impacts sustained from the environment of use.

FDA has identified the following risks to health associated specifically with this type of device and the measures required to mitigate these risks in table 1.

TABLE 1—EXTERNAL COMPRESSION DEVICE FOR INTERNAL JUGULAR VEIN COMPRESSION RISKS AND MITIGATION MEASURES

Identified risks to health	Mitigation measures
Syncope due to excessive compression	Non-clinical performance testing.
Use error, interference with other equipment, or ineffective treatment leading to impact-related trauma or injury.	Human factors testing, and Labeling.
Adverse tissue reaction	Biocompatibility evaluation.

FDA has determined that special controls, in combination with the general controls, address these risks to health and provide reasonable assurance of safety and effectiveness. For a device to fall within this classification, and thus avoid automatic classification in class III, it would have to comply with the special controls named in this final order. The necessary special controls appear in the regulation codified by this order. This device is subject to premarket notification requirements under section 510(k) of the FD&C Act.

III. Analysis of Environmental Impact

The Agency has determined under 21 CFR 25.34(b) that this action is of a type that does not individually or cumulatively have a significant effect on the human environment. Therefore, neither an environmental assessment nor an environmental impact statement is required.

IV. Paperwork Reduction Act of 1995

This final order establishes special controls that refer to previously approved collections of information found in other FDA regulations and guidance. These collections of information are subject to review by the Office of Management and Budget (OMB) under the Paperwork Reduction Act of 1995 (44 U.S.C. 3501–3521). The collections of information in part 860, subpart D, regarding De Novo classification have been approved under OMB control number 0910–0844; the collections of information in 21 CFR part 814, subparts A through E, regarding premarket approval, have been approved under OMB control number 0910–0231; the collections of information in part 807, subpart E, regarding premarket notification submissions, have been approved under OMB control number 0910–0120; the collections of information in 21 CFR part 820, regarding quality system regulation, have been approved under OMB control number 0910–0073; and the collections of information in 21 CFR part 801, regarding labeling, have been approved under OMB control number 0910–0485.

List of Subjects in 21 CFR Part 890

Medical devices.

Therefore, under the Federal Food, Drug, and Cosmetic Act and under authority delegated to the Commissioner of Food and Drugs, 21 CFR part 890 is amended as follows:

PART 890—PHYSICAL MEDICINE DEVICES

■ 1. The authority citation for part 890 continues to read as follows:

Authority: 21 U.S.C. 351, 360, 360c, 360e, 360j, 360l, 371.

■ 2. Add § 890.3050 to read as follows:

§ 890.3050 External compression device for internal jugular vein compression.

(a) *Identification.* An external compression device for internal jugular vein compression is a non-invasive device that is intended to increase intracranial blood volume to reduce the occurrence of specific changes in the brain following head impacts sustained from the environment of use.

(b) *Classification.* Class II (special controls). The special controls for this device are:

(1) The patient-contacting components of the device must be demonstrated to be biocompatible.

(2) Performance testing must demonstrate that the device performs as intended under anticipated conditions of use for the duration of the labeled use life.

(3) Human factors and usability testing must demonstrate that users can correctly use the device, including the user's ability to correctly determine device size and confirm the proper fit of the device. Users must understand product limitations, warnings, and precautions, including the warning that the device does not prevent head injury and medical treatment should be sought following head injury.

(4) Labeling must include the following:

(i) A warning that the device does not replace, and should be worn with, other protective sports equipment associated with specific sports activities, such as helmets and shoulder pads;

(ii) A warning that the device should not be worn if it interferes with other existing protective equipment;

(iii) A warning that users should avoid head and neck impacts to the extent possible;

(iv) A warning that serious harm can result from persistent, excessive pressure on the neck due to incorrect device size and fit; and

(v) A warning that the device has not been demonstrated to prevent long-term cognitive function deficits, and the ultimate impact on clinical outcomes has not been evaluated.

Dated: August 28, 2024.

Lauren K. Roth,

Associate Commissioner for Policy.

[FR Doc. 2024–19722 Filed 8–30–24; 8:45 am]

BILLING CODE 4164–01–P

DEPARTMENT OF THE INTERIOR

Bureau of Ocean Energy Management

30 CFR Part 550

[Docket No. BOEM–2023–0012]

RIN 1010–AE11

Protection of Marine Archaeological Resources

AGENCY: Bureau of Ocean Energy Management, Interior.

ACTION: Final rule.

