Ms. Carol M. Borgstrom
Director
Office of NEPA Policy and Compliance, EH-42
U.S. Department of Energy (DOE)
Washington, DC 20585-0119

Dear Ms. Borgstrom:

In accordance with the National Environmental Policy Act (NEPA) and
Section 309 of the Clean Air Act, Environmental Protection Agency (EPA) Region 6 has reviewed the Draft Environmental Impact Statement (DEIS) Site Selection for the Expansion of the Strategic Petroleum Reserve (SPR). As required by the Energy Policy Act of 2005, DOE would expand the SPR to its full authorized capacity by selecting additional storage sites. DOE would develop one new site or a combination of two new sites, and would expand capacity at two or three existing sites. Storage capacity would be developed by solution mining of salt domes and disposing of the resulting salt brine by ocean discharge or underground injection. New pipelines, marine terminal facilities, and other infrastructure could also be required.

EPA rates the DEIS as "EC-2," i.e., EPA has "Environmental Concerns and Requests Additional Information in the Final EIS (FEIS)." EPA has identified environmental impacts that should be avoided to protect the environment. These concerns may require changes to the

preferred alternative or application of mitigation measures that can reduce environmental impact. EPA has identified the need for additional information to be included in the FEIS to complement and to more fully insure compliance with the requirements of NEPA and the Council on Environmental Quality (CEQ) regulations. Areas requiring additional information or clarification include: general information, air quality, water quality, and wetlands. Detailed comments are enclosed with this letter, which more clearly identify our concerns and the informational needs requested for incorporation into the FEIS.

Our classification will be published in the Federal Register according to our responsibility under Section 309 of the Clean Air Act to inform the public of our views on proposed Federal actions. If you have any questions, please contact Mike Jansky of my staff at (214) 665-7451 for assistance.

EPA appreciates the opportunity to review the DEIS. Please send our office five copies of the FEIS when it is sent to the Office of Federal Activities, EPA (Mail Code 2252A), Ariel Rios Federal Building, 1200 Pennsylvania Ave, N.W., Washington, D.C. 20004.

Sincerely yours,

Rhonda M. Smith, Chief
Office of Planning and

Coordination (GEN-XP)

Enclosure

DETAILED COMMENTS
ON THE
DRAFT ENVIRONMENTAL IMPACT STATEMENT
FOR THE
PROPOSED EXPANSION OF THE
STRATEGIC PETROLEUM RESERVE

COMMENTS

General

Page1-3, Section 1.4.2.1, Summary of Scoping: The response to the scoping comment regarding cumulative impacts that the Stratton Ridge LNG project is not going forward is incorrect. Freeport LNG is actively pursuing the development of a 7.5 bcf underground gas storage facility in the salt dome. Please correct this in the FEIS.

Pages 2-27 to 2-30, Section 2.4.1, Bruinsburg Storage Site: The Figure 2.4.1-5 is incorrect or at best misleading. The ExxonMobil Refinery is not on the west side of the Mississippi River as depicted. It is almost due east of the Placid Oil Refinery, but on the other side of the river. If there is a new crude oil pipeline planned to run from the proposed Anchorage Tank Farm under the Mississippi River to the ExxonMobil Refinery this should be discussed in the FEIS.

Page 2-52, Section 2.4.6, Stratton Ridge Storage Site: Figure 2.4.6-1 should reflect the proposed Freeport LNG underground gas storage facility that either overlaps or immediately adjoins the proposed Stratton Ridge facility.

Page 3.61, Section 3.4.8, Stratton Ridge (Multi-Use Impacts): There

is no discussion of the proposed use of the Stratton Ridge dome by Freeport LNG as an underground gas storage site.

Page 3-70, Section 3.5.1-3, Greenhouse Gas Emissions: The analysis of the release of methane gas during the solution mining of the salt domes should be compared to the analysis conducted by the US Coast Guard and Sandia National Laboratories for the salt dome storage construction impacts at the proposed Main Pass Energy Hub (pp. 4-103 and 4-104, Final EIS March 2006) off the coast of Louisiana.

