaging practicable alternative pursuant to the Clean Water Act. This information is used to determine whether to issue a permit, issue a permit with conditions, or deny a permit for the proposed activity.

Role of the SCSPA

The SCSPA was established in 1942 by Act No. 626 of the South Carolina General Assembly. The SCSPA is an agency of the State of South Carolina. The Applicant's jurisdiction extends throughout the state of South Carolina. The mission of the SCSPA includes 1) promoting, developing, constructing, equipping, maintaining, and operating the harbors or seaports within the State, 2) to foster and stimulate the shipment of freight and commerce through said harbors and seaports, and 3) to perform any act or function which may tend to or be useful toward the development and improvement of the said harbors and seaports.

In the past 20 years there has been a worldwide shift of cargo transportation to containerization in response to the greater efficiencies afforded by that process. In recognition that the existing container facilities at the Port of Charleston (Columbus Street, North Charleston, and Wando Welch Terminals) were rapidly approaching their maximum practical capacity, the SCSPA proposed to develop a new marine container on a 1,300-acre tract of land they owned on Daniel Island. After almost four years of work and the preparation of a draft EIS by USACE, the SCSPA elected to withdraw their permit application in 2000.

In 2002, the SCSPA was directed by the South Carolina General Assembly to begin environmental impact studies and other required actions to locate a new terminal facility on the west bank of the Cooper River. The General Assembly also directed the Charleston Naval Complex (CNC) Redevelopment Authority (RDA) to convey certain parcels of land to the SCSPA for the development of breakbulk, roll-on-roll-off, and container terminal operations. The location of these parcels was identified in a Memorandum of Understanding and Agreement (MOUA) regarding future development

plans at the former Charleston Navy Base that was signed by the SCSPA and City of North Charleston.

The MOUA identifies the southern half of the former Charleston Navy Base as the Port Facility Area. The SCSPA currently operates Veterans Terminal (a bulk, break bulk, Roll-On-Roll-Off, and project cargo facility), which consists of 110 acres of land and four former U.S. Navy piers near the southern end of the CNC property. The proposed project consists of developing a new marine container terminal on 240 acres of land that is also located within the Port Facility Area. The area north of Viaduct Road and Supply Street will be redeveloped by the City of North Charleston as a mixed use project, which provides the waterfront access to the residents of North Charleston and is generally known as the Noisette Project.

The MOUA also states "that certain minimum infrastructure must be in place before the SCSPA commences container operations. This minimum infrastructure includes a truck access road leading directly from the Port Facility Area to I-26 and three rail overpasses in the areas of Rivers Avenue and Harley Street, Rivers Avenue and Durant Road, and North Rhett and I-526 Streets." According to the SCSPA's permit application, "(t)he South Carolina Department of Transportation in conjunction with the State Infrastructure Bank, the South Carolina Public Railways Commission, and the Charleston Area Transportation Study will be planning rail and highway access to serve the Port's needs on the former Charleston Navy Base."

Role of the South Carolina Department of Transportation

An Access Roadway Feasibility Study (ARFS) was prepared to help identify a roadway corridor that provides a direct connection between the proposed port facility and Interstate 26. The South Carolina Department of Transportation (SCDOT), Berkeley-Charleston-Dorchester Council of Governments (BCDCOG), FHWA, and Corps participated in the development of the study, and on August 10, 2005, the SCDOT submitted an application for a DA permit to construct a four lane limited access highway between the proposed marine container terminal and the Interstate 26. Since the construction and operation of the proposed port facility and the access roadway are dependent upon one another, the Corps advised the SCDOT and the SCSPA that both projects would be evaluated in the EIS that was being prepared for the proposed port facility. The two projects are collectively referred to as the Proposed Project in both the draft and the final EIS.

Role of the USACE

The USACE has overseen and directed the development of the EIS. Charleston District Commanders Lieutenant Colonel Peter C. Mueller (June 2001–June 2003), LTC Alvin B. Lee (June 2003-June 2005), and LTC Edward R. Fleming (June 2005-Present) were directly involved in these decisions. Based on comments received during the scoping process and throughout our preliminary evaluation of the Proposed Project, the USACE identified the following topics as those with specific relevance for this

application and they became the focus of the EIS: roadway and railway traffic, air quality, water quality, threatened and endangered species, noise, light, public safety, quality of life, social effects such as division of existing communities, navigation and recreational boating, sediment quality, sedimentation rates, wetlands, and aquatic resources such as Threatened or Endangered species Essential Fish Habitat.

During this permit evaluation and NEPA process the USACE has coordinated its activities with other regulatory and resource agencies with important roles in the process. Among these agencies are the Federal Highway Administration (FHWA), Environmental Protection Agency (EPA), the U.S. Fish and Wildlife Service (USFWS), the National Marine Fisheries Service (NMFS), the SC Department of Health and Environmental Control's Office of Ocean and Coastal Resource Management (OCRM) and Bureau of Environmental Quality Control (EQC), SC Department of Natural Resources (DNR), and SC State Historic Preservation Office (SHPO). These agencies have also been involved in the review and approval of the proposed compensatory mitigation program for affected aquatic resources. At this time, these agencies have indicated that the mitigation offered by the SCSPA and SCDOT for the Proposed Project now compensates appropriately for unavoidable impacts to aquatic resources.

There has been both public opposition and public support for the Proposed Project since the inception of the EIS process. There were a number of opponents, as well as proponents, at the scoping meeting for the EIS, five public workshops, and at the Public Hearing held on November 17, 2005. Several local communities and municipalities have adopted resolutions, or submitted comments, in opposition to the Proposed Project. This opposition is based in large part on concerns regarding impacts of the proposed project on roadway traffic, air quality, noise, light, and property values.

3. Statutory Authorities Applicable to the Proposed Project

a. USACE Authorities

Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403): Section 10 of the Rivers and Harbors Act prohibits the unauthorized obstruction or alteration of any navigable waters of the United States and requires issuance of a permit from the DA for any structures placed in navigable waters of the United States

Section 404 of the Clean Water Act (33 U.S.C. 1344): Section 404 of the Clean Water Act (CWA), authorizes the Secretary of the Army, acting through the Chief of Engineers, to issue permits, after notice of and opportunity for public hearing, for the discharge of dredged or fill material into waters of the United States, which includes wetlands. The selection and use of disposal sites must be in accordance with the 404(b)(1) guidelines developed by the EPA.

b. SCDHEC Authorities

Coastal Zone Management Act (16 U.S.C. 1451 *et seq*.): The Coastal Zone Management Act requires all Federal projects or activities authorized by Federal permit to comply, to the greatest extent practicable, with the state's Coastal Zone Management Program (CZMP). South Carolina's Coastal Zone Management Act defines the state's coastal zone as "all coastal waters and submerged lands seaward to the state's jurisdictional limits and all lands and waters in the counties of the state which contain any one or more of the critical areas." The critical areas, 1) coastal waters, 2) tidelands, and 3) beach and dune systems, fall under the South Carolina Department of Health and Environmental Control, Office of Ocean and Coastal Resource Management's (OCRM) direct permitting authority.

Freshwater wetlands are addressed through the Coastal Zone Consistency determination program. OCRM reviews all activities requiring permits by Federal agencies to determine if the project is consistent with the Coastal Zone Management Program. In order to receive certification approval an activity must be determined to be consistent with relevant policies contained in the SC Coastal Zone Management Program, including the SC Stormwater Management and Sedimentation Control Act. These policies are aimed at protecting freshwater wetland areas, as well as the quality of surface waters.

Section 401 of the Clean Water Act: Section 401 of the CWA requires any action that may result in a discharge into waters of the United States requires a 401 certification from the State in which the discharge originates. The South Carolina Department of Health and Environmental Control's Bureau of Environmental Quality Control (EQC) is responsible for the 401 certification decision for the proposed marine container terminal and access roadway. As described below, SCDHEC issued a 401 Water Quality Certification for both the proposed marine container terminal and port access roadway.

SCDHEC issued a Critical Area Permit, Coastal Zone Consistency Determination, and 401 Water Quality Certification for the SCSPA's proposed marine container terminal (P/N 2003-1T-016) on October 30, 2006, which was modified to address specific concerns regarding the permit conditions on February 8, 2007. SCDHEC also issued a Critical Area Permit, Coastal Zone Consistency Determination, and 401 Water Quality Certification for the SCDOT's proposed port access roadway (P/N 2005-1N-440) on November 13, 2006, which was modified as addressed in the supplemental decision document on February 8, 2007. The South Carolina Coastal Conservation League filed a Request for Contested Case Hearing for each permit on March 9, 2007.

c. Other Authorities

Clean Air Act (42 U.S.C 7401-7671q): The Clean Air Act requires the EPA to set National Ambient Air Quality Standards (NAAQS) for pollutants considered harmful to public health and the environment. Primary standards set limits to protect public health, including sensitive populations such as asthmatics, children, and the elderly.

Secondary standards set limits to protect public welfare, including protection against decreased visibility, damage to animals, crops, vegetation, and buildings. In addition, the individual states were required to develop a State Implementation Plan to define the strategy for assessing and maintaining these established air quality standards.

The Clean Air Act also requires the EPA to use the results of state ambient air quality monitoring to assign a designation to each area of the United States for compliance with the NAAQS. In South Carolina, compliance designations are usually defined by individual counties. Berkeley, Charleston, and Dorchester Counties, are currently in compliance will all NAAQS and are currently designated as attainment areas. SCDHEC has indicated that an Early Action Plan or similar measures may need to be implemented to ensure that Charleston County (and the rest of South Carolina) complies with the new NAAQS value for 24-hour $PM_{2.5}$. The SCSPA and SCDOT have developed a Memorandum of Agreement to assist in defining their efforts to work together to manage port-related emissions and ensure that Charleston County continues to be designated as an attainment area.

Endangered Species Act (16 U.S.C. 1531-1544): The Endangered Species Act (ESA) provides for the designation and protection of invertebrates, wildlife, fish and plant species that are endangered or becoming extinct and conserves the ecosystem on which such species depend. The ESA makes it illegal to kill, collect, remove, harass, import, or export a protected species without a permit from the Secretary of the Department of the Interior. Regulatory and administrative actions are the responsibility of the USFWS and the NMFS. All Federal agencies must follow regulations as outlined under Section 7 of the ESA, which defines the process through which Federal actions that may affect protected species are approved, disapproved, and appealed. The Corps consulted with the USFWS and the NMFS regarding the potential impact of the Proposed Project on Federally listed species protected by the ESA. Based on conservation measures that were incorporated into the Proposed Project by the SCSPA and a special condition regarding manatees that will be incorporated into the DA permit by the Corps, NMFS and USFWS concurred with our determination that the Proposed Project is not likely to impact any Federally listed threatened and endangered species.

Fish and Wildlife Coordination Act (16 U.S.C. 661-666c): Federal agencies are required to consult with the USFWS and the NMFS, if applicable, and the appropriate State agency regarding the conservation of wildlife resources by prevention of their direct or indirect loss and damage due to the activity proposed in a permit application.

Fishery Management Conservation Act (16 U.S.C. 1801 *et seq*.): Congress enacted amendments to the Magnuson-Stevens Fishery Conservation Management Act in 1996 that established procedures for identifying Essential Fish Habitat (EFH) and required interagency coordination to further the conservation of federally-managed fisheries. Rules published by the NMFS specify that any Federal agency that authorizes, funds or undertakes, or proposes to authorize, fund or undertake an activity that could adversely affect EFH is subject to the consultation provisions of the above-mentioned Act. As a result of concerns that were expressed by NMFS during consultation on the Proposed

Project, the SCSPA elected to modify their mitigation plan to include activities such as marsh restoration on Drum Island, helping to fund the preservation and enhancement of Morris Island, and helping to fund existing SCDNR oyster restoration programs that would better offset the anticipated impacts to EFH.

Migratory Bird Treaty Act (16 U.S.C. 703-712): The Migratory Bird Treaty Act provides protection to migratory birds such as waterfowl, shorebirds, passerines, hawks, owls, vultures, and falcons. The Act makes it unlawful to pursue, hunt, take, capture, or kill any migratory bird, part, nest, or egg, except as permitted by regulation.

National Environmental Policy Act (42 U.S.C. 4321 *et seq*.): The National Environmental Policy Act (commonly called NEPA) requires that the responsible federal agency perform an assessment of all reasonable alternatives to a proposed action that would avoid or minimize adverse effects upon the quality of the human environment. An EIS was prepared pursuant to the Council on Environmental Quality Regulations (40 CFR parts 1500-1508) and the USACE of Engineers Procedures for Implementing NEPA (33 CFR Parts 230 and 325 Appendix B). This ROD documents the decision regarding DA Permit Application Nos. 2003-1T-016 and 2005-1N-440.

National Historic Preservation Act (16 U.S.C. 407(f)): The National Historic Preservation Act (NHPA) requires the Federal agency responsible for the action to consider the effect on historically significant cultural resources. Requirements of Section 106 of the Act apply to any Federal undertaking, funding, license or permit. In South Carolina, the SC Department of Archives and History (SCDAH) is consulted when projects are subject to review under Section 106 of the NHPA. The review process typically requires a broad range of activities, including Federal and State agency coordination, public involvement, identification of cultural resources in the project area, formal assessment of National Register eligibility, and development of mitigation strategies, if applicable. The State Historic Preservation Office indicated that the Proposed Project is not expected to effect cultural resources. In the event that previously unknown archeological resources are discovered during the development of the Proposed Project, a general condition of the DA permit requires the permittee to notify the Corps so that the necessary coordination can be conducted.

4. Proposed Project and Compensatory Mitigation Plan

The Proposed Project consists of the development of the SCSPA's proposed marine container terminal and SCDOT's proposed port access roadway that provides direct access to Interstate 26.

Proposed Marine Container Terminal: The proposed port facility is located on approximately 220 acres of land at the south end of the former Charleston Navy Base in North Charleston, South Carolina. The footprint of the proposed port facility also includes approximately 70 acres of tidal marsh and open water habitat that would be dredged and filled to provide additional container storage or developed as a pile supported wharf. In addition, 80 acres of open water habitat would be deepened to

provide access to the federal navigation channel. The project site is located on the west bank of the Cooper River between two existing contraction dikes, which were constructed to reduce shoaling within the adjacent federal navigation channel.

The proposed port facility includes: 1) 255 acres of developed container terminal complex (wharves, container yards, gate facilities, and support facilities), 2) 25 acres of stormwater management facilities, 3) 78 acres of dredged berth and access channel, 4) a sediment suspension system, and 5) improvements to Tidewater Road to provide future access to Cooper River Marina.

Construction of the proposed berths and access channel to a depth of -45 feet mean low water (MLW), with 2 feet of advanced maintenance and 2 feet of overdepth would generate approximately 6.5 million cubic yards (mcy) of dredged material. The proposed bottom elevation would be the same as the adjacent federal navigation channel. The SCSPA currently operates three marine container terminals within the Port of Charleston. The existing bottom elevation is considered sufficient for operation of the Panamax and Post-Panamax vessels that are expected to be the most common vessels calling at the proposed facility.

The majority of the dredging and filling activities would be completed within the first 2 years of construction activity. Based on recent dredging practices that were used to deepen and widen the adjacent federal navigation channel, it is anticipated that that the majority of this new construction would be excavated using a 30-inch hydraulic cutterhead dredge. The dredging would likely occur over a period of 12-15 months, and the dredged material would be placed in the existing Daniel Island confined disposal facilities, which are owned and operated by the SCSPA. Prior to beginning operations, maintenance dredging would be required to remove any material that has settled into the berth and access channel during project construction (5-6 years).

The first phase of construction would consist of dredging, installing the sheet pile wall, and consolidating the subsurface soils on the project site. In order to achieve the load bearing capacity to support stacked, loaded containers, the majority of the uplands located on the project site would be static loaded with fill material for approximately 2 years. In order to minimize the amount of fill material that would be necessary for developing the project site, the SCSPA plans to rotate the surcharge material. Development of the project site would likely begin with the southernmost wharf and container storage areas and would move northward toward the FLETC property as additional throughput capacity is needed. The pile supported sections that are located at either end of the facility (shown on Figure 3.2-2) would be constructed last because of their additional cost and their proximity to nearby structures, such as the contraction dikes and the marina.

Proposed Access Roadway: The proposed access roadway corridor begins at the western boundary of the port facility and extends in a southwesterly direction toward Interstate 26. The port access roadway component is primarily elevated and provides direct access to Interstate 26. The local access roadway component is primarily located

on grade and connects the port access road to Spruill Avenue, Bainbridge Avenue, and Cooper River Marina via Tidewater Road. Approximately 60 acres of new public rights-of-way would need to be acquired by SCDOT prior to development of the proposed roadway. The location of the proposed port facility and access roadway is shown in Figures 3.2-2 through 3.2-4 that were also included in the FEIS.

The proposed port access roadway is a four lane, 1.2-mile limited access highway that provides direct access from the proposed port facility to Interstate 26. The development of the roadway would require the construction of a new interchange on Interstate 26 near the existing Spruill Avenue interchange (Exit 218) and the Meeting Street Road interchange (Exit 217). In order to safely and efficiently accommodate future traffic volumes and merging onto Interstate 26, the existing Spruill Avenue interchange would be closed and the existing Meeting Street Road interchange would be redesigned to allow for the construction of new collector and distributor roads.

The port access road is designed to prevent container trucks that enter and exit the proposed port facility from using local streets. The majority of the access roadway is elevated to avoid and minimize potential impacts to the environment and existing transportation infrastructure, such as Shipyard Creek, CSX Cooper Railyard, Spruill Avenue, Meeting Street, and King Street. A grade separated interchange is located on the Macalloy Industrial Park property, which provides local residents, port employees, and Cooper River Marina users access to Interstate 26 via the port access road.

The local access roadway component includes the relocation and expansion of an existing at-grade railway crossing near Shipyard Creek Road to provide access to Spruill Avenue, the construction of a low level bridge across Shipyard Creek to provide access to Cooper River Marina, and a connection to Bainbridge Avenue that enables Veterans Terminal, FLETC, and other traffic on the CNC to avoid local streets and use the proposed roadway to access Interstate 26. In addition, Stromboli Avenue would be reopened between Spruill Avenue and Carner Avenue and these intersections would be improved to safely and efficiently accommodate future traffic. As a result, of these improvements the portion of Meeting Street Road between Jacksonville Road and Carner Avenue would be closed and traffic would be rerouted to Carner Avenue.

There are approximately 153.3 acres of waters of the United States on the proposed project site. These areas consist of open water, salt marsh below MHW, and freshwater wetlands that are primarily located immediately adjacent to salt marsh. The areas (in acres) of aquatic resources within the construction boundaries of the proposed port facility and access roadway project would be affected in the following manner:

Proposed Impacts	**Total**	**Filled**	**Dredged[1]**	**Rip-Rap[2]**
Marine Container Terminal				
Jurisdictional salt marsh	9.6	9.6	0	0
Jurisdictional freshwater wetland	2.4	2.4	0	0
Open water and mudflat	147.8	56.6	80.0	11.0

Port Access Roadway				
Jurisdictional salt marsh	4.3	2.7	0	0
Jurisdictional freshwater wetland	0.4	0.3	0	0
Open water and mudflat	0.8	0	0	0
Total	153.3	71.6	80.0	11.0

[1] Includes the berth, access channel, and 2.6 acres under the wharf structure.

[2] Includes the rock dike under the wharf structure and the area of slope protection below MLW adjacent to the proposed containment structure and the existing contraction dike.

Proposed Compensatory Mitigation Plan: The SCSPA and SCDOT submitted a compensatory mitigation plan, dated August 18, 2006, to offset the proposed impacts to waters of the United States. The proposed mitigation plan includes the following:

Drum Island is located downstream of the project site near the confluence of the Cooper and Wando Rivers. The majority of the island is developed as a confined disposal facility and is primarily used for placement of dredged material from the existing berths at Union Pier and Columbus Street Terminal. The SCSPA has proposed to create approximately 22.0 acres of salt marsh by excavating this area to establish elevations that will be routinely inundated by tidal flows. The site will be planted with appropriate salt marsh vegetation and monitored in accordance with recent USACE guidance regarding mitigation success criteria.

Morris Island is located downstream of the project site near the entrance channel to Charleston Harbor. The majority of the island is developed as a confined disposal facility, and is occasionally used for the placement of dredged material from Shem Creek. The SCSPA has proposed to contribute $1,000,000 to assist the Trust for Public Land, a national non-profit private land conservation organization, in securing funding to purchase Morris Island. The island is identified on the National Register of Historic Places and is also used as habitat by numerous migratory birds and several endangered species. The Trust for Public Land is working with resource agencies, local officials, and concerned citizens to develop a management plan for Morris Island. Their goal is to balance continued public access with passive enjoyment, education, and enhancement of the ecological benefits.

The SCSPA has proposed to provide the SC Department of Natural Resources with $1,000,000 in funding to support existing oyster restoration programs in and around Charleston Harbor. The proposed funding is expected to enable SCDNR to restore and enhance approximately 5 miles (8 acres) of oyster reefs. SCDNR will be responsible for identifying suitable sites, implementing the oyster restoration proposed work, and submitting monitoring reports to the appropriate regulatory and resource agencies to document their success. Oyster reefs are considered an important component of the estuarine system because they support hundreds of species of invertebrates, crustaceans, and fish. This component of the SCSPA's mitigation plan is expected to help compensate for adverse impacts that result from the filling and excavation of intertidal and subtidal habitats associated with development of the Proposed Project.

The SCSPA has proposed to provide the Nature Conservancy with $1,000,000 in funding to support their ongoing efforts to protect aquatic resources on the Cooper River upstream from the project site. Both the East and West Branches of the Cooper River are currently experiencing development pressure. The proposed funding will be placed in an escrow account and used to either purchase property or a conservation easement to protect aquatic resources and the environment. This component of the SCSPA's mitigation plan is expected to help compensate for adverse impacts to natural resources and water quality that result from the filling and deepening of aquatic resources, stormwater runoff, and site development.

The habitats preserved by conservation easements would continue to provide wildlife habitat for numerous resident and migratory species. The tidal marsh and oyster restoration portion of the approved mitigation plan would replace a portion of the lost habitat and enhance the value of existing habitat within the Cooper River watershed. The SCSPA's mitigation plan includes more than 1,000 acres of compensatory mitigation: the 22-acre Drum Island Tract, the 136-acre Morris Island Tract, the 8-acre oyster restoration, approximately 950 acres of freshwater wetlands and upland buffers as part of the Cooper River Initiative, and the purchase of 26.8 credits from an appropriate Federally approved wetland mitigation bank within the Cooper River watershed.

The development of the proposed access roadway would result in substantially less adverse impact to waters of the United States than the port facility. SCDOT's portion of the approved mitigation plan includes debiting the appropriate number of tidal and freshwater mitigation credits/acres from their existing Huspa Creek (30.52 credits) and Black River Mitigation Banks (1.02 acres). The proposed mitigation credits and acreages are consistent with the Charleston Districts' Standard Operating Procedures for Compensatory Mitigation and the mitigation calculations and ratios that were developed for these specific SCDOT mitigation banks.

5. USACE Identification and Evaluation of Alternatives

Need for the Proposed Project According to the SCSPA, the proposed project is needed to provide additional facilities to support existing business and meet anticipated increases in throughput demand (4.28 percent per year) for containerized cargo in the State of South Carolina. The SCSPA has identified the following minimum needs for new container facilities: 1) proximity to an existing Federal navigation channel or open waters that could be deepened to a project depth of -45 feet MLW, 2) 3,000 feet of new container berth and 200 acres of new terminal backland, and 3) proximity to highway and railway infrastructure.

U.S. container trade projections were obtained from the Institute for Water Resources Report 00-R-04 entitled, National Dredging Needs Study for U.S. Ports ad Harbors: Update 2000. While the SCSPA's projected growth of 4.28% for the Port of Charleston is considered reasonable, there are concerns that the base year (2002) is too low and subsequently understates the container volumes for future years. The IWR

report predicted a national growth rate of 4.52% through 2025. In the event that the actual growth rate more closely approximates the projected national growth rate, the SCSPA will need additional terminal facilities to meet future container throughput demand.

Based on actual data, container volumes at the Port of Charleston grew at a compound annual growth rate of 5.97% between 1998 and 2003. Although improvements to existing facilities are in progress to accommodate container growth until additional container capacity can be developed, the SCSPA has indicated that throughput capacity may be limited because of terminals operating at or near capacity. According to the SCSPA, the primary issue restricting expansion at the Port of Charleston is the lack of backland and the resulting constraints on the staging of the cargo containers.

The SCSPA has stated that without additional container facilities, it would not be capable of fulfilling its mission, which includes fostering and stimulating the shipment of waterborne freight and commerce originating within or without the State of South Carolina. Based on our review of the SCSPA's containerized cargo projections, the Corps concluded that the assumptions and methods used are within the limits of acceptable forecasting procedures and do not overstate the need for the proposed expansion of port capacity.

Identification of Potential Alternatives

The goal of the Alternatives Analysis was to identify the environmentally preferable alternatives, the alternative(s) with the least overall adverse impacts to the existing environment. According to NEPA and the CWA, the "environmentally preferable" alternative promotes the national environmental policy. In general, the selected alternative should minimize impacts to the biological and physical environment. NEPA requires that impacts to the human environment be addressed. The human environment "shall be interpreted comprehensively to include the natural and physical environment and the relationship of people to that environment" (40 CFR 1508.14).

To identify reasonable alternative site locations for proposed container terminal complexes, the USACE used the statement of need presented by the Applicant to develop a set of basic criteria against which potential sites were evaluated. The USACE determined that each reasonable alternative must provide an ultimate annual container throughput capacity of approximately 791,000 containers (1.4 M twenty-foot equivalent units) to accommodate the growth projected by the SCSPA.

To support the Applicant's proposed operational plan, each alternative site must provide 3,000 feet of berths for container vessels and approximately 200 acres of backland directly behind the berths suitable to deploy, organize, and load/unload containers to/from trucks and rail. This would include integration of efficient container storage and support facilities. The USACE determined that the needed container berths could also be realized by developing a one berth expansion of an existing SCSPA

facility and a new, two berth facility to achieve the ultimate container throughput capacity, although that might not be the configuration desired by the SCSPA.

A three-tiered approach for identifying potential locations for the proposed project was undertaken. This approach is described briefly below and in detail in Section 3.4 and Appendix M of the FEIS.

- Basic siting criteria were developed using general information about the Proposed Project to identify a wide range of potential alternative sites in the State of South Carolina (the reasonable operational area of the SCSPA);
- Tier 1 consisted of applying screening criteria related to the construction and operation of a marine container terminal to the entire list of 59 potential sites to determine which sites should be eliminated from further consideration;
- Tier 2 consisted of gathering information about potential impacts (construction, operation, social, and environmental) associated with developing the Proposed Project and each of the 24 potential alternative sites that passed Tier 1.
- The information gathered during Tier 2 was presented to an Expert Panel consisting of representatives specializing in various areas related to planning, design, construction, or operation of marine container terminals to obtain technical opinions on the feasibility of constructing and operating a marine container terminal at each of the 24 potential alternative sites.
- The Corps used this information to identify the range of reasonable and practicable alternative sites that were evaluated in the EIS.

The Tier 1 screening criteria included:

- Navigation Access,
- Road and Rail Access,
- Shoreline Requirements, and
- Backland Requirements.

The Proposed Project and each of the 24 potential alternative sites identified through the Tier 1 evaluation were evaluated against the following Tier 2 screening criteria to determine which sites should be considered in the EIS:

- Dredging Requirements,
- Engineering and Construction Constraints,
- Operational Compatibility,
- Transportation Infrastructure,
- Potential Social Impacts, and
- Potential Environmental Impacts.

The site identification process resulted in the selection of four alternatives in addition to the Proposed Project to be evaluated further in the EIS. The list of project alternatives included two single site alternative locations and two combined alternative

locations, which consist of a two berth alternative location and a one berth expansion at the SCSPA's existing North Charleston Terminal (NCT).

- Daniel Island, Cooper River
- Clouter Island, South
- Drum Island + Expansion at NCT
- Charleston Naval Complex, North + Expansion at NCT

Conceptual terminal layouts were developed for each of these four alternatives to assist in developing the overall scope of work for the EIS and to refine the available acreage of backland, the volume of dredging required, and the approximate location of any transportation improvements.

Based on these layouts, extending the existing wharf would provide sufficient space to berth three 1,000-foot long ships at NCT. However, demolishing the existing grain elevator and backfilling the area behind the new wharf structure provides less than 15 acres of additional container storage area. Since this is far less than the 50+ acres that are required to meet the project purpose, the Corps evaluated adjacent properties to determine if there was a potential to obtain and/or develop additional backland. Based on the information gathered, the acquisition of additional backland was not considered practicable and the expansion of the NCT was eliminated from further consideration.

CNC, North (which is also located at the former Charleston Navy Base) and Drum Island were both evaluated to determine if a three berth facility could be developed at either of these two sites. The development of a three berth facility at the CNC, North site would require the relocation of the existing SCSPA Veterans Terminal, redevelopment (excavation and backfilling) of a former US Navy landfill, and acquisition of additional property from the Federal Law Enforcement Training Center (FLETC) and the City of North Charleston. Any one of these three factors would raise substantial concerns about the ability to develop a marine container terminal on this site. When viewed together this alternative is not considered practicable and was also eliminated from further consideration.

The development of a three berth facility on Drum Island would result in the loss of more than 75 acres of tidal marsh, and the construction of a moveable span bridge across Town Creek that would likely create conflicts with existing operations at the SCSPA's Columbus Street Terminal. In addition, the Charleston Branch Pilots Association stated that the construction of a two or three berth facility near the confluence of the Cooper and the Wando Rivers would pose a hazard to navigational safety. Docking and undocking container ships at this location would also result in delays to ships that transit the area to reach other terminals on both the Cooper River and Wando River. Therefore, this alternative was also eliminated from consideration.

Two alternative sites (Daniel Island and Clouter Island) were evaluated in the FEIS, in addition to the proposed project at the Charleston Naval Complex and the No-

Action Alternative. The locations of these alternatives are shown in Figure 3.4-1 of the FEIS. Each of the alternative sites considered in the FEIS includes a layout for a container terminal yard and a three berth wharf. The layout of each alternative site would be similar to the Proposed Project in terms of paved area, lighting, drainage, and container processing capabilities. In order to allow for a consistent comparison with the Proposed Project, an access roadway, an access channel, and a turning basin were added to the conceptual layout for each of the alternative sites. However, the exact site layout and the configuration of the associated infrastructure are variable because of site specific differences in the location of the alternatives within the overall landscape.

Alternatives Evaluated in the EIS

The alternatives are discussed in Section 3.5 (*Comparison of Alternatives and their Impacts*), Section 5 (*Environmental Consequences*), and throughout the FEIS. The following provides a brief description of each alternative considered in the FEIS. Aquatic resources present at each alternative site would be the subject of avoidance, minimization, and mitigation efforts, and compensatory mitigation for aquatic values would be commensurate to that required for the Proposed Project.

(1) No-Action Alternative The No-Action Alternative assumes that the Proposed Project is not constructed (i.e. a marine container terminal would not be constructed at the southern end of the CNC property with a roadway providing direct access to I-26). As a result, the regional need to meet the projected containerized cargo capacity demands for the State of South Carolina may not be met. Additional market demand for goods transported by containerized cargo would be provided by existing terminals at the Port of Charleston, and other nearby terminals, such as Savannah, via truck and/or rail.

The future development of the project site would likely be commercial, industrial, or some other type of port facility (bulk, break-bulk, or roll-on-roll-off) because of its location near the federal navigation channel. However, the No-Action Alternative may result in a series of smaller actions, which do not require an EIS and may not result in the same level of mitigation that is being proposed by the SCSPA. It is possible that the site could be cleared, paved and used for industrial purposes without Clean Water Act authorization if impacts to waters of the United States are avoided. Development of the project site in this manner would include the use of Viaduct Road and existing local roadways to access Interstate 26, resulting in an increase in traffic on local roadways.

(2) Proposed Project The SCSPA's proposed marine container terminal and SCDOT's proposed port access roadway are collectively referred to as the Proposed Project. The project site consists of a portion of the former Charleston Naval Base and the development of a roadway corridor that avoids and minimizes potential impacts as it passes through the adjacent urban areas. The majority of the site was previously used as a confined disposal facility for material dredged from the former US Navy Piers. Construction of the proposed project at this location would include the placement of fill material to raise the elevation of the existing site, installation of a containment structure

to fill open water, and dredging to create the depths necessary to access the proposed facility from the existing federal navigation channel. Three container berths would be constructed along the western side of the Daniel Island Reach. Roadway access would be provided by constructing a four lane, limited access highway to provide direct access between the project site and Interstate 26.

An estimated 9.6 acres of tidal marsh, 2.4 acres of jurisdictional freshwater wetlands, and 56.6 acres of open water would be impacted by the placement of fill material to construct the port facility. An additional, 2.74 acres of tidal marsh and 0.34 acres of jurisdictional freshwater wetlands would be impacted by the placement of fill material to construct the proposed roadway. The dredged open water area would be approximately 4,000 feet long and 750 feet wide (79.9 acres), and would include three berths and an access channel. This area would be dredged to a depth of -45 feet MLW (plus two feet advanced maintenance and two feet overdredge), similar to the adjacent federal navigation channel. Including those areas that would be excavated and backfilled within the containment structure, approximately 6.5 mcy of material would be dredged and placed in the SCSPA's existing confined disposal facilities on Daniel Island.

(3) Daniel Island This alternative site is located on the eastern side of the Daniel Island Reach immediately across from the Proposed Project. This site primarily consists of a portion of a former confined disposal facility. The federal easements, which allowed this property to be used for maintenance of the federal navigation channel, expired in 1996 and these areas are now operated and maintained by the SCSPA. This alternative is a portion of the area that was evaluated by the SCSPA in the late 1990's for the development of a much larger marine container terminal.

Construction of the proposed project at this location would include the installation of a containment structure to fill open water and dredging to create the depths necessary to access the proposed facility from the existing federal navigation channel. Three container berths would be constructed along the eastern side of the Daniel Island Reach. Roadway access would be provided by constructing a four lane, limited access highway along the western edge of Daniel Island to provide direct access between the project site and Interstate 526.

An estimated 20.7 acres of tidal marsh and 23.8 acres of open water would be impacted by the placement of fill material to develop a port facility. An additional, 21.8 acres of tidal marsh and 1.3 acres of jurisdictional freshwater wetlands would be impacted by the placement of fill material to construct the proposed roadway. The dredged open water area would be approximately 3,000 feet long and 600 feet wide (49.3 acres), and would include three berths and an access channel. This area would be dredged to a depth of -45 feet MLW (plus two feet advanced maintenance and two feet overdredge), similar to the adjacent federal navigation channel. Including those areas that would be excavated and backfilled within the containment structure, approximately 3.8 mcy of material would be dredged and placed in the SCSPA's existing confined disposal facilities on Daniel Island.

(4) Clouter Island This alternative site primarily consists of a portion of an existing confined disposal facility that is used to maintain the federal navigation channel. Construction of the proposed project at this location would include the installation of a containment structure to fill open water, and dredging to create the depths necessary to access the proposed facility from the existing federal navigation channel. Three container berths would be constructed along the western side of the Navy Yard Reach. Roadway access would be provided by constructing a four lane, limited access highway to provide direct access between the project site and Interstate 526.

An estimated 9.5 acres of tidal marsh and 7.0 acres of open water would be impacted by the placement of fill material to construct the port facility. An additional, 10.3 acres of tidal marsh and would be impacted by the placement of fill material to construct the proposed roadway. The dredged open water area would be approximately 3,500 feet long and 650 feet wide (62.5 acres), and would include three berths and an access channel. This area would be dredged to a depth of -45 feet MLW (plus two feet advanced maintenance and two feet overdredge), similar to the adjacent federal navigation channel. Including those areas that would be excavated and backfilled within the containment structure, approximately 5.1 mcy of material would be dredged and placed in the SCSPA's existing confined disposal facilities on Daniel Island.

