FINDING OF NO SIGNIFICANT IMPACT
STRATEGIC PETROLEUM RESERVE LIFE EXTENSION-II (SPR LE-II)
WORK PACKAGES

Agency: US Department of Energy

Action: Finding of No Significant Impact

Summary: The US Department of Energy (DOE) Strategic Petroleum Reserve (SPR) prepared an Environmental Assessment (EA) to fulfill the need for analysis of proposed actions planned in support of the Strategic Petroleum Reserve Life Extension II (SPR LE-II) project. There is a total of 87 proposed actions represented with analysis including the application of categorical exclusion, full individual National Environmental Policy Act (NEPA) analysis (for ten proposed actions) and cumulative effects for all.

Based on the finding of the EA and through implementation of mitigation measures, the DOE has determined that the proposed actions will not cause a significant effect to any of the analyzed environments. Short-term, minor impacts are anticipated for air, noise, water resources and socioeconomics. An Environmental Impact Statement is not deemed necessary and the DOE is issuing this Finding of No Significant Impact (FONSI).

Public Availability: The EA and FONSI may be viewed at:

https://energy.gov/nepa/listings/environmental-assessments-ea

or

https://www.spr.doe.gov/NEPA/LE2/NEPA_LE2.html

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As mentioned above, there are 87 work packages associated with the SPR LE-II. Ten work packages were fully analyzed. Among the 77 that were not, all but two of the activities meet criteria for a Categorical Exclusion (CX) in accordance with 10 CFR 1021 Appendix B to Subpart D of Part 1021 – Categorical Exclusions Applicable to Specific Agency Actions. The remaining two are addressed in the previously approved EIS FES-76-5 Final EIS BC Salt Dome and the previously approved EA DOE-EA-0954 Oil Degasification at SPR Sites.

All the work packages are listed in Tables 1 and 2 of DOE/EA-2073 (attached). The ten that were fully analyzed are summarized below.

There are no impacts anticipated to the following:

- Cultural Resources
- Ecological Resources (includes Threatened and Endangered Species)
- Environmental Justice
- Prime Farmland/Soils

Where temporary, minor impact is anticipated, it is related to activities inherent to construction work for each of the ten fully analyzed proposed actions. They are:

- Air Quality – fugitive dust, petroleum-powered generator emissions.
- Noise - Heavy equipment, generators, demolition equipment/activities, jack and bore machinery, heavy earth-moving equipment and heavy trucks used to haul equipment, materials and construction debris removal.
- Water Resources – The potential for soil erosion at construction sites may increase surface water turbidity.
- Socioeconomics - Short-term, beneficial impact may be realized with local construction work hiring.

Two sites had special considerations for Land Use and Water Resources and indicated that the no action alternative may cause impact:

BC-MM-1360, Site Road Access to Bayou Choctaw-19, -101, -102 and Baily Bridge

- Long-term, minor beneficial impact is anticipated for Land Use. Completion of this project eliminates the current need to use private property for access to the well pads.
- Analysis of the no action alternative for this work package indicates long-term minor impact to Land Use with the need to continue to utilize adjacent private property.

BH-MM-756/756A, Replace Section of 36" Crude Oil Pipeline (COP) at Hillebrandt Bayou

- The no action alternative may result in significant impact to Water Resources if the pipe walls continue to erode.

Description of the Proposed Action Analysis

Bayou Choctaw

BC-MM-1360 Site Road Access to BC-19, 101, 102, and Bailey Bridge

Proposed Action: Replacement of the North-South Bridge and roadway to allow workover rigs to access caverns BC-19, BC-101, BC-102 and replacement of the Bailey Bridge are needed.

Temporary, minor impacts anticipated for air quality (fugitive dust, increased particulate matter), noise (heavy construction equipment and vehicles) and surface water resources (soil erosion that may impact turbidity). Best management practices to mitigate impact will be implemented.

Short-term, beneficial impact anticipated for socioeconomics with potential local construction-work hiring.

Long-term, beneficial impact anticipated for land use (no need for right-of-way from local land-owners).

No Action Alternative: Bridge replacement is not conducted. Vehicles too large for current bridge conditions will continue to use adjacent private land which is allowed by the land owners of their own good-will.

Long-term, minor impact is anticipated. SPR Bayou Choctaw employees will continue to use private property to access the well pads. If the property owners decide not to grant access, there will be no safe access alternative.

