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UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF OCEAN ENERGY MANAGEMENT

(Insert Appropriate Regional Office)

Requirements for Geological and Geophysical Explorations or Scientific Research on the Outer Continental Shelf

Application for Permit to Conduct Geological or Geophysical **Exploration for Mineral Resources or Scientific Research on** the Outer Continental Shelf

(Attachment 1)

Nonexclusive Use Agreement for ScientificResearch on the Outer Continental Shelf (Attachment 2)

SUBMIT: One original, one copy of the original, one digital copy, and one public copy (all with original signatures).

Paperwork Reduction Act of 1995 (PRA) Statement: The PRA (44 U.S.C. 3501 et seq.) requires us to inform you that the Bureau of Ocean Energy Management (BOEM) collects this information to evaluate applications for permits to conduct pre-lease exploration offshore and to monitor activities of scientific research conducted under notices. BOEM uses the information to ensure there is no environmental degradation, personnel harm, damage to historical or cultural sites, or interference with other uses. Responses are mandatory or to obtain or retain a benefit. Proprietary information is protected in accordance with standards established by the Federal Oil and Gas Royalty Management Act of 1982 (30 U.S.C. 1733), the Freedom of Information Act (5 U.S.C. 552(1), (4)), and Department regulations (43 CFR 2). An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid Office of Management and Budget control number. The reporting burden for this form is estimated to average 300 hours per response in the Gulf of Mexico Region and 1,000 hours per response for applications in the Pacific, Alaska, and Atlantic OCS due to NEPA requirements. Much of the work to comply with NEPA requirements has already been done in the Gulf; however, for areas outside the Gulf, BOEM is accounting for the total time expended to compile and submit the necessary information to obtain the required authorizations to acquire a BOEM permit. This includes the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect of this form to the Information Collection Clearance Officer, Bureau of Ocean Energy Management, 45600 Woodland Road, Sterling, VA 20166.

Form BOEM-0327 (January 2021) Previous Editions are Obsolete. In accordance with 5 CFR 1320.10, BOEM is authorized to continue sponsoring this collection of information while the renewal submission is pending with OMB.

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UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF OCEAN ENERGY MANAGEMENT

REQUIREMENTS FOR GEOLOGICAL AND GEOPHYSICAL EXPLORATIONS OR SCIENTIFIC RESEARCH ON THE OUTER CONTINENTAL SHELF

Authority

You must perform all geological and geophysical explorations or scientific research activities authorized and conducted in the Outer Continental Shelf (OCS) according to the OCS Lands Act, 30 CFR Parts 551, 251, and other applicable Federal statutes and regulations, and amendments thereto.

General Requirements of Permits and Notices

You must conduct geological and geophysical activities for mineral exploration or scientific research activities authorized under 30 CFR Parts 551, 251, and in compliance with all applicable mitigation measures so that those activities do not:

- A. Interfere with or endanger operations under any lease or right-of-way or permit issued or maintained pursuant to the OCS Lands Act;
- B. Cause harm or damage to aquatic life or to the marine, coastal, or human environment;
- C. Cause pollution;
- D. Create hazardous or unsafe conditions;
- E. Unreasonably interfere with or harm other uses of the area (including submarine cables); or
- F. Disturb archaeological resources.

Any person conducting geological or geophysical activities for mineral exploration or scientific research under 30 CFR Parts 551 and 251 must immediately report to the Regional Director, BOEM:

- A. Detection of hydrocarbon occurrences;
- B. Encounters of environmental hazards that constitute an imminent threat to human activity; or

C. Activities that adversely affect the environment, aquatic life, archaeological resources, or other uses of the area in which the exploration or scientific research activities are conducted.

Any person conducting shallow or deep stratigraphic test drilling activities under a permit for mineral exploration or scientific research under 30 CFR Parts 551 and 251 must utilize the best available and safest technologies.

The authorization that BOEM grants you under 30 CFR Parts 551 and 251 to conduct geological and geophysical explorations for minerals or for scientific research does not confer a right to any discovered oil, gas, or other minerals, or to a lease under the OCS Lands Act.

Time Restriction for Permits and Notices

Permitted activities approved for a specified period, including requests for extensions, and activities under a notice may not exceed 1 year.

Geological and Geophysical Activities Requiring Permits and Notices

Geological and Geophysical Explorations for Mineral Resources

You may not conduct geological and geophysical explorations for mineral resources in the OCS without an approved permit unless you conduct such activities pursuant to a lease issued or maintained under the OCS Lands Act. You must obtain separate permits for either geological or geophysical explorations for mineral resources. If BOEM disapproves an application, the statement of rejection will state the reasons for the denial and will advise the applicant of those changes needed to obtain approval.