Environmentally Preferable Alternative To determine the environmentally preferable alternative, relevant public interest factors identified during the scoping and public coordination processes, and the potential environmental impacts associated with each alternative site were considered (see Table 3 located near the end of this ROD). Differences may exist between this table and the FEIS due to the USACE evaluation of these environmental impacts in light of the Agency's statutory mission and jurisdictional authority, and the fact that the analysis was performed without consideration of compensatory mitigation. The complete discussion on each alternative is presented in Sections 3.5 and 5.1-5.4 of the FEIS.

The development of a marine container terminal and port access roadway at any of the alternative sites that were evaluated in the FEIS (Proposed Project, Daniel Island, and Clouter Island) would result in both beneficial and adverse impacts to public interest factors. For the purpose of this discussion the projected impacts from each of the alternative sites are summarized into three categories: 1) public interest factors where impacts are considered almost equal; 2) public interest factors that have moderate differences among the alternative sites; and 3) public interest factors that have substantial differences among the alternative sites. In the end, the issues that were identified as the most relevant during the public interest review and those that exhibited the greatest differences among the alternatives were used in determining the environmentally preferred alternative.

1) Evaluation criteria considered to have almost equal impacts, both adverse and beneficial, among the alternative sites are; physical setting, socioeconomics, navigation, cultural resources, section 4(f) properties, 6(f) properties,

and other recreational properties, threatened and endangered species, shorelines, and floodplains.

Physical Setting: All three alternatives include former CDFs that would be filled and surcharged to provide stable soils that are capable of supporting the weight of loaded, stacked containers. The land surface (250 acres) would be paved and raised to ensure that buildings, structures, and containerized cargo are located above the appropriate base flood elevation. The development of the Proposed Project would require the largest volume of dredging and placement of fill material because the port facility layout extends further into the Cooper River that the other alternatives sites. However, the upland portion of the Proposed Project includes a number of impervious areas such as former buildings and parking areas associated with the former Charleston Navy Base and would result in the least impacts to unpaved areas. In addition, the access roadway associated with the Daniel Island and Clouter Island alternatives is longer and would result in greater impacts to tidal marsh and undeveloped areas. Development of any of the alternative sites would result in localized impacts to topography and surficial hydrology.

Socioeconomics: The Tri-County (Berkeley, Charleston, and Dorchester Counties) region is classified as a Metropolitan Statistical Area by the US Census Bureau and as a Major Labor Market Area by the US Department of Labor because of the population density, commuting patterns, and economic integration of the area. Therefore, the development of marine container terminal at any of the three alternative sites would likely have a similar beneficial impact on job creation, personal income, business revenue, indirect purchases, and additional state and local tax income within the Tri-County region and the state.

Navigation: Navigation impacts are projected to be similar for all of the alternative sites. Analysis factors included the projected increase in background vessel traffic on the Cooper River, increase in vessel traffic associated with a new marine container terminal, delays caused by vessels using a portion of the navigation channel as a turning basin, and overall distances traveled through Charleston Harbor. Since the Clouter Island alternative site is located approximately one mile upstream from the other alternative sites, there would likely be a slight increase in delays caused by vessels needing to pass one another in the federal navigation channel.

Cultural Resources: All of the alternative sites are located on the Cooper River, and ocean going ships would be required to pass through Charleston Harbor to access a new port facility. Based on coordination with SHPO, the projected increase in ship traffic (approximately 2-3 ships per day) in the existing federal navigation channel would have no effect on existing Historic Districts and other resources that are considered eligible for the National Register of Historic Places. Underwater archeological surveys have been conducted for each of the alternative sites, and no resources that are considered eligible for the NRHP were identified. Since the alternative sites are developed as confined disposal facilities or as a former US Navy Base there is little potential for the presence of archeological resources.

Threatened and Endangered Species: None of the alternative sites include habitat that is considered suitable for Federally listed plant or animal species that are known to occur in Berkeley or Charleston Counties. However, there are several Federally listed species that are known to use coastal waters in the vicinity of the Port of Charleston. As described below, the development of a marine container terminal at any of the three alternative sites would not affect any Federally listed marine species as a result of conservation measures that were incorporated into the proposed project by the SCSPA and special conditions that would be added to a DA permit authorizing activities in waters of the United States at any of the alternative sites.

Shorelines: The development of any of the alternative sites would result in an incremental increase in vessel traffic within the existing federal navigation channel and on the Cooper River. The Clouter Island alternative would be expected to have slightly greater impacts than the Proposed Project or Daniel Island because vessels would be required to travel approximately one mile further upstream. However, the potential impacts associated with any of the alternative sites are expected to be minimal.

Floodplains: All of the alternative sites include areas that are identified as floodplains and floodways. Development of a marine container terminal and access roadway in these areas would result in the placement of fill material to raise the surface of the container storage areas above the appropriate flood elevations. Likewise, buildings and structures, such as roadways and bridges would be constructed above the appropriate flood elevations. The developed area would represent a very small portion of the overall Cooper River floodplain and development would be expected to have negligible impacts on nearby properties that are also located within the floodplain.

2) Evaluation criteria considered to have impacts, both adverse and beneficial, that have moderate differences among the alternative sites are; social characteristics, community infrastructure and municipal services noise, light, Section 4(f) properties, Section 6(f) properties, and other recreational facilities, hazardous waste and materials, water resources, aquatic sediments and dredging, natural resources.

Social Characteristics: As described below, the alternative sites are located in different areas and are experiencing different levels and types of development pressure. In general, the development of a marine container terminal and access roadway would be expected to have a beneficial impact on household income and locally owned businesses throughout the region. It would also be expected to have a negligible overall effect on population, racial composition, age distribution, and educational attainment within the region.

Concerning environmental justice, development of a marine container terminal and access roadway is not expected to divide existing residential communities at any of the alternative sites. The Proposed Project is the only alternative site that is located within an urban area, and the associated access roadway would be located near more than one neighborhood that was identified as both minority and low-income in the FEIS. Although the access roadway was designed to avoid and minimize potential impacts to

residential properties, it would impact a small portion of a playing field near Rosemont. Based on the overall number of residents within these neighborhoods, the Proposed Project would have secondary impacts on a larger number of low income, minority residents than either of the other two alternative sites.

The construction of the access roadway associated with the Daniel Island or Clouter Island alternative sites would result in unavoidable adverse impacts to a number of residences and a church that is located on or adjacent to Clements Ferry Road. Although the proposed roadway would affect fewer residents, the direct impacts to these particular residences would be greater. These residences are believed to be occupied by some of the few remaining long term residents of the area.

Community Infrastructure and Municipal Services: Development of any of the alternative sites would have negligible direct impacts on overall capacity or regional needs for water supply, wastewater treatment, solid waste facilities, and electrical utilities. However, business growth that would be induced by development of a marine container terminal and access roadway may result in an increase in regional needs for community infrastructure and municipal services.

The Proposed Project and Daniel Island would require minimal infrastructure on-site to connect to existing water and wastewater facilities. However, Clouter Island is undeveloped and would require either installation of new water or wastewater lines under the Cooper River or a new wastewater treatment plant. The projected increase in roadway and railway traffic or the construction of the proposed access roadway and improvements to local roadways would alter local traffic patterns and may affect how emergency responders elect to travel to and from certain areas.

Noise: The noise generated by the construction and operation of a marine container terminal and access roadway would be similar for each of the alternative sites. The construction of the Proposed Project would result in slightly greater impacts because more dredging and placement of fill material would be required to develop the project site. In addition, there are fewer sensitive receptors in the vicinity of both the Daniel Island and Clouter Island alternatives at this time, so there would be fewer individuals impacted by the projected noise.

Noise impacts associated with the operation of the Proposed Project or Daniel Island would likely be greater than the Clouter Island alternative because of the proximity of developed properties on the CNC (Cooper River Marina and FLETC) and future development on Daniel Island.

Light: Light generated by the construction and operation of a marine container terminal and access roadway would be similar for each of the alternative sites. Mast lighting would be visible from the Cooper River and from nearby elevated roadways and bridges. Prior to the construction of I-526 development was concentrated on the west bank of the Cooper River near the City of Charleston and City of North Charleston. Although the northern portion of Daniel Island has experienced substantial growth in the

past few years, the Daniel Island and Clouter Island alternative sites are undeveloped and there are very few sources of nighttime light. Therefore, the change in light conditions at these alternative sites would be more substantial than the Proposed Project, which would blend in with the existing nighttime lighting of the CNC and the City of North Charleston.

Light trespass may extend as far as 300 feet beyond the boundaries of the proposed port facility. The Proposed Project would be expected to result in greater adverse impacts than the Clouter Island or Daniel Island alternatives because of the proximity of developed properties on the CNC (Cooper River Marina and FLETC). However, this type of impact can be managed through the use of appropriate lighting designs and minimized by limiting the height of light poles and using appropriate light shields. In addition, lighting impacts may be further minimized by optimizing the lighting design through choice of lamp wattage, fixture orientation, and mounting heights.

Section 4(f) Properties, Section 6(f) Properties, and other Recreational Facilities: As described in the FEIS, Section 4(f) and Section 6(f) properties are afforded certain protections under the Department of Transportation Act and the Land and Water Conservation Act, respectively. The development of any of the alternative sites would result in an incremental increase in ocean going vessel trips, potential interactions between commercial and recreational vessels on the Cooper River, and potential impacts to existing waterfront recreational facilities on Charleston Harbor. Since the Clouter Island alternative is located approximately one mile further upstream, there would be a slightly greater potential for vessel interactions or impacts to waterfront recreational facilities such as the recently opened Riverfront Park on Noisette Creek.

The Proposed Project includes the construction of improvements to Tidewater Road to provide future access to Cooper River Marina, which is identified as a Section 4(f) property. The proposed roadway would provide more direct access to the existing marina. In addition, a portion of the local access roadway would impact an existing container storage yard, which is located immediately adjacent to Park South. A ramp associated with the proposed interchange on I-26 would impact a small portion of an existing playing field near Rosemont. These potential impacts have been avoided and minimized to the maximum extent practicable and would result in minimal impact to the existing facilities.

Hazardous Waste and Materials: As described above, subsurface soils and surficial groundwater on any of the alternatives would be impacted by the preparation of the site for storage of stacked, loaded containers. All three of the sites include CDFs that may have been used in the past for disposal of contaminated sediments that were dredged from the former US Navy piers or the federal navigation channel. In addition, there are several areas on the CNC alternative site where past soil or groundwater contamination have been documented. Site disturbance, such as the excavation of stormwater management basins or the installation of drainage wicks to facilitate soil consolidation, would require that any contaminated soil or groundwater be handled properly. This work would be conducted in accordance with the existing RCRA permit for the site, and

would likely result in partial remediation of the project site. The majority of the developed site would be paved and would reduce the potential for exposure to contaminated soil or groundwater.

Aquatic Sediments and Dredging: The development of any of the alternative sites would result in the dredging of aquatic sediments that have been impacted by anthropogenic sources. Sediment analyses that were conducted for each of the alternative sites indicate that each has been impacted in the past to some degree by deposition of contaminants. Although the development of the Proposed Project (6.5 mcy) would require more initial dredging than Clouter Island (5.1 mcy) or Daniel Island (3.8 mcy), the dredging and disposal of this material would meet state water quality standards for any of the alternative sites.

Since the berth and access channel areas for the Proposed Project overlap the Daniel Island Reach turning basin, more than 70 percent of the proposed dredging has been previously authorized as part of the Charleston Harbor Project. The construction of the Proposed Project would result in a slight decrease in the overall acreage of open waters that would be deepened because the location of the turning basin would be shifted toward the centerline of the federal navigation channel. In an effort to reduce long term maintenance dredging of the berth and access channel, the Proposed Project would use of a portion of the federal navigation channel to turn vessels.

The development of any of the alternative sites would result in minimal impacts to existing sedimentation rates within the federal navigation channel, and a need for future maintenance dredging of the berth, access channel, and turning basin areas. Maintenance material would be placed in the Daniel Island CDF, with the possible exception of the Proposed Project. If the portion of the access channel that overlaps the authorized turning basin is incorporated into the federal navigation channel, the maintenance material would be placed in the Clouter Island CDF. The Clouter Island alternative (280,000 cy) and the Proposed Project (210,000 cy) are expected to require greater maintenance dredging than the Daniel Island alternative (90,000 cy).

Natural Resources: The development of any of the alternative sites would result in similar impacts to both terrestrial and aquatic resources. All three of the alternative sites primarily consist of low value terrestrial habitat that is either developed as a CDF or dominated by relatively common plant and animal species. The upland portion of the Proposed Project includes urban areas that were previously impacted by commercial and/or industrial development, and would have slightly less impact on terrestrial communities.

The development of the Proposed Project would impact the greatest acreage of aquatic resources (149.5 acres). However, more than half of this acreage (78.6 acres) overlaps the previously authorized turning basin on Daniel Island Reach, which would be deepened as part of the Charleston Harbor Project. The Daniel Island (113 acres) and Clouter Island (89.4 acres) alternatives would result in the loss or modification of less open water areas and slightly greater impacts to tidal marsh. In addition,

development of the Clouter Island alternative would require the replacement of CDF capacity that is used to maintain the federal navigation channel, which may result in the loss of a far greater acreage of waters of the United States (300+ acres).

Water Quality: The development of any of the alternative sites would result in similar impacts to water quality associated with stormwater runoff and deepening portions of the Cooper River. The Proposed Project (79.9 acres) and Clouter Island alternative (62.5 acres) would result in the deepening of a greater area of open water to the same bottom elevation as the federal navigation channel than the Daniel Island alternative (36.6 acres). As a result, short term and long term dredging impacts, decreases in current velocities, the area affected by an increase in bottom salinity, and the area impacted by both minor increases and decreases in dissolved oxygen would be slightly greater. As described below, SCDHEC used the 3-D hydrodynamic model that was developed by the BCDCOG to evaluate the Cooper River TMDL and has issued a water quality certification for the Proposed Project.

3) Evaluation criteria considered to have impacts, both adverse and beneficial, that have substantial differences among the alternative sites are; land use, transportation, air quality, aesthetics.

Land Use: All three of the alternative sites are located on the Cooper River near the federal navigation channel. Although each of these sites includes areas that are currently or have been developed in the past as a confined disposal facility, their projected land uses are very different. The CNC alternative site is a portion of a former US Navy Base that was closed in 1993 and has been redeveloped with a mixture of commercial businesses, government offices, public marinas, and maritime industries. Nearby properties on Shipyard Creek are primarily industrial and are developed with bulk cargo terminals and related maritime industries. Therefore, the proposed port facility is in keeping with the existing and projected land uses for this area.

The Daniel Island alternative consists of a former confined disposal facility that was previously evaluated for development as a marine container terminal. The Governor of South Carolina has directed the SCSPA to sell more than 1,300 acres located on Daniel Island in order to assist in financing the development of the Proposed Project. This area is currently being evaluated for sale as a mixed use residential and commercial development. The development of a marine container terminal on a portion of this property would not be in keeping with this projected future land use.

The Clouter Island alternative consists of an existing confined disposal facility that is used to maintain the upper portion of the federal navigation channel. There are no plans to develop any portion of Clouter Island within the foreseeable future because this area has been identified as the primary disposal area for dredged material from the Charleston Harbor Project for the next 50 years.

Transportation: The development of any of the alternative sites would generate a similar volume of port related roadway and railway traffic associated with employees,

delivery of containerized cargo, and induced development within the region. The access roadway associated with the Daniel Island and Clouter Island alternative sites would provide access to I-526 and the access roadway associated with the CNC alternative would provide access to I-26. The increase in port related traffic would require these respective roadways to be improved sooner than projected in the No-Action alternative.

As a result of substantial development that is occurring in Mount Pleasant and on Daniel Island, background traffic on I-526 is expected to more than double in the future and almost every segment of this roadway is projected to reach a failing Level of Service in the No Action Alternative. Therefore, additional port related traffic would further exacerbate this condition. Background traffic along the I-26 corridor is expected to grow at a more moderate pace and the impact on Level of Service of the Proposed Project would affect fewer roadway segments and is considered much less severe. In addition, port related truck traffic currently uses I-526 to travel from the Wando Terminal to their final destination. Concentrating almost 75 percent of the future port related traffic onto I-526 would result in greater direct and secondary impacts than dividing this traffic between I-26 and I-526 corridor.

Air Quality: The air quality emissions associated with the development of a marine container terminal and access roadway would be similar for any of the alternative sites. Construction of the Proposed Project would require more dredging and placement of fill material than the other alternatives. Whereas, the Daniel Island and Clouter Island alternatives would require construction of a slightly longer access roadway, and port related truck traffic would be required to travel approximately 5 miles further to reach the existing railway yards in North Charleston. In addition, ocean going vessels would be required to travel approximately one mile further to reach the Clouter Island alternative.

The Clouter Island alternative is also located closer than the other two alternatives to industries that already generate elevated concentrations of certain air quality parameters. When added to these emissions, the development of a marine container terminal and access roadway would result in greater cumulative impacts to air quality. The area surrounding the Daniel Island alternative is expected to be developed as mixed use commercial and residential. Unlike the Proposed Project which is separated from nearby residence and most sensitive receptors by Shipyard Creek, CSX Cooper Railyard, and other industries, the Daniel Island alternative may be much closer to future residential developments.

Aesthetics: The development of a marine container terminal and access roadway on any of the alternative sites would result in the construction of similar features that would be visible from adjacent or nearby properties. Since the Proposed Project is located on or near urban areas, commercial and industrial sites, and other port facilities it would be in keeping with the adjacent land use. Although certain project features would be visible from adjacent and nearby properties they would tend to blend into the surrounding environment. As discussed previously, the west bank of the Cooper River is relatively

undeveloped. Therefore, the development of the Daniel Island or Clouter Island alternative would result in greater changes in appearance than the Proposed Project.

Environmentally Preferable Alternative

As described above, development of a marine container terminal would have impacts on a number of different factors. In order to select the environmentally preferable alternative, USACE must consider each of these factors in light of our statutory responsibilities to protect both navigation pursuant to Section 10 of the Rivers and Harbors Act, and aquatic resources pursuant to Section 404 of the Clean Water Act. In order to develop a marine container terminal and access roadway on any of the alternative sites, both waters of the United States and navigable waters of the United States would be impacted.

As described above, the Proposed Project is expected to result in the direct loss and the modification through deepening of the greatest acreage of aquatic resources. However, the development of the Clouter Island alternative would result in the loss of CDF capacity that is necessary to maintain the existing federal navigation channel. Replacement of this CDF capacity would likely result in substantially greater secondary impacts to aquatic resources. Likewise, there are several other areas where the Proposed Project would have slightly greater or moderately greater impacts to the human environment.

As described in the 404(b)(1) Guidelines, USACE must also consider other environmental concerns in determining whether or not a specific activity is considered the least environmentally damaging practicable alternative pursuant to the CWA. In this case, the development of the Daniel Island or Clouter Island alternative site would result in significantly greater impacts to transportation, air quality, and/or land use than the Proposed Project. Therefore, for the reasons described above the Proposed Project is considered both the environmentally preferable alternative pursuant to NEPA and the least environmentally damaging practicable alternative pursuant to the CWA.

6. Environmental Impacts Summary - CNC Alternative

a. Environmental Setting The following is a brief summary of the overall environmental setting of the region and the Charleston Naval Complex site where the Proposed Project would be located. A more detailed description can be found in Section 4 (*Affected Environment*) of the FEIS.

The CNC site is located on the Cooper River near the southern end of the former Charleston Navy Base. The site includes approximately 220 acres of uplands that were previously disturbed by the US Navy during the development of the site. These areas include scrub forest, an inactive CDF, dormitories, roadways, parking areas, and former munitions bunkers. Elevations on the site are generally between 5 and 10 feet above mean low water (MLW). However, most structures are constructed on pilings and there is evidence of the land surface settling one foot or more in various areas. The FEIS for

the Disposal and Reuse of the Charleston Naval Base and other relevant documents were reviewed to help determine past activities conducted on the CNC property.

Areas subject to Corps jurisdiction within the footprint of the proposed port facility include 2.4 acres of jurisdictional freshwater wetlands, 9.6 acres of tidal marsh, and 56.6 acres of open water. All of these areas would be impacted to construct the Proposed Project. In addition, 4.2 acres of tidal marsh, 0.8 acres of open water, and 0.4 acres of freshwater wetlands are located within the proposed access roadway corridor. SCDOT has requested authorization to fill 2.74 acres of tidal marsh and 0.34 acres of jurisdictional freshwater wetlands to construct the Proposed Project. The remainder of the aquatic resources within the roadway corridor would be avoided or spanned by pile supported sections of the roadway.

The Proposed Project would also include deepening 77.9 acres of open water to construct the berth and access channel, and the placement of rip rap below the proposed wharf and adjacent to the containment structure and the existing contraction dike for stabilization. Although these areas would be impacted by the Proposed Project they would not be removed from jurisdiction and would continue to provide aquatic resource functions and values.

A number of commercial and industrial properties adjacent to the CNC are either being redeveloped or are currently evaluating plans for expansion to meet their future needs. Preliminary traffic studies were conducted to determine if local roadways can accommodate both future background growth and port related traffic. Based on the results of this study and in accordance with the MOUA between the SCSPA the City of North Charleston regarding the development of the CNC property, a port access roadway would be necessary to operate the proposed marine container terminal. All containerized cargo would exit the site by truck and would travel directly to I-26, minimizing impacts to the adjacent communities and local roadways.

SCDOT would need to obtain approximately 60 acres of public roadway right-of-ways to construct the proposed port access roadway. The access roadway was designed to avoid impacts to residential properties and to minimize potential impacts to existing commercial and industrial properties. We anticipate that minor modifications to the footprint of the actual roadway may occur during the right-of-way acquisition process in order to further avoid and minimize these potential impacts.

The Proposed Project is located in Charleston County, which is currently classified by the EPA as an attainment area for all current NAAQS standards.

b. <u>Environmental Impacts</u> The possible consequences for this proposed project were studied for environmental concerns, social well being, and the public interest, in accordance with regulations published in 33 CFR 320-331. All factors that may be relevant to the proposal were considered. The following is a brief discussion concerning factors that were determined during the scoping and public coordination

process to be particularly relevant to this application. More detailed information can be found in Section 5 (*Environmental Consequences*) of the FEIS.

(1) Land Use As described above, the Proposed Project is located near the south end of the former Charleston Navy Base. The project site has been conveyed to the SCSPA by the Charleston Navy Base Redevelopment Authority (RDA). Many of the tenants that were using buildings or structures located on the project site have allowed their leases to expire and have elected to relocate their businesses. The remaining tenants would be required to relocate prior to construction of the Proposed Project. The development of the Proposed Project would result in the clearing, paving, and filling of open waters, scrub forests, maintained grassy areas, and a former CDF on the CNC.

The proposed access roadway begins in the City of North Charleston at the proposed port facility and crosses the Macalloy Industrial Park property and the CSX Cooper Railyard before crossing into the City of Charleston. The proposed interchange with Interstate 26 would primarily affect commercial and industrial properties located within the City of Charleston. These properties include a Rhodia chemical plant, Southern Lumber, and several undeveloped properties that are being evaluated for soil and/or groundwater remediation prior to redevelopment. In addition, a small portion of a playing field that was recently constructed by the City of Charleston between Interstate 26 and Rosemont would be directly impacted by ramp construction.

The redevelopment of the project site and the remainder of the former Charleston Navy Base would be expected to occur in the No-Action Alternative. The Proposed Project is in keeping with the FEIS for the Disposal and Reuse of the Charleston Naval Base, the MOUA, and local land use plans for the surrounding area.

The City of North Charleston: According to the MOUA between the City of North Charleston and the SCSPA, the southern portion of the former Charleston Navy Base is identified as the Port Facility Area and the properties that are located between Spruill Avenue and Shipyard Creek have been identified as part of the Port Overlay District. The MOUA states that the City of North Charleston will encourage the location of port related facilities within this area and that new residential development will be discouraged to the extent allowed by law.

The Port Facility Area includes the existing Veterans Terminal, FLETC, Cooper River Marina, and a number of other commercial and government properties that are located on the former Charleston Navy Base. The Macalloy Industrial Park property, the Montenay Incinerator, CSX Cooper Railyard, two shipping container storage yards, a graveyard, an existing city park, and approximately 20 residential and commercial properties are located within the adjacent Port Overlay District. The Proposed Project is considered consistent with North Charleston's long-range plan for the area east of Spruill Avenue. In addition, North Charleston has been evaluating options to relocate the existing park for several years in order to allow existing commercial interests to consolidate their operations east of Spruill Avenue.

The City of Charleston: The City of Charleston is located south of the former Charleston Navy Base and the Port Overlay District. Similar to the City of North Charleston, the immediately adjacent properties located east of the Spruill Avenue/Meeting Street corridor primarily consist of commercial and industrial sites. Bulk cargo (primarily coal) and bulk liquid (primarily gas) port terminals are located adjacent to Shipyard Creek across from the former Charleston Navy Base. The Corps of Engineers is currently processing a permit application that was submitted by Kinder Morgan to increase throughput capacity of their existing coal terminal on Shipyard Creek.

The Proposed Project is in keeping with the existing land uses and future development plans for this area. The construction of the port access road would directly impact several commercial and industrial properties and would result in both beneficial and adverse impacts to local traffic patterns and the ability of property owners to access I-26 in the future. The development of a marine container terminal on the CNC is expected to have long term, beneficial and adverse impacts as a result of construction of the port access roadway and induced development in the surrounding area.

(2) <u>Physical Setting</u> Many of the existing structures on the CNC were originally constructed on pilings because the subsurface soils consist of former tidal marsh that was previously filled by the US Navy. There has been subsidence in many areas and additional work would be required to stabilize site soils to ensure that they are capable of supporting loaded, stacked containers. Development of the project site would include the installation of drainage wicks to facilitate consolidation of upland soils and the placement of approximately 6.5 mcy of fill material. Additional coordination would be required prior to beginning construction to evaluate potential secondary impacts associated with obtaining this fill material.

The development of the Proposed Project would also include the installation of a containment structure that extends 850 feet into the Cooper River and the conversion of approximately 72 acres of jurisdictional wetlands and other waters of the United States into developed upland areas. The majority of the port access roadway would be elevated and constructed on pilings. However, there would be some minor impacts associated with the placement of fill material for at grade sections and the development of stormwater control measures. Overall, the Proposed Project would result in long term, localized impacts to topography and surficial groundwater.

In order to ensure that impacts to the physical setting are avoided and minimized as described in the FEIS the following special condition will be included in the SCSPA's federal permit:

That the permittee understands and agrees that impacts associated with obtaining fill material for the proposed port facility must be evaluated by this office. The permittee must submit sufficient information for this office to evaluate potential impacts (to waters of the United States, Federally listed threatened or endangered species, cultural resources, etc.) 90 days prior to

commencement of fill activities. If avoidance and minimization is not considered practicable additional mitigation will be required to compensate for any unavoidable adverse impacts.

(3) Socioeconomics The construction and operation of the Proposed Project is expected to result in a major socioeconomic benefits to the region and the state of South Carolina by supporting future job growth and industrial development. The cost to develop the proposed port facility and access roadway is projected to be almost one billion dollars. The projected increase in containerized cargo operations is expected to result in new jobs on the terminal site, at distribution centers, at trucking companies, and other maritime support services within the region. For example, the Port of Charleston has been identified by a number of corporations, such as Vought and BMW, as an important factor in their decision to locate operations within the state of South Carolina.

The development of the proposed port facility is projected to result in 1895 construction jobs and $71.7 million in wages per year that would generate $20 million per year in state and local tax revenues during the 6-year construction period. In addition, the operation of the proposed port facility would result in 1790 full time equivalent jobs and $66 million in wages per year that would generate $13.0 million in state and local tax revenues per year.

(4) Social Characteristics and Environmental Justice

Changes in Population Growth: The Tri County region is projected to experience substantial growth in population in the No-Action alternative. It would be difficult to estimate how many additional people may move to the region for a port related job. However, it can be assumed that jobs generated by the Proposed Project would be filled by both current and future residents. According to US Census data, many of the neighborhoods that are located immediately adjacent to the former Charleston Navy Base have experienced a decrease in the overall number of residents and an increase in the percentage of minority residents over the past 30 years. Local roadway improvements and increased job opportunities associated with the Proposed Project may help to reverse this declining trend in population growth.

Community Values: Several organizations and communities have expressed concerns about the potential impacts of the Proposed Project on existing residential neighborhoods and the quality of life, citing potential impacts to noise, light, traffic, air quality, vibrations, and aesthetics. Responses to specific comments were provided in Appendix EE of the FEIS or in this ROD. In general, the construction and operation of the proposed access roadway is expected to have a greater impact on local residents and businesses than activities associated with the proposed port facility. The proposed roadway has been designed to minimize these potential impacts to the maximum extent practicable.

Displacement of Existing Residences, Businesses, and Community Facilities: The development of the proposed port facility on the CNC would require the relocation of several tenants that leased property on the former Charleston Navy Base after it closed in 1996. The majority of these tenants have already elected to relocate their businesses. The remainder of these tenants would be expected to relocate when their lease expires within the next few years. In addition, SCDOT would need to acquire a portion of several commercial and industrial properties and a portion of a playing field in order to obtain the public right-of-ways necessary for the proposed access roadway. Several of the affected property owners have objected to the location of the proposed access roadway because of the impact that it would have on their specific business or future business plans. SCDOT has attempted to avoid and minimize direct impacts to these properties to the maximum extent practicable.

Authorization of work or structures by the Corps does not convey a property right, nor authorize any injury to property or invasion of other rights. Overall the development of the Proposed Project would result in unavoidable adverse impacts to commercial and industrial properties that would be impacted by the proposed access roadway. SCDOT and FHWA regulations provide for the fair and equitable compensation and/or relocation of businesses that would be directly impacted by the proposed access roadway, which would be addressed during right-of-way acquisition.

Property Values: The Proposed Project is one of many redevelopment activities that would be expected to have both beneficial and adverse effects on residential and non-residential property values in the vicinity of the former Charleston Navy Base. There are a number of variables, such as interest rates, inflation, adjacent land uses, regional development plans, and future infrastructure improvements that would also affect future property values. The Corps recognizes that commercial and industrial redevelopment may have an adverse impact on the appreciation of nearby residential properties. However, these effects would be difficult to quantify because of the number of factors that influence future property values. For example, residential properties that are located a similar distance from the existing Wando Welch Terminal in Mount Pleasant have experienced significant appreciation in value over the past 10 years. Ultimately, future property values near the former Charleston Navy Base are expected to be a product of all of these factors.

Environmental Justice: Based on US Census Bureau data, the majority of neighborhoods that are located immediately adjacent to the CNC exhibit both a greater percentage of minority and low-income residents than Charleston County or the State of South Carolina. The proposed access roadway does not divide any of these existing neighborhoods or communities, no residential properties would be acquired to obtain the necessary public right-of-ways, and no residents would be required to relocate as a result of the Proposed Project.

The surrounding area is expected to experience substantial growth and redevelopment in the No-Action alternative as a result of several ongoing projects, such as Magnolia Development, Macalloy Industrial Park, Noisette, and Ashley River Center.

Former industrial properties that are located west of I-26 are being redeveloped as upscale, mixed use commercial and residential properties. Meanwhile, commercial and industrial properties that are located east of the Meeting Street/Spruill Avenue corridor are being redeveloped in keeping with the surrounding industries. The development of large numbers of new residences associated with these other projects would be expected to affect the total population, racial composition, and the average income of the residents of these areas.

Environmental justice was an important consideration in the evaluation of the Proposed Project and the design of the proposed access roadway. The Proposed Project is expected to have both beneficial and adverse impacts on the adjacent communities and the region. As described above, the Proposed Project is in keeping with the adjacent land uses and was designed to avoid and minimize potential impacts to residents of the adjacent minority and low-income communities. The Proposed Project is expected to have moderate long term adverse impacts to social characteristics.

Compensatory Mitigation: As described above, the SCSPA, City of North Charleston, and the Lowcountry Alliance for Model Communities developed a community mitigation plan that includes establishing a trust for the creation of affordable housing, support for education programs, career training, and business opportunities for local vendors, funding for improvements to existing community centers, and assistance in the development of a community master plan.

The proposed compensatory mitigation plan includes the conveyance of excess property associated with the removal of Exit 218 for community enhancement and full compensation and assistance for those local businesses and properties that would be directly impacted by right-of-way acquisition. SCDOT has also agreed to support summer education programs, school to work programs, college scholarships, employment training programs, and technical assistance for small and disadvantaged businesses as part of the Proposed Project. The SCSPA's and SCDOT's CNC Marine Terminal Mitigation Plan was included in Appendix N of the FEIS.

In order to ensure that these and other portions of the proposed compensatory mitigation plan that are discussed elsewhere in this ROD are conducted, the following special conditions will be included in both the SCSPA and SCDOT federal permit.

That the permittee recognizes that its commitment to implement their portion of the CNC Marine Terminal Mitigation Plan, dated May 1, 2006, and revised August 18, 2006, was a deciding factor towards the favorable decision on this permit. If the permittee is unable to execute any portion of the approved mitigation plan within three years of the date of issuance of this permit, the permittee will be required to actively work with the Corps in coordination with NMFS and other Federal and state regulatory and resource agencies to develop a contingency plan to accomplish the necessary mitigation.

The permittee's responsibility to complete the required compensatory mitigation as set forth in Special Condition XXX will not be considered fulfilled until you have demonstrated mitigation success and have received written verification from the Corps.

(5) Community Infrastructure and Municipal Services The Charleston Water System (formerly known as the Charleston Commissioners of Public Works) would provide both potable water service and sanitary wastewater collection. Since the project site would be filled and surcharged prior to development, new infrastructure would be required onsite to tie into the existing water and wastewater systems. In addition, an onsite lift station and force main would likely be required to carry wastewater. Conflicts between the proposed access roadway and existing electrical utilities would be addressed during right-of-way acquisition. Potential impacts to local traffic patterns and the potential effect on emergency services caused by the proposed access roadway may benefit from future improvements to local roadways that were recommended in the CHATS I-26 relocation study. The Proposed Project is expected to result in negligible impacts to community infrastructure and municipal services.

(6) Transportation Since the SCSPA's permit application did not include a port access road, a detailed traffic study was conducted to determine if existing local roadways would accommodate port related traffic. Although local streets were originally designed to accommodate traffic from the former Charleston Navy Base, these existing roadways are expected to experience substantial increases in background traffic and decreases in Level of Service as a result of the redevelopment of nearby commercial and industrial properties.

SCDOT participated in the development of the Existing Roadways Study and prior to the release of the DEIS submitted a permit application to construct a four lane, limited access highway between the proposed port facility and Interstate 26. The proposed access roadway would prevent port related truck traffic from using local roadways, and would also provide non-port related traffic a more direct route from the CNC to I-26. The proposed access roadway would alleviate future traffic conditions on some local roadways by providing another access point to the CNC. Improvements to local roadways are not considered part of the Proposed Project and would be conducted in accordance with regional transportation improvement plans.

Local businesses and residents expressed concerns about the potential impact of closing or modifying one or more of the existing interchanges on Interstate 26 throughout our evaluation of the proposed roadway alternatives. As a result, the Proposed Project includes the construction of collector distributor roads along I-26, and the reconstruction of the Meeting Street Road interchange (Exit 217) to accommodate future background traffic. However, the Spruill Avenue interchange (Exit 218) would be removed and future local traffic would be required to use existing surface streets or to use the proposed port access roadway to access I-26. The future improvements to surface streets that were recommended in the CHATS I-26 Relocation Study would likely address many of these concerns.

Although the closure of Exit 218 would result in both beneficial and adverse impacts on local traffic patterns, the construction of the port access roadway is expected to alleviate future traffic conditions on local roadways. Likewise, the construction of improvements to the Meeting Street Road interchange (Exit 217), the reopening of Stromboli Avenue, and improvements to the intersection of Carner Avenue and Stromboli Avenue are expected to increase the ability of these and other roadways to accommodate future background traffic. Overall the construction of the port access roadway is expected to result in both short term adverse (during construction) and long term beneficial and adverse impacts to local traffic patterns. Property owners that would be directly impacted by the acquisition of public roadway right-of-ways would be fully compensated in accordance with FHWA and SCDOT guidelines.