Page 3-92, Section 3.5.8.2, Construction Impacts: The discussion of State Implementation Plan (SIP) requirements incorrectly references Louisiana statutory and regulatory standards instead of the Texas standards that actually apply to Stratton Ridge. The Louisiana SIP would be applicable to part of the Bruinsburg proposal (pipeline construction/operation with the Baton Rouge air shed (Ascension, East Baton Rouge, Iberville, Livingston, and West Baton Rouge parishes in Louisiana) and the tank farm construction/operation at Anchorage) as well as the various proposals that include expansion of the Bayou Choctaw facility. The Texas SIP would apply to the proposed Stratton Ridge facility and the pipelines in the Houston–Galveston– Brazoria air shed (Brazoria, Chambers, Fort Bend, Galveston, Harris, Liberty, Montgomery, and Waller counties in Texas) as well as the various proposals that include expansion of the Big Hill

facility within the Beaumont–Port Arthur air shed (Hardin, Jefferson, and Orange counties in Texas).

Page 3-108, Section 3.6.2.1.3, Impacts Associated with Constructing Pipelines: The FEIS should identify any special procedures to be employed

for the Mississippi River crossing from the Baton Rouge area to the proposed Anchorage tank farm included in the Bruinsburg proposal.

Page 3-111, Section 3.6.2.1.5, Impacts of Oil Spills to Surface Waters: There is only a reference made to Louisiana SPCC regulations. Are there Mississippi and Texas SPCC regulations that would be applicable to one or more proposals?

Page 3-117, Section 3.6.2.1.9, Impacts from On-Site Wastewater Treatment Plants: Would new wastewater treatment plants or enhancements of existing wastewater plants at the 3 SPR facilities considered for expansion be necessary to handle the larger workforces?

Pages 3-120 to 3-122, Section 3.6.3.1.1, Bruinsburg Surface Water: Table 3.6.3-1 includes a footnote (a) in the header, but the explanation given is only applicable to surface water bodies in Mississippi. There is no corresponding reference to the use designations or classifications for water bodies in Louisiana, although several Louisiana water bodies are included in the table. The table would be more helpful if the surface water bodies were listed by geographic order (north to south) so that those surface water bodies crossed by the Bruinsburg to Anchorage crude oil pipeline could be designated as being in Mississippi or Louisiana.

Page 3-124, Section 3.6.3.1.1, Bruinsburg Surface Water: An incorrect inference could be drawn (2nd paragraph) that all of the impaired water bodies crossed by the crude oil pipeline are in Mississippi. But according to the information in Table 3.6.3-1 (portion on p. 3-121), some of the impaired water bodies are in Louisiana.

Page 3-146, Section 3.6.7.1.2, Richton Surface Water: While the surface water bodies crossed by the crude oil pipeline going to the Liberty

tank farm are in Mississippi, several of them drain into Louisiana. The FEIS should explain whether potential impacts to designated uses in Louisiana have been incorporated into the environmental analysis.

Page 3-162 to 3-165, Section 3.6.9.1, Bayou Choctaw Surface Water: Bayou Bourbeaux and Bayou Borbeaux appear to be used interchangeably throughout this section. For example, Bayou Borbeaux is on Table 3.6.9-1, but Bayou Bourbeaux is on Figure 3.6.9-1. The text on p.3-162 uses both spellings in different paragraphs. Are both references to the same water body or are there actually two different bayous? If the latter is correct, the table and figure should be revised to reflect two different water bodies.

Pages 3-293 to 3-299, Section 3.8.2, Affected Environments: The FEIS should disclose if the construction and operational employment figures, if any, for the Anchorage, Liberty and Texas City tank farms are internalized with the data for the Bruinsburg, Richton and Stratton

Ridge proposed sites, respectively..

Pages 3-299 to 3-303: Section 3.8.3, Impacts: Are the construction and operational employment figures, if any, for the Anchorage, Liberty and Texas City tank farms internalized with the data for the Bruinsburg, Richton and Stratton Ridge proposed sites, respectively?

Page 3-305, Section 3.9.1.1, Identification of Historic Properties: Was the Louisiana State Historic Preservation Office aware that the crude oil pipeline could run from Bruinsburg to the Anchorage tank farm? There

are a number of national and state recognized historic sites in the general area of the proposed route of the pipeline (East Feliciana, West Feliciana and East Baton Rouge parishes).

