



STATE OF MISSISSIPPI
TATE REEVES
GOVERNOR
MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY

October 4, 2022

Mr. Michael J. Varagona
Gulf LNG Liquefaction Company, LLC
Gulf LNG Energy LLC
569 Brookwood Village
Suite 749
Birmingham, Alabama 35209

Dear Mr. Varagona.:

Re: Gulf LNG Energy LLC, LNG
Clean Energy Project
Jackson County
COE No. SAM200402428DJS
WQC No. WQC2015062

Pursuant to Section 401 of the Federal Water Pollution Control Act (33 U. S. C. 1251, 1341), the Office of Pollution Control (OPC) issues this Certification, after public notice and opportunity for public hearing, to Gulf LNG Liquefaction LLC and Gulf LNG Energy LLC, an applicant for a Federal License or permit to conduct the following activity:

Gulf LNG Energy LLC, LNG Clean Energy Project: fill of 35.6 acres of wetlands, 1.06 acres of open water (0.91 acres of permanent fill and 0.15 acres of temporary fill during construction), and dredge approximately 200,000 cubic yards of material from the Mississippi Sound associated with the Gulf LNG Liquefaction Project. This activity will add liquefaction and export capabilities to Gulf LNG Energy, LLC existing terminal located in Jackson County, Mississippi. The project will allow liquefaction of domestic natural gas delivered by pipeline, storage of the liquefied natural gas in the existing LNG storage tanks and loading of the stored LNG into LNG carriers via the existing marine berthing facility. The terminal will retain its current capability to receive, store, re-gasify, and deliver natural gas into the interstate piping system, as originally constructed, thereby making the terminal bi-directional in terms of LNG import and export.

Impacts can be categorized into three parts: Project Facilities, Construction

Support Areas, and Marine Offloading Facilities.

Project Facilities: The project will require the filling of 28.0 acres of tidally influenced marsh wetlands for construction the new facilities. Of the total area of wetlands, proposed to be filled, 9.0 acres are wetlands previously utilized as compensatory mitigation for construction of the existing facility. The project facilities would include two liquefaction trains, required support utilities and infrastructure, and administrative building and parking. In addition to the proposed fill, the application would install a flare system on a single open lattice tower structure at the southeast corner of the terminal site. The flare system would be provided to dispose of excess gases associated with the maintenance, startup/shutdown, and upset plant and conditions.

Construction Support Areas (CSAs): Completion of the work would require use of six CSAs in the vicinity of the terminal. These areas would be utilized for project staging, warehouse yards, contractor offices, and parking. CSA 5 would require the filling of 7.6 acres of low-quality freshwater wetlands.

Marine Offloading Facilities (MOFs): The proposed work also includes the creation of two MOFs. The MOFs will be utilized for receipt of construction materials and equipment by barge. The proposed work would require an initial dredging of up to 100,000 cubic yards of material for the creation of each MOF. Each MOF would be dredged and maintained to a depth of -12 feet mean sea level (MSL). The North MOF dredge area is approximately 1,100 feet long and 280 feet wide. The South MOF dredge area is approximately 820 feet long by 250 feet wide. Within the North MOF, approximately 0.91 acres of open water and 0.03 acre of wetlands would be filled for construction of T-shaped dock. The North MOF structure will extend approximately 305 feet into the waterway. At the South MOF, approximately 0.15 acre of open water and 0.18 acre of wetlands would be filled for construction of the dock. The South MOF structure would extend 75 feet into the waterway. All fill material would be contained by vertical sheet pile. The North MOF is proposed as a permanent structure while the South MOF will only be used during construction and dismantled after construction is complete. Maintenance dredging of the MOFs is proposed throughout the construction period. It is expected that up to 10,000 cubic yards of material may be deposited per year and dredging may occur on irregular cycles as determined necessary. All dredged material is proposed for disposal in an USACE-approved, state-operated disposal site designated for beneficial use. No dredging will occur within the limits of the Bayou Cassotte Navigation Channel.