West Hackberry

WH-MM-693 Marine Service Center

Proposed Action: Construct a marine service center consisting of a covered boat slip with hoist to raise work boats out of the water while not in use. Deployment time and maintenance cost will be reduced and safety increased.

Temporary, minor impacts anticipated for air quality (fugitive dust, increased particulate matter), noise (heavy construction equipment and vehicles) and surface water resources (soil erosion that may impact turbidity). Best management practices to mitigate impact will be implemented.

Short-term, beneficial impact anticipated for socioeconomics with potential local construction-work hiring.

No Action Alternative: Service center is not built. Equipment maintenance costs will not be reduced and deployment time will remain unchanged.

No impacts anticipated.

WH-MM-1025 Replace the 42-inch Pigging Water Underground Pipeline

Proposed Action: This alternative includes the construction of a new settlement pond and involves replacing a portion of the existing 42-inch pipe to feed the new pond area.

Temporary, minor impacts anticipated for air quality (fugitive dust, increased particulate matter), noise (heavy construction equipment and vehicles) and surface water resources (soil erosion that may impact turbidity). Best management practices to mitigate impact will be implemented.

Short-term, beneficial impact anticipated for socioeconomics with potential local construction-work hiring.

No Action Alternative: Contaminated raw water from pipeline pigging operations will continue to compromise the operability of the caverns into which it is disposed. This leads to higher maintenance and labor costs.

No impacts anticipated.

WH-MM-1349/649/337 Subsidence and Inundation Mitigation

Proposed Action: In order to protect critical infrastructure from storm surge flooding, all infrastructures on caverns, including cavern pad and containment dike need to be raised.

Temporary, minor impacts anticipated for air quality (fugitive dust, increased particulate matter), noise (heavy construction equipment and vehicles) and surface water resources (soil erosion that may impact turbidity). Best management practices to mitigate impact will be implemented.

Short-term, beneficial impact anticipated for socioeconomics with potential local construction-work hiring.

No Action Alternative: Repeated loss of drawdown capability due to storm surge flooding will occur.

No impacts anticipated.

WH-MM-1350 Recomplete/Replace Brine Disposal Wells

Proposed Action: Construction/repair of a Brine Disposal System with adequate capacity capable of fulfilling Level 1 performance criteria. This work includes new brine disposal well development, cleaning of existing wells, and adding new pumps in addition to utilizing existing brine injection pumps.

Temporary, minor impacts anticipated for air quality (fugitive dust, increased particulate matter), noise (heavy construction equipment and vehicles) and surface water resources (soil erosion that may impact turbidity). Best management practices to mitigate impact will be implemented.

Short-term, beneficial impact anticipated for socioeconomics with potential local construction-work hiring.

No Action Alternative: Not performing this work will result in outdated, fatigued equipment in need of cleaning and updates, which is unable to fulfill Level 1 Performance Criteria.

No impacts anticipated.

WH-MM-1359 Revise WH Raw Water Injection (RWINJ) Pump Exercise System

Proposed Action: Water for the RWINJ pump exercise will be diverted into a holding pond that is being built within the design for WH-MM-1025. The raw water is used for

cooling water and is currently routed into the caverns, which is contributing to irreversible damage and compromising cavern life-span.

Temporary, minor impacts anticipated for air quality (fugitive dust, increased particulate matter), noise (heavy construction equipment and vehicles) and surface water resources (soil erosion that may impact turbidity). Best management practices to mitigate impact will be implemented.

Short-term, beneficial impact anticipated for socioeconomics with potential local construction-work hiring.

No Action Alternative: Continuing to discharge the raw cooling water into the caverns will shorten the life-span of the cavern with irreversible damage.

No impacts anticipated.

Big Hill

BH-MM-596/596A Replace Onshore Section of Brine Disposal Line

Proposed Action: Optimize a new line size with new, appropriately-sized brine disposal pumps and motors consistent with current mission.

Temporary, minor impacts anticipated for air quality (fugitive dust, increased particulate matter), noise (heavy construction equipment and vehicles) and surface water resources (soil erosion that may impact turbidity). Best management practices to mitigate impact will be implemented.

Short-term, beneficial impact anticipated for socioeconomics with potential local construction-work hiring.

No Action Alternative: The current integrity testing and inspection program cannot properly assess or assure the condition of the aging pipeline.

No impacts anticipated.

