

United States Department of the Interior

BUREAU OF OCEAN ENERGY MANAGEMENT

Gulf of Mexico OCS Region 1201 Elmwood Park Boulevard New Orleans, LA 70123-2394

In Reply Refer To: GM 235D November 13, 2020

Ms. Teri Halverson Arena Offshore, LP 4200 Research Forest Drive Suite 230 The Woodlands, Texas 77381

Dear Ms. Halverson,

Reference is made to the following plan:

Control No. S-8004

Type Supplemental Development Operations Coordination Document Received March 11, 2020, amended June 17, 19, and August 10, 2020

Lease(s) OCS-G 03331, Block 251, Eugene Island Area (EI)

OCS-G 36208, Block 261, Eugene Island Area (EI) OCS-G 36209, Block 262, Eugene Island Area (EI)

You are hereby notified that the approval of the subject plan has been granted as of October 8, 2020, in accordance with 30 CFR 550.270(b)(1).

This approval includes the activities proposed for Wells A012 and A014 in EI Block 251, Wells A010 and A015 in EI Block 261, and Wells A001, A003, A013, and A016 in EI Block 262 and the revision of air emissions for Platform A (Complex ID 22164) in EI Block 251.

In accordance with 30 CFR 556.901(d), additional security may be required for your proposed activities. Prior to conducting activities in which you need to obtain approvals and/or permits described in 30 CFR 550.281(a) from the appropriate District Manager or BSEE Regional Supervisor, you must contact BOEM Risk Management Operations Group by email at boemrmog@boem.gov to determine if additional security is required and comply with any demand for this security.

Our review indicates that there are pipelines in the vicinity of your Wells and Platform A that may pose a hazard to your proposed operations. Therefore, take precautions in accordance with Notice to Lessees and Operators No. 2008-G05, Section VI.B, prior to performing operations.

In response to the request accompanying your plan for a hydrogen sulfide (H₂S) classification, the area in which the proposed drilling operations are to be conducted is hereby classified, in accordance with 30 CFR 250.490(c), as "H₂S absent."

Exercise caution while drilling due to indications of shallow gas and faulting.

You must comply with the following species protective measures in all activities conducted pursuant to the plan:

- COMPLIANCE WITH BIOLOGICAL OPINION TERMS AND CONDITIONS AND REASONABLE AND PRUDENT MEASURES: This approval is conditioned upon compliance with the Reasonable and Prudent Measures and implementing Terms and Conditions of the Biological Opinion issued by the National Marine Fisheries Service (NMFS) on March 13, 2020. This includes mitigation, particularly any appendices to Terms and Conditions applicable to the plan, as well as record-keeping and reporting sufficient to allow BOEM and BSEE to comply with reporting and monitoring requirements under the Biological Opinion; and any additional reporting required by BOEM or BSEE developed as a result of Biological Opinion implementation. The NMFS Biological Opinion may be found here:

 https://www.fisheries.noaa.gov/resource/document/biological-opinion-federally-regulated-oil-and-gas-program-activities-gulf-mexico. The Appendices and protocols may be found here:

 https://www.fisheries.noaa.gov/resource/document/appendices-biological-opinion-federally-regulated-oil-and-gas-program-gulf-mexico.
- SUPPORT BASES AND VESSEL TRANSIT ROUTES: Approval of your plan is conditioned upon your use of the support bases and vessel transit routes as described in your plan. BOEM/BSEE must be notified at least 15 days prior to any vessel route changes that require transit of the Bryde's Whale area, and you must receive prior approval for that transit from BOEM/BSEE.
- MARINE TRASH AND DEBRIS AWARENESS AND ELIMINATION: The
 applicant will follow the guidance provided under Appendix B. Gulf of Mexico Marine
 Trash and Debris Awareness and Elimination Survey Protocols found in the Biological
 Opinion issued by NMFS on March 13, 2020. The guidance can be accessed on the
 National Oceanic and Atmospheric Administration (NOAA) Fisheries internet site at
 https://www.fisheries.noaa.gov/resource/document/appendices-biological-opinion-federally-regulated-oil-and-gas-program-gulf-mexico.
- VESSEL-STRIKE AVOIDANCE/REPORTING: The applicant will follow the
 guidance provided under Appendix C. Gulf of Mexico Vessel Strike Avoidance and
 Injured/Dead Aquatic Protected Species Reporting Protocols found in the Biological
 Opinion issued by NMFS on March 13, 2020. The guidance can be accessed on the
 NOAA Fisheries internet site at
 https://www.fisheries.noaa.gov/resource/document/appendices-biological-opinion-federally-regulated-oil-and-gas-program-gulf-mexico.
- SEISMIC SURVEY OPERATION, MONITORING, AND REPORTING GUIDELINES: The applicant will follow the guidance provided under Appendix A. Seismic Survey Mitigation and Protected Species Observer Protocols found in the Biological Opinion issued by NMFS on March 13, 2020. The guidance can be accessed on the NOAA Fisheries internet site at https://www.fisheries.noaa.gov/resource/document/appendices-biological-opinion-federally-regulated-oil-and-gas-program-gulf-mexico.

The following measures regarding pile driving shall also be taken by the applicant:

- Establish an Exclusion Zone of 157 meters and Monitoring Zone of 500 meters. Monitoring by a dedicated observer, which would have no other tasks, must take place from 30 minutes prior to initiation of pile driving activity through 30 minutes post-completion of pile driving activity.
- Initiate and conduct pile driving only during daylight hours, as practicable. Use lights to
 monitor the exclusion zone during times when visibility is limited due to dark, rain, fog,
 etc.
- Use soft start techniques when initiating pile driving. Soft start requires the operator to provide an initial set of strikes at reduced energy, followed by a thirty second waiting period, then two subsequent reduced energy strike sets. A soft start must be implemented at the start of each day's pile driving and at any time following cessation of impact pile driving for a period of 30 minutes or longer.
- Delay pile driving if an Endangered Species Act (ESA) listed species is observed entering or within the Exclusion Zone within 30 minutes prior to commencement of pile driving. If a delay is called for based on an ESA listed species entering or within the Exclusion Zone, pile driving may not commence until either the animal has voluntarily left and been visually confirmed beyond the Exclusion Zone or 30 minutes have elapsed without subsequent detection.
- Shut down pile driving if an ESA listed species is observed entering or within the Exclusion Zone while pile driving is underway, except when shutdown would jeopardize human safety or the stability of the pile being driven. Pile driving may not commence following shutdown until either the animal has voluntarily left and been visually confirmed beyond the Exclusion Zone or 30 minutes have elapsed without subsequent detection.
- In advance of the pile driving activity, the designated, dedicated observers shall provide an email and/or resume package describing qualifications to BSEE at protectedspecies@bsee.gov and NMFS at nmfs.psoreview@noaa.gov for approval in the observer role. Qualifications shall include background experience, training and/or education appropriate for fulfilling the role as an observer of ESA listed species.
- Specifics of the pile driving activity and reasoning for why a shutdown could not occur should be communicated to the observer and reported in the post activity report sent to BSEE and NMFS.
- Report any observations of ESA listed species and report any mitigation actions that were
 undertaken in response to observations of ESA listed species (i.e., postponing ramp up or
 shutting down due to presence of ESA listed species in the exclusion zone) to BSEE
 at <u>protectedspecies@bsee.gov</u> and to NMFS at <u>nmfs.psoreview@noaa.gov</u> after
 operations have ceased.

These measures are designed to promote environmental protection, consistent environmental policy, compliance with environmental laws, and safety.

If you have any questions or comments concerning this approval, please contact Chiquita Hill at (504)736-2668.

Sincerely,

for Bernadette Thomas Regional Supervisor Office of Leasing and Plans