



**UNITED STATES DEPARTMENT OF COMMERCE**

National Oceanic and Atmospheric Administration

**NATIONAL MARINE FISHERIES SERVICE**

Southeast Regional Office

263 13th Avenue South

St. Petersburg, Florida 33701-5505

<http://sero.nmfs.noaa.gov>

February 17, 2015

F/SER47:JD/pw

(Sent via Electronic Mail)

Lt. Col. John Litz, Commander  
Charleston District, Corps of Engineers  
69A Hagood Avenue  
Charleston, South Carolina 29403-5107

Attention: Courtney Stevens

Dear Colonel Litz:

NOAA's National Marine Fisheries Service (NMFS) reviewed public notice 2013-01087-2JU, dated January 12, 2015. Abengoa Energy Crops requests authorization from the Department of the Army to fill 0.82 acres of freshwater wetlands and to dredge 3.11 acres of the Cooper River to construct a multimodal cargo and ship terminal in Charleston County. In addition to these impacts, the proposed wharf, railway, and ship conveyor would impact an unspecified amount of salt marsh and tidal creek habitat. As compensatory mitigation for filling the freshwater wetlands, the applicant proposes to purchase 4.8 credits from the Pigeon Pond Mitigation Bank. The applicant proposes mitigation for neither the salt marsh impacts nor the dredging of the Cooper River. The Charleston District's initial determination is the wetland fill and dredging would not have substantial individual or cumulative adverse impacts on essential fish habitat (EFH) or federally managed fishery species. As the nation's federal trustee for the conservation and management of marine, estuarine, and anadromous fishery resources, the following comments and recommendations are provided pursuant to authorities of the Fish and Wildlife Coordination Act and the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act).

*Proposed Project Description*

The applicant proposes to redevelop an industrial property along the Cooper River between Noisette Creek and Filbin Creek by removing two existing dolphins and constructing a wharf, railway, ship conveyor, access road, offices, and other infrastructure. The wharf would be approximately 470 feet by 50 feet (23,500 square feet) and connect to the uplands by a runway (250 feet by 12 feet). The notice does not clearly specify the number of pilings supporting the wharf and runway. To transfer bulk materials to and from vessels at the marine terminal, the applicant would construct a 20-foot wide conveyor system connecting a warehouse to the marine terminal; for the conveyor, the applicant would install six 12-inch, precast pilings in salt marsh and open water and six in freshwater wetlands. The terminus of the conveyor system would be the northern end of the proposed wharf near the entrance of a small tidal creek.

To receive ocean-going vessels, the berth would be dredged to -42 feet mean low water (MLW) plus 2 feet of allowable overdepth; the existing depth is approximately -27 feet MLW. Approximately 45,000 cubic yards of sediment would initially be dredged over 3.11 acres of river bottom with a hydraulic dredge. Material would be pumped, via pipeline, to the Clouter Creek Confined Disposal Facility (CDF). The applicant anticipates maintenance dredging approximately 7,000 to 10,000 cubic yards of material



every one or two years from the berth footprint. The proposed berth includes a portion of the Delfin berth at the northern adjacent facility (SAC 2005-IR-107); the federal permit for that berth expired in 2011 and the currently proposed permit would partly replace the Delfin permit. The applicant submitted a draft Sediment Sampling and Analysis Plan, dated January 15, 2015, but has yet to report results from the sampling.

#### *Essential Fish Habitat in the Project Area*

The site of the proposed project includes estuarine emergent wetlands (i.e., salt marsh), a tidal creek, and unconsolidated bottom. The South Atlantic Fishery Management Council (SAFMC) identifies these habitats as EFH for estuarine-dependent species of the snapper-grouper complex. Salt marsh is also EFH for penaeid shrimp, including white shrimp (*Litopenaeus setiferus*) and brown shrimp (*Farfantepenaeus aztecus*). Salt marshes are EFH because larvae and juveniles concentrate and feed extensively and shelter within these habitats. As a consequence, growth rates are high and predation rates are low, which makes these habitats effective nursery areas. The SAFMC provides additional information on EFH for federally managed species in Volume IV of the *Fishery Ecosystem Plan of the South Atlantic Region*<sup>1</sup>.

The waters of the Cooper River, the tidal creeks connected to it, and the surrounding coastal marsh also serve as nursery and forage habitat for other species, such as red drum (*Sciaenops ocellatus*), black drum (*Pogonias cromis*), Atlantic menhaden (*Brevoortia tyrannus*), and blue crab (*Callinectes sapidus*). Many of these species are prey for other fish managed under the Magnuson-Stevens Act, such as mackerels, snappers, groupers, billfish, and sharks. Red drum are important as a recreationally caught species, and estuarine wetlands within the project area provide habitat for several life stages of red drum. NMFS notes the public notice identifies red drum as having EFH; however, in 2008, NMFS transferred management authority of red drum from the Magnuson-Stevens Act to the Atlantic Coastal Act. As such, red drum are no longer subject to EFH consultation.