Page 3-324, Section 3.10.2.2, Operation and Maintenance Impacts: Were the noise impacts associated with the pumping station west of Columbia, MS, along the Richton to Liberty crude oil pipeline analyzed and included in the Richton data?

Page 4-2, Section 4.2, Methodology: There are other Gulf Coast area natural gas pipeline and storage projects regulated by FERC that are not directly associated with LNG terminals that should be considered in Table 4.2-1 and the potential cumulative impacts analysis.

Page 4-16, Section 4.8.1 Stratton Ridge Storage Site: The description incorrectly characterizes the Freeport LNG proposal. Freeport LNG intends to create a salt dome cavern storage facility for natural gas post-regasification. It is not an underground storage facility for liquefied natural gas. The cumulative impacts analysis should reflect the Freeport LNG proposed natural gas storage facility as well as the natural gas pipeline from the regasification facility on Quintana Island.

Page 4-21, Section 4.11.2, West Hackberry Associated Infrastructure: The paragraph incorrectly characterizes the state of LNG terminal and pipeline development in Calcasieu and Cameron parishes. Currently one LNG terminal is operating in Calcasieu Parish and three FERC approved LNG terminals in Cameron Parish are under various stages of development. The operating terminal (Trunkline LNG) has been approved for an expansion. Two of the Cameron Parish terminals have already sought expansion, one of which has been granted by FERC.

Air Quality

In Chapter 3, the potential emissions from backup diesel generators are estimated and provided for public review. However, it is unclear from the document whether or not the emissions from the backup generators are to be included in any necessary state or federal permits for the facility. Please note that if the backup generator emissions are not accounted for in a permit and occur in a nonattainment area, then these emissions must be part of the general conformity applicability analysis. If the emissions from these backup generators are included in a permit, then they may be excluded from the general conformity applicability analysis. Please

clarify this in the FEIS.

The DEIS provides a breakdown of emissions expected from each type of activity (i.e., pipeline construction, salt dome construction, emissions from worker vehicles, etc.) for each potential site. Please clarify in the final EIS that emissions for all co-located activities occurring within the same calendar year have been summed in general conformity applicability analysis. In other words, if the salt dome construction and pipeline construction are occurring in the same year and within the same nonattainment area, then these emissions should be summed in order to consider their impact on the airshed within the nonattainment area.

To compare VOC emissions to the conformity de minimis levels, a correction factor of 20% is applied to the total non-methane hydrocarbon emissions modeling results to essentially remove ethane from the equation. Please justify the use of 20% as a correction factor.

Since the Stratton Ridge emission estimates appear to be quite close to the conformity de minimis threshold, if this site is selected as the preferred alternative in the FEIS, we recommend inclusion of the updated applicability

analysis and conformity determination (if necessary) in the FEIS.

Appendix A indicates that construction equipment emission estimates were made with the assumption that any diesel equipment will meet the EPA Tier 1 emission standards, or, in other words, that relatively new (model year 2000 or newer) equipment will be used for construction activity on this project. Please clarify this assumption and explain whether this will be a requirement of the construction bidding process.

Wetlands

Section 2.2.3: The FEIS should identify a preferred alternative without relegating avoidance, minimization and mitigation of wetlands to a later decision via the Section 404 process. The DEIS identifies the Clovelly site as least environmentally damaging to wetlands. Section 404 of the Clean Water Act requires the least damaging practicable alternative be selected. It appears from the information provided by DOE that the proposed Clovelly site plus the expansion of the 3 existing facilities (Bayou Choctaw, Big Hill and West Hackberry) should be selected as the preferred alternative.

Appendix B.4: The DEIS states that DOE would prepare a compensation plan and submit it with the application (404 permit). EPA recommends that a preference be made by DOE to look first for restoration opportunities where possible. Restoration of wetlands such as reforestation of prior converted cropland along with restoration of hydrology would more likely result in successful mitigation and would help meet the Administration=s No-Net-Loss@ Policy.