Interstate 26 Widening: Transportation studies that were prepared for the Proposed Project indicate that Interstate 26 is expected to reach a failing Level of Service in the No-Action alternative. Since I-26 would require improvements to accommodate future background traffic (whether or not the proposed port facility is ever constructed), the potential impacts of these improvements are being evaluated in a separate NEPA document that is being prepared by FHWA. From a regulatory perspective, the construction of a proposed port facility and access roadway, and the construction of future improvements to I-26 have independent utility and should be evaluated separately. Unless the purpose of the proposed project is to construct regional transportation improvements, an applicant for a DA permit should not be required to evaluate regional transportation improvements that are primarily the product of long term regional growth. In this case, the Proposed Project only consists of the development of a marine container terminal and a port access roadway.

As described above, the future widening of Interstate 26 between the port access road and Interstate 526 is currently being evaluated by SCDOT and FHWA. Preliminary studies indicate that the addition of an eastbound and a westbound lane could be accommodated within the existing right-of-way, and that a one lane widening could safely and efficiently accommodate the projected growth in background traffic and the anticipated port related traffic. The development of the Proposed Project would result in these improvements to Interstate 26 occurring sooner than would otherwise be expected.

Railways: The development of the Proposed Project would result in an increase in future railway traffic. Approximately 20 percent of containerized cargo would be carried to an existing intermodal railway yard and would result in an increase in the overall number and/or length of future trains carrying containerized cargo. Based on coordination with the local railway carriers, there are no specific plans to construct improvements to their existing intermodal facilities. However, operational and infrastructure improvements would be necessary in order to accommodate future increases in both freight and containerized cargo.

The projected increase in railway traffic would result in additional impacts to residents and businesses that are currently impacted by the operation of existing railways. Likewise, there would be an increase in delays at existing railway crossings. Therefore, the Proposed Project would be expected to result in long term adverse impacts associated with the projected increase in railway traffic and potential secondary or cumulative associated with future improvements to existing railway infrastructure. In addition, the relocation and expansion of the existing railway crossing at Shipyard Creek Road associated with the construction of the port access road would result in a long term adverse impact to the future operation of the existing CSX Cooper Railyard.

Compensatory Mitigation: The port access roadway includes several elements that were incorporated into the Proposed Project to further avoid and minimize project related impacts and to improve future traffic conditions on local streets, such as the reconstruction of Exit 217, the reopening of Stromboli Avenue, improvements to the intersection of Carner Avenue and Stromboli Avenue, and the construction of a connection to Bainbridge Road to enable existing government offices, businesses, and other port related traffic on the CNC to use the port access road.

The construction of the proposed port access roadway serves to avoid and minimize potential impacts to local roadways associated with the development of the proposed port facility. At this time, the majority of residences in Rosemont already experience elevated noise levels. The noise barrier that was included in the proposed mitigation plan would benefit the residences affected by the Proposed Project, and an even greater number of residences that are already affected by existing highway noise.

In order to ensure that impacts to local roadways are avoided and minimized as described in the FEIS the following special condition will be included in the SCSPA's federal permit:

> **That the permittee understands and agrees that their commitment not to begin operation of the approved port facility until the access roadway between the marine container terminal and Interstate 26 is operational was an integral part of our evaluation. Operation of the port facility cannot commence until the access roadway is operational and available for use by all port related truck traffic.**
>
> **That the permittee understands and agrees that its commitment to transport at least 75 percent of the fill material (soil) to the project site by water was a deciding factor towards the favorable decision on this permit.**

(7) <u>Navigation</u> The transit distance from the entrance to Charleston Harbor to the CNC site would be approximately 12.6 miles. Background vessel traffic on the Cooper River is projected to increase from approximately 1,300 transits per year in 2004 to approximately 1,900 transits per year in 2025 or approximately 7 total transits per day. The Proposed Project would result in an additional 1,300 transits per year or approximately 5 additional transits per day. The overall increase in vessel traffic

associated with the Proposed Project constitutes an acceptable interference with navigation as described below.

The Charleston Branch Pilots Association is responsible for providing safe navigation of seagoing vessels while they are underway within Charleston Harbor. According to the Harbor Pilots, the projected vessel trips would be accommodated on the Cooper River by scheduling transits. In addition, a study was performed to evaluate delays caused by using of a portion of the existing navigation channel to turn vessels and delays caused by interactions between large ocean vessels during transit. The findings of this study indicate that the economic impact of delays on future vessel traffic on the Cooper River would be long term and minimally adverse (less than $200,000 per year in 2025).

The proposed wharf includes a setback of approximately 850 feet from the existing federal navigation channel. The area between the wharf and the edge of the federal navigation channel would be excavated by the SCSPA for an access channel. Since the waterward edge of the proposed wharf does not extend beyond Cooper River Marina or the existing contraction dike, the location of the wharf is not expected to adversely affect the course of commercial or recreational vessels on the Cooper River. The Charleston Harbor deepening and widening project that was authorized in 1996 included the construction of a new turning basin on the Daniel Island Reach near the project site. The Corps of Engineers is conducting a General Reevaluation Report to determine if the authorized turning basin should be modified and a portion of the proposed access channel should be incorporated into the Charleston Harbor Project.

Recreational vessel traffic in the vicinity of the CNC alternative is also projected to increase in response to regional population increases. There is potential for future conflicts between commercial vessels and recreational boats due to these increases in both recreational and commercial vessel transits. The primary conflict risk factors are associated with recreational boats operating near, or attempting to cross, the federal navigation channel in close proximity to deep-draft commercial vessels and tows that are underway. Collisions between vessels, capsizing or swamping from ship wakes could occur if proper safety precautions and navigational rules are not observed by both commercial vessels and recreational boaters.

(8) <u>Noise</u> The development of the Proposed Project would result in an increase in both short term and long term impacts to future noise levels. In general, the construction and operation of the proposed port facility would result in the greatest impacts to adjacent properties on the CNC. Whereas, the construction and operation of the port access roadway would result in the greatest impacts to nearby businesses and residences.

Construction: Major noise sources during construction would include heavy-duty trucks entering and leaving the construction site, earth moving equipment, pile driving, and dredging operations. The FEIS includes a general description of activities, methods, and practices that would be used during construction, and is intended to

provide some indication of the potential noise impacts. However, actual noise impacts would be dependent upon the detailed design plan and construction schedules.

Operation: Based on their proximity to the proposed port facility, Cooper River Marina and the FLETC would experience long term adverse impacts associated with noise levels during operation. Intermittent noise sources, such as a dropped container or hatch cover would likely be audible on Daniel Island or within the adjacent residential communities.

Traffic noise analyses that were conducted for the proposed access roadway indicate that almost 100 residences within the adjacent communities already experience elevated noise levels as a result of existing roadway traffic. As a result of background traffic growth in the No Action alternative an additional 15 residences in Union Heights would be expected to experience elevated noise levels in 2025. The Proposed Project and the removal of the Spruill Avenue interchange would benefit some residences in Union Heights and would adversely impact some other residences. The majority of the residences impacted by the increase in noise levels associated with the Proposed Project would be located in Rosemont.

Based on the projected origins and destinations, more than 90 percent of port related truck traffic would use the westbound interchange ramps. The increase in noise levels in Rosemont would primarily be associated with the increase in background traffic that would use the eastbound interchange ramp that would be moved closer to Rosemont as part of the Proposed Project. Overall the Proposed Project would result in a net increase of 15 additional residences that would be impacted by elevated noise levels associated with roadway noise. Based on the modeling that was conducted for the Proposed Project, the construction of a noise barrier would be expected to reduce the number of affected residences below existing levels.

The development of the proposed access roadway would result in long term adverse impacts to approximately 26 residences in Rosemont if a noise barrier is not constructed. Issuance of a DA permit does not obviate the need for the SCSPA or the SCDOT to comply with the applicable local noise standards. The SCSPA and SCDOT would be expected to work with the appropriate local authorities to control noise levels during both construction and operation.

Compensatory Mitigation: The modeled impacts to Rosemont meet state and Federal criteria for noise abatement. Although the SCDOT's mitigation plan for the Proposed Project includes the construction of a highway traffic noise barrier, the decision whether or not to construct a noise barrier would be dependent upon additional coordination with the affected residents. Several members of the community have indicated that they are opposed to the construction of a noise barrier. In the event that the community is unable to make a decision, a noise barrier would likely be constructed in order to protect the interests of those affected parties that want a noise barrier.

The MOUA discusses the creation of vegetated buffer zones between the Port Overlay District and the adjacent residential neighborhoods. The proposed buffer zones are primarily located on developed property that is owned by private individuals or corporations. Therefore, it is uncertain whether the buffer zones identified in the MOUA would be established in the future. In contrast, the proposed port facility is located approximately 2,500 feet from the nearest residential structure, and existing vegetation, the existing railyard, and both developed and undeveloped industrial properties would tend to block some noises and help to dissipate others.

The SCSPA has agreed to work with FLETC to design and construct a noise barrier to minimize potential impacts associated with vehicles traveling along internal roadways located near their common property boundary. Since the first phase of development would be located closest to Cooper River Marina, this noise barrier would not be designed or constructed until several years after the port facility begins operation. In order to ensure that potential noise impacts are avoided and minimized as described in the FEIS the following special condition will be included in the SCSPA's federal permit:

> **That the permittee agrees to develop and implement a noise abatement plan to address noise impacts on the adjacent Federal Law Enforcement Training Center (FLETC) property. Noise abatement measures, such as sound barriers, acoustic insulation, and vegetated buffers will be used to reduce construction and operational noise associated with the approved port facility to acceptable levels in residential/dormitory structures on the FLETC property. The noise abatement plan must be reviewed and approved by this office in coordination with FLETC.**

(9) <u>Light</u> Marine container terminals must be well lit facilities to meet Occupational Safety and Health Administration (OSHA) workplace safety regulations, and some lighting must be maintained at all times for security reasons. Lighting would primarily be provided by high mast poles, with elements strong enough to provide OSHA regulated light levels at the work surface. The mast poles are generally widely spaced to minimize interference with the movement of containers. The lighting plan for the Proposed Project would be designed to minimize light trespass to adjacent properties, such as Cooper River Marina and FLETC, to the maximum extent practicable.

The preliminary roadway lighting design only includes mast lighting on the local access roadway. The increase in light trespass would be similar to urban lighting on existing roadways and would primarily impact the adjacent commercial and industrial properties. The elevated portions of the access roadway leading from the port facility to I-26 would not be lighted similar to the interstate to avoid and minimize potential impacts to residential properties. Although port activities, such as unloading oceangoing ships may occur at nighttime, port related vehicle traffic would mostly occur during daylight hours when the gates are open for truck traffic and delivery of containers.

Skyglow associated with the Proposed Project would likely be visible from Daniel Island, Thomas Island, the Cooper River, and elevated roadways and bridges similar to the existing Wando Welch Terminal. However, the overall contribution of the Proposed Project is expected to be minimal in comparison with the existing urban lighting within the adjacent North Charleston study area.

Compensatory Mitigation: Potential mitigation measures that were identified in the SCSPA's portion of the mitigation plan include the use of shielded fixtures and the ability to individually control lighting levels within different sectors of the terminal for specific activities such as general lighting for operations or reduced lighting levels for security conditions.

(10) Aesthetics Although portions of the CNC site are developed with buildings and parking areas, the proposed facilities would change the visual character of the waterfront on the project site from an undeveloped, vegetated area to a lighted industrial facility. Therefore, changes in the visual character of the CNC site and subsequent changes in viewsheds from the Cooper River, and offsite residential, commercial, and industrial locations would be expected to occur.

The proposed port facility would be visible from both developed and undeveloped industrial properties along Shipyard Creek and from adjacent properties on the CNC. The waterfront cranes would likely be visible from further away because of their height. The majority of the views from the north would be obscured by the former US Navy piers and developed areas on the CNC. However, the views from the south across the Cooper River will change from an undeveloped, vegetated area between an existing marina and other developed areas on the CNC to a lighted industrial facility.

The construction of improvements to existing roadways, such as the reopening of Stromboli Avenue or the construction of collector and distributor lanes associated with the Meeting Street road Interchange would not substantially alter the appearance or area roadways. Likewise, the at-grade portions of the access roadway would be obscured by adjacent commercial and industrial development and would tend to blend into the surrounding properties. The elevated portions of the port access roadway would be visible from local roadways and nearby properties. In general, these roadways would not differ in appearance from existing elevated roadways in the area and would be expected to have a minimal adverse impact on aesthetics.

Compensatory Mitigation: The MOUA discusses the creation of vegetated buffer zones between the Port Overlay District and the adjacent residential neighborhoods. The proposed buffer zones are primarily located on developed property that is owned by private individuals or corporations. Therefore, it is uncertain whether the buffer zones identified in the MOUA would be established in the future. However, the proposed port facility is located approximately 2,500 feet from the nearest residential structure, and existing vegetation, the existing railyard, and both developed and undeveloped industrial properties would likely obscure views of the port facility from both the west and the south.

(11) Air Quality Coordination between the USACE, SCDHEC, and USEPA occurred throughout the evaluation of the Proposed Project. SCDHEC and USEPA reviewed protocols for major analysis elements and the procedures used for air dispersion modeling. Based on comments that were received in response to the DEIS, additional modeling was conducted to provide additional information on potential cumulative impacts.

Early Action Plans: Ambient air quality within Berkeley, Charleston, and Dorchester Counties meet the current NAAQS and SCAAQS standards. Along with most other counties in South Carolina, all three counties have voluntarily agreed to participate in an Early Action Plan to proactively address air quality issues prior to their becoming problematic. All three counties also signed an Early Action Compact to address the reduction in the NAAQS standard for ground-level ozone. Local Early Action Plans were submitted in March 2004 to identify emission reduction strategies that would reduce ozone levels in the future.

Dispersion Modeling – Proposed Terminal Operations Impact on Pollutants with NAAQS: An EPA approved air quality dispersion model, ISCST3, was used to estimate the potential ambient air quality impact of the construction and operations of the proposed terminal on areas near the project site. Inputs to this model included the emission inventory developed for the Proposed Project, which includes all onsite activities, oceangoing container ships and support vessels within the federal navigation channel, container trucks and other port related vehicles within 5 km of the project site.

Since the projected construction emissions are considerably lower than the projected operational emissions at full capacity in 2025, the dispersion model was used to evaluate 2025 operational conditions. For the NAAQS evaluation, the maximum impacts of the Proposed Project were added to the maximum background concentrations to identify the maximum cumulative impact. In addition, a cumulative impact analysis was conducted by evaluating the interaction of project related emissions and permitted users in the area.

The Proposed Project is expected to result in long term adverse impacts as a result of project related mobile emissions. As described below, SCSPA and SCDHEC have developed a MOA that includes the development of an emissions inventory to further define the actual operational impacts and to identify the cost effective ways to reduce port related emissions and to assist SCDHEC in managing regional air quality.

Reduction in the 24-Hour NAAQS Standard for PM 2.5

The air quality modeling that is included in the FEIS projects that the maximum 24 hour contribution of the Proposed Project operating at full capacity in 2025 will be 16.5 mg/m3. When added to the maximum ambient background data for $PM_{2.5}$ (29.2 mg/m3 based on 2002-2004 SCDHEC monitoring data) the maximum cumulative impacts associated with the Proposed Project, 45.7 mg/m3 are expected to comply with the current NAAQS 24 hour standard for $PM_{2.5}$ of 65 mg/m3.

On October 17, 2006, the USEPA issued a final rule regarding the NAAQS standard for $PM_{2.5}$ which reduces the 24 hour standard for $PM_{2.5}$ from 65 mg/m3 to 35 mg/m3 in 2010. In addition, SCDHEC has released ambient monitoring data for 2005, which indicates that the maximum ambient air quality for 24 hour $PM_{2.5}$ has increased to 32.5 mg/m3 in Charleston County and has increased to 34.7 mg/m3 within the Cape Romain Wildlife Refuge. According to the 2005 ambient air quality data, Charleston County and Cape Romain Wildlife Refuge are very close to exceeding the new $PM_{2.5}$ standard. Based on coordination with SCDHEC, the State Implementation Plan will be updated to include measures to reduce 24 hour $PM_{2.5}$ before this new standard is implemented in 2010. They also anticipate that most counties will implement an Early Action Plan for 24 hour $PM_{2.5}$, and that ambient air quality data for 24 hour $PM_{2.5}$ in Charleston County and at Cape Romain would decrease in the future.

South Carolina is considered a pro-active state with regard to air quality, as evidenced by the projected reductions in ground-level ozone that are expected to occur in the next 10 years. It is likely that ambient air quality values for 24 hour $PM_{2.5}$ would be reduced by future management strategies. Likewise, the projected emissions for the Proposed Project (operating at full capacity in 2025) would likely be reduced through improved technology or by implementing onsite air quality management measures. Therefore, based on additional coordination with EPA, it would be speculative to say that the Proposed Project would violate future air quality standards when operating at full capacity in 2025.

Cape Romain National Wildlife Refuge: The visibility and deposition analysis that was included in the FEIS was based on potential emissions from the Proposed Project during the worst case hour without plume depletion. Based on additional coordination with the USFWS, the “worst case scenario” inputs that were used in the FEIS are much more conservative than what would be required for this type of analysis. Additional model runs were conducted to evaluate potential impacts to visibility and deposition using both plume depletion and wet deposition. Based on the results of this analysis, the Proposed Project does not exceed the Federal Land Manager’s standards for deposition, and only slightly exceeds the Federal Land Manager’s standards for visibility. According to the USFWS, the Proposed Project is not expected to result in an adverse impact to future air quality at Cape Romain.

Air Toxics: The Proposed Project would primarily result in long term increases in mobile emissions associated with the combustion of diesel and gasoline fuels. Therefore, our analysis focused on criteria pollutants emitted from fuel combustion, and air toxics associated with projected car and truck emissions. Although EPA has developed a nationwide inventory of air toxic emissions from mobile sources at the county level, specific emission factors for estimating air toxics from marine sources have not been developed. Therefore, air toxics associated with marine sources were addressed qualitatively in the FEIS.

Conformity Emissions: A general conformity determination is required for any Federal action in the Charleston area which would result in NO_x or VOC emissions greater than the threshold of 25 tons per year. Conformity-related emissions are a subset of total construction emissions and are those generated by activities subject to USACE review under Section 10 and Section 404. For the proposed project these would include primarily dredging activities, marine construction activities, and placement of fill into jurisdictional waters, including wetlands.

Compensatory Mitigation: In response to air quality concerns that were expressed during the permit process, the SCSPA and SCDHEC have developed an MOA that includes several measures that would assist in monitoring and managing air quality emissions. The SCSPA has agreed to purchase an air quality monitor that would be used by SCDHEC to quantify baseline air quality conditions near the Proposed Project prior to construction. In addition, SCSPA has agreed to develop an emissions inventory for the proposed port facility that would assist SCDHEC in evaluating cumulative impacts from both permitted and non-permitted sources within the region. The MOA also includes a number of measures that will be included in the bid documents for the Proposed Project to ensure that contractors are using best management practices to reduce potential impacts such as fugitive dust during construction to the maximum extent practicable.

(12) Cultural Resources The USC Legacy Project (1995) identified four properties near the proposed port facility that may be considered eligible for the National Register of Historic Places because of their potential to reflect the Cold War operation of the former US Naval Station Charleston. Buildings 1303 and 1310 are located more than 800 feet from the project site and are surrounded by administrative buildings, commercial facilities, and industrial facilities. Buildings 643 and 686 are located on Bainbridge Avenue immediately adjacent to the proposed port facility and are currently being used by the Federal Law Enforcement Training Center.

An underwater cultural resources survey was conducted to supplement previous surveys (Watts 1989) that were prepared for the U.S. Navy. Although a number of underwater anomalies were identified within open water areas of the project site, neither of these surveys identified any resources that may be considered eligible for the NRHP. The cultural resources survey of the proposed access roadway corridors identified three properties that may be considered eligible for listing in the NRHP (Architectural Sites 4286, 4306, and 4309). These properties consist of two residences located in Union Heights and a former firehouse that is located on Meeting Street, approximately 0.25 miles south of Union Heights.

In regard to the historic districts located near Charleston Harbor, the development of a new marine container terminal on the Cooper River would result in an increase in the number of oceangoing vessels that enter the Port of Charleston. The projected increase in the number of vessels that would use the existing federal navigation channel is not expected to adversely effect NRHP listed sites or historic districts that are located on Charleston Harbor and the lower portion of the Cooper

River. SHPO concurred with our determination that the Proposed Project would have no effect on properties listed or eligible for listing in the NRHP in a letter dated June 30, 2006.

(13) Section 4(f) Properties, Section 6(f) Properties, and Other Recreational Facilities Cooper River Marina is operated by the Charleston County Parks and Recreation Commission. The development of the proposed port facility immediately adjacent and upstream of the marina would eliminate the existing roadway that provides access to marina. The Proposed Project includes the construction of improvements to Tidewater Road and the relocation of existing utilities to provide continued service to the existing marina. The Proposed Project would result in long term minor beneficial and adverse impacts to the marina property.

Park South Recreation Center is located near the intersection of Spruill Avenue and Stromboli Avenue. The proposed access roadway includes the construction of a four lane roadway east of Spruill Avenue that would provide access to the port access roadway, the Montenay Incinerator, and existing container storage yards that are located east of Park South. In addition, Stromboli Avenue west of Spruill Avenue would be reopened and widened to accommodate future traffic. The proposed roadway improvements may improve access to Park South, which would have both beneficial and adverse impacts. However, the City of North Charleston has indicated that they are continuing to evaluate options for relocating the existing park west of Spruill Avenue because of the existing industrial surroundings.

The City of Charleston recently constructed a playing field between Interstate 26 and the Rosemont neighborhood. The east bound onramp of the proposed port access roadway would impact a portion of this playing field. Although the proposed right-of-way for this ramp is identified as 75-feet in the FEIS, it is our understanding that the actual width of this right-of-way would likely be reduced to minimize potential impacts to the playing field during right-of-way acquisition.

There are a number of waterfront parks, boat ramps and other recreational facilities located adjacent to Charleston Harbor. These properties would be indirectly affected by an increase in seagoing vessels within the existing federal navigation channel. However, the current waterfront experience includes viewing maritime activity, and the projected increase in vessel traffic would be in keeping with that experience.

The number of recreational boats within Charleston Harbor is also expected to increase as a result of background growth in the population of the region. The increase in the number of both commercial vessels and recreational boats will lead to an increase in the potential for interactions when a recreational boater needs to cross the federal navigation channel to reach their destination. In addition, wave action associated with the passage of seagoing vessels will affect small boat operations and facilities, such as piers and marinas near the federal navigation channel.

(14) Hazardous Materials, Hazardous Wastes, and other Regulated Substances The Proposed Project is located on a former US Navy Base. Hazardous materials, such as oil and gas from the motor pool or perchlorethylene from the base laundry that were accidentally released into site soils or the surface aquifer as a result of base operations are well documented. Any work conducted on the project site would be required to comply with the existing Resource Conservation and Recovery Act permit and the corrective actions plan for the CNC site. With the exception of the excavation of the proposed stormwater pond, the majority of the site will be filled and paved to develop container storage areas and support facilities. This would tend to reduce the number of potential exposure pathways for hazardous materials that are located within the existing subsurface soils.

Subsurface soils will be surcharged and consolidated in order to create the stable soil conditions that are necessary to support loaded, stacked containers. Stormwater basins that are used during the construction phase will need to be designed to handle any contaminated groundwater that is brought to the surface by the drainage wicks that are used to facilitate the soil consolidation process. No other impacts (i.e., disturbance, spreading, or placement) to hazardous materials are anticipated during site preparation and construction activities. Construction contractors would be required to have emergency response plans for hazardous material and fuel products used in support of the work, as well as a waste management plan prior to initiating construction activities.

The proposed access roadway crosses several former and existing commercial and industrial sites, including one CERCLA site (the former Macalloy Steel property). Remediation of the Macalloy property was administered by the USEPA and SCDHEC and includes the construction of a stormwater collection basin. Likewise, there are several other properties within the port access roadway corridor that have registered for the SCDHEC Voluntary Remediation Program in order to address existing soil and/or groundwater contamination as a result of past activities. Since the majority of the proposed roadway would be elevated, the installation of the pilings that support this structure would need to be conducted in a way that prevents potential cross contamination within the surface aquifer.

The types of hazardous materials transported through the proposed port facility would be similar to those currently moved through the Port of Charleston. The quantity of hazardous material is expected to remain below five percent of the total cargo handled and transported. Therefore, the Proposed Project is expected to result in both long term benefits associated with the remediation of the project site, and long term adverse impacts associated with the incremental increase in the potential risk of spills of hazardous materials.

(15) Water Resources The development of the Proposed Project would result in long term adverse impacts to stormwater runoff and surface waters.

Stormwater Runoff: The CNC alternative site consists of approximately 225 acres of uplands and freshwater wetlands and 65 acres of tidal marsh and open water

within the Cooper River watershed. According to preliminary stormwater management plans stormwater runoff from the proposed port facility would be directed through a 25-acre stormwater detention pond with pipe outfalls. The existing overland flow pattern of surface runoff to Shipyard Creek and the Cooper River would change to point-source discharges through man-made outfalls. The Proposed Project would require state stormwater discharge permits from SCDHEC. Adverse impacts associated with the proposed port facility and access roadway would be managed through the use of stormwater treatment measures and best management practices.

Water Quality: A key consideration of the CWA §404 permit process is the potential impacts that a proposed project may have on water quality. SCDHEC issued a Critical Area Permit and a 401 Water Quality Certification for both the proposed port facility and access roadway. The Proposed Project would not violate state water quality standards and was determined to be consistent with the goals and policies of the state Coastal Zone Management Plan.

Total Maximum Daily Load (TMDL) for Dissolved Oxygen: A TMDL was established for dissolved oxygen in the Charleston Harbor System, which includes the Cooper River and the project site, in 2002. The TMDL is a calculation of the maximum amount of a pollutant that a waterbody can receive and still meet state water quality standards. The TMDL includes reductions from the existing pollution loads that are necessary to meet state water quality standards and it allocates these reductions among the pollutant sources in the watershed.

The Proposed Project was evaluated by SCDHEC using the 3-D hydrodynamic model that has been developed by the BCD COG to address the TMDL for dissolved oxygen. The Proposed Project includes the dredging of the berth and access channel areas on the Cooper River, which would modify the cross sectional area of the river and decrease current velocities. In addition, deepening these areas would enable higher density salt water located near the bottom of the water column in the federal navigation channel to spread into the berths and access channel. The naturally occurring low levels of dissolved oxygen is concentrated near the bottom of the water column is considered less than significant and SCDHEC determined that the Proposed Project complies with state water quality standards.

Dredging and Filling: The majority of the dredging to construct the Proposed Project is expected to occur over a two year period. Based on methods that were used to construct the recent harbor deepening and widening in this area, the work will likely be conducted by hydraulic dredging. The dredged material would be conveyed to the Daniel island CDFs using a pipeline and booster pumps, if necessary. This would result in temporary increases in the turbidity of the Cooper River due to resuspension of sediments at the dredge site and increases in the turbidity of the Cooper River and the Wando River in the vicinity of the CDF outfalls. Dredging activities would include Best Management Practices (BMPs) to minimize any adverse impacts to water quality.

Wastewater: Sanitary wastewater from the terminal complexes would be collected, treated, and disposed of by the North Charleston Sewer District. North Charleston discharges treated sanitary wastewater into the Cooper River under a separate point-source discharge permit. The quantity of treated sanitary wastewater discharge attributable to the project would be 2,700 gallons/day, which is a very small fraction of the current point-source discharge of approximately 17 million gallons/day entering the Cooper River.

(16) Sediments and Dredged Material The construction of the Proposed Project would produce approximately 6.5 mcy of dredged material. Approximately 1.2 mcy would be dredged from the area between the shoreline and the proposed wharf and then backfilled with more stable soils once the containment structure has been installed. Approximately 4.0 mcy would be dredged from the berth and access areas, and another 1.2 mcy would be dredged to account for miscellaneous design variable such as slopes and any maintenance dredging that would be required prior to receiving the first ship.

The primary impact from the placement of the dredged material would be temporary elevated turbidity levels in the Cooper and Wando Rivers as a result of the discharge of overflow water from the hydraulically dredged material that is placed within the Daniel island CDFs. Based on the results of the sediment analysis and modeling of the potential elutriates, the discharge water from offsite placement operations associated with the construction and maintenance dredging are not expected to negatively impact surrounding water quality.

Sedimentation Rates: As described previously, dredging activities associated with the construction of the berths and access channel would result in the deepening of 79.9 acres of open water between the proposed wharf and the existing federal navigation channel. Changes in river geometry would reduce current velocities and would affect the location and rate of sediment deposition. These changes are expected to result in a minimal increase in the volume of maintenance dredging required in the federal navigation channel. In addition, the Proposed Project would require maintenance dredging of the berth and access channel areas.

Sediment Suspension System: The Proposed Project includes the installation of a sediment suspension that would reduce the need for maintenance dredging within the berth areas. A similar system was installed at the SCSPA's Columbus Street Terminal in 2005 and is undergoing testing in accordance with a monitoring protocol that was established to verify that the sediment suspension would have minimal adverse impacts on aquatic resources and sedimentation within the adjacent federal navigation channel. The proposed sediment suspension system is expected to reduce the frequency of future maintenance dredging within the berths. Therefore, maintenance dredging will primarily consist of material from the access channel.

General Reevaluation Report: The Corps is currently evaluating whether a portion of the proposed access channel, which overlaps the previously authorized

turning basin within the Daniel Island Reach of the Charleston Harbor Project, should be incorporated into the federal navigation channel. This General Reevaluation Report is not expected to alter the dimensions of the Proposed Project.

Area of Concern 501: According to the US Navy, two Mark 47 Torpex loaded depth bombs were dropped in the Cooper River near the Charleston Navy Base on November 20, 1943. Studies that were conducted by the US Navy in 1998 in an effort to identify the actual location of the depth bombs were not successful. According to the SCSPA, the US Navy has engaged an explosive ordnance consultant to assess the potential risk of dredging within this area and to prepare a mitigation plan that would help to avoid and minimize potential risks. The SCSPA is aware of the potential presence of ordnance within the footprint of the Proposed Project, and has already begun coordinating with the US Navy to ensure that any dredging activities are conducted properly and that any ordnance or other underwater objects are safely removed to prevent any dredging related accidents.

In order to ensure that potential impacts associated with dredging are avoided and minimized as described in the FEIS the following special conditions will be included in the SCSPA's federal permit:

That the permittee understands and agrees that a dredging operations plan must be submitted for review and approval by the Corps 60 days prior to beginning construction. The dredging operations plan must include a dredging schedule, the production of a dredging log, the amount of dredged material removed each working day, methods to control excessive releases of Total Suspended Solids at the spillways, and procedures to handle emergency situations such as an unanticipated release of dredged materials.

That the permittee insures that the contractor is aware that it is the expectation of this office that environmentally responsible dredging take place at all times. Therefore, it is essential that care and diligence is taken to assure that the disposal area embankments are not breached, material overflow does not occur, and the spillway is properly and carefully maintained. The material should be pumped into the disposal area at such a rate as to allow settling at the spillway thereby minimizing suspended solids.

An on-site meeting will be accomplished between the permittee and this office prior to initiation of dredging. The permittee should contact the Corps 60 days prior to commencement of work to arrange this meeting.

That the permittee agrees to conduct the work authorized herein in a manner that will not prevent or interfere with full and free use of the adjacent or nearby navigable waters of the United States by the boating public.

That the permittee must contact the United States Coast Guard to ascertain and assist in the issuance of a Notice to Mariners advising the boating public of the place and time that the dredging activity will be occurring.

That the permittee is responsible for properly installing and providing appropriate warning and marking devices to alert the boating public of any dangers (such as cables, anchors, buoys and other appurtenances) associated with the proposed dredging activity. All warning and marking devices must be marked and installed in accordance with United States Coast Guard standards.

That the permittee agrees to contact the Boating Division of the South Carolina Department of Natural Resources to advise them of the place and time that the dredging activity will be occurring. The permittee will solicit any information that the Department may have on local boating traffic patterns and activities in the project area. Such information will be used to facilitate dredging plant and appurtenances setup and operation to insure safe navigation through the area of work.

Federal authorization for dredging activities is limited to ten years from the date of issuance provided all other special conditions are complied with.

(17) Natural Resources The former Charleston Navy Base and the adjacent urban areas that would be impacted by the port access roadway have been subject to considerable disturbance by human activities in the past, and plant and animal species that occupy the project site consist of relatively, common species that are tolerant to living in developed areas. Development of the Proposed Project would result in the loss of approximately 82.4 acres of upland forest/scrub habitat, 64.5 acres of developed areas, 49.2 acres of a former CDF, and 38.7 acres of maintained grass areas. Total long-term terrestrial habitat loss would be approximately 265 acres, but the quality of affected habitat is low, and similar habitat is available in other parts of the watershed.

Cumulative effects would include a general reduction in the population of upland plant and animal species on the project site and a general increase in the population of certain animal species that are highly mobile on nearby undeveloped sites. The Proposed Project would not be expected to imperil any upland plant or animal species or to notably reduce species diversity within the Cooper River watershed.

Aquatic Vegetation and Wildlife: Development of the Proposed Project is expected to result in the loss of 2.7 acres freshwater wetlands, 12.3 acres of tidal marsh, and 56.6 acres of open water habitat located within the footprint of the proposed port facility and access roadway. Long-term adverse impacts would occur as a result of the loss of these aquatic resources. In addition, approximately 80.0 acres of open waters would be deepened to construct the berths and access channel areas, and rip-rap would be placed below MHW adjacent to the sides of containment structure and near the existing contraction dike.

Aquatic habitats on the project site that support wildlife and fisheries include seasonal freshwater wetlands, tidal marsh, intertidal and subtidal mudflats, and open

waters. Fish, shellfish, and estuarine reptiles and birds that utilize the nearby tidal marsh, mudflats, and open waters may be displaced during project construction. Likewise, increased turbidity during the construction period may temporarily affect the ability of these species to use these areas for foraging.

During construction, the benthic infaunal community would be removed from the portion of the project footprint that extends into the Cooper River and would be deepened. Operation of the sediment suspension system is expected to prevent sediment from settling into the berth area during the ebb and flow portion of the tidal cycle. Future maintenance dredging would also impact the benthic community occupying the open water bottoms in the vicinity of the project site by increasing suspended solids and temporarily lowering phytoplankton productivity. Fish and estuarine reptiles would also be displaced during this activity. Dredging and deepening open water habitats would have both short and long-term adverse impacts.

The deepened portions of the berth and access channel areas are expected to experience decreased dissolved oxygen levels similar to the federal navigation channel during the hot periods of the summer and, due to disturbance by ships, could have exposed clays in the center while the silts accumulate on the edges. These areas are likely to be characterized by the quicker colonizing infaunal species. Typically, fish avoid these deep channels during warm summer months and are found there during cooler winter months.

The loss of tidal marsh and shallow water habitat along the edge of the Cooper River within the footprint of the port facility would reduce resting and foraging habitat for pelicans, shorebirds, and other species that utilize these areas. Approximately 12.3 acres of tidal marsh and 2.1 acres of mudflats would be lost due to the development of the Proposed Project. Additional potential effects resulting from operation of the proposed port facility may include decreased water quality due to stormwater runoff and high suspended solids resulting from ship transits and maneuvering within the berth and access channel areas. These effects could result in an overall decline in abundance and diversity of estuarine animals in the vicinity of the port facility. Terminal operations also present an increased risk for spills of potentially harmful substances.

Cumulative effects of the proposed project may include a general reduction in the local population sizes of some aquatic animal species. The Proposed Project would not be expected to imperil any aquatic animal species or notably reduce species diversity within the aquatic animal community in the Cooper River watershed.