Geological and Geophysical Scientific Research

You may not conduct geological and geophysical scientific research related to oil, gas, and sulphur in the OCS without an approved application for permit or filing of a notice. You must obtain separate permits for geological and geophysical scientific research that involves the use of solid or liquid explosives or the drilling of a deep stratigraphic test. If BOEM disapproves an application for permit, the statement of rejection will state the reasons for the denial and will advise the applicant of the changes needed to obtain approval.

You must file a notice with BOEM at least 30 days before you begin scientific research not requiring a permit. We may inform you of all environmental laws and regulations pertaining to the OCS. BOEM recommends that you submit your notice 90-120 days prior to beginning your work to ensure timely review of your notice by BOEM.

Information Required for Permits

Each applicant for a permit must complete the applicable sections of the Application for Permit (Attachment 1) and must include a public-information, page-size plat(s) showing the location of the proposed area of activity (Section B.2 or C.2 of Attachment 1). In addition, each applicant for a geological or geophysical permit must submit the appropriate attachment to section D of the Application. This includes a detailed map of the proposed activity for Section D.8 (Geological Application) or Section D.12 (Geophysical Application). Only applicants for a notice of scientific research must complete a Nonexclusive Use Agreement (Attachment 2).

The information provided on the Application for Permit (excluding section D) and on the Nonexclusive Use Agreement, including continuation sheets and the page-size plat(s), is considered NON-PROPRIETARY INFORMATION. These non-proprietary portions of the application constitute the "public information" copy of Form BOEM-0327 and with the executed permit will be available to the public upon request.

The information listed in Section D is considered PROPRIETARY INFORMATION and you should NOT attach it to the public information copy. BOEM will not make this information available to the public without the consent of the potential permittee or for a period mandated by law or regulation. However, BOEM may determine that earlier release is necessary for the proper development of the area permitted.

Modifications to Approved Permits

The BOEM Regional Supervisor must approve any modification to the permitted operations.

Filing Locations for Permits to Conduct Explorations for Mineral Resources and for Permits or Notices to Conduct Scientific Research

File one original, one copy of the original, one digital copy, and one public copy (all with original signatures) at the following locations at least 30 days before you begin operations. BOEM recommends that you submit your notice or application 90-120 days prior to beginning your work to ensure timely review of your notice by BOEM.

A. For the OCS off the State of Alaska:

Regional Supervisor for Resource Evaluation Bureau of Ocean Energy Management Alaska OCS Region 3801 Centerpoint Drive Suite #500 Anchorage, Alaska 99503-5823

B. For the OCS in the Gulf of Mexico and off the Atlantic Coast:

Regional Supervisor for Resource Evaluation Bureau of Ocean Energy Management Gulf of Mexico OCS Region 1201 Elmwood Park Boulevard New Orleans, Louisiana 70123-2394

C. For the OCS off the States of California, Oregon, Washington, or Hawaii:

Regional Supervisor, Office of Strategic Resources Bureau of Ocean Energy Management Pacific OCS Region 760 Paseo Camarillo Suite #102 Camarillo, California 93010-6092

Attachment 1

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF OCEAN ENERGY MANAGEMENT

(select one)

(Insert Appropriate Regional Office)

APPLICATION FOR PERMIT TO CONDUCT GEOLOGICAL OR GEOPHYSICAL EXPLORATION FOR MINERAL RESOURCES OR SCIENTIFIC RESEARCH ON THE OUTER CONTINENTAL SHELF

(Section 11, Outer Continental Shelf Lands Act of August 7, 1953, as amended on September 18, 1978, by Public Law 95-372, 92 Statute 629, 43 U.S.C. 1340; and 30 CFR Parts 551 and 251)

Name of Applicant

Number and Street

City, State, and Zip Code

Application is made for the following activity: (check one)

Geological exploration for mineral resources

Geological scientific research

Geophysical exploration for mineral resources

Geophysical scientific research

Submit: Original plus three copies, totaling four copies, which include one copy of the original, one digital copy, and one public copy (all with original signatures).