Mitigation will be achieved through 50 acres of marsh creation to the south side of the proposed expanded terminal. Construction of the tidal marsh area

would require approximately 323,000 cubic yards of fill material and 22,000 cubic yards of rip rap for armoring. The fill material would be obtained from the Tombigbee Project – Mobile River USACE BU site provided materials are still available at the time of construction and permits and permission can be obtained. The applicant would need to obtain a lease from the Mississippi Secretary of State and likely a sublease from the Port Authority for use of this site. [SAM200402428DJS, WQC2015062].

The Office of Pollution Control certifies that the above-described activity will follow the applicable provisions of Sections 301, 302, 303, 306, and 307 of the Federal Water Pollution Control Act and Section 49-17-29 of the Mississippi Code of 1972, if the applicant complies with the following conditions:

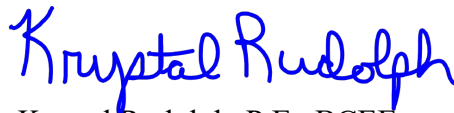
1. Best management practices shall be used during construction to minimize turbidity at dredge and mitigation sites. The restoration sites shall be constructed and maintained in a manner that minimizes the discharge of turbid waters into waters of the Mississippi Sound and surrounding areas. Best management practices should include, but not limited to, staked filter cloth; sodding, seeding, and mulching; staged construction; and the installation of turbidity screens around the immediate project area.
2. No sumps shall be created in open waters by proposed the proposed dredging or placement of fill material in the mitigation area. The water bottom elevations shall gradually decrease to open water.
3. Sediment testing for approval of material placement shall be done in accordance with protocols established by the Beneficial Use Group as part of the Beneficial Use Program within the Department of Marine Resources.
4. Pilings and/or bulkhead material shall be steel, concrete, plastic, vinyl, or timber treated to meet appropriate marine conditions. No creosote materials shall be used.
5. The approved mitigation plan submitted to the U.S. Army Corps of Engineers, the Department of Marine Resources, and the Department of Environmental Quality shall be implemented as proposed (dated August 2018). The permittee responsible mitigation areas shall be held in public trust by the Secretary of State as required by state law. All terms of the approved mitigation plan shall be met.

6. Coverage under a Large Construction Storm Water General NPDES Permit shall be obtained prior to the start of construction activities. **No construction activities shall begin until such approvals are obtained.**
7. Prior to construction of any equipment that may emit air pollutants, the applicant must evaluate the air emissions to determine if an Air Permit to Construct and/or Operate is required per 11 Miss. Admin. Code Pt. 2, Chapter 2, Mississippi Commission on Environmental Quality, Permit Regulations for the Construction and/or Operation of Air Emissions Equipment (Adopted May 8, 1970; Last Amended July 28, 2005). If a permit is required, the permittee must submit an application to the MDEQ and comply with all applicable parts of the regulation.
8. Turbidity outside the limits of a 750-foot mixing zone shall not exceed the ambient turbidity by more than 50 Nephelometric Turbidity Units.
9. No sewage, oil, refuse, or other pollutants shall be discharged into the watercourse.

The Office of Pollution Control also certifies that there are no limitations under Section 302 nor standards under Sections 306 and 307 of the Federal Water Pollution Control Act which are applicable to the applicant's above-described activity.

This certification is valid for the project as proposed. Any deviations without proper modifications and/or approvals may result in a violation of the 401 Water Quality Certification. If you have any questions, please contact Florance Bass of my staff.

Sincerely,



Krystal Rudolph, P.E., BCEE
Chief, Environmental Permits Division

KR: FB

cc: Philip A. Hegji, U.S. Army Corps of Engineers, Mobile District
Willa Brantley, Department of Marine Resources
Mr. Paul Necaise, U.S. Fish and Wildlife Service
Mr. Bill Ainslie, Environmental Protection Agency