Waters of the United States: Development of the Proposed Project would result in the loss of 68.6 acres of waters of the United States as a result of the placement of fill material freshwater and estuarine wetlands and the excavation and backfilling of open waters. In addition, the excavation of the proposed berth and access channel would result in the deepening of 77.9 acres of open waters. The loss of freshwater and estuarine wetlands and open waters within the footprint of the proposed

project and the deepening of the berth and access channel areas are considered long-term adverse impacts to aquatic resources within the Cooper River watershed.

A temporary increase in turbidity in the vicinity of the Proposed Project may occur during construction as a result of on-site activities, such as clearing, grading, and surcharging the project site, installation and backfilling of the containment structure, construction of the wharf, construction of bridge approaches, construction of bridge supports. This may result in a short-term adverse impact to adjacent and/or offsite estuarine wetlands and open water habitats.

Nonindigenous Species: Operation of the proposed port facility would result in an incremental increase in container ship traffic within the Port of Charleston. However, container vessels generally carry less ballast water than bulk carriers and tankers. Because of fleet modernization, ballast water management practices, and associated technological changes that reduce the need for ballast water discharge, the proposed terminal would result in a small change in ballast water discharge in the Cooper River.

Essential Fish Habitat The development of the Proposed Project would result in the loss or modification of salt, brackish, and freshwater emergent marshes, intertidal consolidated areas (mudflats), and estuarine water column that is designated as Essential Fish Habitat (EFH) and potential impacts to Council-managed species that use these areas within the Cooper River watershed.

Dredging and filling activities would disturb approximately 2.7 acres of freshwater wetlands, 12.3 acres of tidal marsh, and 147.8 acres of open waters. Infaunal species and associated sediments located within the footprint of the proposed port facility would be lost through removal. Recolonization of 11.6 acres beneath the pile supported wharf and 77.9 acres of berth and access channel areas that will be deepened would be expected to occur over time; however, impacts would continue on a periodic basis in connection with maintenance dredging events. Approximately 2.7 acres of freshwater wetlands, 12.3 acres of tidal marsh, and 56.6 acres of open waters would be permanently lost because of the placement of fill material and conversion of these areas into developed uplands.

Potential EFH impacts of dredging activities in open water areas include direct removal/burial of organisms; turbidity/siltation effects; contaminant release and uptake of nutrients, metals, and organics; and release of oxygen consuming substances. The recovery of the shallow water benthic infaunal community following dredging and/or deposition of dredged material would require approximately 12 to 24 months.

A long-term impact to EFH is expected to result from increased shipping traffic associated with the terminal effects on open-bay water habitat. A wide range of materials would move through the terminal complexes, both as cargo and as fuel and service items for ships. While major spills and other discharges of potentially harmful substances are uncommon, the incremental increase in vessel traffic on the Cooper River would be a concern.

The effects of vessel-induced wave damage or disturbance would be difficult to quantify, but may be of concern to EFH. In some areas, high-energy wave trains from large vessels may be responsible for erosion of shorelines and intertidal wetlands. In heavily trafficked areas, bottoms may become unstable and colonization by bottom dwelling organisms may not be possible or may be limited to quick colonizing organisms that favor a stiff clay bottom. Indirect effects may include increased bioavailability of contaminants through re-suspension of sediments that can affect EFH. Impacts from maintenance dredging would be similar to maintenance dredging throughout the Charleston Harbor system.

Compensatory Mitigation: The SCSPA has submitted a compensatory mitigation plan that includes the restoration of tidal marsh on Drum Island, oyster restoration, the preservation and enhancement of tidal marsh at Morris Island, and the preservation and enhancement of freshwater wetlands on the Cooper River to offset the proposed impacts to aquatic resources. In order to ensure that potential impacts to natural resources are avoided and minimized as described in the FEIS the following special condition will be included in the SCSPA's federal permit:

That the permittee understands and agrees that the approval and operation of the sediment suspension system is conditional upon the development and implementation of an appropriate monitoring plan. Prior to installation of the sediment suspension system, the monitoring plan must be reviewed and approved by the Corps in coordination with the US Fish and Wildlife Service (USFWS) and National Marine Fisheries Service (NMFS).

That the permittee understands and agrees that the sediment suspension system must be removed if the Corps determines that the continued operation of the system would result in unacceptable impacts (i.e. adverse impacts greater than conventional maintenance dredging) to aquatic resources or on the Charleston Harbor Project, a Federal navigation project.

(18) <u>Threatened and Endangered Species</u> No Federally listed plant or animal species were identified on the project site, nor is the available habitat considered suitable for any of these species. Therefore, the construction and operation of the upland portion of the Proposed Project is not expected result in any adverse effect on federally listed plant species or any designated critical habitat. However, there are several Federally listed animal species that are known to use coastal waters in the vicinity of the Port of Charleston and the project site.

NMFS Coordination: In a letter dated March 29, 2006, the Corps determined that the Proposed Project is not likely to adversely affect North Atlantic right whales and humpback whales, and requested concurrence from NMFS' Protected Resources Division. Based on their review of the DEIS and additional information regarding the Proposed Project, NMFS' Protected Resources Division elected to initiate formal

consultation on May 17, 2006, because of concerns about the potential effects of increased shipping traffic on right whales.

The Corps, NMFS, and SCSPA held several meetings to discuss the potential effect of the Proposed Project on right whales and other Federally listed species that are known to occur in the vicinity of the project. Specifically, NMFS expressed concern that the incremental increase in shipping traffic would pose a threat to both adult and newborn right whales that migrate between designated critical habitat that is located off the coast of New England and Canada and summer calving grounds that are located off the coast of Georgia and Florida, which is also identified as critical habitat.

NMFS identified vessel speed as one of their primary concerns. At this time, NMFS is currently evaluating a proposed regulation that would require all ships approaching east coast ports to reduce speed within 30 miles of the eastern seaboard. A proposed rule was published in the Federal Register on June 26, 2006, and a decision is expected in the next few years. The Corps believes that the issue of speed reduction is outside of our regulatory authority under the Clean Water Act and that national rulemaking would be the appropriate way to handle this matter.

In an effort to address NMFS' concerns regarding the potential affect of the Proposed Project on the right whale, the SCSPA has agreed to provide funding to support ongoing aerial surveys in the vicinity of the Port of Charleston. Aerial surveys are considered the most effective way to identify and track migrating right whales. The information gathered during these surveys can be relayed to individual ships so that they can take measures such as altering course or reducing speed to avoid whale/ship interactions. One of the benefits of this approach is that it helps to protect the right whale from the incremental increase in vessel traffic associated with the Proposed Project and background vessel traffic associated with other existing and proposed facilities within the Port Charleston.

In addition, the SCSPA agreed to continue participating in education and outreach activities to help raise awareness regarding the right whale. If national rulemaking is implemented regarding ship speed, all seagoing vessels that call on the proposed port facility and the Port of Charleston would be required to comply with these regulations. The USCG is responsible for enforcing regulations regarding vessels under way in US territorial waters.

NMFS also analyzed the potential effects the Proposed Project on sea turtles, shortnose sturgeon, and whales, and determined that the potential effects are limited to the direct effects of pile driving, dredging, and increased shipping traffic, and indirect effects from water quality associated with construction, such as turbidity and noise. Based on their evaluation of the Proposed Project, NMFS concluded that the potential effects on sea turtles, sturgeon, and whales, including right whales and hump back whales, are insignificant or discountable. In a letter dated October 3, 2006, NMFS concurred with our determination that the Proposed Project is not likely to effect the North Atlantic right whale and the humpback whale.

USFWS Coordination: In response to the information included in the DEIS, USFWS recommended that the Corps include a special condition to protect the manatee in the DA permit for the proposed port facility. The Corps has agreed to include this permit condition and the USFS concurred with our determination that the Proposed Project is not likely to effect the manatee in a letter dated April 23, 2007.

In order to ensure that potential impacts to endangered species are avoided and minimized as described in the FEIS the following special condition will be included in the SCSPA's federal permit:

That the permittee understands and agrees that their commitment to incorporate conservation measures to protect the North Atlantic right whale (*Eubaleana glacialis*) into the Proposed Project was an integral part of our review. Failure to conduct the approved conservation measures would be considered a violation of the terms and conditions of this permit and would trigger the requirement for additional consultation with NMFS.

That all dredging should be performed during the winter months (November 1 through February 15) to the maximum extent practicable. In order to insure protection of West Indian Manatees that may enter the project area during dredging activities performed outside the winter months, the permittee will comply with the following:

a. That the contractor will insure that all personnel associated with the project are made aware of the potential presence of manatees and the need to avoid collisions with them.

b. That all construction personnel will be advised that there are civil and criminal penalties for harming, harassing, or killing manatees which are protected under the Marine Mammal Protection Act of 1972, the Endangered Species Act of 1973, and the Florida Manatee Sanctuaries Act of l978. The permittee is aware that it and/or contractor may be held responsible for any manatee harmed, harassed, or filled as a result of construction activities.

c. That all vessels associated with the project will operate at "no wake/idle" speeds at all times while in water where the draft of the vessel provides less than four feet clearance from the bottom and that vessels will follow routes of deep water whenever possible.

d. That if manatees are seen within 100 yards of the dredging area, all appropriate precautions shall be implemented to ensure protection of the manatees. These precautions shall include operating all equipment in such a manner that moving equipment does not come any closer than 50 feet of any manatee. Operation of any equipment closer than 50 feet to a manatee shall necessitate immediate shutdown of the equipment.

e. Siltation or turbidity barriers shall be made of material in which manatees cannot become entangled, shall be properly secured, and shall be regularly monitored to avoid manatee entanglement or entrapment. Barriers must not impede manatee movement

f. That any collision with any/or injury of a manatee will be reported immediately to the S.C. Wildlife and Marine Resources department, Heritage Trust Section, (803) 844-2473.

g. That the contractor will maintain a log detailing sightings, collisions, or injuries to manatees should they occur during the contract period. Following project completion, a report summarizing incidents and sightings will be submitted to:

Mr. Ed Duncan
S.C. Wildlife and Marine Resources Department
Heritage Trust Section
P.O. Box 12559
Charleston, SC 29422-2559

and

Ms. Melissa Bimbi
United States Department of Interior
Fish and Wildlife Service
176 Croghan Spur Road, Suite 200
Charleston, South Carolina 29407.

(19) Shoreline Erosion The Proposed Project would result in approximately 25 additional weekly vessel transits on the Cooper River by 2025. Since existing weekly vessel transits are projected to increase from 26 in 2000 to 37 in 2025, there would be a total of approximately 62 weekly vessel transits on the Cooper River. Transits associated with the proposed facilities would comprise about 40 percent of the total.

Impacts from increased transits to shoreline structures and activities would potentially occur in the vicinity of existing facilities, such as Charleston Harbor Marina (Patriots Point) and Cooper River Marina. Displacement waves generated by vessels, tows, and tugs would cause wave run-up at these locations, which would have adverse effects on in-water structures or operation of small recreational vessels. These facilities are located adjacent to an existing federal navigation channel and must be designed and maintained to withstand the passage of large, oceangoing ships.

The incremental increase in the number of vessels associated with the Proposed Project would result in more frequent impacts, which may result in additional maintenance of these facilities. This would be a long term adverse impact.

(20) Floodplains: The CNC site primarily consists of areas that were filled to develop the former Charleston Navy Base. The majority of the site is located within the floodplain of the Cooper River and is subject to both riverine flooding from rainfall runoff and coastal flooding from tropical storm surge. Approximately 75 percent of project site is designated as a Special Flood Hazard Area on the Federal Emergency Management Agency's (FEMA's) Federal Insurance Rate Maps because it is located within a storm surge area (V Zone) or a 100-year floodplain (A zone).

Flood elevations on the project site are due primarily to tidal surge. The land surface of the project site would be elevated by the placement of fill material to meet base flood elevation requirements determined by FEMA. The Charleston County Flood Ordinance prohibits the placement of fill material in a V Zone, such as the open water portion of the project site. However, the ordinance allows for variances to be issued for new construction necessary for a functionally dependent use, such as a port facility.

In order to provide direct access between the port facility and Interstate 26, the proposed access roadway crosses Special Flood Hazard Areas, such as Shipyard Creek. The proposed access roadway would be designed to meet or exceed the appropriate base flood elevations. Since the majority of the access roadway is elevated to avoid conflicts with existing roadway and railway infrastructure, the placement of fill material would be limited to bridge approaches, the local access corridor, and interchanges with existing roadways.

The placement of fill material within open water and raising the elevation of the approximately 290-acre project site would have a negligible effect on the overall storage capacity of the Cooper River watershed. Therefore, the development of the project site is not expected to affect the potential for flooding of adjacent and nearby properties that are located within special flood hazard areas. These properties will continue to be subject to both riverine and coastal flooding.

(21) Other Factors Considered The following factors were considered during the evaluation process but were determined not to be particularly relevant to this application: energy needs, mineral needs, and food and fiber production.

c. Cumulative Impacts Summary Section 7.0 of the FEIS summarizes the potential cumulative effects associated with the construction and operation of the Proposed project, taking into consideration a number of identified past, present, and future activities that may occur in the Cooper River watershed. The projects considered in this assessment included:

- Interstate 26 Widening Project
- Interstate 26 Relocation Study
- Charleston Area Transportation Study
- BCDCOG Travel Demand Study
- Proposed Expansion of Kinder Morgan
- Former Macalloy Steel Property

- Magnolia Development
- Transportation Improvement Plan (TIP)
- Metropolitan Transportation Plan
- Regional Planning State Implementation Plan (SIP).
- Ongoing Maintenance of the Charleston Harbor Project
- Other Approved USACE Permits
- Columbus Street Terminal Sediment Suspension System
- Right Whale EIS

The Proposed Project, when considered in the context of past, present, and future activities can be expected to contribute in an incremental way to the overall cumulative effects on a number of specific resources. The SCSPA and SCDOT have proposed compensatory mitigation for impacts to jurisdictional wetlands at a ratio of 2:1. The Corps has determined and the EPA, USFWS, NMFS, SCDNR, and SCDHEC have indicated that the SCSPA's proposed mitigation plan appropriately compensates for project related impacts.

Some of the cumulative effects can be considered positive, such as the increase in employment opportunities and increased tax base in both the Tri-County area and the State of South Carolina. Cumulative effects on roadway traffic from the Proposed Project would include public investment in roadway improvements to maintain an acceptable Level of Service. For resources such as air and water quality, the overall cumulative effects of the proposed project are not expected to alter or impair the current trends indicated by recent historical data for these important resources.

The Proposed Project is expected to have a small cumulative effect to navigation interests in Charleston Harbor as project-related ship and tow transits increase during the next 20 years. This cumulative increase in project-related shipping may also similarly increase the potential for erosion along unprotected areas of the Cooper River shoreline.

The air emissions associated with past, present and future projects and activities in the Tri-County area are addressed through the EPA and SCDHEC regulatory program to improve air quality and maintain compliance with air quality standards. In addition, the SCSPA and SCDHEC have signed a Memorandum of Agreement and have agreed to work cooperatively to help identify cost effective ways to continue to reduce port related emissions.

The construction and operation of the proposed project would affect in a cumulative fashion the resources and ecological components addressed in this EIS, some in a positive way and some in a negative way. On balance, the potential cumulative effects associated with the proposed project are not expected to be significant.

7. Public Interest Review

Over the past three years we have used a variety of methods to inform and involve the public in our evaluation of the Proposed Project. These methods have included public notices, newsletters, public information workshops, stakeholder meetings, a public website, press releases, a project hotline, and email notifications. In addition, the Corps was asked to make presentations at neighborhood meetings, a North Charleston City Council meeting, a Charleston County Council meeting, Charleston County state legislative delegation meetings, and other venues. The following is a summary of activities that have occurred during our evaluation of the Proposed Project.

a. Public Coordination A *Notice of Intent* was published in the Federal Register on February 19, 2004, announcing preparation of an EIS for the SCSPA's proposed marine container terminal and the opportunity for public input. In addition, a local Public Notice was sent to adjacent property owners, individuals on the Corps' mailing list, and individuals that previously expressed an interest in the SCSPA's application to construct a marine container terminal on Daniel Island.

Public and Agency scoping meetings were held on March 16, 2004, and March 22, 2004, to determine the issues to be considered in the EIS. Representatives from the USACE and the SCSPA and interested members of the public were present. A public workshop was held from 5:00 to 7:00 p.m., with the scoping meeting immediately following. Written and verbal comments received at, and in association with, these meeting were used to develop the scope of this EIS.

Based on the permit application and the information gathered during scoping the Corps developed the Project Purpose Statement and the criteria that were used to identify potential alternative sites. A newsletter summarizing the comments that were received during scoping and identifying potential alternative sites was mailed to interested parties in July 2004, and a public information workshop was held on August 25, 2004, at the Citadel Alumni Center in Charleston. In addition, a number of interagency meetings were held in 2004 to discuss the scope of work, the studies that would be conducted to evaluate the Proposed Project, and the information that would be included in the DEIS.

The scope of work was finalized in December 2004 and the evaluation of the Proposed Project and the alternatives began in January 2005. Since transportation was by far the number one issue identified during scoping, a second newsletter summarizing the findings of the preliminary traffic studies was mailed to interested parties in April 2005. In addition a public information workshop was held in a meeting room at the North Charleston Coliseum on May 12, 2005, to provide interested parties with an update on the traffic studies and to discuss the potential roadway corridors that were identified in the Access Roadway Feasibility Study.

A newsletter entitled “Draft EIS Guidebook” was distributed in October 2005 to notify the public of the upcoming release of the DEIS, dates of upcoming public information workshops, the date of the Public Hearing, and locations where hardcopies of the DEIS would be available for their review. In addition, this newsletter described the format of the DEIS, and provided a summary of project impacts described in the DEIS. The DEIS included detailed information on all five potential roadway corridors.

The date, time, and location of the public hearing was also announced in the Notice of Availability for the draft EIS that was published in the Federal Register, a local Public Notice that was sent to individuals on the Corps’ mailing list and the mailing list for the proposed project, and a USACE press release that was sent to local media outlets. The public hearing was held on November 17, 2005, at the Performing Arts Center in North Charleston, South Carolina following the release of the DEIS. LTC Edward R. Fleming and Mr. Bernie Groseclose, CEO and President of the SCSPA, each made prepared statements before oral and written comments were accepted from elected officials and the public. A public information workshop was conducted at the same location immediately preceding the hearing.

As a result of comments and concerns that were expressed by the public, USACE elected to extend the 60-day comment period from December 21, 2005 until April 19, 2006. The public was given almost 6 months (October 2005-April 2006) to provide feedback on the Proposed Project and the DEIS. USACE held additional public information workshops, attended neighborhood meetings, and met with a number of specific groups to discuss their comments and concerns regarding the Proposed Project. The potential transportation corridors continued to be the focus of many comments, and public information workshops were conducted to discuss potential impacts associated with the Proposed Project.

On January 26, 2006, a public information workshop was held at Gethsemani Center in Union Heights to discuss the preliminary findings of the Access Roadway Feasibility Study. A second workshop was held on March 30, 2006, at the Military Magnet School in North Charleston to discuss modifications to the proposed project that were being considered to address preliminary comments and concerns that were expressed in response to the DEIS.

The Final EIS was made available for public comment on December 15, 2006. The 30-day comment period for the FEIS was extended by the USACE from January 16, 2007 until February 2, 2007. In addition, the following meetings and coordination have occurred over the past few months in an effort to address specific comments that were submitted in response the FEIS:

8 January 2007: USACE attended the Rosemont neighborhood meeting to present information on the Proposed Project and assist them in providing comments during the comment period.

1 February 2007: USACE, SCSPA, and their contractors met to discuss potential sources of fill material for the Proposed Project and information that would be required to evaluate potential secondary impacts.

5 February 2007: USACE and NMFS met to discuss their comments on the FEIS and resolution of their concerns regarding the Proposed Project.

1 March 2007: USACE, EPA, SCDHEC, and the SCSPA met to discuss comments that were received in response to the FEIS and potential mitigation measures that would address air quality emissions.

7 March 2007: USACE and USFWS teleconference to discuss the assumptions that were used in visibility and deposition modeling that were included in the FEIS.

16 March 2007: USACE, SELC, and SCCCL met to discuss their comments on the FEIS and to clarify certain issues regarding the models that were conducted to evaluate air quality and transportation impacts.

6 April 2007: USACE and NMFS met to discuss additional information that was submitted to them regarding the Proposed Project and future coordination regarding the draft ROD and draft permit in accordance with the 404(q) elevation procedures.

b. Public Comments Over the course of our evaluation of the Proposed Project, the USACE has received more than 800 comment submissions from interested parties including state and federal agencies, local agencies and governments, elected officials, and the general public. The comment submissions have been in the form of letters, petitions, post cards, faxes, and court reporter transcripts of oral testimony, and have been received during the following stages:

- During the EIS Scoping Process;
- During the preparation of the Draft EIS;
- During the Draft EIS comment period ending April 19, 2006;
- During the Final EIS comment period ending February 2, 2007; and
- During the preparation of this Record of Decision.

(1) Comments on the Draft EIS and Related Public Notices Due to the large number of comments received and their complexity, a computerized Comment Database system was developed to compile, inventory, analyze, consolidate, and respond to the comments during the course of the EIS study.

The USACE and its consultants reviewed all comment submissions and entered each individually in the database. For each comment submission, the key comment issues were identified, summarized, and consolidated into one or more comment categories contained in the database. The summarized comments in the database were then used by the USACE to assist in revising the Draft EIS and to develop a response to each comment.

Appendix H of the FEIS provides copies of these Public Notices, and Appendix EE (Volume 5 of 5) of the Final EIS contains the following:

- A detailed description of how comments received on the Draft EIS and in response to several public notices were processed,
- Indexes to agency and public comments that have been received and have been processed, and
- A categorized report of the comments received which presents the responses of the USACE to each comment.
- Scanned images of all comments received in response to the DEIS

Copies of all comments received during the development of the EIS and processing of the SCSPA and SCDOT permit applications are contained in the project file. The following sections include a summary of the comments that were received in response to the FEIS and the Corps' responses to those comments. Comments that were submitted by more than one agency, individual, or organization were grouped together in order to provide a more comprehensive response to a particular issue, such as concerns about air quality. Other issues are generally addressed below the summary of the specific comments.

(2) Comments on the FEIS

The FEIS was released on December 15, 2006 and the 30-day comment period was extended more than two weeks in response to requests for an extension of the comment period. Although the comment period closed on February 2, 2007, the Corps continued to coordinate with other agencies, meet with interested parties, and accept written comments throughout the preparation of the ROD. This ROD addresses all comments that were submitted to the Corps through April 4, 2007.

Federal Agencies/ US Representatives

Environmental Protection Agency

In a letter dated January 16, 2007, the EPA stated that the FEIS has gone a long way to addressing their concerns with direct, indirect, and cumulative impacts to wetlands and tidal bottoms. However, final action related to their comments made under the Section 404(q) MOA will be made in according to the procedures of the MOA. EPA also submitted the following comments:

- NEI data only contain emissions from permitted sources: therefore, these data could only be used to reveal trends in industrial emissions not emissions generally associated with direct population changes (e.g. area sources and mobile emissions).
- Section 5.8 does not address the region's compliance with the NAAQS and PSD increments.
- Project emission rates for the construction period and their associated ambient impacts were not included. These temporary emissions can be significant and should be considered.

- The target values/standards used in monitoring (e.g. 3-year average) are not generally applicable to air quality modeling compliance determinations using estimated emissions and historical meteorological data records. The maximum 24-hour concentration or the 99th percentile 24-hour PM10 concentration should be used to ensure that the ambient concentrations in 2025 are in compliance. The maximum 24-hour concentration or the 98th percentile 24-hour PM2.5 concentration should be used to ensure that the ambient concentrations in 2025 are in compliance.
- The details of the prototype ship and its engine characteristic were not disclosed so their conservative characteristics cannot be confirmed.
- Only light and heavy-duty gasoline vehicles are considered in the analysis. However, it is reasonable to assume that that a large number of light duty trucks [pick-ups, vans, and sport utility vehicles] would also be visiting the facility. The reason why the analysis was restricted in this regard should be explained.
- The estimated emissions from container ships in Table 13 appear to be much greater than the maximum hourly rates provided in Table G-3a and the annual average hourly rates provided in Table G-4c of Appendix G. The annual container ship emissions in Table 13 are also larger than the total project emissions in Table 34.
- The highest hourly short-term emission rate should provide the maximum annual emission rate.
- The procedures used to develop the PSD inventory and a copy of the actual inventory was not provided. The location of the modeled NAAQS and PSD increment exceedances are only provided for the Proposed Project, not the alternative project locations.
- The Class I area visibility (and possibly the deposition) assessment used the values provided in Appendix G. Comments concerning the modeled emission values in Table 13 may also affect this assessment
- Traffic noise impacts and post-construction noise monitoring should be evaluated as the project progresses. Post-construction monitoring verifies predicted attenuation levels and helps in determining whether additional mitigation measures are needed.

Response

In accordance with the terms and conditions of the MOA between EPA and the Department of the Army regarding Section 404(q) of the Clean Water Act, the draft permit and ROD were forwarded to the EPA for their review on April 13, 2007. In a letter dated April 25, 2007, EPA indicated that the information included in the DEIS, FEIS, and ROD, and the compensatory mitigation has addressed their concerns. Therefore, EPA did not request a higher level of review for this project pursuant to Section 404(q) of the CWA.

The following responses are intended to address EPA's specific questions about the air quality analyses that were included in the FEIS:

- The regional emissions trend analysis that was included in the FEIS was based on information obtained from EPA's AirData database, which according to EPA's webpage includes mobile sources such as onroad highway vehicles and nonroad vehicles or equipment.
- Regional compliance with NAAQS and PSD increments are discussed in Appendix S, Section 5.2 Air Quality Impacts in the FEIS and in the General Comments section of this ROD.
- Based on prior coordination with EPA, construction related impacts were only qualitatively discussed in the FEIS because these impacts would be less than the modeled impacts associated with operations at full build out in 2025. In addition, the SCSPA and SCDHEC have developed an MOA that includes using best management practices during construction to reduce potential air quality impacts.
- Maximum ambient monitored values for the period 2002-2004 were used as the ambient background value for air quality modeling.
- As stated in Appendix S of the FEIS, the characteristics for the prototype ship was based on the ICF document entitled, *Current Methodologies and Best Practices in Preparing Port Emission Inventories*.
- Based on a sensitivity analysis that was conducted for the Proposed Project, using 50 percent light duty gasoline vehicles (LDGV) and 50 percent light duty gasoline trucks to characterize employee vehicles instead of using 100 percent LDGV would increase overall emissions by less than one percent.
- The emissions identified in Table 13 and Appendix B of the Air Quality Report were based on an incorrect assumption from the DEIS, which indicated that a ship's main propulsion engine would be running the entire time that the ship is in the berth. Although the models were updated to reflect the ship's main engine being started one hour prior to departure, the original versions of these tables were inadvertently left in the FEIS.
- The maximum annual emissions rate was based on practical limitations associated with the operation of the proposed port facility. For instance, there are only three berths and an average port call would be 18 hours. Although departures would be staggered throughout the day, it would be unreasonable to assume that a ship would be operating their main propulsion engine (preparing to leave) every hour, 24 hours a day, and 365 days a year.
- The procedures for developing the PSD inventory were included in Section 4.4 – Emission Rates of the Air Quality Report in the FEIS.
- Based on guidance provided by the USFWS, Bureau of Air Quality, the visibility and deposition analyses that were included in the FEIS were updated to include plume depletion, wet deposition, and an increased background visual range. A copy of the updated analyses was also provided to EPA for their review.
- The proposed mitigation plan includes the construction of a noise barrier that would benefit the majority of residents that would be impacted by the Proposed Project and an even greater number of residents that are currently impacted by existing interstate highway noise. Post construction noise monitoring was not included in the proposed mitigation plan. However, the SCSPA and SCDOT would be required to comply with applicable local noise ordinances.

US Department of Transportation, Surface Transportation Board (STB)

STB's Section of Environmental Analysis reviewed the FEIS and stated that they would have no jurisdiction over the Proposed Project.

Response

Comment acknowledged.

USFWS, Office of Environmental Policy and Compliance

In a letter dated January 16, 2007, USFWS, Office of Environmental Policy and Compliance stated that most of the concerns that were previously submitted by the Service were addressed and included in the FEIS. However, the USFWS continues to be concerned about the following issues:

- Operation of a sediment control system represents a prolonged impact to the subtidal environment and should be considered a potential impact to larval fish and benthic organisms.
- Sediment suspension creates a prolonged downstream discharge of sediments and may transport contaminated material to unpolluted areas.
- Sediment suspension may be considered a form of agitation dredging, an action specifically prohibited by the Coastal Zone Management Act.
- Acquisition of fill material from offsite lands represents a direct impact that is attributable to the project. Borrow areas should be identified to determine potential species and habitat impacts as well as soil suitability for the end use.
- The FEIS did not adequately address measures to avoid potential impacts to the West Indian manatee (*Trichecus manatus*) resulting from terminal construction and operation.

Response

Previous studies evaluating the use of sediment suspension systems at other port facilities indicate that most small fish (> 2 inches) are capable of avoiding the underwater blower units, while most small larvae and eggs pass through the unit unharmed. The SCSPA received authorization to install a similar system at their Columbus Street Terminal in June 2004. That system was installed in 2006 and is currently undergoing testing to evaluate potential impacts to bottom sediments, sedimentation rates, larval fish, and benthic organisms.

The sediment suspension system is designed to prevent suspended sediment from settling within the berth areas. The operation of the system would not impact current velocities or sediment deposition rates in areas more than 250 feet from the edge of the wharf structure. In addition, the system is not expected to alter the composition of the existing suspended sediment or the locations downstream where sediment would normally be deposited. Prior to the installation and operation of the sediment suspension system, the SCSPA would be required to submit a similar monitoring plan for review and approval by USFWS, NMFS, and the Corps.

SCDHEC-OCRM is responsible for evaluating compliance with the Coastal Zone Management Act. OCRM has reviewed and approved the use of a sediment suspension system at both Columbus Street Terminal and the Proposed Project.

The Corps also believes that obtaining fill material from one or more offsite sources would be an impact of the Proposed Project. According to the SCSPA, specifying the source of the fill material months or even years prior to construction would adversely affect their ability to obtain competitive bids for providing the fill material. Additional coordination would be required to identify any potential impacts (protected species, cultural resources, wetlands, etc.) associated with obtaining the necessary fill material. The SCSPA would be responsible for submitting the information necessary to evaluate potential impacts, so that the Corps can coordinate with the appropriate regulatory and resource agencies.

As described above, the Corps advised the USFWS that a special condition would be included in the SCSPA's permit to protect the manatee. The USFWS concluded consultation and concurred with our determination that the Proposed Project is not likely to affect the manatee in a letter dated April 23, 2007.

USFWS, Bureau of Air Quality

In a letter dated January 17, 2007, USFWS, Branch of Air Quality stated that the Port of Charleston is located approximately 30 kilometers from Cape Romain National Wildlife Refuge, which is a Class I Wilderness Area. USFWS requested a 30-day extension of the comment period on the FEIS.

In a letter dated March 1, 2007, USFWS, Branch of Air Quality provided the following comments:

- Emission rates that were input into the model do not appear to include all emissions of the project, such as ships traversing the shipping channel, small marine vessels, and on-shore mobile sources. USFWS recommends using the CALPUFF dispersion model.
- Background visual range should be corrected in the model.
- 20 D Screening Procedure may exclude significant increment consuming sources and is not recommended.
- Wet and dry deposition of sulfur and nitrogen must be evaluated in the FEIS. Red tides were documented in 1998, 1999, and 2003.
- Studies of ozone injury on foliage that were conducted in 1996-1998 and 2002-2003 indicate that ozone levels are low, but are slightly above the threshold to cause plant injury.
- Regional haze and the state approach to reach natural visibility in the year 2064 should be addressed in the FEIS. SIP plans are due in 2007 and emission projections for this project should be included in the state emissions inventory.

Response

The comment period was extended from January 16, 2007 until February 2, 2007. In addition, the Corps has continued to accept and respond to comments that were received after the comment deadline.

Based on additional coordination and guidance provided by USFWS, Branch of Air Quality, additional analyses were conducted to evaluate the potential impact of the Proposed Project on Cape Romain National Wildlife Refuge. Based on the unusually high deposition rates that were reported in the FEIS, USFWS advised the Corps that ISCST3 typically provides conservative results for deposition analysis and suggested that the Corps consider using the CALPUFF model. The Corps submitted an updated deposition analysis using ISCST3 that included clarification of the assumptions and inputs, plume depletion, and wet and dry deposition rates.

The visibility analysis for Cape Romain was updated using a background visual range of 182 kilometers, which was recommended by the USFWS. This is greater than the visual range that was used in the original analysis and would be more protective of the environment. Based on additional coordination with SCDHEC, there are numerous ongoing actions that would result in significant improvements in air quality and visibility to Cape Romain, such as the following Federal rules and programs:

- The Federal Clean Air Interstate Rule requires states to reduce emissions of sulfur dioxide and oxides of nitrogen (NOx). South Carolina is in the process of finalizing a regulation that will allow facilities to meet their emissions reductions requirements by controlling power plant emissions through an interstate cap and trade program.
- The Federal Tier 2 Vehicle and Gasoline Sulfur Program effects every new passenger car and every gallon of gasoline sold in the U.S. The phase in of these vehicles and low sulfur gasoline began in 2004 and will be completed with the 2007 model year vehicles.
- The Federal Clean Diesel, Truck/Bus and Low Sulfur Diesel Rule will apply to all model year 2007 engines and vehicles. This program also reduced sulfur in highway diesel fuel from 500 parts per million (ppm) to 15 ppm in 2006.
- The Federal Clean Air Nonroad Diesel Rule is the most recent nonroad standard and would reduce emissions from nonroad diesel equipment by over 90 percent and would reduce sulfur in nonroad diesel fuel by 99 percent in 2007. This would apply to most nonroad diesel fuel in 2010 and to fuel used in locomotives and marine vessels in 2012.

The Proposed Project would also result in air quality emissions that would contribute to regional haze. According to SCDHEC, South Carolina participates in the Visibility Improvement State and Tribal Association of the Southeast (VISTAS) to assess visibility impairment and to work toward natural background visibility conditions. SCDHEC is currently developing a revision to the State Implementation Plan regarding regional haze, and preliminary results indicate that visibility at Cape Romain will be below the glide slope in 2018. Through another regional effort by states in the southeast, regional air quality modeling is underway to assess ozone and PM2.5.

Preliminary estimates indicate that ozone and PM2.5 standards will be achieved at monitors at Cape Romain in 2009 and 2018, respectively.

Based on this additional information, USFWS, Branch of Air Quality stated in a letter dated April 23, 2007, that Nitrogen and Sulfur analysis yielded no results above the Deposition Analysis Threshold and visibility analysis showed that for a majority of the time within the Class I area, the contrast (delta E) was within the screening criteria. Therefore, the Proposed Project is expected to have a minimal adverse impact on visibility and will not significantly affect deposition at Cape Romain.

National Marine Fisheries Service

In a letter dated January 16, 2007, NMFS' Habitat Conservation Division requested a two week extension of the comment period for the FEIS from January 16, 2007, until January 30, 2007.

