Southeast Regional Office
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July 7, 2006

Mr. David Silawski
Office of Petroleum Reserves (FE-47)
U.S. Department of Energy
1000 Independence Avenue, S.W.
Washington, D.C. 20585-0301

Dear Mr. Silawski:

The NOAA's National Marine Fisheries Service (NMFS) has reviewed the Department of Energy's (DOE) Draft Environmental Impact Statement (DEIS) titled, "Site Selection for the Expansion of the Strategic Petroleum Reserve" dated May 2006. The purpose of the proposed action is to select sites necessary to expand the Strategic Petroleum Reserve (SPR) from its current 727 million barrel (MMB) storage capacity to a one billion barrel capacity. Five new sites for SPR facilities are proposed: Chacahoula and Clovelly, in Lafourche Parish, Louisiana; Bruinsburg, Claiborne County, Mississippi; Richton, Perry County, Mississippi; and Stratton Ridge, Brazoria County, Texas. Existing SPR facilities where storage capacity may be increased are located at Bayou Choctaw, Iberville Parish, Louisiana; West Hackberry, Cameron and Calcasieu Parishes, Louisiana; and Big Hill, Jefferson County, Texas. NMFS offers the following comments on the DEIS:

3.0 AFFECTED ENVIRONMENT AND POTENTIAL IMPACTS
3.7 Biological Resources
3.7.1 Methodology
3.7.1.3 Essential Fish Habitat

Page 3-184, paragraphs 1 and 2. This section of the document describes methods to identify essential fish habitat (EFH) associated with this project at the brine diffuser and offshore pipeline rights-of-way (ROW) only. Onshore components of some of the various new and proposed expansion sites would potentially impact EFH for various federally managed species as well. Methods to identify and quantify onshore impacts of SPR expansion activities should be included in this section of the DEIS.

3.7.2 Impacts Common to Multiple Sites
3.7.2.1 Construction Impacts
3.7.2.1.5 Essential Fish Habitat

The NMFS has concerns with siting the Richton brine discharge pipe in the Gulf of Mexico approximately one mile south of Pascagoula Ship Channel. The DOE predicts that the increase in salinity will be as high as 4.7 parts per thousand and will extend into Horn Island Pass/Pascagoula Ship Channel which connect to Mississippi Sound.

Salinities within the pass, ship channel, and sound vary greatly, with the highest salinities generally occurring in June. The DEIS states that demersal species such as white and brown shrimp are tolerant of a wide range of salinities; however, we are unaware of any information regarding how a higher than ambient salinity gradient in a restricted pass/channel may affect larval and postlarval recruitment from the Gulf of Mexico into an estuary. Since this action could result in a switch in dominance from white shrimp to brown shrimp (page E-28) and is to last for up to five years, more detailed evaluations should be provided, and alternative sites located further south of Horn Island Pass and the Pascagoula Ship Channel should be addressed.

3.7.4 Chacahoula Storage Site
3.7.4.1 Affected Environment
3.7.4.1.2 Chacahoula Rights-of-Way

Page 3-219, paragraph 1. *Essential Fish Habitat.* The DEIS incorrectly indicates the project would not be located in an are designated as EFH. The raw water intake (RWI) pipeline between the Gulf Intracoastal Waterway (GIWW) and upland developed areas south of Louisiana Highway 90 would be located in tidally influenced areas that have been designated as EFH for postlarval, juvenile and sub-adult life stages of white shrimp, brown shrimp, and red drum. The brine disposal pipeline would share the ROW with the RWI pipeline between the GIWW and Louisiana Highway 90. From the GIWW, the brine disposal pipeline would extend 33.4 miles through wetlands and shallow water bottoms prior to reaching the beach and extending offshore. Intermediate, brackish, and saline marsh habitats would be impacted by brine disposal pipeline installation activities. Primary categories of EFH potentially impacted by the RWI and onshore components of the brine disposal pipeline include estuarine wetlands, estuarine water bottoms, submerged aquatic vegetation, and estuarine water column. The document should be revised to correctly identify the federally managed species and life stages having EFH designated in the Chacahoula ROWs and listing the general categories of EFH potentially impacted by construction activities.

3.7.4.1.3 Raw Water Intake and Access Road
Page 3-219, paragraph 6. *Essential Fish Habitat.* The DEIS indicates the project would not be located in EFH. As indicated above, that information is incorrect. The document should be revised as recommended in the preceding paragraph.

3.7.4.2 Impacts
3.7.4.2.2 Chacahoula Pipeline Rights-of-Way
Page 3-224, paragraph 1. *Essential Fish Habitat.* This section states that "No EFH is located in or near the boundaries of the proposed Chacahoula ROWs." As noted above, this is incorrect. NMFS recommends the document be revised to quantify the acres of various categories of EFH that would be impacted by the construction of the RWI ROW and discuss mitigation necessary to compensate for adverse impacts to EFH.