To be completed by BOEM

Permit Number:

Date:

A. General Information

1. The activity will be conducted by:

| | | For | | | | |
|----|--|-------------------------------------|---|--|--|--|
| | Service Company Name | | Purchaser(s) of the Data | | | |
| | Address | - | Address | | | |
| | City, State, Zip | _ | City, State, Zip | | | |
| | Telephone/FAX Numbers | _ | Telephone/FAX Numbers | | | |
| | E-Mail Address | _ | E-Mail Address | | | |
| 2. | The purpose of the activity is: | Mine | Mineral exploration | | | |
| | | Scie | ntific research | | | |
| _ | Species Observers (PSO's), mammal exclu | et: Excess sion zon oottom no | sive sound level Mitigation; Soft Start, Protected e or 2) Potential Effect: Bottom disturbance; odes) (use continuation sheets as necessary or | | | |
| 4. | The expected commencement date is: | | | | | |
| | The expected completion date is: | | | | | |
| 5. | The name of the individual(s) in charge of the field operation is: | | | | | |
| | May be contacted at: | | | | | |
| | Telephone (Local) | (N | Marine) | | | |
| | Email Address: | | | | | |

6 The vessel(s) to be used in the operation is (are):

| Vessel Name (s) | Vessel Model | Registry Number(s) | Radio Call Sign(s) | Registered Owner(s) |
|-----------------|--------------|--------------------|--------------------|---------------------|
|-----------------|--------------|--------------------|--------------------|---------------------|

- 7. The port from which the vessel(s) will operate is:
- 8. Briefly describe the navigation system (vessel navigation only):

B. Complete for Geological Exploration for Mineral Resources or Geological Scientific Research

- 1. The type of operation(s) to be employed is: (check one)
 - a. _____ Deep stratigraphic test, or
 b. _____ Shallow stratigraphic test with proposed total depth of _____, or
 c. _____ Other
- 2 Attach a page-size plat showing: 1) The generalized proposed location for each test, where appropriate, a polygon enclosing the test sites may be used; 2) BOEM protraction areas, coastline, point of reference, OCS boundary/3-mile limit; 3) Distance and direction from a point of reference to area of Activity; and 4) Label as "**Public Information**".

C. Complete for Geophysical Exploration for Mineral Resources or Geophysical Scientific Research

- 2 Attach a page-size plat showing:
 - a. The generalized proposed location of the activity with a representative polygon;
 - b. BOEM protraction areas, coastline, point of reference, OCS boundary/3- mile limit;
 - c. Distance and direction from a point of reference to area of activity;
 - d. Label as "Public Information"; and

e. Submit relevant shape files needed to recreate the map as part of the required digital copy.

3. List all energy source types to be used in the operation(s): (Air gun, air gun array(s), sub-bottom profiler, sparker, towed dipole, side scan sonar, etc.).

4. Explosive charges will _____will not _____be used. If applicable, indicate the type of Explosive and maximum charge size (in pounds) to be used:

 Type
 Pounds
 Equivalent Pounds of TNT

D. Proprietary Information Attachments

Use the appropriate form on page 9 for a "geological" permit application or the form on page 11 for a "geophysical" permit application. You must submit a separate Form BOEM-0327 to apply for each geological or geophysical permit.

E. Certification

I hereby certify that foregoing and attached information are true and correct.

| Print Name: | | | |
|-----------------------|-------------------------------|---------------------|--------------|
| SIGNED | | DATE | |
| TITLE | | | |
| COMPANY NAM | E: | | |
| === | | | ===== |
| | | | |
| | TO BE COMPLE | TED BY BOEM | |
| ermit No | Assigned by | of BOFM | Date |
| his application is he | | | |
| a Accepte | ed | | |
| b Returne | d for reasons in the attached | | |
| SIGNED | TITLE | Regional Supervisor | DATE |
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Section D Proprietary Information Attachment Required for an Application for Geological Permit

Description of proposed coring, drilling or sampling method. Include heat flow measurements 1 and depth of penetration. Description of coring, drilling or sampling equipment to be used: 2 List proposed coring, drilling or sample location(s) with their latitude and longitude coordinates and the total number of samples to be acquired. These locations may be sent digitally on a CD. (Attach 3. separate page if necessary): Navigation system or method to be used to position sample locations: Δ Method of sample storage, and handling: 5 List each test to be conducted on the samples with a brief description of its objective: 6 Estimated date on which samples, logs, and analyzed and/or processed data will be ready for 7. inspection:

8 Attach map(s), plat(s), and chart(s) (preferably at a scale of 1:250,000) and/or an electronic version of same showing latitude and longitude, scale, protraction areas, specific block numbers, OCS boundary/3-mile limit, and specific sample location(s) in latitude(s) and longitude(s) for each of the proposed sample sites(s). The map, plat or chart should be submitted at a sufficient size and scale to make out all details of the activities shown. Label the hardcopy map "**Proprietary**." Along with the hardcopy map, submit on CD, the ArcGIS shape files needed to reproduce the map of the proposed sample site(s) including site names in the attribute table.