In a letter dated February 2, 2007, NMFS referenced previous concerns regarding potential impacts to EFH and the lack of an acceptable mitigation plan. In addition, they provided the following comments:

- Concerns identified in an October 12, 2006, letter regarding increasing marsh restoration efforts on Drum Island, information on current ownership of areas adjacent to the preservation areas on Morris Island, development of contingency plans for Morris Island and the Cooper River Initiative preservation efforts.
- Request additional information on potential impacts on fish and invertebrates from operation of the sediment suspension system in order to develop measures to avoid and minimize potential impacts
- Pending our review of the additional information requested, our original EFH recommendation from December 16, 2005, remains unchanged. Your detailed response must include a description of measures proposed by your agency to avoid, mitigate, or offset the adverse impacts of the activity.
- NMFS continues to assert that creation and enhancement of viable oyster reef communities will provide greater benefit in improving water quality and fish habitat within the Charleston Harbor area that could be realized from the proposed acquisition of properties located 22 miles upriver from the project site.
- Unclear whether the upland acreage located adjacent to the west side of the proposed preservation area is currently protected from future development.
- Unaware of any detailed description of the preservation areas on the Cooper River West Branch that would allow us to assess their value to fishery resources. Unlike most preservation in that it would allow limited, additional development of these properties in the future.
- Proposed mitigation plan does not include mitigation explicitly identified to compensate for increased risk of spills.
- Construction and maintenance dredging would have a significant impact on the aquatic environment.
- The change in water quality would probably result in decreased diversity and loss of habitat for many organisms. These impacts are cumulatively significant and should be offset through specific mitigation efforts identified in the FEIS.

- The major modification and disturbance impacts to EFH would be from water quality changes in dissolved oxygen, salinity, turbidity, and current velocity.
- Primary environmental concern with the use of a sediment control system is the entrainment of organisms within the intake pipe. Discussion should be expanded to include benthic organisms, resident and migratory fish, invertebrates, shrimp and anadromous fish. Monitoring plan should evaluate turbidity, sedimentation, resuspension of metals and other contaminants and reduction of DO.
- Proposed Project would result in the most significant impacts to EFH in Charleston Harbor in recent times. Proposed mitigation plan does not sufficiently offset the impacts to EFH, and NMFS expressed concern about the lack of a contingency plan should the land acquisition efforts not come to fruition.
- NMFS expressed concern about the cumulative impacts associated with handling large quantities of fill material, vehicles generating heavy metals and oil and grease via stormwater runoff, sediment suspension and release of contaminants during dredging, potential for accidental releases of bilge water, varying levels of disturbance associated with the increase in shipping traffic, potential for major spills and other discharges of toxic or hazardous materials, and vessel induced distubances such as prop wash.

Response

After reviewing the draft EIS, NMFS submitted letters dated December 16, 2005, February 16, 2006, and March 10, 2006, regarding the need for additional coordination pursuant to the Magnuson Stevens Fishery Conservation and Management Act, and the MOA between Department of Commerce and the Department of the Army regarding Section 404(q) of the Clean Water Act.

The draft permit and ROD were forwarded to NMFS on April 13, 2007, for their review so that they can determine whether to request elevation of the permit decision for the Proposed Project pursuant to Section 404(q) of the CWA. This information was also reviewed by NMFS' Charleston Office pursuant to Section 600.920(g) of the Magnuson Stevens Fishery Conservation and Management Act. In a letter dated April 25, 2007, NMFS stated that they have reasonable assurance that the compensatory mitigation will offset the adverse impacts to EFH and that impacts resulting from the sediment suspension system will be menaged appropriately. Therefore, NMFS removed their objection to the Department of the Army authorizing the Proposed Project, and did not request a higher level of review for this project pursuant to 404(q) of the Clean Water Act.

Mitigation

The revised mitigation plan includes the restoration of 22 acres of tidal marsh on Drum Island, the contribution of funds to help preserve 130 acres on Morris Island, the contribution of funds to help preserve uplands and wetlands in the upper Cooper River, and funding existing SCDNR oyster restoration programs. According to the SCSPA, the portion of Drum Island within the former bridge right-of-way would provide a buffer area between the existing CDF and the mitigation area. Excavating immediately adjacent to the dikes would tend to reduce the integrity of the structure and the entire CDF. The

proposed marsh restoration (22 acres) is more than twice the acreage of the affected tidal marsh that would be impacted by the Proposed Project.

The Corps provided NMFS with additional information on the current ownership of other parcels on Morris Island and a copy of an ecological survey that was prepared by SCDNR. Although the marsh, intertidal and subtidal areas that would be preserved on Morris Island may not be identical to the shallow water and open water habitat that would be lost or modified as a result of the Proposed Project, the preservation of these habitats is expected to benefit species that use the adjacent shallow water and open water habitat. The acreage of aquatic habitats that would be preserved on Morris Island exceeds the total acreage of aquatic habitat loss for the Proposed Project.

All of the proposed funding must be placed in an escrow account prior to beginning work on the Proposed Project. The release of funds would be subject to the review and approval of the Corps and SCDHEC. In the event that any of the activities included in the approved mitigation plan have not been completed within three years, the SCSPA would be required to develop a contingency plan. The Corps believes that waiting and using the best available information to develop a contingency plan would result in greater overall benefit to the aquatic environment. The contingency plan would be subject to the review and approval of the other regulatory and resource agencies.

The development of the Proposed Project would result in the SCSPA deepening approximately 77.9 acres of open water to develop the berth and access channel areas. More than 70 percent of the proposed deepening and almost 20 percent of the placement of fill material would overlap areas where deepening has already been authorized as part of the Charleston Harbor Project. In light of these previously authorized impacts, the net impact of deepening and filling these areas as part of the Proposed Project would not be considered as substantial.

Sediment Suspension

As described above, the SCSPA received authorization to install a similar sediment suspension system at their Columbus Street Terminal (CST) in June 2004. That system was installed in 2006 and is currently undergoing testing in accordance with a monitoring protocol that was developed by SCDHEC and SCDNR to evaluate potential impacts to bottom sediments, sedimentation rates, larval fish, and benthic organisms. The Corps provided NMFS with copies of monitoring reports from other facilities that use similar systems, and a copy of the modeling protocol that was approved for the CST.

The sediment suspension system is designed to prevent suspended sediment from settling within the berth areas. The operation of the system would not impact current velocities or sediment deposition rates in areas more than 250 feet from the edge of the wharf structure. In addition, the system is not expected to alter the composition of the suspended sediment or the locations downstream where sediment would normally be deposited. Lessons learned from the operation of the sediment suspension system at Columbus Street should help to reduce any potential impacts

associated with the Proposed Project. Prior to the installation and operation of the sediment suspension system, the SCSPA would be required to submit a similar monitoring plan for review and approval by USFWS, NMFS, and the Corps.

Water Quality

The Proposed Project has been evaluated by SCDHEC using the new 3-D water quality model that was developed by the BCDCOG for the Cooper River TMDL. Based on the findings of this analysis, SCDHEC issued a 401 water quality certification. In addition, the Corps reviewed a separate 3-D hydrodynamic model to evaluate potential impacts to hydrodynamics and effects on sedimentation rates in the federal navigation channel. Based on the findings of this analysis, the Proposed Project is expected to have a negligible impact on sedimentation rates within the federal navigation channel. We recognize that dredging the berth and access channel areas to the same depth as the adjacent federal navigation channel would enable higher salinity water located near the bottom of the channel to spread into these areas. As a result of naturally occurring low levels of dissolved oxygen during the warm summer months, these deepened areas would likely be avoided by fish and shellfish during part of the year. However, the net increase in the volume of available water column may benefit fish and shellfish at other times of the year. The proposed dredging and disposal of dredged material in the Daniel Island CDF would result in temporarily elevated levels of sediment within the water column. The elutriate plume associated with these potential impacts has been evaluated and is not expected to pose a hazard for aquatic species.

Oil Spills

As stated in the FEIS, the development and operation of the Proposed Project would result in an incremental increase in the overall number of port related roadway and vessel trips. Secondary impacts associated with accidental releases or spills from containers or the vehicles or vessels carrying those containers would be subject to the applicable Federal, State and local regulations, such as the Charleston Area Contingency Plan. Based on coordination with the USCG, existing SCSPA marine container terminals do not meet the regulatory definition of a facility in 33 CFR 154 and are not required to develop an individual Facility Response Plan. However, the vessels calling at the facility would be required to have a Shipboard Oil Pollution Emergency Plan per 33 CFR 151 and would also need a Vessel Response Plan per 33 CFR 1555 if they carry oil as cargo. Although the Corps recognizes that the Proposed Project would result in an incremental increase in the potential for incidents to occur, the SCSPA does not package the cargo within the containers or transport the containers entering or leaving the port facility. Therefore, they generally would not be involved in any spill response activities. Any mitigation as a result of a specific release or spill would likely be conducted by the responsible parties.

Cumulative Impacts

The Proposed Project would result in greater impacts to aquatic resources than either of the other alternatives that were evaluated in the FEIS. However, as a result of other more substantial impacts to the human and natural environment, the Proposed Project is considered the least environmentally damaging practicable alternative. NMFS

has stated that the Proposed Project would result in a number of activities that would result in cumulative impacts on aquatic resources that must be mitigated. As described above, the loss or modification of waters of the United States has been mitigated through the preservation, enhancement, and restoration of waters of the United States within the Cooper River watershed.

Concerns such as pollutant loading associated with the development of the project site would be addressed through the use of stormwater treatment measures such as the proposed detention basin during SCDHEC's review and approval of the stormwater management plan for the project site. Likewise, impacts associated with the placement of fill material would be addressed through the use of best management practices during SCDHEC's review and approval of the land disturbance permit for the project site.

As described above in the threatened and endangered species section, NMFS' Protected Resources Division initiated formal consultation on May 17, 2006, because of concerns over the potential effects of increased shipping traffic on right whales. The SCSPA has agreed to incorporate conservation measures such as provide funding to support ongoing aerial surveys in the vicinity of the Port of Charleston. The information gathered during these surveys can be relayed to individual ships so that they can take measures, such as altering course or reducing speed, to avoid whale/ship interactions. This is expected to help protect the right whale from vessel traffic associated with the Proposed Project and other existing and proposed facilities within the Port Charleston.

US Coast Guard

In an email dated January 19, 2007, the USCG requested we clarify that security regulations (33 CFR 105) identified in Section 5.2.7.2 of the FEIS are intended to protect the port facility from outside threats. Any additional security measures will be between the facility and their neighbors in the spirit of cooperation.

Response

Comment acknowledged.

Representative James Clyburn, Member of Congress

Representative Clyburn requested an extension of the comment period for the FEIS not to exceed 30 days.

Response

The comment period was extended from January 16, 2007 until February 2, 2007. In addition, the Corps has continued to accept and respond to comments that were received after the comment deadline.

<u>State Agencies/ State Representatives</u>

State Budget and Control Board

In a letter dated December 18, 2006, the State Budget Control Board indicated that the Grant Services Unit, Office of State Budget had initiated an intergovernmental review of the Proposed Project. According to this letter, state agencies and Council's of

Government will determine which project applications they wish to review. In a follow up letter dated January 8, 2007, State Budget Control Board indicated that they had conducted an intergovernmental review of the Proposed Project as provided by Executive Order 12372. No comments were provided.

Response

Comment acknowledged

SC House of Representatives, Floyd Breeland

Representative Breeland requested that there be no impact to the Rosemont community. He expressed his strong opposition to the proposed location of the port access road for the following reasons:

- Rosemont and Silver Hill were previously affected by construction of I-26 and they never recovered.
- Magnolia Project will also affect these communities in some way
- The proposed route will impact Southern Lumber and Rosemont.
- The majority of the residents of Rosemont and Silver Hill are elderly and unable to relocate. The residents have been disrupted time after time and continue to be disrupted.
- The Rosemont community was not included in the beginning phase of the project.

Response

The Proposed Project is expected to impact both Rosemont and Southern Lumber as described in the FEIS. Although the development of the proposed access roadway would directly impact a portion of the Southern Lumber property, no residential properties would be impacted by the acquisition of the necessary public roadway right-of-way. Therefore, no residents (elderly or otherwise) in Rosemont would be required to relocate as a result of the Proposed Project. Silver Hill was not specifically addressed in the FEIS because it is located south of the study area for the Proposed Project. Residents of Silver Hill would likely be impacted by changes in local traffic patterns associated with developing the proposed access roadway.

The Corps recognizes that residents of Rosemont were not added to the mailing list for the Proposed Project until SCDOT submitted a permit application for the proposed access roadway in August 2005. Once the scope of work was expanded to include the port access roadway, the adjacent residents (including those in Rosemont) were added to the project mailing list. They received newsletters and local public notices regarding the DEIS, the extension of the comment period, public information workshops, and the release of the FEIS. In addition, an individual that attended a public information workshop in January 2006 provided the Corps with an expanded list of residents that would be interested in the Proposed Project.

The residents of Rosemont were provided the opportunity to comment on the Proposed Project, the DEIS, and the FEIS. The Corps has received comment letters

and petitions that were submitted by the residents of Rosemont. We believe that they have clearly stated their concerns and opposition to the Proposed Project.

The proposed access roadway would primarily be located within the existing I-26 right-of-way, and would impact a small portion of a playing field that is located between Rosemont and I-26. The compensatory mitigation plan includes the construction of a noise barrier adjacent to the proposed access ramp near Rosemont. The proposed noise barrier would benefit residents that would be adversely impacted by the Proposed Project, and an even greater number of residents in Rosemont that are currently impacted by highway noise levels associated with I-26.

Local Agencies / Elected Officials

Councilman Henry Darby

As a member of Charleston County Council and a representative of the area affected by the Proposed Project, Mr. Darby requested that the comment period for the FEIS be extended at least 30 days.

Response

The comment period was extended from January 16, 2007 until February 2, 2007. In addition, the Corps has continued to accept and respond to comments that were received after the comment deadline.

Councilman Teddie Pryor

Mr. Pryor requested that the comment period for the FEIS be extended 30 days to provide his constituents in Rosemont more time to review the entire document.

Response

The comment period was extended from January 16, 2007 until February 2, 2007. In addition, the Corps has continued to accept and respond to comments that were received after the comment deadline.

Charleston County Public Works Department

The Mosquito Control Division requested the opportunity to review and offer input on the BMP maintenance plan and to evaluate the scope of inspection and treatment efforts that may be required after construction to control mosquito populations.

Response

The Mosquito Control Division previously commented on the DEIS and stated that they offer no objection to the issuance of a permit with the condition that the controlling agency of the dredged material disposal sites continues to reimburse Charleston County for mosquito control efforts that include inspection and product application associated with these sites. The SCSPA has indicated that they will continue to work with Charleston County and provide funding to address mosquito control for the Daniel Island CDFs.

Charleston County Council

Ms. Beverly Craven provided a copy of a Resolution that was passed by Charleston County Council at its meeting of April 3, 2007. The Resolution stated that members of the public had raised valid issues for consideration, and that it is important for the Corps to review these concerns in order to minimize impacts. Charleston County Council called upon the Corps of Engineers to make sure that all of the models in the FEIS are properly formulated and that all analysis has been verified to have been correctly performed in order to make sure all impacts are correctly measured so that all necessary mitigation is identified and addressed as a condition of any permits which are issued. They also joined in the City of North Charleston's request that air monitoring stations be installed in the surrounding neighborhoods to monitor before construction, during construction and after construction of the terminal and that the results be published twice per year with public notification.

Response

Throughout our evaluation of the proposed project, the Corps has encouraged public participation in order to assure that any comments and concerns are expressed. Based on our review of the models that were included in the FEIS, the Corps discovered that one of the original tables included in the Air Quality Report was not updated during the preparation of the FEIS and overestimated vessel related emissions. However, the inputs that were used in the actual model were correct and this did not affect the overall findings of the report.

The potential impacts of air quality emissions on Cape Romain National Wildlife Refuge were also overestimated in the FEIS. Based on coordination with USFWS, Branch of Air Quality, additional model runs were conducted. As described above, the Proposed Project is not expected to have an adverse impact on Cape Romain. The City of North Charleston's request that air quality monitors be installed in the surrounding neighborhoods and that the results be published twice a year is beyond the scope of the Proposed Project. SCDHEC, Bureau of Air Quality is responsible for monitoring and managing air quality conditions throughout the state of South Carolina in accordance with the State Implementation Plan. Information gathered by SCDHEC is considered public information and is available through the Freedom of Information Act.

In order to address concerns about actual port related emissions, SCDHEC and SCSPA have developed an MOA that includes establishing a new PM2.5 monitoring station near the project site, developing an emissions inventory for the port facility, and including BMPs in bid documents to reduce air quality emissions during construction.

City of Charleston

In a letter dated January 12, 2007, Mayor Joe Riley requested that the comment period for the FEIS be extended at least 30 days.

In a letter dated February 2, 2007, Mayor Riley stated the City of Charleston supports the SCSPA's need to expand to stay competitive and meet the growing demand for intermodal shipping at the CNC. However, he expressed concern about community environmental, and transportation impacts to Rosemont, the Neck area, and

all citizens and businesses on peninsular Charleston. Mayor Riley provided the following comments:

- Air, noise, and light pollution will be introduced into Rosemont, reduction in transportation options in the Neck area, and increased traffic on I-26 area direct result of the Proposed Project.
- The entire I-26 interchange for the port access roadway is located within the City of Charleston and would cause a severe and detrimental impact by reducing the size of a long awaited and newly constructed park.
- The removal of Exit 218 and/or Exit 217 will result in longer, more complicated, and more costly trips to access I-26.
- CHATS study shows that I-26 will not be relocated further away from Rosemont. Rosemont will continue to bear a disproportionate share of the impacts of I-26 and future port traffic.
- Proposed Project will result in an increase in traffic on I-26 and cause this roadway to reach a failing Level of Service sooner. Further study of the I-26 corridor and other elements of the transportation network is necessary to ensure they work together to support citizens and businesses in peninsular Charleston.
- Location of the port access road needs further study and design to lessen impact on Rosemont, the Neck area, and the City of Charleston. If the proposed roadway is the correct location, SCSPA and SCDOT should work with the City of Charleston and Rosemont on an extensive appropriate mitigation plan that would include the following potential items: a new, completed park space to replace the one impacted by the port access road, thorough study of the I-26 corridor and surrounding rail lines north of Mount Pleasant Street, removal of all freight rail between King and Meeting Streets to provide at least four at-grade crossing, enhancement of King and Meeting Streets as described in the CHATS study, provide a convenient at-grade intersection on the port access road for other vehicles in the Neck area.

Response

The comment period was extended from January 16, 2007 until February 2, 2007. In addition, the Corps has continued to accept and respond to comments that were received after the comment deadline.

City of Charleston expressed concerns about the need for an extensive and appropriate mitigation plan for the Proposed Project. Specifically, this letter cited the need for a new park space to impact the one impacted by the Proposed Project. As stated elsewhere in this document, Federal and State regulations require that full compensation be provided to property owners for direct impacts associated with roadway projects. Compensation for impacts to the park space would occur during the right-of-way acquisition process.

City of Charleston also expressed concern that the construction of the Proposed Project would reduce future options for transportation improvements in the Neck Area. The Corps is unaware of any specific plans to construct transportation improvements in

the Neck Area other than the proposed port access roadway. The I-26 relocation study that was prepared by CHATS recommends improvements to local roadways to accommodate growth in future background traffic. We believe that these types of improvements to local roadways would also help address some concerns about the closure of Exit 218 and future access to I-26 east of the port access roadway. The development of the proposed access roadway is not expected to limit the ability of these improvements to be conducted.

The best available information such as the BCDCOG travel demand model was used and in some cases updated to develop traffic projections and to evaluate future roadway operations. The development of regional traffic plans or the evaluation of roadway or railway improvement projects that would occur whether or not the Proposed Project is developed are beyond the scope of our evaluation of a specific permit application. The Corps believes that the FEIS includes sufficient information on the potential impacts of the Proposed Project on existing roadway and railway infrastructure to complete our public interest review and make a permit decision.

The City of Charleston's concerns regarding increased traffic on I-26, the findings of the Access Roadway Feasibility Study, potential impacts of the proposed port access roadway, air, noise, and light pollution in Rosemont, removal of the Spruill Avenue interchange (Exit 218), and construction of improvements to the Meeting Street Road interchange (Exit 217) have been fully addressed in the FEIS or in the General Comments section below.

City of North Charleston

In a letter dated January 16, 2007, Mayor Keith Summey provided the following comments on the Proposed Project and the FEIS.

- FEIS states that there should be negligible impact to intersections on arterial roads from increases in truck traffic, and only minor impacts resulting from terminal employee traffic.
- Traffic models do not accurately reflect the travel patterns for northbound vehicular traffic. Minor impacts to the Hobson @ McMillan, Rivers @ Cosgrove, and Rivers @ Azalea intersections would add to an already highly stressed future traffic situation.
- City of North Charleston requests improvements such as signal timing and dedicated right and/or left hand turn lanes for minor impacts to the Hobson @ McMillan, Rivers @ Cosgrove, and Rivers @ Azalea. Improvements are also recommended for Viaduct and Viaduct @ Spruill Avenue.
- Norfolk Southern railway at grade crossings at Taylor Street and Remount Road, west of Interstate 26 and north of Interstate 526 are expected to experience two additional trains per day. CSX railway at grade crossings at Montague Avenue and Remount Road are also expected to experience two additional trains per day.

- FEIS did not conduct an assessment of the negative economic impacts of increased roadway blockage on the local community. Traffic models do not reflect the reduction in capacity on adjacent arterials at blocked crossings.
- North Charleston is proposing the creation of quiet zones at impacted crossings and noise walls to buffer adjacent neighborhoods: Taylor Street, Remount/Airport, Montague Avenue, Remount Road, Eagle Landing, Jet Park Road, Aviation Avenue, Midland Park Road, and Ashley Phosphate Road.
- North Charleston is also requesting the installation of noise walls at neighborhoods adjacent to the rail yards, and elevated structures at those crossings that increase substantially.
- North Charleston proposes that environmental mitigation funds be spent locally to restore Filbin and Noisette Creeks instead of other locations.
- The project site is located within a VE Zone. All structures must meet North Charleston ordinances including the one foot freeboard requirement.

In a letter dated March 26, 2007, Mayor Summey provided copies of two resolutions that were adopted by North Charleston City Council on March 22, 2007. Resolution 2007-33 stated that members of the public had raised valid issues for consideration, and that it is important for the Corps to review these concerns in order to minimize impacts. North Charleston City Council requested that air monitoring stations be installed in the surrounding neighborhoods to monitor before construction, during construction and after construction of the terminal and that the results be published twice per year with public notification. They also called upon the Corps of Engineers to make sure that all of the models in the FEIS are properly formulated and that all analysis has been verified to have been correctly performed in order to make sure all impacts are correctly measured so that all necessary mitigation is identified and addressed as a condition of any permits which are issued. Resolution 2007-36 requested that the Corps of Engineers delay the issuance of the permit for the proposed container terminal until such time as the City of North Charleston is satisfied to the questions raised in Resolution 2007-33.

Response

Traffic models were designed to evaluate the potential impact of the Proposed Project on existing transportation infrastructure. The Existing Roadway Traffic Study included in the FEIS indicates that improvements to local roadways would be required to accommodate future traffic from other projects that would have a greater impact on both local streets and intersections. The development of the port access roadway would provide an alternate access point to the CNC and is expected to help alleviate future traffic conditions at Hobson @ McMillan, Viaduct, and Viaduct @ Spruill Avenue. Port related and non-port related traffic (employees, visitors, contractors, etc) would likely use a number of routes including the port access roadway to reach the CNC. The recommended improvements to the Rivers @ Cosgrove or Rivers @ Azalea may be warranted to handle growth in future background traffic.

Increases in the use of existing railway corridors are expected to occur whether or not the Proposed Project is developed. Likewise, an increase in the length or the

number of trains that use an existing rail crossing may result in an adverse economic impact on adjacent properties. These types of economic impacts are extremely difficult to quantify because of the number of variables (business type, origins and destinations, potential alternate routes, timing, etc). They were considered qualitatively in our overall evaluation of the Proposed Project.

The construction of noise barriers and the creation of quiet zones would reduce the impact of existing rail traffic and future increases in rail traffic on some adjacent properties. The proposed SCDOT mitigation plan includes improvements to several at-grade railway crossings in order to reduce existing noise impacts within the adjacent community. The Corps is unaware of any plans by CSX or Norfolk Southern to construct noise walls at their existing rail yards.

The Corps has evaluated the environmental mitigation plan and believes that it appropriately offsets the impacts associated with the Proposed Project. The proposed compensatory mitigation would occur within the affected watershed or at an appropriate federally approved mitigation bank.

The construction of the Proposed Project involves a number of activities that are regulated by different levels of government. The issuance of a DA permit does not obviate the need for a permittee to comply with other applicable regulations or standards, such as base flood elevations or noise ordinances.

Resolution 2007-33 was adopted one week prior to the Resolution passed by Charleston County Council. The text is almost identical and the Corps' response is described above. It would be inappropriate for the Corps to delay issuance of the SCSPA's and SCDOT's permit application until the City of North Charleston is satisfied as described in Resolution 2007-036. The Corps is responsible for evaluating the Proposed Project and providing the applicant with a timely response once we have completed our evaluation.

Councilman Bob King

Councilman King stated that he continues to oppose the SCSPAs presence on the CNC. There are still many unresolved items that will negatively impact the entire City of North Charleston. To create increased truck and train traffic on a system that is already overburdened without a firm solution in place to protect our residents shows little regard for those most impacted.

Response

Councilman King's opposition to the Proposed Project is contrary to the MOUA that was developed by the City of North Charleston and the SCSPA regarding the redevelopment of the former Charleston Navy Base. The Corps believes that potential impacts to the City of North Charleston have been evaluated and that these impacts have been avoided and minimized to the maximum extent practicable. As described in the FEIS, roadway and railway traffic is expected to increase in the future whether or not the Proposed Project is ever constructed.

SCDOT, CHATS, and private railway companies that serve the area are expected to develop infrastructure improvements to meet future roadway and railway demands. Specifically, SCDOT is currently evaluating the widening of I-26 and CHATS recently evaluated the relocation of the portion of I-26 that is located between Cosgrove Avenue and the City of Charleston. The future widening of I-26 and improvements to local roadways that were recommended by the CHATS' study would likely help to address some of Councilman King's concerns.

As described above, the Proposed Project consists of both the proposed port facility and port access roadway. The port access roadway is considered an integral part of the future operation of the proposed port facility and would help to avoid and minimize potential adverse impacts to existing local roadways. A special condition would be included in the DA permit for the proposed port facility to ensure that the port access roadway has been constructed and is available for use by port related truck traffic before the port facility begins operations.

Organized Groups

Southern Environmental Law Center Attorneys at Law Representing South Carolina Coastal Conservation League

Comments that were provided by the SELC on the FEIS include an evaluation of specific models and their underlying assumptions that was commissioned by the SCCCL. These comments include the following:

- The Proposed Project could lead to Charleston being classified as a non-attainment area for a new PM2.5 standard that was adopted by the EPA on December 18, 2006, and will be implemented in 2010. Failure to include certain offsite sources, such as offsite trucks, vessels in the shipping channel, and ships at berth may underestimate this future exceedance.
- The Proposed Project will cause I-26 to reach a failing Level of Service sooner than previously projected. Recommend consideration of measures to mitigate or avoid that failure.
- Access Roadway Feasibility Study contradicts earlier Existing Roadways Study and states that I-26 will fail in the No-Action alternative. Why did the consultant use different traffic models to evaluate freeway segments?
- Widening of I-26 was not included in the FEIS, nor does not appear in the Long Range Plan. CHATS study for relocation of I-26 was ignored in the FEIS.
- How much of the capacity increment is going to be consumed by the Proposed Project?
- FEIS does not account for future improvements to throughput capacity, such as denser stacking and offsite warehousing.
- Secondary trips from local warehouses should be evaluated in the FEIS.
- Employee trips underestimated during peak traffic hours. Fewer than 10% of terminal employees will be on typical weekday shifts.

- Qualitative evaluation of roadway alternatives are vague and do not offer the reader the opportunity to compare the build and no-build traffic conditions, such as PM peak hour speeds and queuing of traffic.
- Mobile sources generated by the project are a significant source of air emissions. All criteria pollutants would be emitted at over 100 tons/year.
- Underestimation of emissions from ships at berth and in the navigation would result in underestimation of the Significant Impact Area for each pollutant, number of sources in the offsite inventory would increase, NAAQS impacts would be greater, PSD impacts would be greater.
- Concerns about specific inputs into the model, such as the length to width ratio of certain roadways, stack heights, coordinates.
- Water side and land side analysis of air toxics can be modeled separately. Reasons for not conducting the water side analysis do not apply to the land side analysis, which should have been conducted.
- Existing levels of cancer risk associated with air toxics have been estimated by the EPA in the National Air Toxics Analysis. NATA estimated average cancer risk in Charleston County from air toxics is 34.5 in one million, which is above the statewide average risk of 25.2 in one million.
- Total VOC speciation profiles for the five EPA priority mobile source air toxics have been used for marine diesel inventories in Canada.
- Port emissions inventories that include the component data for air toxics inventory generation have been proposed for nine US ports
- Car and truck toxic emissions are estimated in the FEIS, and are much lower than the combined impact of yard equipment and marine vessels.
- Diesel particulate emissions were not estimated in the FEIS.
- FHWA mesoscale and microscale analysis, Interim Guidance on Air Toxics Analysis in NEPA Documents, Transportation Conformity
- Lack of No-Action air quality analysis
- Emissions from port-related increase in train activity.
- Emissions from refrigerated containers.
- Compliance with EPA guidance for PSD modeling.
- Underestimation of fugitive emissions. 11 tons vs. 1400 tons. Mitigation for fugitive emissions.
- SCDHEC air modeling guidelines, such as terrain heights, were not used. Release height of onsite vehicle sources. FEIS may underestimate ground level concentration for most land based receptors.
- Potential impacts to Cape Romain exceed Deposition Analysis Thresholds for NO2 and SO2. Wet deposition required. Impacts assessment of ships passing close to Cape Romain. Limited assessment of shipping channel and offsite trucks.
- Modeling protocol stated that offsite ships and trucks, other marine vessels, passenger cars would be included in air dispersion.
- Release heights generally increased in the FEIS, such as use of actual emission heights for trucks, yard tractors, container ships, and hydraulic dredges.

- Limited ability to comment on the appropriateness of new analyses that were not included in the DEIS protocol.
- VMT reduced from 63.5 M to 49.1 M miles, port calls reduced from 1260 to 650 per year, motor vehicle emissions reduced from 68.2 tons to 17.6 tons per year
- No evaluation of greenhouse gasses and global warming,
- SUVs and pickup trucks have higher emissions that light duty trucks.
- Proposed Project evaluates a relatively small area and is understandably a small component of regional emissions
- Current Methodologies and Best practices for Preparing Port Emissions Inventories
- Shipping channel was not included in SO2 and PM modeling
- No accounting for secondary impacts in air analysis
- Without further revision of the FEIS and its proposed mitigation the Proposed Project would have an adverse impact on air quality
- Potential noise impacts are reported in 24-hour averaged 65 DNL and make no mention of the instantaneous maximum limits referenced in the Charleston County Noise Ordinance
- FEIS failed to provide qualitative or quantitative analysis of air toxic emissions (current emissions, ambient conditions, project related emissions, a comparison of no-build and build scenarios, total air toxic emissions, projection of future ambient conditions, current or future estimates of public health impacts and risks associated with air toxics, ability of the Proposed Project to comply with generally accepted standards, guideline, or procedures for air toxics). Proposed Project appears to have significant air toxics emissions despite well known health risks.
- FEIS failed to provide information on noise generation using the metrics required by local code enforcement.
- FEIS needs to acknowledge that the Proposed Project will lead to dissolved oxygen level that are lower than the state water quality standard in effect for the Cooper River.
- Corps must consider the CHATS study of I-26 relocation. Proposed roadway deprives the Magnolia property owner's reasonable access to I-26. Reconfiguration of the interstate and connecting interchanges should be evaluated as a mitigation measure.
- Problems outlined with the FEIS warrant preparation of a supplemental EIS.
- FEIS includes a different Statement of Purpose that the DEIS.
- FEIS is not consistent in keeping impacts and alternatives bundled together, which results in under-reporting of the Proposed Project's impacts to area's air and transportation resources and human health.
- FEIS should document the foreseeable environmental impacts that acquisition of fill material will have.
- FEIS must demonstrate how the Proposed Project complies with the 404(b)(1) Guidelines despite it's higher environmental impacts.
- Potential air quality non-attainment may lead to major burdens for businesses and heath in the area.

- FEIS does not include microscale analysis of impacts adjacent to affected roadways and intersections required by FHWA.
- Growing evidence that port related emissions present serious health concerns for surrounding communities and the region as a whole.
- FEIS must not only address the criteria air pollutants, but also the costs and consequences of introducing greater amounts of these toxic pollutants into Charleston's air. Diesel and other fossil-fuel emissions pose a great risk to human health, which should be addressed in the FEIS.
- Potential for locally aggravated effects to public health continues to go unrecognized. Communities in closest proximity will generally experience higher ambient concentrations of harmful pollutants. Recent studies support a correlation between increased health risks and proximity to mobile sources.
- Proper analysis of port related impacts will lead to the need for cleaner operations and greater mitigation, such as incentive based programs to reduce diesel emissions in the local area, installing diesel oxidation catalysts and/or diesel particulate filters on terminal equipment, repowering and/or retrofitting tug boat engines, use of electric cranes, using on road engines for nonroad applications, using propane powered forklifts, rubber tired gantry cranes, use of alternative marine power, and using low-sulfur distillate fuel in main and auxiliary engines as vessels approach port .
- Failure of I-26 is an indirect but certain impact of the project, which will in turn require I-26 to be widened. This major environmental impact needs to be documented, assessed, publicized, and mitigated.
- EIS must consider the cumulative effects of actions that are within the realm of reasonable foreseeability, such as harbor deepening. Port of Charleston does not currently service ships drafting more than 45 feet. Proposed Project is designed to handle the Regina Maersk which drafts 50 feet when fully loaded and would make harbor deepening more likely.
- Concerns about the North Atlantic right whale. Aerial surveys may not pass muster under the Endangered Species Act and would not insulate the SCSPA or a shipping company from claims of an unlawful taking if ship traffic were to cause harm or death to even one right whale.
- Shortcomings of the air, traffic, and noise models in the FEIS have made discussions of mitigation unnecessarily vague.

Response

The Corps provided the SCCCL and their consultants with additional information and met with them to discuss a number of issues related to their specific comments on both the traffic and air quality models. The Corps evaluated their comments and in certain instances ran additional analyses or sensitivity analyses to determine if their specific comments would alter the overall findings of these models. Based on these analyses, we continue to believe that the studies that were included in the FEIS provide the information necessary to evaluate the Proposed Project.

Since most of the comments that were submitted by SELC extend beyond the Corps' regulatory authority under the CWA and Rivers and Harbors Act, we coordinated

with the appropriate Federal and state agencies to determine if the impacts of the Proposed Project to resources that they protect or regulate had been characterized sufficiently to meet their needs. For example, the Corps would defer to EPA and FHWA regarding the sufficiency of the air quality data that was included in the FEIS. Likewise, the Corps would defer to FHWA regarding the inputs, assumptions, and overall findings of the traffic models.

Transportation

The Access Roadway Feasibility Study (ARFS) and the Existing Roadway Study evaluate the future use of different roadways and would be expected to have slightly different effects on I-26. Specifically, the ARFS includes the development of a port access roadway that would alter local traffic patterns and would result in all port related truck traffic entering and exiting I-26 at a single interchange. This is fundamentally different than allowing port related truck traffic to pass through neighborhoods and use local streets to access the interstate at a number of different interchanges. In addition, the inputs to the ARFS traffic models were updated to include the best available information. The incremental analysis that was conducted to identify the future Level of Service on I-26 was performed at the request of FHWA and the models used by the consultant were reviewed and approved by FHWA.

The greatest percentage of vehicles associated with the Proposed Project would occur in the first segment of the interstate (between the port access roadway and Cosgrove Avenue). As these vehicles move away from this interchange the total number of port related vehicles would be expected to diminish as vehicles exit the interstate to travel to their final destination (intermodal railyards, warehouses, etc). By the time port related vehicles reach the more heavily traveled segments of I-26 near the I-526 interchange, they are expected to be less than 2 percent of the overall traffic.

The Proposed Project is being designed to be more efficient than any of the SCSPA's existing container terminals. The projected throughput capacity is considered to be a reasonable estimate of future container throughput capacity based on logistics and existing technology. Although future improvements in technology may enable them to handle additional containers in the future, it would be speculative to make these types of assumptions today. Substantial modifications to the projected throughput capacity for the Proposed Project would need to be considered in the future based on the best available information at that time.