#### *Impacts to Essential Fish Habitat*

The proposed project would directly impact 0.82 acres of freshwater wetlands by filling and to 3.11 acres of the Cooper River by dredging. The public notice does not quantify the salt marsh and unvegetated tidal area impacted by the wharf, railway, and ship conveyor. Using the public notice drawings, NMFS estimates this impact to be about one acre. Dredging sediments would make the area unfavorable for natural benthic communities by disturbing sediments and deepening the berth by approximately 15 feet; benthic organisms such as polychaetes and bivalves serve as prey to several federally managed fisheries. The initial and continued maintenance dredging would also disturb substrates, increasing total suspended solids and potentially introducing contaminated sediments into the water column. Run-off from the site and increased shipping traffic could also release contaminants into the Cooper River, potentially reducing water quality.

Pilings used to support the wharf and conveyor system would fill salt marsh and unconsolidated bottom, and the resulting structures would shade these habitats, diminishing their productivity. The pile driving may result in injury or behavioral modifications to fish from pressure waves. During pile driving, a transient stress wave, or pulse, propagates down the length of the pile. This pulse causes waves to propagate outward through the water column and bottom sediment resulting in multiple rapid increases and decreases in sound pressure and acoustic particle motion that can cause physical injury<sup>2</sup>. High noise levels can also temporarily or permanently damage fish or marine mammal hearing. Based on the provided plans, the proposed trestle supports are timber, 12-inch piles. Driving timber piles typically produces lower noise levels than driving concrete or steel piles. Steel piles are proposed for the conveyor.

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<sup>1</sup> Available at <http://safmc.net/EcosystemLibrary/FEPVolumeIV>

<sup>2</sup> Popper, A. N. and M. C. Hastings. 2009. The effects of anthropogenic sources of sound on fishes. *Journal of Fish Biology* 75:455-489.

The public notice does not address the type and size of piles used for the wharf. To minimize noise impacts from pile driving, the applicant should use a vibratory hammer or implement other measures to reduce noise levels.

*Avoidance, Minimization, and Mitigation*

To compensate for impacts to 0.82 acres of freshwater wetlands, the applicant proposes to purchase 4.8 credits from the Pigeon Pond Mitigation Bank. NMFS offers no objection to the plan; however, impacts to tidal marsh and the Cooper River should also be compensated. Filbin Creek and Noisette Creek are nearby and listed on the South Carolina Department of Health and Environmental Control's 303(d) list. Considering the project would impact marsh and potentially reduce water quality, the applicant should pursue permittee-responsible mitigation, such as salt marsh restoration or oyster reef creation, within the Copper River watershed.

*Conservation Recommendations*

NMFS finds the proposed filling and dredging of wetlands will adversely affect EFH. Section 305(b)(4)(A) of the Magnuson-Stevens Act requires NMFS to provide EFH conservation recommendations when an activity is expected to adversely affect EFH. Based on this requirement, NMFS provides the following:

**EFH Conservation Recommendations**

- The permit shall be held in abeyance until sediment sampling demonstrates contaminant levels of substrates to be dredged would not adversely impact aquatic life.
- The construction of structures over salt marsh should be minimized to the maximum extent practicable; no impact to tidal hydrology of the remnant creek shall be permitted.
- The permit shall require pile driving noise minimization measures, such as use of a vibratory hammer.
- The permit shall require mitigation for the impacts to salt marsh habitat.

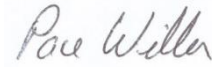
Section 305(b)(4)(B) of the Magnuson-Stevens Act and implementing regulation at 50 CFR Section 600.920(k) require the Charleston District to provide a written response to this letter within 30 days of its receipt. If it is not possible to provide a substantive response within 30 days, an interim response should be provided to NMFS. A detailed response then must be provided 10 days prior to final approval of the action. The detailed response must include a description of measures proposed by the Charleston District to avoid, mitigate, or offset the adverse impacts of the activity. If the response is inconsistent with an EFH conservation recommendation, a substantive discussion justifying the reasons for not following the recommendation must be provided.

In accordance with section 7 of the Endangered Species Act of 1973, as amended, it is the responsibility of the Charleston District to review and identify any proposed activity that may affect endangered or threatened species and their designated critical habitat. Determinations involving species under NMFS jurisdiction should be reported to NMFS Protected Resources Division at the letterhead address.

The Marine Mammal Protection Act of 1972, as amended, prohibits, with certain exceptions, the "take" of marine mammals in U.S. waters. If the proposed action may incidentally take, by harassment, a marine mammal, the Charleston District should contact NMFS Office of Protected Resources, Permits Division, at NOAA Headquarters, Silver Spring, Maryland.

NMFS appreciates the opportunity to provide these comments. Please direct related correspondence to the attention of Ms. Jaclyn Daly-Fuchs at our Charleston Area Office. She may be reached at (843) 762-8610 or by e-mail at [Jaclyn.Daly@noaa.gov](mailto:Jaclyn.Daly@noaa.gov).

Sincerely,



/ for

Virginia M. Fay  
Assistant Regional Administrator  
Habitat Conservation Division

cc:

COE, [Courtney.M.Stevens@usace.army.mil](mailto:Courtney.M.Stevens@usace.army.mil)  
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