

SUPPLEMENTAL ENVIRONMENTAL IMPACT STATEMENT: SITE SELECTION FOR THE EXPANSION OF THE STRATEGIC PETROLEUM RESERVE

SUMMARY OF PUBLIC SCOPING COMMENTS

On March 5, 2008, the U.S. Department of Energy (DOE) published a notice of intent to prepare a Supplemental Environmental Impact Statement (SEIS) and conduct public scoping meetings regarding the selection of a new site for expanding the Strategic Petroleum Reserve (SPR) (73 *Federal Register* 11895]. As stated in the notice, since selecting the Richton, MS site as the location of a new SPR facility, DOE is considering different locations for the water intake structure on the Leaf River, the oil terminal in Pascagoula, and if needed, the brine disposal pipeline in the Gulf of Mexico. DOE invited interested agencies, organizations, Native American tribes, and members of the public to submit comments or suggestions to assist in identifying alternatives, significant environmental issues, and the appropriate scope of the SEIS. The public scoping comment period began on March 5 and ended on April 29, 2008. Created by ICF

DOE obtained oral comments at public scoping meetings held in New Augusta, MS on April 7, 2008, Leakesville, MS on April 8, 2008, Lucedale, MS on April 9, 2008, and Pascagoula, MS on April 10, 2008 and written comments via mail and email. Most commentors opposed using either the Leaf River or the Pascagoula River as the source of water for creating oil storage caverns. Many commentors also opposed discharging brine from cavern construction operations to the proposed location in the Gulf of Mexico. A few commentors opposed the proposed location of the oil terminal in Pascagoula. Many commentors suggested alternative locations for these facilities.

This document briefly summarizes the major comments received since the start of the scoping period through May 16, 2008. Overall, DOE has received oral testimony from 130 individuals and 350 written comment submissions. This summary is organized in the following order:

- Proposed action and alternatives,
- Geology and soils,
- Air quality,
- Water resources,
- Biological resources,
- Cultural resources,
- Safety,
- Cumulative impacts,
- Irretrievable and irreversible impacts, and
- Other.

Proposed Action and Alternatives

Source of Water

- Commentors suggested the following alternatives to the Leaf River for the raw water intake structure: the Mississippi River, the Mississippi Sound, the Gulf of Mexico, and the Tombigbee, Mobile, Yazoo, and Tennessee Rivers.
- Other suggestions include examining potential locations outside of Mississippi, such as Alabama and Mobile Bay.

- Other commentors suggested using multiple sources of water in order to lessen the impact on the primary source. They suggested using deep aquifers to the north of the Richmond salt dome and the Okatibbee Reservoir as supplementary water sources.

Brine Discharge Location

- Many commentors suggested that the brine diffuser be located farther offshore, beyond Horn Island and the Gulf Islands National Seashore. They suggested putting it at least 50 miles, and as far as 100 miles, offshore.
- Other commentors suggested that the DOE consider deep-well injection of the brine rather than releasing it into the Gulf.

Oil Terminal Location

- Commentors stated that the oil terminal should be at a location mutually agreed upon by the Port and the city of Pascagoula or at a shared location with Chevron.
- Commentors felt that the proposed facilities should be located outside of hurricane-prone areas, particularly the oil terminal.

Other Facilities

- Some commentors suggested that DOE consider the no-build alternative, citing the high cost of petroleum and the potential availability of alternative forms of energy.
- Other commentors suggested that the DOE consider another salt dome location.

Geology and Soils

- Some commentors expressed concern that the salt and soils within the Richton salt dome, the proposed location of the SPR storage facility, have radiological contamination as a result of weapons testing done underground in nearby domes and that this contamination would ultimately end up in surface waters.
- Commentors expressed concern that an earthquake would cause a major oil spill.

Air Quality

- Commentors suggested that DOE fully evaluate potential direct and indirect impacts to air quality from air emissions.

Water Resources

Raw Water Intake

- Most commentors stated that the Pascagoula River should not be used for water withdrawal, because it is a pristine, unencumbered river, and the River and its watershed should continue to be protected. They expressed concerns about the effects of water withdrawal on water depth, stream channel width, currents, and river salinity and oxygen levels.

- They also noted that the Pascagoula River already has low flow conditions because of a continued drought. Commentors stated that withdrawing water from the Pascagoula River would exacerbate periods of low flow.
- Commentors are concerned that withdrawing water from the Pascagoula may cause saltwater to flow further upstream than it currently flows.
- Commentors stated that DOE should not be able to withdraw water below a level that is protective of aquatic resources and want to know how that level will be determined. A few commentors suggested using Instream Flow Incremental Methodology (IFIM).
- Commentors noted that releases from nearby reservoirs are often needed to meet the current needs of industry. They are concerned that additional water withdrawals will worsen the problem. Commentors asked for clarification of who will have first rights to the water in times of scarcity, DOE or the already-permitted water users.
- Commentors expressed concern about potential physical damage to property along the Pascagoula River from lower water levels. Commentors asked how they would be compensated for any property damage.
- Commentors stated that freshwater supplies must be protected, as the demand for freshwater is increasing and states in the southeast are already fighting over water supplies.
- Commentors expressed concern that pumping water from the Pascagoula River would lower water tables and negatively affect wells used as water supplies.