SUMMARY: The Department of the Interior (the Department or DOI), acting through the Bureau of Ocean Energy Management (BOEM), is finalizing regulatory amendments to require lessees and operators to submit an archaeological report with any oil and gas exploration or development plan they submit to BOEM for approval of proposed activities on the Outer Continental Shelf (OCS). The previous

regulations required an archaeological report only if the plan covered an area that a BOEM Regional Director had ''reason to believe'' may have contained an archaeological resource. This final rule will increase the protection of archaeological resources in compliance with section 106 of the National Historic Preservation Act (NHPA) by acknowledging that there is a greater likelihood that such resources exist, thereby increasing the likelihood that these resources will be located and identified before they can be inadvertently damaged by an OCS operator. This rule defines the minimum level of survey information necessary to support the conclusions in the archaeological report, the procedures for reporting possible archaeological resources and continuing operations when a possible resource is present, and what to do if an unanticipated archaeological resource is discovered during operations.

DATES: This final rule is effective October 3, 2024. You may make comments on the information collection (IC) burden in this rulemaking and the Office of Management and Budget (OMB) and BOEM must receive such comments on or before October 3, 2024. The IC burden comment opportunity does not affect the final rule effective date.

ADDRESSES: BOEM has established a docket for this action under Docket No. BOEM–2023–0012. All documents in the docket are listed on the *https://www.regulations.gov* website and can be found by entering the Docket No. in the ''Enter Keyword or ID'' search box and clicking ''search''.

You may submit comments on the IC to OMB's desk officer for the Department of the Interior through *https://www.reginfo.gov/public/do/PRAMain.* From this main web page, you can find and submit comments on this particular information collection by proceeding to the boldface heading ''Currently under Review—Open for Public Comments,'' selecting ''Department of the Interior'' in the ''Select Agency'' pull down menu, clicking ''Submit,'' then checking the box ''Only Show ICR for Public Comment'' on the next web page, scrolling to this final rule, and clicking the ''Comment'' button at the right margin. Additionally, you may use the search function to locate the IC request related to the rule on the main web page. Please provide a copy of your comments to the Information Collection Clearance Officer, Office of Regulations, BOEM, Attention: Anna Atkinson, 45600 Woodland Road, Sterling, Virginia 20166; or by email to *anna.atkinson@boem.gov.* Please reference OMB Control Number 1010–0196 in the subject line of your comments.

FOR FURTHER INFORMATION CONTACT: Karen Thundiyil, Chief, Office of Regulations, BOEM, 1849 C Street NW, Washington, DC 20240, at email address *Karen.Thundiyil@boem.gov* or at telephone number (202) 742–0970. Individuals in the United States who are deaf, deafblind, hard of hearing, or have a speech disability may dial 711 (TTY, TDD, or TeleBraille) to access telecommunications relay services for contacting the contacts listed in this section. These services are available 24 hours a day, 7 days a week, to leave a message or question with the above individual. You will receive a reply during normal business hours. Individuals outside the United States should use the relay services offered within their country to make international calls to the point-of-contact in the United States.

SUPPLEMENTARY INFORMATION:

Preamble acronyms and abbreviations. Multiple acronyms are included in this preamble. While this list may not be exhaustive, to ease the reading of this preamble and for reference purposes, BOEM explains the following acronyms here:

AAA American Anthropological Association
ACRA American Cultural Resources Association
ACUA Advisory Council on Underwater Archaeology
AKDNR Alaska Department of Natural Resources
AKSHPO Alaska State Historic Preservation Office
ANCSA Alaska Native Claims Settlement Act
APE Area of Potential Effect
API American Petroleum Institute
ARPA Archaeological Resources Protection Act
BOEM Bureau of Ocean Energy Management
BOEMRE Bureau of Ocean Energy Management, Regulation and Enforcement
BSEE Bureau of Safety and Environmental Enforcement
CAH Coalition for American Heritage
CFR Code of Federal Regulations
CRA Congressional Review Act
DOI Department of the Interior
DOCD Development Operations Coordination Document
DPP Development and Production Plan
E.O. Executive Order
EP Exploration Plan
FR Federal Register
HRG High-Resolution Geophysical
IC Information Collection
MMS Minerals Management Service
NAGPRA Native American Graves Protection and Repatriation Act
NAICS North American Industry Classification System
NEPA National Environmental Policy Act
NHPA National Historic Preservation Act
NOAA National Oceanic and Atmospheric Administration
NOPC National Ocean Policy Coalition
NPS National Park Service
NRHP National Register of Historic Places
nT Nano-tesla
NTL Notice to Lessees
OIRA Office of Information and Regulatory Affairs (a component of OMB)
OMB Office of Management and Budget
OOC Offshore Operators Committee
OCS Outer Continental Shelf
OCSLA Outer Continental Shelf Lands Act
PRA Paperwork Reduction Act
RFA Regulatory Flexibility Act
RIA Regulatory Impact Analysis
SAA Society for American Archaeology
SBA Small Business Administration
SBREFA Small Business Regulatory Enforcement Fairness Act
SHA Society for Historical Archaeology
TXHC Texas Historical Commission
UMRA Unfunded Mandates Reform Act
U.S.C. United States Code
WADAHP Washington Department of Archaeology and Historic Preservation

Background information. On February 15, 2023, the Department proposed revisions to the regulations for the protection of marine archaeological resources on the OCS. The comments received regarding the proposed rule, some of which resulted in regulatory changes, and their corresponding responses are summarized in this preamble. A ''track changes'' version of the regulatory language that identifies the changes in this action compared to the current regulations is also available in the docket.

