Finding of No Significant Impact
Brine Disposal Pipeline Replacement Project
Strategic Petroleum Reserve, West Hackberry Facility,
Cameron Parish, Louisiana

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) in response to a proposal to replace an existing brine disposal pipeline at the West Hackberry (WH) facility. The EA was prepared in accordance with Title 40 of the Code of Federal Regulations (CFR) Parts 1500-1508, the US Department of Energy (DOE) National Environmental Policy Act (NEPA) Implementing Procedures at 10 CFR Part 1021, Compliance with Floodplain and Wetland Environmental Review Requirements at 10 CFR Part 1022, and the SPR Project Management Office NEPA Implementation Plan approved in 2010.

Based on the findings of the EA and through implementation of mitigation measures, the DOE has determined that the proposed action will not cause a significant effect on the human environment. Direct impacts to aquatic and other ecological resources, air and water quality, and the floodplain were determined to be short-term and minor. 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 reviewed at: http://energy.gov/nepa/downloads/ea-2039-draft-environmental-assessment. Copies may also be obtained from:

US Department of Energy
Strategic Petroleum Reserve Project Office
Reading Room/Library DOE
900 Commerce Road, East
New Orleans, LA 70123
Contact: Kristen Frischhertz
Phone: (504) 734-4316
Email: Kristen.frischhertz@spr.doe.gov

For further information, contact:

Mr. Will Woods, Environmental Specialist
Strategic Petroleum Reserve
FE-4441
900 East Commerce Road
New Orleans, LA 70123
Email: Will.woods@spr.doe.gov

Description of the Proposed Action: The proposed action involves the replacement of an existing aging brine disposal pipeline which is functionally obsolete with a new pipeline that meets current industry standards for brine transport. The proposed action would involve the installation of approximately 2.1 miles of 24-inch pipeline, by open cut trenching and jack and bore techniques, to replace the existing brine disposal pipeline which would remain in place but would be removed from service. The proposed brine disposal pipeline would support the activities associated with the SPR WH facility.

Alternatives: The No Action Alternative would not facilitate upgrades to the existing aging brine disposal pipeline. Eventually, the use of the existing brine disposal pipeline would be discontinued and would need to be replaced. As the pipeline ages consistently along the 2.1 mile length, repair of selected areas of the existing pipeline is not an option. Without the brine disposal pipeline, oil in the salt caverns at the WH facilitiy could not be moved or circulated as needed.

Several proposed action alternatives were considered but eliminated from further study. The first action alternative evaluated but eliminated from consideration involved the removal of the existing brine disposal pipeline and the installation of the proposed brine disposal pipeline in the same location as the existing pipeline. This alternative was eliminated from further study as the existing brine disposal pipeline needs to remain in operation during the installation of the proposed brine disposal pipeline. This alternative would create a situation in which the WH facility would have no brine disposal capabilities for an extended period of time. This situation would prevent the WH facility from moving any petroleum products, as needed, during construction of the proposed pipeline.

The second action alternative evaluated but eliminated from consideration involved the installation of the proposed brine disposal pipeline along the existing pipeline alignment for the entire length of the project. This alternative was eliminated from further study as additional ROW between two residential structures was not available to construct the proposed brine disposal pipeline as originally configured.

The third action alternative evaluated but eliminated from consideration involved open cut pipeline installation methods along the entire length of the proposed brine disposal pipeline, including road crossings. This technique would result in road closures and detours within the proposed project area. The open cut method along the entire length of the proposed pipeline was eliminated from further consideration as there is no available detour route which would allow access to residential and industrial properties east of the pipeline alignment on Maggie Hebert Road.

The fourth action alternative evaluated but eliminated from consideration involved the use of Horizontal Directional Drilling (HDD) at road crossings and environmentally sensitive areas. HDD consists of a pipeline installation method using a wet drilling method (involving the use of water and bentonite, a non-toxic, non-hazardous natural clay material). The water and bentonite are mixed to form a drilling fluid which lubricates a drill bit as a horizontal hole is drilled beneath, for example, a roadway. The pipe is pushed through the hole without impacts to the surface of the soil aside from the HDD entrance and exit holes. Drilling spoils are removed from the drilling area at the entrance hole and stockpiled for replacement when the drilling activity is completed. Excess drilling spoil would be placed atop the construction area and graded so that pre-construction grades would be maintained. The HDD method was eliminated as an option for the placement of the new brine disposal pipeline as the pipe would require an internal concrete lining which could crack during the HDD installation process. In other words, due to the internal concrete lining, the pipe lacks the flexibility to be installed using the HDD method.

Environmental Impacts: Twelve temporary direct impacts and two temporary indirect impacts, including right-of-way acquisition and removal of mature trees within Hackberry Recreational Area, are anticipated as a result of the implementation of the proposed project. Temporary direct impacts include impacts to land use, right-of-way acquisition, soils/farmland, floodplains, surface water, waters of the United States (including wetlands), vegetation/wildlife habitat, essential fish habitat, coastal areas, parks and managed areas, public facilities, noise, and construction activities. Temporary direct and indirect impacts resulting from pipeline construction activities as well as two permanent direct impacts would not have any anticipated cumulative impacts to environmental or socioeconomic resources within the project area. The two permanent direct impacts (land use and vegetation/wildlife habitat) reflect that the installation of the pipeline would limit the land usages of the pipeline right-of-way in the future. The project has been designed to generally follow the existing pipeline corridor, minimize the size/acreage requirement for a temporary construction easement, and minimize disturbances to wooded areas along the pipeline right-of-way. Once the pipeline has been installed, the site will be returned to the original grade and allowed to revegetate.

Mitigation: Appropriate Best Management Practices (BMPs), such as dust suppression, heavy equipment maintenance, and erosion control measures will be implemented during construction to avoid impacts to air and water quality. These measures will also address impacts to aquatic resources as specified in the Stormwater Pollution Prevention Plan (SWPPP) for construction activities. Project permits will stipulate the BMPs that will be implemented and how hazardous and non-hazardous wastes will be handled and disposed. A spill response plan will be required of all DOE contractors to ensure that hazardous waste is not released into the environment.

If work is planned for the nesting season, generally September through March, a survey of the project area by a qualified biologist will be conducted following procedures prescribed by the US Fish and Wildlife Service (USFWS) prior to the construction start date.

Other mitigation measures will be assessed during the permitting phase of the project (e.g., waters of the US/wetland permitting, etc.) and implemented as per the permit requirements prior to the initiation of the proposed action.

Determination: Based on the analysis in DOE EA-2039 (attached), the DOE has determined that the proposed action to replace the existing brine disposal pipeline at the WH facility does not constitute a major federal action that would significantly affect the quality of the human or natural environment within the meaning of NEPA. Therefore, the preparation of an EIS will not be required and the DOE is issuing this FONSI.

Issued in New Orleans, this 9TH day of FEBRUARY, 2017.

William C. Gibson, Jr.

Willilam C. Gibson, Jr.
Project Manager
Strategic Petroleum Reserve