Brine Discharge

- Commentors stated that DOE should conduct site-specific modeling to determine both the potential impacts of brine discharge at the proposed location and the best location for the brine diffuser.
- Commentors noted that the brine diffuser is proposed to be placed in a busy and shallow shipping channel and are concerned that the brine will settle into the Pascagoula Ship Channel and be transported north via ship traffic.

Biological Resources

- Commentors stated that water withdrawal from the Pascagoula River would adversely affect aquatic communities by altering the natural flow of water; impinging and entraining eggs, fry, and juvenile fish and turtles; modifying and destroying feeding, spawning, and basking habitats; and changing the temperature and chemical composition of the water, including decreasing the oxygen concentration and increasing salinity.
- Commentors stated that the using the Pascagoula River as a raw water source may adversely affect threatened and endangered species (including the yellow-blotched map turtle, Gulf sturgeon, pearl darter, black pine snake, gopher tortoise, red cockaded woodpecker, American chaffseed, green sea turtle, loggerhead turtle, leatherback turtle, and hawksbill turtle) and critical habitats, including essential fish habitat . In addition,

commentors expressed concern about potential impacts to state-listed species, including the Delicate spike, and non-endangered fish species.

- Commentors expressed concern that pipeline construction would harm migratory birds and other wildlife.
- Commentors suggested that DOE identify and examine impacts to essential fish habitat, including emergent wetlands, estuarine water column, estuarine benthic sediments, and submerged aquatic vegetation.
- Commentors expressed concern that a decrease in freshwater flow in the Pascagoula River would negatively affect the Pascagoula River estuary and the Mississippi Sound by changing essential fish habitat and leading to habitat loss.
- Some commentors expressed concern that the effect of increased salinity near the brine diffuser may ultimately create a dead zone like the one at the mouth of the Mississippi River.
- Commentors asserted that the discharge of brine would have adverse impacts to major estuarine nursery grounds, as estuarine dependent species use Horn Island Pass to migrate from the Gulf of Mexico to nursery areas in the Mississippi Sound.
- Commentors expressed concern that the sea grass beds managed by the National Park Service as part of the Gulf Islands National Seashore would be adversely affected.
- Commentors suggested that diadromous fish migration, particularly the Gulf sturgeon and Alabama shad, could be affected by impedance of migratory pathways. They suggested that DOE should consider the potential impacts to the American eel and striped bass, also diadromous fish species, as well.
- Commentors expressed concern about potential wetland degradation and loss along the pipeline right-of-ways and expressed interest in DOE's plans for wetland mitigation, particularly because wetlands currently held by The Nature Conservancy would be impacted.

Cultural Resources

- Commentors suggested that there are known archaeological resources at and around the Merrill site (the newly proposed location for the raw water intake structure on the Pascagoula River) that DOE should investigate.

Safety

- Commentors expressed concern about locating facilities in a hurricane-prone area and about terrorism.
- Commentors expressed concern that there would be pipeline leaks or spills with adverse effects to the surrounding environment, particularly wetlands.
- Commentors want to better understand the potential for spills and other accidents and how the facilities would be protected.

- Commentors expressed concern about the depth that the pipeline would be buried in the Gulf and wanted to know if the potential future need to deepen shipping channels was being considered.
- Commentors expressed concern about increased shipping activity at the Port of Pascagoula and increased potential for accidents, such as spills, fires, and explosions.

Cumulative Impacts

- Commentors expressed concern that metals and other contaminants in the brine discharge would bioaccumulate in the Gulf ecosystem.
- Commentors stated that DOE should consider the impact of unpermitted water withdrawals that currently take place, such as irrigation and livestock water, particularly during periods of low flow.
- Commentors suggested that DOE consider the cumulative impact of this project in conjunction with the following:
 - already permitted industrial water withdrawals,
 - planned ship channel dredging,
 - National Pollutant Discharge Elimination System (NPDES) discharges,
 - other existing or planned pipelines, and
 - other major projects, including liquefied natural gas facilities and the Chevron Pascagoula Refinery expansion.
- Commentors suggested that DOE consider cumulative impacts of the project on climate change and the impact of climate change on the project, including air emissions contributing to climate change and climate change-induced sea level rise and tropical cyclone activity affecting the long-term viability of the project.
- Commentors suggested that secondary and indirect impacts may include increased industrial activity, and particularly increased oil and gas infrastructure development, in the region, road construction and widening, and ship channel construction and widening.

Irreversible and Irretrievable Commitment of Resources

- Commentors stated that constructing oil storage caverns would cause irreversible and irretrievable loss of salt, which they consider a valuable economic resource.
- They suggested that the salt should be recovered, by either mining without the use of water or removing the salt in settling ponds or at a desalination plant before it is discharged.

Other

- Commentors stated that the project area is still recovering from Hurricane Katrina, and that they are concerned about further damage to the ecosystems they depend on for commerce and enjoy for recreation.

- Commentors expressed concern that the seafood industry would be harmed if the water withdrawal and brine discharge negatively affect habitats and species.
- Commentors suggest that recreational activities like canoeing, swimming, fishing, birding, scenic touring, and camping would all be adversely impacted by water withdrawal and its ecological impacts on the Pascagoula River.
- Commentors expressed concern that tourism industries, such as ecotourism, charter boats, and waterfront casinos, would be negatively impacted by potentially lower water levels in the Pascagoula River and dead zones in the Gulf of Mexico.
- Commentors suggested the need for additional public participation and local expert input into assessing the potential environmental impacts of the proposed action and alternatives.