The traffic models that were included in the FEIS evaluated the worst case traffic scenario at the PM peak traffic hours. Several comments expressed concern that more than 45 percent of all port related traffic would be disbursed throughout the region. Based on the peak capacity of the proposed port facility in 2025, this represents approximately 325 truck trips that would be spread between about 10 different areas. The greatest concentration of these port related trucks would be approximately 50 trucks that would use SC Highway 7 to travel toward various destinations in West Ashley or along US Highway 17 during peak hours. The majority of these other areas would be expected to receive about 20 truck trips that would also travel to various

destinations during peak hours. Attempting to further refine these projections is not considered realistic, and would not improve our ability to evaluate the permit applications for the Proposed Project.

Air Quality

The air quality models that were used to evaluate the Proposed Project were selected as a result of coordination with EPA and SCDHEC regarding the potential impacts of the Proposed Project. As a result of comments that were provided on the DEIS, additional modeling was conducted to evaluate potential cumulative impacts associated with the interaction of mobile emissions from the Proposed Project with nearby permitted facilities. This represents a substantial effort that was made to evaluate potential air quality emissions that do not require an air quality permit.

SCCCL stated that the EPA's National Air Toxics Analysis, the estimated average cancer risk in Charleston County is 34.5 in one million, which is greater than the statewide average risk of 25.2 in one million. This appears to be consistent with other studies that indicate cancer risk is typically higher in urban areas. However, Charleston County is currently classified as an attainment area for air quality, and the Proposed Project is only one of many activities that would contribute to overall air quality emissions within the region.

The air quality analyses that were prepared for the Proposed Project include all of the information that was requested by EPA and SCDHEC, the agencies responsible for compliance with the applicable air quality standards. The Corps believes that gathering additional regional and neighborhood specific data extends well beyond the scope of an application for a DA permit. SCDHEC is the state agency responsible for monitoring regional air quality and taking steps to ensure that public health is protected through good stewardship and compliance with the NAAQS standards.

The findings of the air quality analyses that were included in the FEIS disclose a worst case scenario. The air quality emissions associated with the Proposed Project operating at full capacity in 2025 were added to the maximum ambient air quality conditions for the region. This does not take into account the MOA that was recently signed by the SCSPA and SCDHEC regarding the monitoring and management of air quality emissions at SCSPA port facilities or any ongoing or future efforts by SCDHEC to manage regional air quality in accordance with the State Implementation Plan.

The majority of greenhouse gas emissions from the Proposed Project would result from the combustion of diesel fuel or gasoline in the marine vessels, on-road vehicles, and yard equipment. Annual emissions of the three main greenhouse gasses associated with fuel combustion, CO2, N20, and methane, were estimated, and are expected to result in a minimal increase in overall regional emissions.

The SC Coastal Conservation League's concerns regarding the new NAAQS standard for 24-hour PM 2.5, inputs to the air quality models, future operation of I-26, future widening of I-26, the CHATS I-26 relocation study, secondary truck trips, total

vessel emissions from ships, air toxics, fugitive emissions associated with the placement of fill material, Cape Romain National Wildlife Refuge, revisions to studies that were included in the DEIS, noise, water quality, ability of property owners to access I-26 in the future, need for a Supplemental EIS, secondary impacts associated with obtaining fill material, compliance with the 404(b)(1) Guidelines, identification of the proposed access roadway, potential for future air quality non-attainment, compliance with FHWA guidelines for air quality analyses, human health risks, harbor deepening, the North Atlantic right whale, and the proposed mitigation plan have been fully addressed in the FEIS or in the General Comments section below.

New Rosemont Neighborhood Association

In a letter dated, December 13, 2006, Ms. Nancy Button, President of the New Rosemont Neighborhood Association, asked the Corps to participate in a meeting with SCDOT and the residents of the community. Ms. Button also provided the Corps with a copy of a letter dated December 12, 2006, to SCDOT that states their decision as a community is no impact to Rosemont.

In a letter dated, January 9, 2007, Ms. Button thanked the Corps for being their guest at the January 8, 2007, meeting, and for providing an explanation of the proposed port facility and access roadway. In addition, Ms. Button requested a 30 day extension of the comment period for the FEIS.

Response

The Corps contacted Ms. Button and advised her that we would be unable to attend a meeting on January 12, 2007. The Corps agreed to bring detailed maps and to make a presentation on the proposed access roadway at their monthly neighborhood meeting on January 8, 2007.

The comment period was extended from January 16, 2007, until February 2, 2007. In addition, the Corps has continued to accept and respond to comments that were received after the comment deadline.

Robinson & Cole, LLP Attorneys at Law Representing Magnolia Development, LLC and it's affiliates Ashley I, LLC and Ashley II of Charleston LLC

In a letter dated, January 16, 2007, Robinson & Cole, LLP requested a 15 day extension of the comment period for the FEIS on behalf of their clients, Magnolia Development.

In a second letter dated, January 16, 2007, Robinson and Cole, LLP provided the following comments regarding the Army Corps of Engineers' responses to Magnolia Development's comments on the DEIS and on the Access Roadway Feasibility Study, Supplemental Report that was included in Appendix W of the FEIS.

- Macalloy Industrial Park (MIP) includes the 138-acre Macalloy Steel site and the 8-acre Brandt scrap metal facility.

- MIP is divided into 10 parcels. Construction of roads and utilities has been completed and development plans for the relocation of three businesses have been finalized.
- A number of parties have expressed an interest in developing the remainder of the MIP into an intermodal rail yard.
- The Van Ness Sign site consists of a 5.8 acre undeveloped tract that has elevated arsenic, lead, toxaphene, and PAH concentrations in soil, sediment, and groundwater.
- The responses to Magnolia Development's comments in the DEIS fail to fully describe the impacts of Alternative 1D on the MIP.
- Alternative 1D reduces access from the MIP to Interstate 26. Temporary impacts associated with the construction of improvements to Exit 217.
- The loss of Exit 218 forces traffic past the Union Heights neighborhood. Traffic must travel an additional 2.0 miles to access Interstate 26 eastbound.
- Magnolia was not consulted about the half-diamond interchange, the location of the local access road, or the additional bridge crossing Shipyard Creek on the northern end of the MIP – all of which greatly impact future development
- The proposed interchange does not provide access from the MIP to the proposed port facility.
- The proposed roadway may render the northern and western portions of the MIP unsuitable for the planned uses of the site, which would reduce the value of the property.
- Roadway drainage design is not provided. The impacts of stormwater runoff on the MIP should be fully and accurately described in the FEIS.
- Physical impacts, such as relocating or reconfiguring the stormwater pond on the MIP, should be fully and accurately described in the FEIS.
- Alternative 1D reduces access from Ashley River Center to Interstate 26. (3,000 residents, 500,000 square feet of office space, 200,000 square feet of retail/restaurant space, and an elementary/middle school for 800 children).
- Additional right-of-way for the collector-distributor roads associated with Exit 217 would most likely be taken from Ashley River Center.
- Alternative 1D reduces access from Magnolia Development to Interstate 26. All of Magnolia Development is not included in the study area.
- Brandt Parcel and Core Sound Realty sites are not described in the FEIS.
- FEIS should describe the potential impacts of Alternative 1D on Hall Two and the Core Sound Realty sites.
- FEIS does not quantify the impacts to wetlands that would result from widening and paving Tidewater Road as it relates to Alternative 1D.
- Portions of Ashley River Center and the Magnolia Development site were not included in the study area for the FEIS. The FEIS may have underestimated future traffic volume generated by these two sites and how that volume would impact the design of the proposed roadway.
- FEIS purposefully excludes traffic volumes that would be generated from the Ashley River Center, Promenade, and Clemson Research Center because they are not included in the region's adopted travel demand model. The

traffic generated by these developments must be examined to accurately predict traffic volumes and flows.

- Ashley River Center would likely have a significant affect on the estimated volume of traffic using Exit 217 and Exit 218.
- The FEIS includes forecasts for other developments, such as Veterans Terminal and FLETC that do not appear to be included in the BCDCOG travel demand model.
- Widening of Interstate 26 from the Port Access Road to Montague Avenue should be fully discussed and presented in the FEIS. Statements regarding the need and the extent of Interstate 26 widening are inconsistent.
- Segments of the traffic model are inaccurate. There are only three "through" lanes on Interstate 26 between I-526 and Remount Road.
- The FEIS does not examine or attempt to incorporate the relocation of Interstate 26 into the port access roadway design. The completed CHATS study should be used in preparing a Supplemental FEIS.
- Magnolia Development encouraged the Corps to examine the possible relocation of Interstate 26 as a part of developing a regional long term transportation plan for the area.
- If the relocation of Interstate 26 is considered speculative, the widening of Interstate 26 should also be considered speculative because there is no Transportation Improvement Project in the SCDOT highway program.
- Magnolia Development successfully demonstrated that OCRM had failed to adequately evaluate the extent to which the proposed use could affect the value and enjoyment of adjacent owners.
- Magnolia Development has proposed an interim port access road solution that would enable the SCSPA port facility to be constructed and to begin operations while providing the time necessary to complete a comprehensive multi-modal transportation study of the Neck Area and the I-26 corridor.

In a letter dated February 1, 2007, Robinson & Cole, LLP provided the following comments on behalf of Magnolia Development regarding the Charleston Area Transportation Study that was released on January 8, 2007:

- The CHATS study states that no additional capacity is needed south of Exit 218 to accommodate additional traffic generated by the Proposed Project.
- The I-26 west sections from Heriot Street to Montague Avenue will operate at a Level of Service E or F by the year 2025 due to an inadequate number of lanes even if the Proposed project is not built.
- The CHATS Study conclusion is based on the unsupported assumption that traffic generated by the proposed project will travel to the west of the I-26 relocation study area.
- The FEIS calls for widening of certain sections of I-26 to accommodate additional traffic generated by the Proposed Project.
- The Level of Service estimates included in the FEIS and CHATS study conflict in four key areas: Spruill Avenue and Meeting Street intersection, I-26 East from Cosgrove Avenue to Meeting Street, I-26 West from Proposed Access Road to Heriot Street, five of six sections of I-26 West.

- Projected failure of I-26 in the short term underscores the importance of examining the potential benefits of relocating I-26 for the successful long-term transportation development in the area. Magnolia requests that the Corps prepare a Supplemental FEIS that fully examines the relocation of I-26.

Response

The comment period was extended from January 16, 2007 until February 2, 2007. In addition, the Corps has continued to accept and respond to comments that were received after the comment deadline.

Magnolia Development's comments focused on potential impacts associated with the proposed port access roadway. In addition, they provided information/clarification about a number of issues such as the parcels that make up the Macalloy Industrial Park, the current status of the ongoing redevelopment, and properties within or near the proposed right-of-way where soil and/or groundwater may have been impacted by previous development. These issues were reviewed and would not alter the overall findings of the Supplemental Report regarding the access roadway.

As shown in the FEIS, the proposed access roadway includes an interchange that would be located on the Macalloy property. Although this interchange would result in direct impacts to the Macalloy property, it would also substantially improve access between the MIP and I-26. Providing direct access from the MIP to I-26 would be expected to alleviate some future truck traffic on local roadways. The Corps recognizes that the reconstruction of the Meeting Street Road interchange would have a temporary impact on local traffic patterns. However, the long term benefits of constructing improvements to this existing interchange far outweigh the short term adverse impacts.

Modifications to the proposed access roadway such as the relocation of the local access roadway or the reconstruction of the Meeting Street Road interchange were first presented at public information workshops and stakeholder meetings that were held during the comment period for the draft EIS. The Corps believes that allowing the public to provide comments on each of the roadway alternatives contributed to the identification and development of a roadway corridor that avoids and minimizes potential impacts to the maximum extent practicable. Compensation for direct impacts to the Macalloy Industrial Park property would be addressed by SCDOT during right-of-way acquisition.

Detailed stormwater plans are not necessary for the Corps to complete our evaluation of the Proposed Project. SCDHEC regulates stormwater discharges within the state of South Carolina, and SCDOT would be required to obtain a stormwater permit for the proposed access roadway once the final design is completed. Likewise, SCDOT would be required to coordinate with EPA and SCDHEC regarding specific activities that may affect remediation activities on properties that are being managed for past impacts to soil or groundwater resources.

As described in the FEIS, the development of the proposed access roadway and the removal of the Spruill Avenue interchange are expected to affect local traffic patterns. These changes would result in both beneficial and adverse impacts to residents and businesses depending on their specific travel needs. However, the benefits associated with providing direct access from the Proposed Project, Veterans Terminal, FLETC, and other properties on or near the former Charleston Naval Base to I-26 are expected to outweigh the impacts to local traffic patterns.

Based on coordination with FHWA, the growth projections for Veterans Terminal and FLETC were updated to ensure that the proposed access roadway could accommodate future traffic volumes from these existing facilities on the CNC. The growth projections for Ashley River Center (ARC) and other properties that may be redeveloped on or near the CNC that were included in the most recent version of the regional traffic model were not updated because new development plans have not been approved. The Corps recognizes that background traffic growth may exceed regional projections if zoning and or development plans change in the future. However, the Corps believes that the traffic analyses that were included in the FEIS used the best available information to evaluate the impacts of the Proposed Project.

Magnolia Development's concerns regarding direct and secondary impacts to properties they are redeveloping within or near the study area such as Macalloy Industrial Park, Ashley River Center, and Magnolia Development, future access to I-26 from their properties, impacts to Union Heights caused by changes in local traffic patterns, temporary impacts associated with the construction of improvements to Exit 217, changes to the proposed roadway that occurred between the DEIS and the FEIS, inputs and assumptions that were used in traffic models, future widening of I-26, the CHATS I-26 relocation study, the need for a comprehensive multi modal transportation plan for the Neck Area and the I-26 corridor, differences in the findings of the traffic models that were included in the FEIS and the CHATS relocation study have been fully addressed in the FEIS or in the General Comments section below.

Jena Band of Choctaw Indians

There will be no significant impact in regards to the Jena Band of Choctaw Indians. We have no objections to its implementation.

Response

Comment acknowledged.

Southern Lumber and Millwork

In a letter dated January 8, 2006, Ms. Joyce Shuler provided the following comments:

- Once again, I am protesting the proposed location for the Port Access Road. The proposed alternative will cause irreparable financial and social damage to the entire area. The path of this road needs closer examination.
- The interchange at Cosgrove needs to be re-constructed anyway. Imagine the carnage that is going to take place on I-26 at the Cosgrove interchange when

thousands of eighteen-wheelers will be added to the currently overloaded interstate traffic.

- By incorporating alternate number three, the highway department would not have to remove the existing Exit 218 (Spruill Avenue). The only objection I have been given to joining the interstate at this point is that it is too close to the Cosgrove cloverleaf intersection.

In a letter dated January 31, 2007, Ms. Shuler provided the following comments:

- There should be a thorough air toxic analysis at the neighborhood level and a report on the increased health risks/impacts from the Proposed Project. This analysis should include emissions from port generated traffic on local roadways, ambient air toxics, and emissions from increased background traffic on I-26.
- According to a University of Southern California study living near freeways hurts lung development.
- I believe that your report underestimated the number of trucks leaving the port facility. The proposed location of the port will cause I-26 to fail. Have you accounted for the expense of I-26 widening and the added emissions from cars that are bottlenecked on the interstate?
- Was a study done of a Jasper County location done?

Response

The proposed port access road is expected to impact a portion of the Southern Lumber property. Comments that were submitted by Southern Lumber and other property owners and residents within the study area were used to refine the roadway corridor to avoid and minimize potential impacts to maximum extent practicable.

The development of the port access road includes the construction of a number of improvements to ensure the safe and efficient operation of area roadways, such as the reconstruction of Exit 217, construction of collector-distributor roads, reopening of Stromboli Avenue, and improvements to a number of at-grade rail crossings. In addition, SCDOT is currently evaluating the widening of Interstate 26 to accommodate future traffic. The future widening of Interstate 26 would address Ms. Shuler's concerns about the existing and future operation of the Cosgrove interchange.

Ms. Shuler's concerns regarding the proposed port access roadway, the future operation of I-26, the Cosgrove Avenue interchange, specific inputs to the traffic models, air quality, and a Jasper County alternative have been fully addressed in the FEIS or in the General Comments section below.

Lowcountry Alliance for Model Communities

Mr. Michael Brown, LAMC Chairman, provided the following comments:

- The proposed port access road and the reopening of Stromboli Avenue creates the potential for commercial vehicles to use the adjacent communities' streets as a thoroughfare. LAMC recommends that engineering and administrative measures be established to ensure the safety of these residents and the stability of their community.

- The residents express their desire for Exit 218 to remain open because of the travel time required to use the port access road and impedance related to the overall number of trucks.
- The modification of Alternative 1D to include a connection between the port access roadway and the SCSPA Veterans Terminal will increase the volume of traffic in the impact area, Alternative 1D, and the local access connector. Please explain the intent of the MOUA.

Response

The Proposed Project includes the removal of the Spruill Avenue interchange (Exit 218), which is expected to affect traffic patterns on local roadways leading to Interstate 26. Several comments indicated that it would be less convenient (travel time, distance, port related traffic, etc) to use the port access roadway than continuing to use Exit 218. As a result, some drivers may elect to use Meeting Street or King Street to travel to and from the City of Charleston. Likewise, some commercial vehicles may elect to the reopened Stromboli Avenue to access the port access roadway. LAMC's recommendations regarding engineering and administrative measures have been forwarded to SCDOT for their consideration to ensure that potential impacts to adjacent communities are avoided and minimized to the maximum extent practicable.

A copy of the MOUA between the City of North Charleston and the SCSPA regarding the development of the CNC is included in Appendix B of the FEIS. Based on meetings with the City of North Charleston, it is our understanding that they desire for the port access road to also provide direct access between Veterans Terminal and Interstate 26. This would enable port related truck traffic associated with the existing Veterans Terminal and traffic associated with activities on the CNC to use the port access roadway and avoid using local streets. However, establishing this connection would also create the opportunity for other vehicles to use the port access roadway and the local access connector to travel to and from the CNC.

Charleston Branch Pilots Association

Mr. Whit Smith, President of the Association, stated that the members of the Association unanimously endorse the FEIS regarding the Proposed Project. It is essential that the development of new, additional and capable container handling facilities be implemented at the earliest possible date.

Response

Comment acknowledged.

Mrs. Marie Beavers

I have property in the Howard Heights section and I would like to know what will happen to this section. Will these properties be bought from the homeowners in order to complete this project? If so, when?

Response

The Proposed Project does not require or include the purchase of any properties in Howard Heights.

Mr. Joe Rackley

I read the study on routing traffic from the proposed terminal as presented in the Post & Courier. The solution proposed does not solve the traffic congestion anticipated but merely shifts the problem to Interstate 26. Why not remove the trucks from the Charleston road system altogether? Load the inbound shipping containers onto railcars and ship them to a new transfer terminal that is built near the intersection of Interstate 26 and Interstate 95.

Response

The development of an inland port or some other type of intermodal transfer facility is likely warranted in the future in order to provide future social benefits such as reducing urban roadway and railway congestion, relocating certain port related activities (warehouses, trucking companies, storage facilities, etc.) away from the actual port facilities, stimulating economic development in more remote location, and developing new markets for containerized cargo. However, a preliminary study that was conducted for the SC Department of Commerce in October 2003 (the same year that the SCSPA submitted their permit application), indicated that the inland port concept may not be market-driven and financially viable at this time. Therefore, an inland port facility was not considered a practicable alternative for the Proposed Project.

Mr. Peter Dodds

I wrote a letter to the editor pointing out the correlation between the time of widening, deepening, and straightening of Hog Island Channel and the severe erosion of Crab Bank over the past couple of years. I watch ships come and go at speeds that create very large wakes that break on this important Pelican Rookery. I believe this day in day out assault on the shores of Crab Bank are largely responsible for this erosion. I would look for the Corps to consider that erosion in this permitting process. I think a strict speed limit should be imposed on these ships anytime they are inshore of the mouth of the Charleston jetties as part of the port expansion permit.

Response

Crab Bank is located near the mouth of Shem Creek and was originally constructed by the Corps of Engineers using dredged material. The original confined disposal facility has not been used in many years and has been allowed to deteriorate. The remnants of the CDF are currently being used by pelicans and other birds. The

ongoing erosion at Crab Bank that is described by Mr. Dodds is the result of existing forces that do not appear to be related to existing oceangoing vessels.

As described in the FEIS, the Corps used a simplified wave analysis to evaluate the wave forces that would be generated by an oceangoing vessel when underway within the federal navigation channel. The findings of this analysis indicate that the effect of storms and wind generated waves would be expected to have a greater effect on shorelines and intertidal areas such as Crab Bank than oceangoing vessels. The Proposed Project would begin operation in 2012 and would result in a 12 percent increase in the overall number of oceangoing vessels (2-3 per day) that call the Port of Charleston when operating at full capacity in 2025.

The incremental increase in vessel traffic associated with the Proposed Project is expected to have a negligible effect on Crab Bank. If there is continued interest in maintaining the existing bird habitat at Crab Bank, there may be opportunities to rebuild a portion of the original CDF using dredged material from Shem Creek or the Charleston Harbor Project. This type of beneficial use of dredged material would help to extend the life of existing CDFs and would ensure that potential habitat would be available for pelicans and other birds in the vicinity of Crab Bank in the future.

Ms. Molly Goodwin

Ms. Goodwin requested an extension of the comment period for the FEIS.

Response

The comment period was extended from January 16, 2007 until February 2, 2007. In addition, the Corps has continued to accept and respond to comments that were received after the comment deadline.

Mr. Ronald Goodman

Mr. Goodman believes that I-26 is practically a parking lot now. Some people who live in Summerville and work in Charleston sit in traffic for four hours a day. Adding thousands more trucks will make the situation worse. There is no practical way to widen I-26 again. Many local residents do not like overpopulated areas with excessive traffic. Please find another use for the property at the CNC. North Charleston has enough eyesore industries now.

Response

Mr. Goodman's concerns regarding the operation of I-26 and future population growth have been fully addressed in the FEIS or in the General Comments section below. The FEIS and this ROD were prepared to evaluate the potential impacts of the Proposed Project and to determine if a DA permit should be issued to the SCSPA and SSCDOT to develop the proposed marine container terminal and port access roadway. Decisions regarding acceptable land use within Charleston County or the City of North Charleston should be made at the local level through established zoning procedures.

Mr. Sean Dennis

Mr. Dennis believes that the timing of the release of the FEIS was too close to the holidays to allow for adequate review of the FEIS. He requested an extension of comment period until sometime in March.

Response

The comment period was extended from January 16, 2007 until February 2, 2007. In addition, the Corps has continued to accept and respond to comments that were received after the comment deadline.

Mr. Philip Castengera

Mr. Catengera is concerned about the traffic that will be generated on I-26 as a result of port expansion. He believes that the increase in traffic on I-26 will result in further gridlock and congestion at the I-526 and I-26 interchange. Mr. Castengera recommended diverting all cargo away from our cities and towns by using railroad flat cars to carry containers to a distribution center located near the I-26 and I-95 interchange. He believes that the additional handling of cargo can be minimized and that it would significantly improve traffic congestion.

Response

The development of an inland port or some other type of intermodal transfer facility is likely warranted in the future in order to provide future social benefits such as reducing urban roadway and railway congestion, relocating certain port related activities (warehouses, trucking companies, storage facilities, etc.) away from the actual port facilities, stimulating economic development in more remote location, and developing new markets for containerized cargo. However, a preliminary study that was conducted for the SC Department of Commerce in October 2003 (the same year that the SCSPA submitted their permit application), indicated that the inland port concept may not be market-driven and financially viable at this time. Therefore, an inland port facility was not considered a practicable alternative for the Proposed Project.

Ms. Tashya Allen

Ms. Allen requested an extension of the comment period for the FEIS.

Response

The comment period was extended from January 16, 2007 until February 2, 2007. In addition, the Corps has continued to accept and respond to comments that were received after the comment deadline.

Santee Cooper

In an email dated January 9, 2007, Mr. Michael Brown requested a copy of Figure ES-3 “Proposed Roadway Improvements” in AutoCad, Microstation, or some other engineering format in order to determine if there is a conflict with an existing 115 kV transmission line.

In a letter dated February 7, 2007, Mr. Brown stated that the proposed roadway would cross an existing right-of-way that contains 115 kV and 12 kV overhead lines in three places, and another 12kV overhead that crosses the interstate to provide service to Rhodia. Generally, line elevations can be raised at road crossings without having to relocate overhead lines. There is a more substantial impact where the roadway joins I-26 westbound. It appears that an existing 115kV overhead line may need to be relocated in this area.

Response

Based on additional communication with Mr. Brown and SCDOT, these types of potential impacts are commonly associated with roadway projects and are typically addressed during right-of-way acquisition and/or prior to construction.

Mr. David Goss

Mr. Goss stated that he supports SCDHEC's re-examination of their permit for the port access road. The quality of life in not only the surrounding neighborhoods but across the region along with the viability of the port hang in the balance. Port expansion on the Naval Base Complex makes no sense if the containers are trapped in gridlock because the infrastructure can't handle the volume.

Response

Mr. Goss' concerns regarding the quality of life in the surrounding neighborhoods and the region and future gridlock on the existing transportation infrastructure have been fully addressed in the FEIS or in the General Comments section below.

Mr. Robert Thompson, PhD

Mr. Thompson stated that he is opposed to expansion of SCSPA facilities in Charleston Harbor and is raising the same three points that he raised on December 19, 2005. He requested a 30-day extension of the comment period on the FEIS.

Mr. Thompson does not believe that the FEIS provides sufficient information to assess long-range effects of continued port expansion on traffic and air quality. He cited concerns about secondary traffic from warehouses, SCSPA control over routing on public roads, estimates on the age of truck fleets, diesel particulate and SO2 standards for foreign flag vessels, and potential particulate and SO2 impacts to Cape Romain National Wildlife Refuge.

Mr. Thompson is also interested in the net number of jobs lost and the net number of jobs gained through SCSPA shipping. He believes that this type of economic issue is ever more pressing as fuel costs and trade deficits soar. In addition, he believes that Jasper County should be included as an alternative in the FEIS. He believes that the SCSPA has opened the door to private investment in facility construction and operation. He does not believe that we should mortgage our lovely port and quality of life to overseas shipping interests. He is also concerned about uncontrolled and poorly described health impacts of SCSPA expansion at the CNC.

Response

The comment period was extended from January 16, 2007 until February 2, 2007. In addition, the Corps has continued to accept and respond to comments that were received after the comment deadline.

Mr. Thompson is correct in assuming that the SCSPA does not control the routing of future containerized cargo once it leaves the terminal on public roads. The containers are generally carried by private trucking companies that will use a variety of roadways to access both existing and future warehouses beginning in 2012. We anticipate that improvements to local roadways would be required to handle both background traffic and port related traffic before the port facility reaches full capacity in 2025. These future improvements to roadways would likely be conducted over time in response to future traffic demand.

Air emissions estimates were based on the best available information. Although it is possible to estimate when the SCSPA would purchase or upgrade yard equipment for the proposed port facility, we cannot estimate when an individual or private trucking company will decide to retrofit or purchase new equipment. Likewise, we have used conservative estimates of the emissions from foreign flagged vessels. Therefore, the findings of the air quality analyses that are included in the FEIS should be considered a worst case scenario.

Mr. Thompson's concerns regarding port related traffic, air quality, a Jasper County alternative, Cape Romain National Wildlife Refuge, and the potential health effects of the Proposed Project have been fully addressed in the FEIS or in the General Comments section below.

CSX Transportation

CSXT requested that no at grade crossings be established in the Cooper Yard Corridor because they would interfere with future operations and rail terminal development. The new container terminal is one of several different sources of future railroad traffic in the area that are expected to require significant rearrangements and new investments in rail facilities. Although CSXT has no specific plans for terminal activity at Cooper Yard, they expect that this area will be further developed to meet the needs of the Proposed Project and other bulk railroad traffic in the area.

CSXT is currently making significant capital investments in several corridors to improve capacity and flexibility, such as providing longer sidings to accommodate 10,000-foot long trains. The proposed at-grade crossing would affect their ability to build and store trains at Cooper Yard. In addition, they expressed concerns about vertical clearances associated with the port access road and they requested that the alignment of the port access road be shifted toward the east to allow for potential expansion of Cooper Yard in the future.

Response

The Proposed Project would include the relocation and expansion of an existing at-grade crossing near Shipyard Creek. CSX has indicated that further development of the existing Cooper Yard may be needed in the future to accommodate the needs of the Proposed Project and other bulk railroad traffic, and recommended that the port access roadway be shifted toward the east to allow for future expansion of Cooper Yard. The port access roadway is located on the Macalloy Industrial Park property and is not expected to affect CSX's ability to develop the property that they own. Any issues associated with uncertain and undisclosed future development plans would need to be resolved by CSX and SCDOT during right-of way acquisition for the modifications to the existing at-grade crossing associated with the Proposed Project.

Timothy Holloran

Mr. Holloran expressed concern about locating the proposed port access road near Rosemont and a Rhodia chemical plant. Specifically, he is concerned about port related truck traffic (carrying containers from overseas) using a new interchange near the existing chemical plant. In addition, Mr. Holloran indicated that the location of the proposed interchange would cut off land that would otherwise be available for commercial and residential development. He recommended that alternative 3 be further evaluated and that the existing Cosgrove Avenue interchange be re-configured.

Response

Mr. Holloran's concerns regarding the threat of terrorist actions and the evaluation of potential roadway alternatives have been fully addressed in the FEIS or in the General Comments section below. The Corps believes that potential impacts to both developed and undeveloped properties that would otherwise be available for commercial and residential development have been avoided and minimized to the maximum extent practicable. Property owners would be fairly compensated for any land that would be acquired in order to obtain the public right-of-ways necessary for the port access roadway. The reconfiguring of the Cosgrove interchange is not part of the Proposed Project. It is our understanding that the widening of I-26 would include the construction of improvements to this existing interchange.

Thlopthlocco Tribal Town of Oklahoma

Ms. Deborah Harjochee, the tribal compliance officer, requested to be notified in the event of an inadvertent discovery of culturally significant artifacts.

Response

A general condition of DA permits issued by this office require the permittee to contact the Corps if any historic or archeological remains are discovered during construction, so that we can initiate the appropriate Federal and state coordination regarding cultural resources.

Ms. Deborah Coon

Ms. Coon stated that she is interested in the impact of the proposed access roadway on her property located at 2001 Summerville Avenue.

Response

The Proposed Project is not expected to directly impact Ms. Coon's property. The impacts of the Proposed Project on the adjacent community are described in the FEIS and in the General Comments section below.

Mr. Frank Russell

I think that it is a grave injustice to people in Rosemont to have to absorb impacts of another roadway project. Any proposal that impacts home and homeowner should be the last resort. Consideration should always be given to people of the community.

Response

As described below, the Corps believes that potential impacts to Rosemont have been avoided and minimized to the maximum extent practicable. Potential impacts associated with future traffic noise are addressed in the compensatory mitigation plan for the Proposed Project.

Charleston Branch National Association for the Advancement of Colored People

Ms. Dot Scott stated that by unanimous vote in our meeting of January 25, 2007, the Charleston Branch of the NAACP joins and supports the objections of the New Rosemont Neighborhood Association to the proposed access road because of issues of equity and quality of life. The proposed road would further decimate and divide the Rosemont Community, which already suffers environmental and noise pollution from adjacent industries. Ms. Scott also stated that the route fits into a pattern of chronic environmental discrimination in the Charleston community with minimal care, minimal efforts at mitigation, and minimal attention to voices of concern in the affected community.

Response

As described below, the Corps believes that potential impacts to Rosemont have been avoided and minimized to the maximum extent practicable. Potential impacts associated with future traffic noise are addressed in the compensatory mitigation plan for the Proposed Project.

Martin Law Firm Attorneys at Law Representing the New Rosemont Neighborhood Association

In a letter dated January 31, 2007, Mr. Martin submitted 1) a petition signed by approximately 160 residents that states "We the undersigned oppose the Proposed Maritime Container Terminal at the Charleston Naval Complex. We are concerned about the impact of new or realigned roads, access to our community, air pollution, noise pollution, light pollution, and the adverse impact upon our property values," 2) copies of two reports discussing the traffic, air quality, and noise studies included in the FEIS that were conducted by Resource Systems Group, Inc. (RSG), and 3) the following comments:

- Rosemont opposes realignment of I-26, the proposed access road, and alteration, modification, or elimination of Exits 218 and 219, and the overall degradation of their community caused by these activities.
- Noise, air, light pollution, and aesthetics from the proposed road realignment will severely and adversely affect the lives of homeowners and property values
- We believe the FEIS is seriously flawed and are adopting the comments set forth in the RSG report obtained by the Coastal Conservation League.
- Rosemont is a historically black, unified community, which should be revered and preserved as opposed to ignored and pushed aside. A community mitigation plan was put forward with no consideration of impacts to Rosemont, one of the most severely impacted communities.
- Rosemont can never be replaced. It's families will suffer immediate and irreparable harm. They have, to date, been left out of the process.
- A recent study funded by the General Assembly indicated that the relocation of I-26 is unnecessary. To permit this project to go forward at a cost of $300,000,000 is a disservice and insult to every taxpayer in South Carolina when the goal can be achieved for only $15,000,000 without destroying lives.
- Nothing has been shown to mitigate, excessive noise, light, property value losses, and increased or excessive air emissions and vibrations from the realignment and creation of access ramps that encroach upon Rosemont.
- For Rosemont to consider withdrawing its opposition to the proposal, significant strides must be taken to ensure a mitigation plan is in place for the citizens of Rosemont. Attached hereto please find a petition signed by concerned citizens who live in the Rosemont community.

In a letter dated February 27, 2007, Mr. Martin requested that the Corps not grant any permits for the Proposed Project until the issues identified in their comment letters are properly addressed. In addition, he provided the following comments:

- Neither the mitigation plan or the FEIS include the impact upon Rosemont or address potential mitigation solutions.
- Increased traffic impacts were underestimated in the FEIS. There is no analysis of I-26 widening or the potential impacts of the widening, which include: air and noise pollution, loss of property, loss of enjoyment of life, and traffic overflow.
- Inputs to the air quality model are understated. The air model does not address offsite impacts of the Proposed Project.
- The model predicts that the PM 2.5 standard will be exceeded, and citizens will be subjected to asthma and lung disease. Location of impacts
- The air model included in the FEIS fails to follow EPA modeling guidelines. There has been no estimation of air toxic concentrations in Rosemont, and ship emissions and emissions of increased truck traffic on access roads and highways were not included.
- Rosemont is the residential community most adversely affected by the Proposed Project. We are requesting a meeting to discuss our concerns and a reasonable mitigation plan for Rosemont.

Response

The potential realignment of a portion of Interstate 26 was not included in the FEIS because this preliminary CHATS study is unrelated to the Proposed Project. As indicated in Rosemont's comments, the findings of this study indicated that improvements to local roadways, such as Mount Pleasant Street, Meeting Street, and King Street would be more cost effective and would likely accommodate future local traffic better. The development of the Proposed Project is not expected to influence the findings of the CHATS study. However, the improvements to King Street and Meeting Street that were recommended in the CHATS study would benefit both future background traffic and any port related traffic, such as employees or contractors that may elect to use local roadways to travel to an from the port facility.

As described below, the widening of I-26 would be required to accommodate future background traffic whether or not the Proposed Project is ever constructed. Improvements to I-26 that are currently being evaluated by SCDOT in a separate traffic study were considered in the FEIS. According to SCDOT, the analyses that were conducted to evaluate future I-26 widening indicate that I-26 can accommodate both future background traffic and port related traffic if it is widened. Analysis of potential impacts and/or any mitigation for impacts associated with the widening I-26 would be addressed by SCDOT in their analysis for that specific project, which is considered to have independent utility. The Corps is unaware of any plans to remove the Herriot Street interchange (Exit 219).