Section D Proprietary Information Attachment Required for an Application for Geophysical Permit

Please provide the information in an attached document labeled **BOEM-0327 Section D Proprietary Information Attachment**.

- 1. Attach detailed narrative and description of the energy source(s) and receiving array.
- 2. Attach a map view diagram/schematic that illustrates vessel(s) source and receiver(s) configuration. Label each vessel indicating its function and include the dimensions of streamer(s), tow fish, etc. Indicate the number of chase and alternate vessels to be used.
- 3. List each energy source to be used (e.g., airgun, airgun array(s), sparker, towed dipole, side scan sonar, sub bottom profiler, etc.). Indicate the source's manufacturer, model, Source Level (SL) in dB re 1μPa @1m in water (RMS) and if applicable, Source Level (SL) in dB re 1μPa @1m in water (Peak to Peak) and ping rate. If the manufacturer does not provide a peak to peak level (many side scan sonars, etc.), please enter N/A. Additionally, provide the operational frequency ranges.

| Energy Source | Manufacturer | Model | Array or Airgun Size (cu. in.) | Source Level (SL) in dB re 1µPa@1m in water (RMS) | Source Level (SL) in dB re 1µPa@1m in water (Peak to Peak) | Frequency (Hz, kHz range) | Ping Duration/ Cycle | Ping Rate |
|------------------|--------------|-------|-----------------------------------|--|--|---------------------------------|----------------------------|-----------|
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

For air guns/air gun arrays (excludes multibeam bathymetry, high frequency subbottom profilers, and side scan sonar systems), provide the maximum distance from the sound source to the 190, 180, and 160 dB in RMS dB levels: (Required for Alaska region, GOM region only requires this information for surveys in the GOM that will use simsource during acquisition; Not required for Atlantic permits).

| dB level | Maximum Distance from Source |
|----------|------------------------------|
| 190 dB | |
| 180 dB | |
| 160 dB | |

4. State the shot frequency of the source array(s) as shots per minute or shots per linear mile (statute):

- 5. List the towing depth (ft/m) of the source array(s):
- 6. If applicable, list the towing depth (ft/m) of the receiver(s):
- 7. CSEM, OBN, Magnetotelluric, and OBC surveys: Describe the receiver deployment and retrieval procedures. Indicate the number and spacing of anyocean bottom receivers, cables, and anchors. If anchors will not be retrieved, provide theirphysical composition and rate of decomposition.
- 8. List the navigation/positioning system or method used to position shotpoint locations and/or ocean bottom receivers:
- 9. Proposed areal extent (in OCS blocks) for 3D surveys or total number of line miles for 2D surveys:
- 10. Provide the company identification name of the proposed survey (e.g., Deep Six Survey) and list all proposed initial and final processed data sets that will result from survey acquisition.
- 11. State the estimated date (month and year) on which initial and final processing will be available for all proposed processed data sets:
- 12. Attach map(s), plat(s), and chart(s) (preferably at a scale of 1:250,000) and an electronic version of same showing latitude and longitude, scale, specific protraction areas, OCS boundary/3-mile limit, block numbers. The map, plat or chart should be submitted at a sufficient size and scale to make out all details of the activities shown. The map should be labeled "**Proprietary**." For 2D data acquisition provide specific track lines with line identifications with the total number of line miles proposed or a representative polygon and total number of blocks for 3D surveys. Along with the hardcopy map, submit on CD or flashdrive (subject to security screening), the necessary ArcGIS shape files to reproduce the map for 2D track lines including individual line names in the attribute table. For 3D surveys provide a representative polygon as an ArcGIS shape file. You must provide a shapefile data set of the latitude/longitude location for all track lines, shot lines, and node placements. This can be submitted at a later time but must be received before activities can take place.

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF OCEAN ENERGY MANAGEMENT

Pacific OCS Region

(Insert Appropriate Regional Office)

NONEXCLUSIVE USE AGREEMENT FOR SCIENTIFIC RESEARCH ON THE OUTER CONTINENTAL SHELF

A. State the time and manner in which data and information resulting from the proposed activity will be made available to the public for inspection and reproduction, such time being the earliest practicable time.

B. (applicant) agrees that the data and information resulting from the proposed activity will not be sold or withheld for exclusive use.

(Signature of Applicant)

(Type or Print Name of Applicant)

(Title)

(Date)

Submit: One original, one copy of the original, one digital copy, and one public copy (all with original signatures).