



STATE OF MISSISSIPPI
PHIL BRYANT
GOVERNOR
MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY
GARY C. RIKARD, EXECUTIVE DIRECTOR

January 28, 2019

Certified Mail No.7017 0530 0000 5971 7435
Mr. Rudolph C. Villarreal
USACE, Regulatory Division
U.S. Army Corps. of Engineers, Mobile District
PO Box 2288
Mobile, Alabama 36628

Dear Mr. Villarreal:

Re: US Army COE, Mobile District,
MSGP-18
COE No. SAM201701110RCV
WQC No. WQC2018056

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 U.S. Army Corps. Of Engineers, Mobile District, an applicant for a Federal License or permit to conduct the following activity:

US Army COE, Mobile District, MSGP-18: This project proposes to place fill material within previously existing inshore reefs off the coast of Mississippi for Hancock, Harrison, and Jackson counties. The purpose of the fill material is to enhance and fortify the 67 existing inshore artificial reefs that have been depleted because of adverse effects. The reefs are intended to benefit from this project by creating and enhancing a habitat that will support and sustain healthy population of estuarine fish and other invertebrates. The fill material will consist of crushed concrete, oyster shell, or limestone. [SAM201701110RCV, WQC2018056].

MSGP-18 – Inshore Reefs:

This permit authorizes the placement of fill to enhance and fortify 67 existing inshore artificial reefs. Each reef is approximately 10 acres per site for a total of 670 acres in Mississippi waters throughout the three coastal counties. These reefs have been depleted because of a multitude of adverse effects, stemming from natural causes such as subsidence. The replenishment of these reefs is expected to create and

enhance valuable near shore reef habitat that will support and sustain healthy populations of estuarine fish and other invertebrates. These low-profile reefs consist of oyster shell, crushed concrete, or limestone.

Placement of fill: There are no structures being constructed at or above mean low water. The proposed reef materials will be completely submerged in approximately 4-8 feet of water and located waterward of the mean low water line at all times. Relief of reef materials deployed on the sea floor will be less than 6 vertical inches.

Construction Method: Reef material shall be transported to deployment areas on shallow draft barges that are loaded to conform to the depth of the water at each specific deployment site. Reef material shall consist of crushed concrete, oyster shells, or limestone. Deployment vessels (loaded) shall draw no more than one (1) foot less the depth of water column in which the cultch material will be deployed. The deployment will be performed utilizing a grid pattern to accomplish a uniform distribution of the reef material. To ensure proper maneuverability.

Monitoring: MDMR employees will be onsite to monitor compliance with the terms of the contract. This will include the even distribution of reef material during the deployment at locations specified by the MDMR. Reef material will be deployed by clamshell and/or excavator bucket. Throughout the operation, vessels will be maneuvered over the deployment location in a fashion so that reef material will cover the entire area to the needed density as determined by appropriate MDMR personnel, which will be less than 6 inches of relief. Deployment shall be accomplished only during daylight hours. At no time will the deployment vessels pass outside of the permitted area or over previously deployed areas unless authorized to do so by the MDMR personnel.

Project Location: Project locations consist of fifty-three sites are located within the Mississippi Sound with 14 other sites in adjacent state waters.

Conditions: 1. This general permit does not authorize new reef construction. 2. Reef structures shall not create a navigational hazard. 3. Telemetry studies, to assure relief of reef materials deployed on the sea floor will be less than 6 vertical inches, may be required prior to permit issuance. 4. Fill quantity and placement shall be limited to the minimum amount necessary to achieve reef enhancement. 5. Crushed concrete, oyster shell, or limestone shall be placed in a manner to prevent its migration to surrounding areas and should be placed on a stable substrate to avoid sinking. 6. Concrete/ Crushed Limestone: Cured concrete used in fabricated units specifically designed for artificial reefs or rubble razed from buildings, sidewalks, roadways and bridges may be used in reef construction provided it is clean of solid waste and other construction debris. "Green" or uncured concrete is not authorized as it may be toxic to some aquatic organisms. 7. At no time will the deployment vessels pass outside of the permitted area or over previously deployed areas unless authorized to do so by the MDMR personnel.

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Coordination: Markers and Signage: All reef complexes must display proper signage, markers and/or lighting to inform waterway users of their presence and in accordance with the United States Coast Guard.

The Office of Pollution Control certifies that the above-described activity will be in compliance with 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. Material shall be clean and non-polluting, free of trash, debris, asphalt, etc.
2. Turbidity outside the limits of a 750-foot mixing zone shall not exceed the ambient turbidity by more than 50 Nephelometric Turbidity Units.
3. 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 we can be of further assistance, please contact us.

Sincerely,



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

KR: bgw

cc: Allison F. Monroe, U.S. Army Corps of Engineers, COE-Mobile-S District
Willa Brantley, Department of Marine Resources
Paul Necaie, U.S. Fish and Wildlife Service
Bill Ainslie, Environmental Protection Agency