The traffic analysis that was included in the FEIS indicates that the future operation of the access ramp closest to Rosemont would result in noise impacts to residents of Union Heights and Rosemont. As a result SCDOT included the development of a noise barrier in the proposed mitigation plan. The development of the proposed access ramp has been designed to avoid and minimize potential impacts associated with light and is expected to have a negligible impact on future property values, air quality emissions, or vibrations near Rosemont. Therefore, compensatory mitigation is not being proposed for these potential impacts.

The air quality analyses that were included in the FEIS addressed 24-hour PM 2.5 and air toxics associated with the increase in vehicle traffic. In general, the greatest port related, air quality emissions are expected to occur on or near the project site. Since Rosemont is located one mile from the proposed port facility, potential air quality emissions would primarily be associated with the future traffic traveling on the port access road. Since more than 80 percent of the port related truck traffic is not expected to use the eastbound ramps that are located closest to Rosemont, this potential impact is expected to be negligible. The majority of the vehicles using these ramps would consist of existing and future background traffic associated with the Spruill Avenue interchange (Exit 218).

Rosemont's concerns regarding the potential impacts of the port access roadway, the RSG report that was submitted by the SELC, air pollution, noise pollution, light pollution, impacts to property values, removal of the Spruill Avenue interchange

(Exit 218), overall degradation of their community, the proposed mitigation plan, vibrations from the realignment or creation of access ramps, inputs to the air quality and traffic models, potential increases in 24-hour PM 2.5, and air toxics have been fully addressed in the FEIS or in the General Comments section below.

Rhodia, Inc.

Rhodia provided the following comments regarding the FEIS:

- The FEIS identifies a plan for the port access road that would include a portion of Rhodia's property. Rhodia was not adequately engaged by the Corps or SCDOT in connection with the location of the port access road.
- The FEIS is the only source of information made available to the public.
- We understand that the SCDOT and USACE met with LAMC concerning the port access road without inviting Rhodia or Rosemont. Like Rhodia, residents of Rosemont should be considered as stakeholders and included in relevant meetings and provided clear and timely information about this project.
- Rhodia requests that any adverse effects on the Rosemont neighborhood be fully analyzed and minimized to the maximum extent feasible.
- Rhodia expressed concern over the proposed roadway because of certain security regulations and procedures that the roadway will affect. Due consideration should be given to security issues in the design, construction, and operation of the roadway, such that Rhodia's facility security is not degraded.
- Rhodia urges the Corps and SCDOT to consider conditions that would prevent increased visibility and access to Rhodia from the port access roadway, including the use of barriers, signage prohibiting vehicles from stopping and cameras for observation of suspect activities.
- Rhodia expressed concern about areas subject to EPA and SCDHEC regulation and potential impacts to drainage or other systems related to environmental controls at the Rhodia facility.
- Plans shown in the application and other documents within the FEIS are inadequate to fully determine the impact on Rhodia and its property and would request additional coordination prior to any final permitting. For example, power lines may need to be relocated and may cause disruption of electrical service, potential for disruption of the entrance road and rail access
- Final decision on the port access roadway should consider the result of CHATS' I-26 relocation study. Traffic studies may be deficient because they did not consider future operations of I-26 beyond the I-526 interchange.

Response

In addition, to the publication of the draft and final EIS, Public Notices and Newsletters were mailed to Rhodia describing the proposed port facility and access roadway and notifying them of upcoming public information workshops. In addition, local newspapers, radio stations, and televisions news programs have carried a number of articles or stories about the Proposed Project.

A number of meetings (interagency, public, etc.) have been held throughout the development of the DEIS and FEIS. Neither Rhodia nor Rosemont were intentionally

excluded from any of these meetings. In most cases, individual organizations or groups, such as the Lowcountry Alliance for Model Communities, Magnolia Development, or City of North Charleston requested a meeting to discuss their specific comments or concerns. Likewise, the Corps conducted a number of presentations for neighborhood associations, such as Rosemont and Union Heights.

The Corps recognizes Rhodia's concerns about facility security, interruptions of electrical or railway service during construction, impacts to existing drainage systems and environmental controls that are subject to EPA and SCDHEC regulation, and the acquisition of a portion of their property as a result of development of the access roadway. These types of site specific concerns issues would be resolved during negotiations with SCDOT regarding right-of-way acquisition and may result in minor modifications to the final alignment and/or design of the proposed access roadway to further avoid and minimize potential impacts.

Rhodia's concerns regarding the CHATS relocation study and the future operation of I-26 have been fully addressed in the FEIS or in the General Comments section below.

Mr. Michael McGinty

The extension of the comment period for the FEIS puts the April 2007 approval date in jeopardy. The project has been in the making for years and the debate and public scrutiny has been endless. It is time to complete the permit process.

Response

Comment acknowledged

Mr. Clay Middleton

Mr. Middleton expressed concerns about the potential impacts of the port access road on Rosemont. The construction of a noise barrier will have a negative impact on the minds of the residents and visitors. He asks that a permit not be granted until all avenues of approach regarding transportation concerns have been properly studied with the resident's input.

Response

Mr. Middleton's concerns regarding the port access roadway have been fully addressed in the FEIS or in the General Comments section below.

Mr. Harold Jackson

I believe that closing Exits 217 and 218 would be a mistake. These exits are needed now, and will be needed more so in the future.

Response

Mr. Jackson's concerns regarding the closure of the Spruill Avenue interchange (Exit 218) has been fully addressed in the FEIS or in the General Comments section below. The reconstruction of the Meeting Street interchange (Exit 217) is included in

the Proposed Project and would enable this existing interchange to accommodate the projected future traffic.

Ms. Mickie Kelecy

Ms. Kelecy stated that she believes the Proposed Project is not a good idea. In addition, she provided the following comments:

- The Proposed Project will cause many serious problems, among which are: pollution of land, water, air, and the noise resulting from the increased truck traffic. Should just one of those trucks carrying chemicals get into an accident, it could become a serious health problem for many in the area or some could even lose their lives.
- Moving the proposed port facility from Daniel Island to North Charleston was not a good idea. I would like to suggest finding an alternative site for port expansion.
- Please do not give in to pressures from the SCSPA, the legislators, or the state government. In my opinion, it is a choice between money and the welfare of the people. I believe the welfare of the people should come first.
- No amount of money can make up for having to move, not only due to the likelihood of higher continued costs, but also the fact that there are those who do not want to give up homes they've lived in for many years. For them, it would be traumatic to be forced to move.

Response

Ms. Kelecy's concerns regarding increased traffic and potential impacts to air quality, water quality, noise, pollution, chemical spills, increases in the cost of living, and the welfare of the people have been fully addressed in the FEIS or in the General Comments section below. As described in the FEIS, the development of the Proposed Project would not require the acquisition of any residential properties or the relocation of any residential property owners.

Mr. Richard Wehle

In a letter dated January 22, 2007, Mr. Wehle thanked the Corps for extending the comment period for the FEIS. In addition, he expressed concerns regarding the air quality studies that were included in the FEIS. Specifically, he raised questions about the model inputs, such as number of vehicle trips, the hours of operation, and the annual operating hours. Mr. Wehle recommended that the Corps delay this project until SCDHEC can re-evaluate these air quality issues.

In a letter dated January 27, 2007, Mr. Wehle requested that the Corps deny the SCSPA permit because of concerns about the ability of existing roadway and railway infrastructure to support additional container traffic. He cited concerns about the overall number of containers that would need to be transported by either rail or truck, background population growth and the increase in vehicle miles traveled, future congestion at the I-26 and I-526 interchange, pending application to expand annual coal shipments at Kinder Morgan, and significant congestion at local railroad crossings. It makes no sense to add additional terminal capacity in an area that is already showing signs of overload in residential, commercial, and rail traffic.

Response

Mr. Wehle's concerns regarding roadway and railway infrastructure, background population growth, the projected increase in vehicle miles traveled, and future congestion at the I-26 and I-526 interchange, have been fully addressed in the FEIS or in the General Comments section below.

Coastal Marine Enterprises, Inc.

Dolphin Cove Marina supports Rosemont Community in their efforts to protect residents from the potential adverse effects of the port access road. All adverse effects should be fully analyzed and minimized to the maximum extent practicable. In addition, they provided the following comments on the FEIS:

- SCDOT indicated that the CHATS study is currently underway to evaluate relocating I-26 corridor to a more easterly location. No complete traffic plan can be created until this plan is finalized.
- According to most traffic formulas, the addition of port related traffic will cause I-26 to reach a failing Level of service sooner. It has been suggested that a crude traffic model was used to show that the port does not cause I-26 to fail.
- Concern about possible health risks associated with air toxics. Requested air toxic analysis at a neighborhood level and a report of the increased health risks and impacts from the Proposed Project. This analysis should include emissions from port generated traffic, the ambient air toxic problems, and the emissions associated with increased background traffic on I-26.

Response

Dolphin Cove Marina's concerns regarding the CHATS relocation study, the future operation of I-26, and air toxics have been fully addressed in the FEIS or in the General Comments section below.

United Keetoowah Band of Cherokee Indians in Oklahoma

Ms. Lisa Stopp, the tribal NAGPRA point of contact, offered no objections to the Proposed Project. However, she requested to be notified in the event of an inadvertent discovery of culturally significant artifacts.

Response

A general condition of DA permits issued by this office require the permittee to contact the Corps if any historic or archeological remains are discovered during construction, so that we can initiate the appropriate Federal and state coordination regarding cultural resources.

Ms. Sandra Turner

Since no specific traffic plan has been identified by the SCSPA; how can a true environmental impact study be completed? How would increased truck traffic affect air and noise pollution if I-26 is the only outbound route?

Response

Ms. Turner's comments regarding the increase in truck traffic, air quality emissions, and noise pollution have been fully addressed in the FEIS or in the General Comments section below.

Mr. Sylvester Rodd

In an undated letter that was received on February 13, 2007, Mr. Rodd stated that he is opposed to the Proposed Project and provided the following comments:

- Traffic problems and damage to the environment will cause us to suffer for years to come. We are going to be victims of this proposed port expansion.
- It will be a tremendous defeat for the people of this area who face economic challenges and a victory for the rich and powerful who stopped the Daniel Island site and dumped on the people of North Charleston.
- This will not cause economic development to come to this area. It will further impoverish it.
- The people in the area will not get jobs. They will get smog, noise, damaged environment, shortened life span, diseases, increased crime, traffic, and lower quality of life.
- We have attended the meeting, wrote letters, talked to leaders, we are praying that the port expansion will not take place.

Response

The development of the Proposed Project is not expected to result in smog, shortened life spans, diseases, or increased crime within the adjacent community. The remainder of Mr. Rodd's concerns has been fully addressed in the FEIS or in the General Comments section below.

The Proposed Project is different than the marine container terminal that was proposed on Daniel Island in the late 1990s. The proposed Daniel Island Terminal (1,300 acres) was substantially larger than the Proposed Project (300 acres) and involved the construction of both roadway and railway access. In 2002, the SCSPA was directed by the state legislature to evaluate redeveloping a portion of the former Charleston Navy Base as a port facility. Based on site constraints, the SCSPA was compelled to reduce the scale of their proposed expansion of the Port of Charleston.

In some ways, the evaluation of the Daniel Island Terminal, contributed to the identification of the former Charleston Navy Base as a potential site for future port development. The Proposed Project is in keeping with the past use of the former Charleston Navy Base. Existing port facilities are located upstream, downstream, and across Shipyard Creek from the project site. In addition, the Proposed Project is being developed in accordance with the long term, land use plans and the MOUA regarding the redevelopment of the former Charleston Navy Base that were developed by the City of North Charleston.

Mrs. Dean Morton

In a letter dated February 10, 2007, Mrs. Morton stated that the same objections that kept the terminal from being built on Daniel Island are even more critical now. In addition, she provided the following comments:

- Our area is experiencing gridlock four or five hours a day with many accidents. She believes that safety is a grave concern because these same roads are evacuation routes in the event of a hurricane.
- There are over 135,000 homes being built and thousands more approved every day. She questioned that a state study said I-26 would not be adversely affected by 8,000 -10,000 truck trips added to the congestion.
- The message from the permitting authorities seems to be "full steam ahead" no matter the objections. I thought the mission of the Corps was to protect the public in the issues of the environment, quality of life, and safety.
- Can you recommend that the SCSPA could more wisely use their full resources in Jasper County.

Response

Ms. Morton's concerns regarding the operation of existing transportation infrastructure, hurricane evacuation, the future operation of Interstate 26, and SCSPA development of a Jasper County alternative site have been fully addressed in the FEIS and are addressed in the General Comments section below.

The goals of the Corps of Engineers regulatory program as described in the Standard Operating Procedures for the Regulatory Program: 1) Protect the environment; 2) Make reasonable decisions; and 3) Enhance Regulatory Program efficiency. The public interest review for the Proposed Project includes consideration of the extent of the public and private need for the project, whether there are reasonable and practicable alternative locations or methods that may be used to accomplish the objective of the proposed project, and the extent and permanence of the beneficial or detrimental effects the proposed work is likely to have on the private and public uses to which the project site is suited. For each application, a permit will be granted unless the district engineer determines that the activity would be contrary to public interest or if the activity does not comply with the 404(b)(1) Guidelines (see 33 CFR 320.4(a)(1) - (a)(2)).

<u>General Comments on the Final EIS and Related Public Notices</u>

As described above, approximately 10 letters were received requesting an extension of the comment period, and 5 letters were received in support and 15 letters in opposition to the Proposed Project were received in response to the release of the FEIS and concurrent or subsequent public notices. In addition, a petition opposing the Proposed Project that was signed by approximately 340 individuals was submitted on behalf of the New Rosemont Neighborhood Association.

All comments received during the public notice period and prior to the completion of this Record of Decision were reviewed and addressed as part of the Corps' permit review. A discussion of the most common issues raised by the general public,

organized groups, and local municipalities concerning the Final EIS and related public notices is presented below. These discussions are organized into the following topics:

- NEPA and Permit Process
- Comparison of Alternatives
- Jasper County Alternative
- Air Quality
- Transportation
- Noise
- Adequacy of Analyses in the FEIS
- Mitigation Plan

NEPA and Permit Process

Issue: A supplemental EIS and additional public coordination are required due to the following: changes in the permit applications, identification of the proposed access roadway corridor in the FEIS, insufficient coordination with affected property owners, and unresolved impacts on surface transportation infrastructure.

Response: At various points during the evaluation of the Proposed Project, the USACE received requests for preparation of a supplemental EIS. The NEPA process has extended over a period of more than three years, and there have been multiple opportunities for both agency and public input to the process. A number of analyses have been modified and expanded in response to public comments, particularly in regard to roadway traffic, air quality, water quality, and noise. In addition, the mitigation plans submitted by the SCSPA and SCDOT to compensate for project related impacts have been revised and expanded in response to both agency and public input.

The USACE has determined that a supplemental EIS and additional public coordination are not warranted. The USACE has followed all regulations and guidance in the conduct of the NEPA process for these permit applications through the issuance of public notices, the conduct of public meetings, responses to public comments, and the modification of NEPA documentation. In most cases, changes in the permit application that have been submitted by the SCSPA and SCDOT have been in response to agency and public input during the EIS process and have primarily involved additional or modified features to reduce project impacts. These changes have not substantially altered the basic project or the nature of the impacts that have been disclosed in the FEIS. The USACE has received substantial agency and public input during the course of the NEPA and permit processes. It is unlikely that preparation of a supplemental EIS or additional public coordination would provide additional information that would contribute to a different decision than that reported in this ROD.

Issue: Comments that are similar to one another and/or petitions that were submitted by groups or organizations that have strong feelings about the Proposed Project are listed only once in the comment database – underestimating the importance

of specific issues to those individuals or groups that may have worked together to provide a unified response to significant issues.

Response: The comment database developed for the FEIS identifies petitions and comments with multiple signatures, so that this information is available to the Corps. Likewise, form letters or multiple submittals of similar comments are recognized by the USACE, but each comment is responded to only once. This database format has been used successfully with numerous EIS documents. Under NEPA it is not the number of comments that is important – it is the identification and disclosure of the substance of issues that is important.

Comparison of Alternatives

Issue: The USACE cannot issue a permit for the Proposed Project under the Clean Water Act. The USEPA § 404(b)(1) Guidelines require the USACE to deny a permit if there are practicable alternatives that require the filling of fewer acres of jurisdictional wetlands. The FEIS contains practicable alternatives, which require the filling of fewer acres of wetlands.

Response: The 404(b)(1) Guidelines require the consideration of the overall "impacts to aquatic resources" in identifying the least environmentally damaging alternative. This analysis includes both direct and related actions, and the quality and function of wetlands in the watershed, not just the area of fill in jurisdictional wetlands. Alternatives which may be deemed "reasonable" for analysis under NEPA based on function and engineering feasibility may be subsequently found to be "not practicable" under the CWA § 404(b)(1) Guidelines based on factors such as cost, logistics, and existing technology.

Issue: The FEIS indicates that Interstate 26 will reach a failing Level of Service in the No-Action alternative. The addition of port related traffic to I-26 would only make this situation worse. In order to reduce the number of trucks on local roadways the FEIS should have included an evaluation of an inland transfer facility.

Response: The USACE is responsible for identifying and evaluating a range of reasonable alternatives to the Proposed Project that meet the applicant's needs. An inland transfer facility would likely target customers with certain transportation needs that may or may not be compatible with the current marketing plan for the Port of Charleston. The USACE believes that the operation of an inland transfer facility is markedly different from the Proposed Project, and would require a different type of terminal operation and the development of railway infrastructure improvements that are beyond the scope of the Proposed Project. Studies prepared for the South Carolina Department of Commerce in 2003 indicate that an inland transfer facility would not be practicable because it is not considered economically viable at this time.

Issue: The project purpose that was developed by the Corps is flawed and changed between the DEIS and the FEIS.

Response: The overall project purpose that was used to identify the alternatives that are evaluated in the EIS has not changed. The project purpose that was identified in both the DEIS and the FEIS was exactly the same. Based on comments that were received in response to the DEIS, the Corps made minor changes to the text describing the project purpose. For example, some individuals expressed concern about using the words "state-owned" to describe the port facility. The Corps believes that the project purpose correctly recognizes that the SCSPA is a state agency and that the potential alternatives should be limited to sites located within the state of South Carolina. Potential sites that are located in other states would not meet the needs of the SCSPA and are not considered practicable alternatives.

Issue: The treatment of the proposed port facility and port access roadway is inconsistent in the FEIS.

Response: The decision to prepare an EIS was originally made as a result of the SCSPA's permit application to construct a marine container terminal at the former Charleston Navy Base. The SCDOT's proposed port access roadway has substantially less impacts to waters of the United States and by itself may not have required an EIS. However, these two activities are dependent upon each other to meet their project purpose and the Corps determined that both activities should be evaluated collectively as the Proposed Project in the FEIS. The Corps believes that the potential impacts associated with both activities are fully addressed in the EIS.

Jasper County Alternative

Issue: The FEIS should have evaluated an alternative in Jasper County, South Carolina. In light of the recent announcement by the Governor's of the State of Georgia and South Carolina to create a Bi-State Authority to operate a port terminal in Jasper County – the EIS should be updated to include a Jasper County alternative.

Response: Various groups have suggested that a Jasper County site should have been included as a potential alternative. Although three sites on the Savannah River were originally identified as potential alternatives, these properties were eliminated from consideration as an alternative for the proposed project because of concerns regarding ongoing litigation regarding property ownership, federal easements and the ability of the SCSPA to develop the property, marketing concerns expressed by the SCSPA, logistics, transportation infrastructure requirements, and ongoing litigation regarding the deepening and widening the Savannah Harbor Navigation Project.

On March 12, 2007, the Governors of South Carolina and Georgia signed an agreement that establishes timeframes for creating a bi-state authority for development of a marine container terminal in Jasper County, South Carolina, and receiving certain approvals and funding from the state legislature and the US Congress. This agreement recognizes a number of the concerns described above and directs parties to stay their ongoing lawsuits while the bi-state authority attempts to determine if they can address

other potential obstacles to port development. Provided that they are able to accomplish these and other tasks, there may be a proposal to develop a facility in Jasper County in the future. However, the Corps continues to believe that a Jasper County site was not a reasonable and practicable alternative for the Proposed Project for the reasons described above.

Issue: The USACE should undertake an additional analysis of the economic need for and benefit of the Proposed Project in light of the proposal to construct a marine container terminal in Jasper County.

Response: As described above, the Governors of Georgia and South Carolina have developed a Term Sheet that outlines a plan to determine if it would be possible to develop a marine container terminal in Jasper County. Several groups have suggested that the Proposed Project would only meet the short term needs of the SCSPA and that a much larger port facility in Jasper County would better meet the long term needs of the State of South Carolina.

The Corps performed an analysis of the SCSPA's needs statement and determined that the projections for the Port of Charleston appear to be conservative, but are within the limits of acceptable forecasting procedures. The assumptions and the methods used by the SCSPA are reasonable and do not overstate the need for the proposed expansion. The development of both the Proposed Project and a port facility in Jasper County would likely affect the rate at which each facility would be developed and their ultimate size. However, it would be inappropriate for USACE to question the reasonable projections for the Proposed Project because of speculation that another port facility may be developed in the future.

As described above, there are a number of obstacles that would need to be resolved before anyone could proceed with the development of a new port facility on the Savannah River. The FEIS and ROD both consider the fact that additional marine container terminals may be required in the future to satisfy long term demand.

Air Quality

Issue: The EPA announced on December 18, 2006, that they will be reducing the existing NAAQS 24-hour standard for $PM_{2.5}$ from $65_{ug}/m^3$ to $35_{ug}/m^3$ in 2010. The air quality model that was included in the FEIS indicates that the operation of the Proposed Project will cause an exceedance of the new air quality standard and will result in the Charleston area being classified as a non-attainment area.

Response: The FEIS estimated a 24-hour $PM_{2.5}$ value of $16.5_{ug}/m^3$ which was added to the ambient background value of $29.2_{ug}/m^3$ (based on 2002-2004 SCDHEC monitoring data) to yield a total value of $45.7_{ug}/m^3$. More recent data published by SCDHEC indicates that for the three year period between 2003 and 2005 the 24-hour $PM_{2.5}$ value for Charleston County increased from $29.2_{ug}/m^3$ to $32.5_{ug}/m^3$ and the 24-hour $PM_{2.5}$ value for Cape Romain increased from $29.9_{ug}/m^3$ to $34.7_{ug}/m^3$. Therefore,

there is little capacity for additional emissions of $PM_{2.5}$ in Charleston County near the project site or near the Cape Romain National Wildlife Refuge.

As a result of the almost 50 percent reduction in the NAAQS standard for 24-hour $PM_{2.5}$, the modeled result for the Proposed Project operating at full capacity in 2025 is greater than the new NAAQS standard. Monitoring for compliance with the new NAAQS standard began in January 2007 and initial determinations for compliance would occur in 2010 approximately two years before the proposed port facility is expected to begin operations. SCDHEC has indicated that interim measures would need to be taken to ensure that Charleston County and other areas within South Carolina comply with the new NAAQS standard for 24-hour $PM_{2.5}$.

Issue: Background levels of $PM_{2.5}$ reported in the FEIS indicate that Charleston is nearing non-attainment. The FEIS should discuss the impacts of becoming a non-attainment area.

Response: Prior to the implementation of the new NAAQS standard for 24-hour $PM_{2.5}$, the monitored ambient air quality level in Charleston County was less than half of the NAAQS standard. The reduction of the NAAQS standard by almost 50 percent has resulted in the current ambient air quality levels being reclassified as nearing non-attainment. As the state agency responsible for both monitoring and managing permitted air quality emissions, SCDHEC has indicated that they will take action to ensure that emissions of $PM_{2.5}$ from both permitted and non-permitted sources are reduced in order to comply with the new NAAQS standard for 24-hour $PM_{2.5}$.

According to the EPA, attainment or non-attainment with the Clean Air Act would be based on three years of actual air quality monitoring data. Since ambient air quality levels are the product of a number of factors (future emissions, weather conditions, adjustments or reductions in air quality permits, etc), EPA believes that it would be speculative to say that Charleston County would be classified as a non-attainment area. The Clean Air Act and State Implementation Plans are designed to address air quality concerns before they occur.

As a result of concerns regarding the new NAAQS standard for 24-hour $PM_{2.5}$, SCSPA and SCDHEC have developed an MOA and are working together to develop ways to ensure that NAAQS standards are not exceeded on or near the proposed port facility. The SCSPA has agreed to purchase a particulate matter monitoring station that would be installed, operated, and maintained by SCDHEC. In addition, SCSPA and SCDHEC will develop a detailed emissions inventory to evaluate port related emissions, and will work together to identify cost effective solutions to reduce potential air quality emissions. The SCSPA will also include requirements regarding fugitive dust and air quality emissions in the bid documents for the construction contract.

Issue: The scientific literature contains recent articles linking $PM_{2.5}$ to mortality as well as to sickness and hospital admissions. The FEIS should have addressed potential health impacts to the community.

Response: As stated in the FEIS, the Clean Air Act requires the EPA to set National Ambient Air Quality Standards for pollutants considered harmful to public health and the environment. Primary standards set limits to protect public health, including the health of sensitive populations such as asthmatics, children, and the elderly. Secondary standards set limits to protect public welfare, including protection against decreased visibility, damage to animals, crops, vegetation, and buildings.

A number of studies recognize that residents of urban areas experience higher rates of certain diseases and or cancer. Many of these studies have been performed in areas that are classified as non-attainment areas for the NAAQS standards. Charleston County is currently classified as an attainment area for the NAAQS standards.

Issue: The FEIS did not provide accurate estimates of construction related emissions of $PM_{2.5}$ such as fugitive dust which can have a significant short term effect on local air quality.

Response: Based on coordination with EPA and SCDHEC, detailed air dispersion modeling was conducted to evaluate air quality emissions associated with the operation of the Proposed Project. Since the projected operational emissions are expected to be much greater than construction related emissions, detailed air dispersion modeling was not considered necessary. Since the projected operational emissions comply with the existing air quality standards, construction emissions are assumed to comply with the standards.

Prior to beginning construction the SCSPA would be required to obtain a land disturbance permit from SCDHEC, which includes addressing construction related fugitive dust and $PM_{2.5}$. According to the MOA that was developed by the SCSPA and SCDHEC, the bid documents for the proposed project would require implementation of an “Environmental Compliance Policy”, for dust-related emissions, such as use of water, use of wind fences, staging of construction activities, and attention to the path followed by temporary construction roads.

Issue: The FEIS indicates that the operation of the Proposed Project will result in air quality impacts that exceed standards established by the Federal Land Manger for the protection of Cape Romain National Wildlife Refuge. The FEIS only included dry deposition rates.

Response: The visibility and deposition analysis that was included in the FEIS was based on potential emissions from the Proposed Project during the worst case hour without plume depletion. Based on additional coordination with the USFWS, the “worst case scenario” inputs that were used in the FEIS are much more conservative than what is required for this type of analysis. Additional model runs were conducted to evaluate potential impacts to visibility and deposition using both plume depletion and wet deposition. Based on the results of this modeling, the Proposed Project does not exceed the Federal Land Manager’s threshold for deposition, and only slightly exceeds

the FLM threshold for visibility. The USFWS has indicated that the Proposed Project is not expected to have an adverse impact on Cape Romain.

Issue: The FEIS failed to address the health effects of diesel emissions associated with the operation of the Proposed Project. In May 2002, the USEPA issued its *Health Assessment Document of Diesel Exhaust*. In this study USEPA determined that long-term exposure to diesel exhaust is likely to pose a lung cancer hazard, as well as other types of lung damage, to humans. The Charleston District failed to include an analysis of the increase in cancer cases that would be caused in the adjacent population by the operation of diesel sources at the Proposed Project.

Response: EPA's May 2002 "Health Assessment Document for Diesel Exhaust" concludes that diesel exhaust is "likely to be carcinogenic to humans by inhalation". This document also states "Additional research is needed to … reduce the uncertainty associated with the potential cancer hazard of exposure to diesel exhaust." EPA has not established a quantitative measure of the potential cancer risk because of "the absence of adequate data to develop a sufficiently confident dose-response relationship…" Therefore it was not possible to conduct a quantitative analysis of diesel exhaust and the potential impact of the proposed project related to potential cancer incidence.

Transportation

Issue: A supplemental EIS should include the assessment of the environmental impacts of all connected activities, such as projected future roadway improvements, in a single EIS document.

Response: The FEIS includes an assessment of the direct environmental impacts of the Proposed Project, as well as the secondary and cumulative impacts of these roadway improvements as required by NEPA. While it is recognized that the proposed project may require some additional off-site transportation improvements (such as the widening of I-26) to occur earlier in time, FHWA and SCDOT have primary responsibility for assessing the environmental impacts of those public infrastructure and transportation projects that are considered necessary even if the proposed project were not developed. Those roadway improvements that are directly attributable to the proposed project were considered direct and/or secondary impacts in the FEIS. The USACE has required that the EIS evaluate these impacts to the extent appropriate under NEPA, including a cumulative impacts analysis of other reasonably foreseeable projects. For example, the Corps determined that the SCDOT's proposed access roadway must be evaluated in this EIS.

Issue: A detailed, regional transportation study that evaluates intermodal transportation should be completed before making a decision on the Proposed Project.

Response: During the preparation of the DEIS, the Berkeley-Charleston-Dorchester Council of Governments released their latest version of the regional

transportation model, which evaluates regional population growth and roadway transportation needs through 2030. This information was used as the basis of the transportation studies that were used to identify and evaluate the potential included in both the DEIS and the FEIS. The Proposed Project was

The Corps believes that it would not be appropriate under NEPA to require an applicant for a Department of the Army Permit to develop detailed, transportation planning documents for a region or area. This type of plan is well beyond the scope of the Proposed Project and is not necessary for the Corps to complete our public interest review and to make a permit decision regarding the Proposed Project. Likewise, it would not be appropriate for the Corps to suspend processing a permit application so that such a model could be developed by others.

Noise

Issue: The location of the proposed port access road and detailed analysis of the potential noise impacts to both Union Heights and Rosemont were not included in the DEIS. There has been no public hearing or open discussion about potential adverse impacts associated with the port access road.

Response: The DEIS identified five potential roadway corridors between the proposed port facility and Interstate 26. SCDOT considered feedback that was provided by the public in selecting the proposed roadway corridor. Information workshops and stakeholder meetings were held during the comment period for the DEIS and during the preparation of the FEIS to obtain additional feedback regarding the proposed access roadway. The location of the proposed roadway corridor and quantitative data regarding potential secondary impacts such as noise and light were included in the FEIS. In addition, SCDOT held a number of meetings with affected communities in order to obtain additional feedback and to refine their proposed compensatory mitigation plan for unavoidable adverse impacts associated with the Proposed Project.

Issue: The FEIS reports noise impacts in 24-hour average noise levels and Day-Night Sound Level. Instantaneous noise levels associated with the Proposed Project may exceed Charleston County noise standards.

Response: Potential noise impacts associated with the development of the Proposed Project would include the intermittent operation of noise generating equipment during both construction and operation. Major noise sources during construction include heavy-duty trucks entering and exiting the site, earth moving equipment, pile driving, and dredging operations. The FEIS includes a general description of activities, methods, and practices that would be used during construction. This estimate is intended to provide some indication of the potential noise impacts. However, actual noise impacts would be dependent upon the detailed design plan and construction schedules.

Based on their proximity to the proposed port facility, Cooper River Marina and FLETC would be adversely impacted by noise levels during both construction and operation. Intermittent noise sources, such as pile driving or a dropped hatch cover may be audible on Daniel Island or within the adjacent residential communities. However, this type of occasional noise impact is considered minimally adverse. As has been noted, the development of the port access roadway would result in long term adverse impacts to a number of residences. SCSPA and SCDOT would be expected to work with the appropriate local authorities to control noise levels during both construction and operation, and to comply with the applicable local noise standards.

Issue: The adjacent communities already experience elevated noise levels associated with existing roadway and railway operations. The proposed mitigation plan should address ways to minimize noise levels within the adjacent communities.

Response: Traffic noise analyses that were conducted for the proposed access roadway indicate that almost 100 residences within the adjacent community already experience elevated noise levels as a result of existing roadway traffic. The removal of the Spruill Avenue interchange would benefit certain residences in Union Heights, whereas the increase in background traffic and the development of the port access road would adversely impact other residences. The majority of residences impacted by future background traffic would be located in Union Heights, and the majority of residences impacted by the Proposed Project would be located in Rosemont. The modeled impacts to Rosemont meet state and Federal criteria for noise abatement and would be mitigated by the development of a highway traffic noise barrier. The proposed noise barrier would benefit residents that would be impacted by the Proposed Project and an even greater number of residents that are currently impacted by elevated noise levels associated with existing highway traffic noise.

The Adequacy of Analyses in the FEIS

Issue: The EIS should have analyzed the future impacts of deepening the Charleston Harbor Project to accommodate post-Panamax container vessels with drafts of 50 feet or more. It is reasonably foreseeable that fully-loaded post-Panamax vessels will be calling on the Port of Charleston at some point in the future, and that a channel depth of more than 50 feet will be requested in the future by the SCSPA.

Response: The SCSPA currently operates three marine container terminals, a cruise terminal, and two bulk cargo terminals in Charleston. In addition, several private port operators and Naval Weapons Station Charleston use the existing federal navigation channel. Deepening and widening of the Charleston Harbor Project from -40 feet MLW to -45 feet MLW was completed in 2002, and construction of the Arthur Ravenel Bridge over the Cooper River has increased the air draft at MHW to 186 feet.

The berths and access channel for the Proposed Project would be dredged to the same depth as the existing marine container terminals and the federal navigation channel. The proposed port facility is designed to accommodate post-Panamax ships,

which are more than 1,000 feet long and have a draft of -50 MLW when fully loaded. The SCSPA announced in January 2007 that post-Panamax ships are scheduled to make regular calls at the Columbus Street Terminal. Container ships typically call at more than one port facility, and vessel loads for large Post-Panamax ships are managed so that they can safely call on east coast ports.

Because the construction and operation of the Proposed Project does not require future harbor deepening, the Corps does not believe that it would be appropriate to consider the potential impacts of future harbor deepening. If an incremental analysis of harbor deepening is conducted in the future it may or may not involve portions of the Cooper River near the Proposed Project. It may be more cost effective to deepen the federal navigation channel in the vicinity of the existing Columbus Street or the Wando Welch Terminal. In addition, any deepening of the Charleston Harbor must first be evaluated by the Corps and authorized by the United States Congress. At that time appropriate environmental studies would be conducted and environmental documentation prepared.

Issue: The FEIS does not include an adequate analysis of the impact of the Proposed Project on adjacent residential property values.

Response: The Proposed Project is one of many redevelopment activities that would be expected to have both beneficial and adverse effects on residential and non-residential property values. In addition, there are a number of other variables, such as interest rates, inflation, adjacent land uses, regional development plans, and future infrastructure improvements that also affect property values. The Corps recognizes that commercial and industrial redevelopment may have adverse impacts on the appreciation of nearby residential properties. However, these effects would be difficult to quantify because of the total number of factors that influence future property values. For example, residential properties that are located a similar distance from the existing Wando Welch Terminal in Mount Pleasant have experienced significant appreciation in value over the past 10 years.

Issue: The FEIS does not appropriately disclose the increase in the threat of terrorist activities that would result from the Proposed Project.

Response: Over the past five years there has been increased attention to the potential threat of terrorist activities. Airports and port facilities are among many different types of facilities that have made significant efforts to improve security. As evidenced by the Oklahoma City bombing in 1995 or the hijacking of domestic airlines on September 11, 2001, the threat of terrorist activities may originate from both foreign and domestic sources. The development of a new port facility does not by itself increase the potential threat of terrorist activities. Recent improvements in port security and programs like Project Seahawk at the CNC should help reduce the threat of terrorist activities at port facilities. The Corps recognizes that the Proposed Project or existing public and private port facilities in the Port of Charleston may be a terrorist target in the

future and the proximity of residential areas to a particular terminal site increases the potential for loss of life and damages to residential areas.