3.7.4.2.3 Raw Water Intake
Page 3-225, paragraph 4. *Essential Fish Habitat.* See previous comment.

3.7.5 Clovelly Storage Site
3.7.5.1.1 Clovelly Storage Site
Page 3-227, paragraph 6. *Essential Fish Habitat.* The DEIS states, "No EFH is located in or near the proposed Clovelly storage site." The DEIS characterizes wetlands at the Clovelly storage site as being a tidally-influenced estuarine community and lists plant species which are typical of brackish marsh habitats. Wetlands identified at the project site are categorized as EFH for postlarval, juvenile, and sub-adult life stages of white shrimp, brown shrimp, and red drum. Primary categories of EFH in the Clovelly storage site are estuarine emergent wetlands, estuarine mud bottoms, and estuarine water column. The DEIS should be revised to correctly identify EFH at the Clovelly storage site.

3.7.5.1.2 Raw Water Intake
Page 3-228, paragraph 3. The DEIS states, "No EFH is located in or near the proposed Clovelly storage site." The DEIS states the RWI would be located a few hundred meters southwest of the storage caverns in an area categorized as emergent wetland habitat. Wetlands at the project site are EFH for postlarval, juvenile, and sub-adult life stages of white shrimp, brown shrimp, and red drum. The DEIS should be revised to correctly identify EFH at the Clovelly RWI site.

3.7.5.2 Impacts
3.7.5.2.1 Clovelly Storage Site
Page 3-230, paragraph 2. See previous comment. The document should be revised to quantify impacts to various categories of EFH that would occur from the use of the site and to discuss mitigative actions that could be implemented to minimize and compensate for adverse impacts to EFH.

3.7.5.2.2 Raw Water Intake
Page 3-231, paragraph 3. *Essential Fish Habitat.* See previous comment. The document should be revised to quantify impacts to various categories of EFH that would occur from the use of the site and to discuss mitigative actions that could be implemented to minimize and compensate for adverse impacts to EFH.

Section 3.7.7.2.4 Terminal in Pascagoula
Page 3-256. The DEIS lacks information to allow an adequate assessment of the impacts to the 35 acres of estuarine wetlands at the Pascagoula terminal on Singing River Island. DOE chose to just indicate that, if this alternative is selected, the DOE would refine the conceptual site plan and secure permits from the Corps of Engineers by providing compensation for the unavoidable wetland impacts. The estuarine wetlands on Singing River Island have been designated as EFH for various federal managed fishery species. Also, Mississippi Sound is designated as critical habitat for the Gulf sturgeon under provisions of the Endangered Species Act. The Singing River Island site has been subjected to various activities, including the establishment of a dredged material disposal site, the development of the Port of Pascagoula Special Management Area Plan, and the

construction of a U.S. Navy facility. The site also is incorporated into the Corps of Engineers' proposed Dredged Material Management Plan for the Port of Pascagoula and the federal channel. Accordingly, the Singing River Island site may not be available to construct a terminal, even if the DOE is willing to provide offsetting mitigation unavoidable impacts. The availability of this site as well as other alternative sites in the Pascagoula area should be fully explored prior to DOE making a selection on terminal locations.

3.7.11 West Hackberry Expansion Site
Page 3-288, paragraph 2. *Essential Fish Habitat.* There are extensive wetlands and open water areas surrounding the West Hackberry site and the DEIS reports that expansion activities would affect five acres of "emergent wetlands and water." Tidally influenced wetlands at the expansion site are EFH for postlarval, juvenile, and subadult life stages of white shrimp, brown shrimp, and red drum. Estuarine emergent wetlands, estuarine mud bottoms, and estuarine water column are the primary categories of EFH potentially affected by expansion activities. NMFS recommends the document be revised to identify and discuss EFH at the West Hackberry expansion site.

3.7.11.2 Impacts
Page 3-289, paragraph 6. *Essential Fish Habitat.* The DEIS states "There is no EFH within or near the proposed West Hackberry Expansion Site." This is incorrect, and the document should be revised to quantify impacts to various categories of EFH that would occur from the use of the site and to discuss mitigative actions that could be implemented to minimize and compensate for adverse impacts to EFH.

4.0 Cumulative Impacts
Pages 4-1 through 22. No information is provided in this section related to the cumulative impacts to NMFS trust resources that would be caused by implementation of each of the three alternatives considered to expand SPR storage capacity by 273 MMB. While Section 3.0 of the DEIS quantifies impacts to various categories of habitat that would result at each expansion site, the three alternatives being considered include expansion activities at various combinations of sites. To allow for a side-by-side comparison of the cumulative impacts to various categories of wetlands and EFH that would result from each alternative, this section should be revised to include a summary quantification of impacts to EFH and dependent fishery resources.

NMFS has carefully reviewed the potential impacts associated with the three alternatives to expand SPR capacity by 273 MMB. Because no major new pipeline segments would be required for the Clovelly site, NMFS believes that impacts to tidally influenced wetlands and EFH would be minimized by the selection of the alternative that would include increasing storage capacity to 120 MMB at the Clovelly terminal.

If we may be of further assistance, please contact Mr. Richard Hartman of our Baton Rouge office at concerning the projects in Louisiana and Mr. Mark Thompson of our Panama City office concerning the projects in Mississippi.

Sincerely,

/s/ Rickey N. Ruebsamen

*for*
Miles M. Croom
Assistant Regional Administrator
Habitat Conservation Division