BH-MM-759/756A Replace Section of 36" COP at Hillebrandt Bayou

Proposed Action: The work to replace this piping will include installation of piping offsets, field-applied coatings to weld joints and repairs, removal of two to four 100-foot pipeline section and the proper in-place abandonment (capping) of the existing pipe.

Temporary, minor impacts anticipated for air quality (fugitive dust, increased particulate matter), noise (heavy construction equipment and vehicles) and surface water resources (soil erosion that may impact turbidity). Best management practices to mitigate impact will be implemented.

Short-term, beneficial impact anticipated for socioeconomics with potential local construction-work hiring.

No Action Alternative: There is currently a 40 percent wall loss in the aging pipe. Not replacing it creates risk the pipe will leak and impact the Hillebrandt Bayou.

Potentially significant impact is anticipated if the no action alternative is chosen. If the pipe wall erosion continues and results in a breach of the pipeline, crude oil could be spilled into the Hillebrandt Bayou, creating significant contamination and need for cleanup.

BH-SP-1307/1307A Simultaneous Distribution to Chevron/Unocal, Shell and Sun (or Shell-Zydeco Custody Meter Station)

Proposed Action: This alternative will add an Allocation Custody Transfer (ACT) flow meter skid at Shell-Zydoco that will be locally controlled, but will also operate with remote monitoring and control from Big Hill's control room.

Temporary, minor impacts anticipated for air quality (fugitive dust, increased particulate matter), noise (heavy construction equipment and vehicles) and surface water resources (soil erosion that may impact turbidity). Best management practices to mitigate impact will be implemented.

Short-term, beneficial impact anticipated for socioeconomics with potential local construction-work hiring.

No Action Alternative: This alternative does not meet mission need or functional requirements set by SPR. Big Hill will not be able to proceed with simultaneous deliveries to Shell/Zydeco Station, Phillips 66 Terminal, and Sun Terminal. Big Hill will also not have the ability to maintain its required drawdown rate.

No impacts anticipated.

BH-SP-1407/1407A Pipeline-Beaumont Terminal Flow Control

Proposed Action: This work involves the installation of remote ultrasonic flow meters at Shell, Phillips 66 and Sun Delivery Points. There is a need for a gated control station at the Shell-Zydeco Pipeline delivery point with improvements to the access road.

Temporary, minor impacts anticipated for air quality (fugitive dust, increased particulate matter), noise (heavy construction equipment and vehicles) and surface water resources (soil erosion that may impact turbidity). Best management practices to mitigate impact will be implemented.

Short-term, beneficial impact anticipated for socioeconomics with potential local construction-work hiring.

No Action Alternative: This alternative does not meet mission need or functional requirements set by SPR. Big Hill will not be able to proceed with simultaneous deliveries to Shell/Zydeco Station, Phillips 66 Terminal, and Sun Terminal. Big Hill will also not have the ability to maintain its required drawdown rate.

No impacts anticipated.

The cumulative effects analysis looked at potential geographic and temporal overlap among all work packages, including those where a CX applies. The results are similar to the analysis of the work packages that received full individual analysis; whereas there are no anticipated impacts to cultural resources, ecological resources (including threatened and endangered species), environmental justice and prime farmland/soils. There is temporal overlap of several work packages but these will only cause temporary, minor impact in the areas of air quality, noise and water resources and a temporary, minor beneficial impact on socioeconomics.

There are two Army Corps of Engineers projects occurring with temporal overlap: Calcasieu River and Pass (operations and monitoring) and the Mississippi River and Tributaries Flood Control project. The West Hackberry location would be nearest to these projects. During review of the Draft EA the Corps of Engineers confirmed they do not anticipate the SPR LE-II projects to interfere with their river work.

Mitigation: The Strategic Petroleum Reserve Life Extension Phase 2 Project Execution Plan dated June 2017 includes specifics about permitting and other mitigation activities that will be implemented while executing the proposed actions. Two areas where mitigation activities will play a direct part in alleviating impact are fugitive dust control (air quality) and soil erosion control (to protect surface water).

Determination: Based on the analysis in DOE EA/2073 (attached), the DOE has determined that the proposed actions in support of the SPR LE-II does not constitute a major federal action that would significantly affect the quality of the human or natural environment within the context of NEPA. Therefore, the preparation of an EIS will not be required and the DOE is issuing this FONSI.

Issued in New Orleans, this 26 day of April, 2018.

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