Issue: The development of the Proposed Project would adversely impact low income, minority communities that have been struggling to improve their quality of life.

Response: The Proposed Project is located within an area that is identified as the Port Facility Area in the MOA regarding the redevelopment of the former Charleston Navy Base property. City of North Charleston has agreed to grandfather existing residential land uses east of Spruill Avenue and to discourage future residential development within the Port Facility Area. Therefore, the Proposed Project is consistent with local land use plans for the project site. Land use regulations between adjoining jurisdictions are recognized in the FEIS, but this is not an issue appropriate for resolution by the USACE.

Issue: The FEIS has failed to properly consider the cumulative impacts of the development of the Proposed Project and other projects such as Ashley River Center, Promenade, or the expansion of the Kinder Morgan bulk terminal on existing transportation infrastructure.

Response: The Proposed Project and the proposed Kinder Morgan expansion have independent utility and are not dependent on each other to meet their respective purposes. Containerized cargo associated with the Proposed Project will increase rail traffic at existing Norfolk Southern and/or CSX Intermodal rail yards, while the proposed Kinder Morgan expansion will increase rail traffic at activities at existing Norfolk Southern and/or CSX freight terminals. Based on coordination with Norfolk Southern and CSX, neither of these two private rail companies have specific plans to expand their existing rail yards. However, we anticipate that they will likely make adjustments to operations to accommodate the increase in future rail traffic. Based on the available information, the Surface Transportation Board has indicated that the Proposed Project does not include any activities that would require their approval or their involvement. Modifications to the existing rail network may require additional coordination with STB and NEPA analysis in the future.

Mitigation

Issue: The mitigation that is proposed by the SCSPA and SCDOT is unacceptable – it does not fairly compensate for project related impacts to aquatic resources, air quality, health affects, property values, noise, and/or transportation infrastructure.

Response: Although USACE is required to take a broad view when evaluating a proposed project in accordance with NEPA, our ability to enforce or require certain mitigation measures is limited. For example, our regulatory authority pursuant to the Clean Water Act does not enable us to enforce permit conditions regarding issues such as noise or air quality. Although the Corps considers many issues in light of our

responsibility to conduct a thorough public interest review, we do not establish minimum standards of acceptability for many of these issues. If a proposed project is expected to cause an increase in noise an applicant may incorporate certain mitigation measures such as a noise barrier into their proposed project in an effort to receive a favorable decision on their permit application. If an applicant fails to offer sufficient mitigation to offset adverse impacts that are identified during the NEPA process, those potential impacts would be considered in our overall evaluation of the Proposed Project.

Issue: There are a number of unresolved issues regarding specific impacts to properties that must be acquired by the SCDOT to construct the port access road. Those issues should have been addressed in the FEIS.

Response: The FEIS has been prepared to address the potential environmental consequences of developing the proposed port facility and port access roadway and to provide the information necessary to make a decision regarding a DA permit pursuant to the CWA and Rivers and Harbors Act. Where specific impacts such as the relocation of overhead powerlines have been identified, we trust that SCDOT will continue to work with the affected property owners and the adjacent community during the right-of-way acquisition process to avoid and minimize potential impacts and provide compensation for any unavoidable adverse impacts. In some cases, the actual impacts may be more or less that those identified

Issue: The potential impacts of the Proposed Project on aquatic resources extend well beyond the loss of freshwater wetlands, tidal marsh, and open waters within the footprint of the terminal and roadways. Almost 80 acres of open waters will be directly impacted by deepening, and water quality within an even greater area will be impacted by sedimentation, salinity, and reduced aeration (low dissolved oxygen). The mitigation plan proposed by the SCSPA does not compensate for the direct or cumulative impacts to fish and wildlife resources from the proposed project.

Response: As described in the SCSPA and SCDOT's mitigation plan, the purchase of mitigation credits, tidal marsh restoration, and oyster restoration will lead to direct benefits to water quality and aquatic resources. Other activities, such as the preservation of Morris Island and areas located within the Cooper river watershed will provide benefits to both upland and aquatic habitat and water quality within the affected watershed. Based on coordination with both Federal and state regulatory and resources agencies, the proposed mitigation plan appropriately compensates for projected impacts.

8. Determinations/Summary of Findings

Compliance with 404(b)(1) Guidelines: The development of a marine container terminal is considered a water dependent activity and must be located within or immediately adjacent to the aquatic ecosystem to meet its basic project purpose. The Corps has evaluated alternative sites and design alternatives on the project site that would avoid and minimize impacts to special aquatic sites and other waters of the United States. All of the alternatives considered would result in substantial impacts to

waters of the United States or the human and the natural environment. After weighing these impacts, the Proposed Project is considered the environmentally preferable alternative pursuant to NEPA and the least environmentally damaging practicable alternative pursuant to the Clean Water Act.

Direct impacts to the aquatic ecosystem (Subpart C) include the dredging and filling of waters of the United States as described above. The project site represents a relatively small portion of the Cooper River watershed and the loss and/or modification of open waters would result in a negligible impact to normal flows and tidal fluctuations. The development of the Proposed Project would result in localized increases in salinity, decreases in current flows, and decreases in dissolved oxygen as a result of deepening. These changes would also affect sedimentation rates and patterns within the adjacent federal navigation channel.

The operation of the sediment suspension system would alter the bottom substrate because it would reduce the deposition of suspended sediment in the berth areas. Likewise, maintenance dredging of the access channel would alter the bottom substrate by removing accumulated sediment within the access channel. These long term changes in bottom substrate would result in a less than significant impact on aquatic resources. Dredging and the disposal of dredged material would result in temporarily elevated levels of turbidity. Sediment analyses and the modeling of elutriates that were conducted for the Proposed Project (Subpart G) indicate that contaminants identified in the existing bottom sediments would not be biologically available at levels that would be expected to harm aquatic species or upland species within the CDFs.

The Proposed Project would not result in any direct impacts to Federally listed threatened or endangered species (Subpart D), or any habitat that is considered suitable for supporting species that are known to occur in Berkeley or Charleston County, South Carolina. As a result of conservation measures that were incorporated into the Proposed Project by the SCSPA and special conditions that are being placed on the permit by the Corps, NMFS and USFWS have concurred with the Corps' determination that the Proposed Project is not likely to affect the North Atlantic right whale, the humpback whale, and the West Indian manatee.

The Proposed Project would result in a loss of habitat and direct impacts to fish crustaceans, mollusks and other wildlife that are unable to avoid impacts associated with the dredging and placement of fill material on the project site. These impacts are expected to be localized and less than significant. The proposed port facility and access roadway would also result in the unavoidable loss of the following acreages of special aquatic sites (Subpart E): 2.7 acres of jurisdictional wetlands, 2.1 acres of mudflats, and 12.3 acres of tidal marsh. In addition, the Proposed Project would result in the loss of 56.6 acres of open water habitat and the deepening and/or modification by the placement of rip-rap below MHW of an additional 91.0 acres of open water habitat.

As described above, the project site is located within an urban area (Subpart F) and would result in the redevelopment of a portion of a former Navy Base. The Proposed Project is consistent with regional land use plans and would be expected to have less than significant impacts on municipal and private water supplies, recreational and commercial fisheries, water related recreation, aesthetics, parks, national seashores, wilderness areas, and similar preserves. Likewise, the Proposed Project would not violate the requirements of any Federally designated marine sanctuary.

The proposed discharge would not violate applicable state water quality standards or effluent standards prohibited under Section 307 of the Clean Water Act. The activity would contribute to significant degradation of waters of the United States. The SCSPA and SCDOT have avoided and minimized potential impacts to the aquatic ecosystem to the maximum extent practicable and have submitted a mitigation plan to compensate for unavoidable adverse impacts to the aquatic resources. Although the placement of fill material would result in the loss of some open water habitat, the deepening of the berth and access channel areas would result in a corresponding increase in the available water column. In addition, the restoration of aquatic resources on Drum Island, the preservation and enhancement of upland and aquatic resources on Morris Island and within the upper Cooper River watershed, and the oyster restoration included in the proposed mitigation plan are expected to compensate for the impacts of the Proposed Project.

After careful consideration of the potential short-term and long-term effects of the proposed discharge of dredged or fill material on the physical substrate; water circulation; fluctuation, and salinity; suspended particulates and turbidity; contaminants; aquatic ecosystem and organic determination; proposed disposal site and mixing zones; cumulative effects on aquatic ecosystems; and secondary effects on the aquatic environment in accordance with subparts C-F of 40 CFR 230 and after careful consideration and evaluation of all practicable alternatives and in finding that all appropriate and practicable measures to minimize the potential harm to the aquatic ecosystem have been taken in accordance with subpart H. I find this proposal to be in compliance with the 404(b)(1) Guidelines.

Section 176(c) of the Clean Air Act General Conformity Rule Review: The proposed permit action has been analyzed for conformity applicability pursuant to regulations implementing Section 176(c) of the Clean Air Act. The project site is located within Charleston County, which is currently classified as an attainment area. The Proposed Project would result in short term increases in air quality emissions associated with construction and long term air quality impacts associated with increases in mobile emissions such as marine vessels, yard equipment, and container trucks. These impacts have been analyzed using an air dispersion model and have been reviewed by both Federal and state agencies responsible for implementing the Clean Air Act and the federally approved state implementation plan. It has been determined that the activities proposed under this permit are exempted by 40 CFR Part 93.153. Any later indirect emissions are generally not within the Corps' continuing program responsibility and

generally cannot be practicably controlled by the Corps. For these reasons a conformity determination is not required for this permit action.

Public Interest Determination: I find that issuance of the Department of the Army permit as prescribed by current Department of the Army regulations for the proposed work in accordance with the drawings attached hereto, is based on a thorough analysis and evaluation of the various factors enumerated above; that the project will not adversely affect any of the public interest factors; that there are no reasonable alternatives available to the applicant that will achieve the purposes for which the work is being constructed; that the proposed work is in accordance with the overall desires of the public as reflected in the comments of State and local agencies and the general public; that the proposed work is deemed to comply with established State and local laws, regulations and codes; that the issuance of this permit is consonant with National policy, statutes, and administrative directives; and that on balance, issuance of a Department of the Army permit is not contrary to the public interest.

Title III of the Civil Rights Act of 1964 and Executive Order 12898: The proposed permit action has been analyzed pursuant to regulations implementing Title III of the Civil Rights Act of 1964 and Executive Order 12898. It has been determined that the project would not directly, or through contractual or other arrangements, use criteria, methods, or practices that discriminate on the basis of race, color, or national origin nor would it have a disproportionate effect on minority or low-income communities.

Environmental Consequences: The Proposed Project consists of the development of a marine container terminal and a port access roadway on the former Charleston Navy Base in North Charleston, South Carolina. The construction and operation of a marine container terminal is considered a water dependent activity and would have certain impacts to waters of the United States no matter where it was developed. Based on our evaluation of the Proposed Project, there will be a number of unavoidable adverse impacts to both waters of the United States and the human and the natural environment. The SCSPA and SCDOT have submitted a mitigation plan to compensate for unavoidable adverse impacts associated with the Proposed Project.

There will be impacts to the Level of Service on area roadways from increased truck traffic and some segments of existing roadways will require improvements sooner than projected in the No-Action alternative. There would also be an increase in noise from construction and operations of the Proposed Project and from port related traffic. Traffic studies that were included in the FEIS indicate that the construction of a noise wall is warranted and would benefit the residents of Rosemont. However, due to concerns raised by local residents the decision whether or not to build a noise barrier will likely be based on future coordination with the affected residents.

Operation of the proposed facilities would result in increased discharges of emissions from vessels, trucks, container-handling equipment and other project-related sources. Potential air quality impacts associated with the construction and operation of the Proposed Project are not expected to be significantly adverse, and would be offset

through the implementation of a MOA that was developed by the SCSPA in coordination with SCBAQ and EPA. Levels of air pollutants associated with these increased emissions are expected to be reduced by best management practices and the use of control technologies such as diesel oxidation catalysts.

The proposed facilities would result in changes in localized stormwater runoff patterns and the types and volumes of contaminants that stormwater runoff might contain. However, control technologies proposed by the Applicant will minimize potential changes to receiving waters.

Operation of the proposed facilities will slightly increase the volume of hazardous materials that are moved through area port facilities and over area roadways. This could result in a small increased potential for spills of hazardous materials and could require expanded and improved hazardous material response programs and capabilities.

Operation of the proposed container facilities may incrementally increase the regional opportunities for the use of containers for transport of terrorist weapons in the region. The potential impact of the presence of such weapons would be exacerbated by the density of residential land use immediately surrounding the proposed project site. However, international trade organizations, Federal, state, and local authorities are implementing numerous new programs to reduce the threat of terrorist activities at Ports throughout the United States and around the world.

Operation of the proposed facilities would result in increased levels of ship traffic within the Port of Charleston and on the Cooper River. According to the vessel queuing models that were prepared for the Proposed Project, the impact on other commercial vessel traffic will not be significant. However, this will result in an increase in competition for the use of these waters between commercial and recreational traffic, and an increased potential for navigation accidents and incidents. However, the proposed facility would not significantly increase the total future projected ship traffic in Charleston Harbor as compared to the No-Action Alternative.

Development of the proposed facilities would not result in an overall loss of functions and values of jurisdictional wetlands, but could result in a decrease in overall wetland acreage in the immediate vicinity of the project. The proposed project would result in unavoidable adverse impacts to aquatic vegetation and wildlife, and the direct loss of approximately two hundred acres of terrestrial habitat. The affected resources are of limited habitat value due to prior disturbance, and the impacts of these losses would be offset by the restoration and/or establishment of tidal marsh habitat and the preservation and enhancement of upland and wetland habitat. Consequently, the CWA Section 404 permit that the Corps proposes to issue would be fully justified by the generous mitigation package offered by the Applicant.

The proposed dredging associated with constructing the new berths and access channel would result in the deepening of open water areas from -10 feet MLW to -49

feet MLW and an increase in areas with silt-dominated bottoms and low summertime levels of dissolved oxygen. These impacts would be offset by the preservation of Morris Island and funding of SCDNR's oyster restoration program.

Construction and operation of the proposed port facility would result in additional volumes of dredged material from construction and maintenance, and a corresponding increase in the need to develop future dredged material placement capacity. The SCSPA plans to use their existing Daniel Island CDF for construction. However, if this property is developed in the future there may be a need to identify a CDF for maintenance material. Potential environmental impacts associated with the development of additional CDFs have not been identified. The Corps is currently preparing a General Reevaluation Report to determine if some portion of the access channel should be incorporated into the federal navigation channel in lieu of constructing the turning basin that was previously authorized for the Daniel island Reach.

Impacts to waters of the United States have been avoided or minimized to the maximum extent practicable. Those impacts considered adverse and unavoidable would be mitigated. Mitigation programs for wetland impacts are described in Section 4 of this document.

Economic benefits of the project to the Tri County area are expected to be substantial. The facility will create many jobs and increased tax revenues. The project will allow the Port of Charleston to continue to be competitive and satisfy the long-term growth in the local and regional demand for container goods.

The following is a summary of the special conditions to further satisfy and protect the public interest:

SCSPA Permit Conditions

1. **That the permittee agrees to provide all contractors associated with construction of the authorized activity a copy of the permit and drawings. A copy of the permit will be available at the construction site at all times.**

2. **That the permittee shall submit a signed compliance certification to the Corps within 60 days following completion of the authorized work and any required mitigation. The certification will include:**
    a. **A copy of this permit;**
    b. **A statement that the authorized work was done in accordance with the Corps authorization, including any general or specific conditions;**
    c. **A statement that any required mitigation was completed in accordance with the permit conditions;**
    d. **The signature of the permittee certifying the completion of the work and mitigation.**

3. **The permittee understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration, of the structure or work herein**

authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the Corps, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration.

4. **That the permittee understands and agrees that the approval and operation of the sediment suspension system is conditional upon the development and implementation of an appropriate monitoring plan. Prior to installation of the sediment suspension system, the monitoring plan must be reviewed and approved by the Corps in coordination with the US Fish and Wildlife Service (USFWS) and National Marine Fisheries Service (NMFS).**

5. **That the permittee understands and agrees that the sediment suspension system must be removed if the Corps determines that the continued operation of the system would result in unacceptable impacts (i.e. adverse impacts greater than conventional maintenance dredging) to aquatic resources or on the Charleston Harbor Project, a Federal navigation project.**

6. **That the permittee understands the approved wharf and access channel are located in close proximity to an existing contraction dike, which is part of the Charleston Harbor Project. The permittee must submit detailed design drawings of all structures and excavations within 300 feet of the existing contraction dike for review and approval by the Corps 120 days prior to beginning construction. An assessment of the contraction dike will be conducted by the Corps and the permittee will be responsible for any damages to the contraction dike caused by the development of the approved port facility.**

7. **That the permittee understands and agrees that all dredged material excavated during the construction of the approved port facility will be placed in the existing Daniel Island Confined Disposal Facility (CDF) or used as fill material on the project site. The Daniel Island CDF may also be used for maintenance dredging of the approved port facility. The permittee must receive written approval from the Corps prior to placing dredged material at another location.**

8. **That the permittee agrees to develop and implement a noise abatement plan to address noise impacts on the adjacent Federal Law Enforcement Training Center (FLETC) property. Noise abatement measures, such as sound barriers, acoustic insulation, and vegetated buffers will be used to reduce construction and operational noise associated with the approved port facility to acceptable levels in residential/dormitory structures on the FLETC property. The noise abatement plan must be reviewed and approved by this office in coordination with FLETC.**

9. **That the permittee understands and agrees that impacts associated with obtaining fill material for the proposed port facility must be evaluated by this office. The permittee must submit sufficient information for this office to evaluate potential impacts (to waters of the United States, Federally listed threatened or endangered species, cultural resources, etc.) 90 days prior to commencement of fill activities. If avoidance and minimization is not considered practicable additional mitigation will be required to compensate for any unavoidable adverse impacts.**

10. **That the permittee understands and agrees that its commitment to transport at least 75 percent of the fill material (soil) to the project site by water was a deciding factor towards the favorable decision on this permit.**

11. **That the permittee recognizes that its commitment to implement their portion of the CNC Marine Terminal Mitigation Plan, dated May 1, 2006, and revised August 18, 2006, was a deciding factor towards the favorable decision on this permit. If the permittee is unable to execute any portion of the approved mitigation plan within three years of the date of issuance of this permit, the permittee will be required to actively work with the Corps in coordination with NMFS and other Federal and state regulatory and resource agencies to develop a contingency plan to accomplish the necessary mitigation.**

12. **The permittee's responsibility to complete the required compensatory mitigation as set forth in Special Condition 11 will not be considered fulfilled until you have demonstrated mitigation success and have received written verification from the U.S. Army Corps of Engineers.**

13. **That the permittee understands and agrees that their commitment not to begin operation of the approved port facility until the access roadway between the marine container terminal and Interstate 26 is operational was an integral part of our evaluation. Operation of the port facility cannot commence until the access roadway is operational and available for use by all port related truck traffic.**

14. **That the permittee understands and agrees that their commitment to incorporate conservation measures to protect the North Atlantic right whale (*Eubaleana glacialis*) into the Proposed Project was an integral part of our review. Failure to conduct the approved conservation measures would be considered a violation of the terms and conditions of this permit and would trigger the requirement for additional consultation with NMFS.**

15. **It is understood and agreed that if the District Engineer determines this structure shall in any way in the future conflict with the improvement, operation, maintenance and widening or deepening of the Charleston Harbor Project, the owners themselves, their heirs, successors and assigns will remove said structure within 45 days from the date that written notice is given by the District Engineer, and there shall be no entitlement to compensation from the United States for damage or injury.**

16. **That the permittee agrees to provide, as a part of the completion notification, as-built drawings which indicate all dimensions of the structure as well as the distance between the Charleston Harbor Project, a Federal navigation channel, and the waterward edge of the authorized structure. These drawings must be prepared by a registered land surveyor and submitted within sixty (60) days of the completion of the structure.**

17. **That any Corps of Engineers Monument cannot be disturbed without first notifying this office 30 days in advance. After coordination with this office, a decision will be made as to the proper steps to be taken with regard to removing and relocating the monuments(s).**

18. That the permittee understands and agrees that a dredging operations plan must be submitted for review and approval by the Corps 60 days prior to beginning construction. The dredging operations plan must include a dredging schedule, the production of a dredging log, the amount of dredged material removed each working day, methods to control excessive releases of Total Suspended Solids at the spillways, and procedures to handle emergency situations such as an unanticipated release of dredged materials.

19. That the permittee insures that the contractor is aware that it is the expectation of this office that environmentally responsible dredging take place at all times. Therefore, it is essential that care and diligence is taken to assure that the disposal area embankments are not breached, material overflow does not occur, and the spillway is properly and carefully maintained. The material should be pumped into the disposal area at such a rate as to allow settling at the spillway thereby minimizing suspended solids.

20. An on-site meeting will be accomplished between the permittee and this office prior to initiation of dredging. The permittee should contact the Corps 60 days prior to commencement of work to arrange this meeting.

21. That the permittee agrees to conduct the work authorized herein in a manner that will not prevent or interfere with full and free use of the adjacent or nearby navigable waters of the United States by the boating public.

22. That the permittee must contact the United States Coast Guard to ascertain and assist in the issuance of a Notice to Mariners advising the boating public of the place and time that the dredging activity will be occurring.

23. That the permittee is responsible for properly installing and providing appropriate warning and marking devices to alert the boating public of any dangers (such as cables, anchors, buoys and other appurtenances) associated with the proposed dredging activity. All warning and marking devices must be marked and installed in accordance with United States Coast Guard standards.

24. That the permittee agrees to contact the Boating Division of the South Carolina Department of Natural Resources to advise them of the place and time that the dredging activity will be occurring. The permittee will solicit any information that the Department may have on local boating traffic patterns and activities in the project area. Such information will be used to facilitate dredging plant and appurtenances setup and operation to insure safe navigation through the area of work.

25. Federal authorization for dredging activities is limited to ten years from the date of issuance provided all other special conditions are complied with.

26. That all dredging should be performed during the winter months (November 1 through February 15) to the maximum extent practicable. In order to insure protection of West Indian Manatees that may enter the project area during

dredging activities performed outside the winter months, the permittee will comply with the following:

a. **That the contractor will insure that all personnel associated with the project are made aware of the potential presence of manatees and the need to avoid collisions with them.**

b. **That all construction personnel will be advised that there are civil and criminal penalties for harming, harassing, or killing manatees which are protected under the Marine Mammal Protection Act of 1972, the Endangered Species Act of 1973, and the Florida Manatee Sanctuaries Act of l978. The permittee is aware that it and/or contractor may be held responsible for any manatee harmed, harassed, or filled as a result of construction activities.**

c. **That all vessels associated with the project will operate at "no wake/idle" speeds at all times while in water where the draft of the vessel provides less than four feet clearance from the bottom and that vessels will follow routes of deep water whenever possible.**

d. **That if manatees are seen within 100 yards of the dredging area, all appropriate precautions shall be implemented to ensure protection of the manatees. These precautions shall include operating all equipment in such a manner that moving equipment does not come any closer than 50 feet of any manatee. Operation of any equipment closer than 50 feet to a manatee shall necessitate immediate shutdown of the equipment.**

e. **Siltation or turbidity barriers shall be made of material in which manatees cannot become entangled, shall be properly secured, and shall be regularly monitored to avoid manatee entanglement or entrapment. Barriers must not impede manatee movement**

f. **That any collision with any/or injury of a manatee will be reported immediately to the S.C. Wildlife and Marine Resources department, Heritage Trust Section, (803) 844-2473.**

g. **That the contractor will maintain a log detailing sightings, collisions, or injuries to manatees should they occur during the contract period. Following project completion, a report summarizing incidents and sightings will be submitted to:**

Mr. Ed Duncan
S.C. Wildlife and Marine Resources Department
Heritage Trust Section
P.O. Box 12559
Charleston, SC 29422-2559

and

Ms. Melissa Bimbi
United States Department of Interior

Fish and Wildlife Service
176 Croghan Spur Road, Suite 200
Charleston, South Carolina 29407.

SCDOT Permit Conditions

1. **That the permittee agrees to provide all contractors associated with construction of the authorized activity a copy of the permit and drawings. A copy of the permit will be available at the construction site at all times.**

2. **That the permittee shall submit a signed compliance certification to the Corps within 60 days following completion of the authorized work and any required mitigation. The certification will include:**
   a. **A copy of this permit;**
   b. **A statement that the authorized work was done in accordance with the Corps authorization, including any general or specific conditions;**
   c. **A statement that any required mitigation was completed in accordance with the permit conditions;**
   d. **The signature of the permittee certifying the completion of the work and mitigation.**

3. **The permittee understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration, of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration.**

4. **That the permittee recognizes that its commitment to implement their portion of the CNC Marine Terminal Mitigation Plan, dated May 1, 2006, and revised August 18, 2006, was a deciding factor towards the favorable and timely decision on this permit. If the permittee is unable to execute any portion of the approved mitigation plan within three years of the date of issuance of this permit, the permittee will be required to actively work with the Corps in coordination with NMFS and other Federal and state regulatory and resource agencies to develop a contingency plan to accomplish the necessary mitigation.**

5. **Your responsibility to complete the required compensatory mitigation as set forth in Special Condition d will not be considered fulfilled until you have demonstrated mitigation success and have received written verification from the U.S. Army Corps of Engineers.**

6. **That any Corps of Engineers Monument cannot be disturbed without first notifying this office 30 days in advance. After coordination with this office, a decision will be made as to the proper steps to be taken with regard to removing and relocating the monuments(s).**

9. Conclusion

The Proposed Project consists of the development of a marine container terminal and a limited access highway to provide direct access between the port facility and Interstate 26. The City of North Charleston and the SCSPA developed a MOUA regarding the redevelopment of the CNC site which identifies the project site and nearby areas as the Port Facility Area and the Port Overlay District. Likewise, an FEIS prepared by the US Navy for Disposal and Reuse of the Charleston Navy Base stated that this area should be redeveloped as a port facility.

The USACE has determined that the site, industrial property located along a deep-draft navigation channel near Charleston, would likely be developed for industrial purposes even if the USACE denied the permit. It is probable that the planned avoidance, minimization, and mitigation incorporated into this proposal may not occur at the same level with the piecemeal development of this site that is likely if the permit is denied. Further, the proposal has been fully coordinated with the State and Federal resource agencies, who are now generally in agreement that the mitigation adequately compensates for all impacts.

While I recognize that there will be some negative impacts to nearby residents, the USACE has required the Applicant to avoid, minimize and mitigate for impacts and believes that the project, with conditions, represents the least environmentally damaging practicable alternative based on the SCSPA's and SCDOT's purpose and need for the project.

The USACE has reviewed and evaluated, in light of the overall public interest, the documents and factors concerning this permit application, as well as the stated views of other interested Federal and non-Federal agencies and the concerned public, relative to the proposed work in waters of the United States. This evaluation is in accordance with the guidelines contained in 40 CFR Part 230 pursuant to Section 404(b)(1) of the Clean Water Act and Section 10 of the Rivers and Harbors Act of 1899.

Based on our review, I find that the proposed project is not contrary to the Public Interest and that a Department of the Army permit, with conditions, should be issued.

Edward R. Fleming
Lieutenant Colonel, Corps of Engineers
District Commander

Date 26 April 2007

ACRONYMS

-A-

APE	Area of Potential Effect
ARFS	Access Roadway Feasibility Study

-B-

BMP	Best Management Practice
BCDCOG	Berkeley-Charleston-Dorchester Council of Governments

-C-

CAA	Clean Air Act
CD	Compact Disc
COE	Corps of Engineers
CEQ	Council on Environmental Quality
CERCLA	Comprehensive Environmental Response Compensation and Liability Act
CDF	Confined Disposal Facility
CFR	Code of Federal Regulations
CHATS	Charleston Area Transportation Study
CHP	Charleston Harbor Project
CNC	Charleston Naval Complex
CST	Columbus Street Terminal
CWA	Clean Water Act
CZM	Coastal Zone Management
CZMP	Coastal Zone Management Plan

-D-

DA	Department of the Army
dBA	A-weighted noise level (a unit of measurement)
DEIS	Draft Environmental Impact Statement
DNL	Day-night average noise level
DO	Dissolved oxygen

-E-

EFH	Essential Fish Habitat
EQC	Environmental Quality Control
EIS	Environmental Impact Statement
EMS	Emergency Management Service
EPA	US Environmental Protection Agency
ESA	Endangered Species Act

-F-

FEIS	Final Environmental Impact Statement
FEMA	Federal Emergency Management Agency
FHWA	Federal Highway Administration of the Department of Transportation
FIRM	Flood Insurance Rate Map
FLETC	Federal Law Enforcement Training Center

-G-

GCD	General Conformity Determination

-H-

-I-

I	Interstate

ISCST3	Industrial Source Complex Short Term (an EPA approved air model)
IWR	Institute for Water Resources
	-K-
	-L-
LAMC	Lowcountry Alliance for Model Communities
LEDPA	Least Environmentally Damaging Practicable Alternative
	-M-
mcy	million cubic yards
MHW	Mean High Water
MLW	Mean Low Water
MOA	Memorandum of Agreement
MOUA	Memorandum of Understanding and Agreement
	-N-
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act of 1969
NHPA	National Historic Preservation Act of 1966
NMFS	National Marine Fisheries Service
NO_x	Nitrogen Oxides (($NO + NO_2$) + nitrate (NO_3))
NOAA	National Oceanic and Atmospheric Administration
NRHP	National Register of Historic Places
	-O-
OCRM	Office of Ocean and Coastal Resource Management
OSHA	Occupational Safety and Health Administration
	-P-
$PM_{2.5}$	Particulate Matter less than 2.5 microns in diameter
PM_{10}	Particulate Matter less than 10 microns in diameter
PSD	Potential for Significant Deterioration
	-Q-
	-R-
RCRA	Resource Conservation and Recovery Act
RDA	Redevelopment Authority
ROD	Record of Decision
	-S-
SCCCL	South Carolina Coastal Conservation League
SCDHEC	South Carolina Department of Health and Environmental Control
SCDNR	South Carolina Department of Natural Resources
SCDOT	South Carolina Department of Transportation
SCSPA	South Carolina State Ports Authority
SELC	Southern Environmental Law Center
SHPO	State Historic Preservation Office
SIP	State Implementation Plan
	-T-
TEU	twenty-foot equivalent units
TIP	Transportation Improvement Plan

TMDL	Total Maximum Daily Load
TSS	Total Suspended Solids

-U-

$\mu g/m^3$	micrograms per cubic meter
US	United States
USACE	United States Army Corps of Engineers
USCG	United States Coast Guard
USFWS	United States Fish and Wildlife Service

-V-

VMT	Vehicle Miles Traveled
VOCs	Volatile Organic Compounds

-W-

WQC	Water Quality Certification

-X-

-Y-

-Z-

Public Interest Factors	No Action Alternative	CNC Alternative	Daniel Island Alternative	Clouter Island Alternative
LAND USE				
Compatibility with existing land use.	O	O	I	I
Compatibility with regional land use plans.	O	O	I	I
PHYSICAL SETTING				
Localized impacts to topography and surface hydrology.	II	II	II	II
Secondary impacts associated with obtaining fill material.	II	II	II	II
SOCIOECONOMIC ENVIRONMENT				
Economic benefits (jobs, personal income, business revenue, and indirect purchases).	III	III	III	III
Additional state and local tax revenues from construction and operation.	III	III	III	III
SOCIAL CHARACTERISTICS AND ENVIRONMENTAL JUSTICE				
Increase in household income and locally owned business revenues.	III	III	III	III
Population increases in Berkeley County, Charleston County, and Dorchester County.	O	O	O	O
Increase in local property values.	UNKNOWN	O	O	O
Effect on racial composition, age distribution, and educational attainment	II	O	O	O
Displacement of residences, businesses, or community facilities.	II	II	II	II
Environmental Justice.	N/A	II	II	II
COMMUNITY INFRASTRUCTURE AND MUNICIPAL SERVICES				
Impacts on overall capacity.	UNKNOWN	II	II	II
New facilities or upgrades to systems required.	UNKNOWN	O	O	II
TRANSPORTATION				
Decrease in Level of Service of existing Interstate Highways	UNKNOWN	II	I	I
Construction of surface transportation improvements.	N/A	III	II	II
NAVIGATION				
Delays caused by vessels using a portion of the Federal navigation channel as a turning basin	O	II	II	II
Incremental increase in interactions between commercial vessels and recreational boats.	II	II	II	II
NOISE				
Noise.	UNKNOWN	II	II	O
LIGHT				
Change in nighttime ambient light levels experienced by adjacent or nearby sensitive receptors.	II	II	O	O
Change in nighttime viewshed.	UNKNOWN	II	I	I
AESTHETICS				
Change in viewshed from adjacent or nearby properties.	II	II	I	I
AIR QUALITY				
Long-term impact from emissions (NO_x, VOCs, SO_2, PM_{10} and $PM_{2.5}$) generated by overland transport of cargo into CHS from other ports.	II	N/A	N/A	N/A
Short-term impact of NO_x, SO_2, and PM_{10} during construction.	UNKNOWN	II	II	II
Potential for short-term $PM_{2.5}$ impact from fugitive dust related to construction.	UNKNOWN	I	I	I
Potential long-term impacts from operations related NO_x, SO_2, PM_{10} and $PM_{2.5}$.	N/A	II	II	II
CULTURAL RESOURCES				
Visual effect on National Register of Historic Places sites adjacent to Charleston Harbor	O	O	O	O
Potential to effect cultural resources	O	O	O	O
SECTION 4(f) PROPERTIES, 6 (f) PROPERTIES, AND OTHER RECREATIONAL PROPERTIES				
Potential impacts to existing parks and recreational facilities.	II	II	O	O
HAZARDOUS WASTES AND MATERIALS				
Increase in volumes of hazardous wastes and materials transported.	UNKNOWN	II	II	II
Redevelopment of contaminated areas onsite.	II	II	N/A	N/A
Redevelopment of contaminated areas offsite.	II	II	N/A	N/A
Increase in risk of a terrorist event.	II	II	II	II

WATER QUALITY				
Dredging activities would cause a short-term increase in levels of suspended solids, turbidity.	II	II	II	II
New berth, basin, or channel construction would have a long-term impact on dissolved oxygen levels.	II	II	II	II
Stormwater discharges would include increased levels of constituents, with levels dependent on stormwater management and treatment facilities.	II	II	II	II
AQUATIC SEDIMENTS AND DREDGING				
Changes in bottom surface sediments from dredging.	UNKNOWN	II	II	II
Additional maintenance dredging.	O	II	II	II
Elutriate discharged from CDF.	II	II	II	II
Replacement of capacity of displaced PA.	O	O	II	I
Offsite placement of new work dredged material.	N/A	II	II	II
NATURAL RESOURCES				
Terrestrial vegetation and wildlife.	II	II	II	II
Aquatic vegetation and wildlife.	II	II	II	II
Special aquatic sites (including wetlands).	II	II	II	II
Essential Fish Habitat.	II	II	II	II
Potential for increase in oil spills.	II	II	II	II
THREATENED AND ENDANGERED SPECIES				
Effect on Federally listed Threatened and Endangered species that are known to occur in marine waters near Charleston.	II	II	II	II
SHORELINE EROSION				
Incremental increase in erosion from vessel traffic.	II	II	II	II
FLOODPLAIN				
Placement of fill material and removal of areas from floodplains and floodways.	II	II	II	II
Increase in flooding of nearby or adjacent properties within the floodplain.	O	O	O	O

NOTE: All project impacts are identified as belonging to one of the following categories:

Class I - Significant adverse impact.

Class II – Less than significant adverse impact.

Class III - Beneficial impact.

O – Negligible impact.

N/A - Not applicable, no impact.

UNKNOWN - Data not available to determine impact.

NOTE: Differences may exist between the table and the FEIS due to the USACE evaluation of these environmental impacts in light of the Agency's statutory mission and jurisdictional authority and the fact that this analysis was completed without consideration of mitigation.