Section 3.7.2.1.1: Page 186, paragraph 4, states that Aonly wetlands regulated under Section 404 and 401 of the Clean Water Act would be delineated.@ NEPA has a broader reach than Section 404 of the Clean Water, accordingly, EPA recommends that DOE more fully and accurately account for project impacts to the environment by delineating all wetlands and potential impacts that may occur as a result of the project.

All impacts to aquatic resources should be identified and mitigated for regardless of jurisdictional status. DOE should submit maps showing the extent of all wetlands and differentiate those areas it perceives as jurisdictional and non-jurisdictional for final assessment under Section 404 and 401. Wetlands found to be jurisdictional and impacted directly or indirectly by the project would be evaluated according to Section 404 and 401 of the Clean Water Act. Wetlands identified and confirmed to be non-jurisdictional (isolated) should be mitigated for to fully offset project impacts and to comply with the Administration=s ANo-Net-Loss@ and the President=s 2004 Earth Day Goal of a ANet-Gain@ of the Nations Wetlands.

Section 3.7.2.1.1: Page 186, last paragraph, states that AThe USACE and state agency would review and approve the compensation plan through the Section 404/401 permit process''. Section 404 affords both Federal and state resource agencies the opportunity to review and comment on any and all proposed compensatory mitigation plans prior to final approval. EPA recommends that the DEIS statement above be revised to read AFederal and state resource agencies would have the opportunity to review and comment on the proposed mitigation plan prior to final approval.''

Section 4.2.7: Beyond compliance with NEPA and CWA Section 404, there is also a fundamental need to ensure that the proposed project is not inconsistent with Federal and state efforts to restore coastal Louisiana. The Federal and state interest in stemming the rapid loss of Louisiana's coastal wetlands and barrier islands has lead to a range of ongoing and proposed

coastal restoration projects and programs. These include projects developed under the Coastal Wetlands, Planning, Protection and Restoration Act, as well as the proposed Louisiana Coastal Area Ecosystem Restoration Plan, which is currently being considered by Congress for possible authorization within the Water Resources Development Act. Most recently, the Corps of Engineers and state of Louisiana have embarked on an ambitious effort to produce a plan
that would increase hurricane protection in coastal Louisiana through structural measures such as levees and non-structural measures such as coastal restoration and protection.

The aforementioned Federal investments in coastal restoration are motivated in part by the recognition that past and ongoing loss of Louisiana's coastal wetlands and barrier islands puts vital energy infrastructure at increasing risk from storm damage. In this way, coastal restoration efforts can be considered part of an overall strategy to provide secure and reliable energy for the nation's economy. Rigorous efforts to avoid and minimize adverse wetland impacts from the proposed project will help ensure that it is not in conflict with the Federal interest in these coastal restoration efforts, including the shared goal of energy security. Moreover, the project sponsor should also ensure that there is no conflict with any specific coastal restoration projects that may be in the vicinity of the various alternatives under consideration.

National Pollutant Discharge Elimination System

Region 6 EPA would have oversight on the two sites in the State of Texas, new site Stratton Ridge, and expansion at Big Hill. Our concern is that while the activity does not fall

under the 316(b) regulations for cooling water intake structures, it seems that EPA could possibly make a case-by-case determination using Best Professional Judgement (BPJ) to use equivalent technology. The facility will need 50.4 MGD for solution mining, and they will withdraw the water from the intercostal waterway off the Texas coast. The DEIS states that they will have the structure in a shipping channel maintained by the COE. The intake structure will have rotating marine removal screens, and the velocity would be maintained at 0.5 feet per sec. EPA is interested in knowing what size openings are on the screens and whether any chemicals will be used to inhibit marine growth on the intake structures.

Additionally, the facility will be hydrostatic tested when complete. Basically, the salt cavern is a large bottle shaped structure, taller than wide, holding from 275 to 500 million gallons liquid. The salt dome will not hold 100% oil, water will be used as a means to maintain pressure on the system. A single site may have several such domes at its location. EPA is interested in knowing what volume of water will be required for hydrostatic testing; the volumn of water needed for pipeline infrastructure; and where the discharged is located and the rate of discharge. Please provide this information in the FEIS.