UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 4
ATLANTA FEDERAL CENTER
61 FORSYTH STREET
ATLANTA, GEORGIA 30303-8960

APR 28 2011

Lt. Colonel Jason A. Kirk
District Engineer
Attn: Mr. Stephen Brumagin
U.S. Army Corps of Engineers
69A Hagood Avenue
Charleston, South Carolina 29403-5107

Subject: I-73 SAC 2008-1333-DIS

Dear Colonel Kirk:

This letter is in response to your request for comments on the above referenced joint public notice (JPN). The South Carolina Department of Transportation (Applicant) seeks a permit to perform mechanized land clearing, excavation, and the discharge of fill material, in waters of the U.S. to construct a new four lane limited access highway as part of the proposed I-73 interstate system, approximately 80 miles in length, and located in Marlboro, Dillon, Marion, and Horry Counties, South Carolina. The project will permanently impact a total of 293.4 acres of wetlands and 4,643 linear feet of stream.

The U.S. Environmental Protection Agency, Region 4, has reviewed the JPN, and supporting information supplied by the applicant dated January 4, 2011. Based on that review, EPA has found that the project does not comply with Section 404(b)(1) Guidelines, and we therefore recommend that the permit for the project, as currently proposed, be denied. Our concerns were documented in a letter dated March 28, 2011, and are incorporated here by reference.

Alternative Analysis

The applicant's preferred alternative is to construct a new four lane interstate roadway approximately 80 miles in length in Marlboro, Dillon, Marion, and Horry Counties, South Carolina. The applicant's preferred route runs parallel to SC 38/ US 501, a current four lane route. A high percentage of the preferred alternative route is new road and intuitively may cause greater impacts and fragmentation than utilizing an existing road corridor, including the SC 38/US 501. As an alternative to the applicant's preferred route, EPA highly recommends the use of the existing SC 38/US 501 road corridor that would remove the need for a new crossing of Aquatic Resources of National Importance (ARNI), including the State Heritage Preserve wetlands and streams, and the Lake Swamp area.

EPA recommends the consideration of this existing SC 38/US 501 route, along with phased up-grades, as the preferred alternative for the I-73 corridor, as it is an existing four lane highway with up-grade potential, and transects already degraded waters of the U.S. This recommendation is proposed as a lower impact alternative to the applicant's preferred alternative corridor. In a recent third party study dated March 11, 2011, provided to EPA and paid for by the Southern Environmental Law Center, a transportation analyst determined that the existing SC 38/US 501 route, with up-grades, would be the least impacting and least costly route of all that were evaluated.

The third-party study also evaluated two additional options, including a route following the SC 9 corridor, and a route that would include a new connector from US 74 to SC Route 22. The US 501 and SC Route 9 corridors were both examined early in the National Environmental Policy Act process, by evaluating very wide corridors which resulted in estimates of large impacts. For this reason, they were both eliminated from further consideration. EPA, however, recommends a re-examination of these options using the narrower corridor width that was later used to evaluate the applicant's preferred alternative, to allow for an equivalent comparison with the existing SC 38/US 501 corridor. We also recommend using recent aerial photography and more recent wetland inventories to provide greater accuracy of the estimated impacts, instead of using the National Wetlands Inventory mapping layers that do not reflect current conditions in this case.

Preferred Alternative Impacts

The applicant states that, using the Charleston District Standard Operating Procedures to calculate impacts, 18,220 stream credits and 4,163 wetland credits are required to compensate for the proposed impacts to waters of the U.S. It appears that the project will impact State Heritage Preserve properties along, with areas in Lake Swamp, all of which the EPA considers ARNIs. Impacts to these areas need to be discussed in detail including the avoidance and minimization utilized. All streams being impacted were categorized as impaired and given the lowest existing condition score possible. The applicant needs to provide comprehensive information detailing the current stream and wetland conditions that would cause the impacted areas to meet these definitions of impairment.

Mitigation

The applicant's plan for mitigation through buying credits from the Sandy Island Mitigation Bank and restoring two permittee-responsible mitigation sites is not consistent with the 2008 Mitigation regulations which require applicants to look sequentially at mitigation banks, in-lieu fee programs, and permittee-responsible mitigation for required compensatory mitigation. It appears that credits from other banks are available for the impacted hydrologic unit codes, and these should be exhausted before permittee-responsible mitigation is considered.

The applicant's watershed description and site selection rationale for the wetland mitigation site are missing some important details. A good example of what is required in a watershed approach is given in the guidance from the U.S. Army Corps of Engineers, Kansas City District entitled, *Compensatory Mitigation Plan Requirements for Permittee Responsible Mitigation Projects*, January 2010. Goals and success criteria for the wetland portion of the project mitigation need to be specifically matched to the wetland types being restored. The applicant's stream mitigation plan provides inadequate information to determine if the plan can be successful. The applicant needs to provide information for the existing stream, including the drainage area, stream type, bankfull area and width, width-to-depth ratio, width floodprone area, entrenchment ratio, maximum depth at bankfull width, valley slope, bed material, etc. A reference reach should also be chosen and have the same factors measured. The applicant must then determine the expected measurements of these factors for the design reach and how they will be achieved, including map plans showing the in-stream structures (cross-vanes, j-hooks, etc.) and their placement.

Based on the above observations, EPA has determined that the project, as currently proposed, does not comply with the Section 404(b)(1) Guidelines and will have substantial and unacceptable adverse impacts on ARNIs. Therefore, we recommend denial of the project, as currently proposed. This letter

follows the field-level procedures outlined in the August 1992 Memorandum of Agreement between the EPA and the Department of the Army, Part IV, paragraph 3(a) regarding Section 404(q) of the Clean Water Act.

Thank you for the opportunity to review and comment on this JPN. If you have any questions regarding these comments, please contact Mr. Kelly Laycock, ORISE Intern, (Laycock.Kelly@epa.gov or 404-562-9132) or Ms. Jennifer Derby, Section Chief (derby.jennifer@epa.gov or 404-562-9401).

Sincerely,

Gwendolyn Keyes Fleming
Regional administrator

cc: Mr. Stephen Brumagin, USACE
Mr. Travis Hughes, USACE
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