Organization of this document. The information in this preamble is organized as follows:

I. General Information

A. Executive Summary

1. Purpose of This Regulatory Action

The purpose of this rule is to address concerns regarding BOEM's regulatory requirements for protecting marine archaeological resources; specifically, BOEM's inability to accurately identify the location of such potential resources and BOEM's long term historic policy of requiring archaeological surveys only in cases where there is evidence that a resource exists. This rule amends the existing provisions to require lessees and operators to submit an archaeological report with any oil and gas exploration or development plan they submit to BOEM for approval of proposed activities on the OCS.

2. Summary of Major Provisions

The two major provisions finalized in this rule are: (1) the replacement of the ''reason to believe'' standard in the current regulations with the requirement that all proposed exploration or development plans that would result in seabed disturbance must be accompanied by an archaeological report, and (2) the codification of minimum requirements for any new high-resolution geophysical (HRG) surveys. The standards for new HRG surveys are generally defined in performance terms based on scientific standards, rather than using specific parameters. This provision allows lessees and operators greater flexibility in determining how to conduct their surveys and how to produce the resulting archaeological reports.

3. Costs and Benefits

BOEM estimates that the changes will increase total OCS archaeology survey costs over the next 20 years by $5.9 million (at a 3 percent discount rate). The majority of the revisions in this final rule will have no or negligible cost impacts for lessees and operators. All expected incremental costs of the rule are due to the requirement for HRG archaeological surveys in water depths of less than or equal to 100 meters and for a magnetometer, gradiometer, or the equivalent towed at an altitude and line spacing sufficient to detect ferrous metals or other magnetically susceptible materials of at least 1,000 pounds.

B. Does this action apply to me?

Entities potentially affected by this final action are holders of oil, gas, and sulfur leases on the OCS and associated operators.

C. Where can I get a copy of this document and other related information?

In addition to being available in the docket, BOEM will post an electronic copy of the documents related to this final action at: *https://www.boem.gov/regulations-and-guidance.*

II. Background

A. BOEM Statutory Authority and Responsibilities

Section 5 of the Outer Continental Shelf Lands Act (OCSLA), 43 U.S.C. 1334, authorizes the Secretary of the Interior (Secretary) to issue regulations to administer OCS leasing for mineral development. Section 5(a) of OCSLA (43 U.S.C. 1334(a)) authorizes the Secretary to ''prescribe such rules and regulations as may be necessary to carry out [provisions of OCSLA]'' related to leasing on the OCS. Section 5(b) of OCSLA (43 U.S.C. 1334(b)) provides that ''compliance with regulations issued under'' OCSLA must be a condition for ''[t]he issuance and continuance in effect of any lease, or of any assignment or other transfer of any lease, under the provisions of'' OCSLA. Section 18 of OCSLA (43 U.S.C. 1344) states that ''[m]anagement of the [OCS] shall be conducted in a manner which considers economic, social, and environmental values of the renewable and nonrenewable resources contained in the [OCS].''

Secretary's Order 3299 (as amended) established BOEM and delegated to it the authority to carry out conventional (*e.g.,* oil and gas) and renewable energy-related functions on the OCS, including, but not limited to, activities involving resource evaluation, planning, and leasing under the provisions of OCSLA. As such, BOEM is responsible for managing development of the Nation's offshore energy, mineral, and geological resources in an environmentally and economically responsible way. BOEM requires a lessee to submit a detailed plan of its proposed activities for review before BOEM will approve, among other activities, the installation of any facility, structure, or pipeline on the OCS. As part of the plan submission, BOEM requires detailed information regarding the nature and location of historic properties that may be affected by the proposed activities. This information is used to assist the Bureau in meeting its obligation under section 106 of the NHPA and the National Environmental Policy Act (NEPA).

B. History of Protection of Marine Archaeological Resource Regulations and Guidance

Beginning in 1982, BOEM's predecessor agency, the Minerals Management Service (MMS), developed a predictive model to attempt to define where archaeological resources were ''likely'' to exist in the Gulf of Mexico. MMS, and later BOEM, used the predictive model to designate certain OCS lease blocks as possessing a high- or low-probability for containing archaeological resources. This model relied primarily on archival evidence of reported lost shipwrecks.

Prior to 2006, the Department's regulation at then 30 CFR 250.194, ''What archaeological reports and surveys must I submit?'' stated: ''If it is likely that an archaeological resource exists in the lease area, the Regional Director will notify you in writing.'' That regulation was revised in 2006 to clarify the basis for requiring an archaeological survey (*i.e.,* a type of geophysical survey that is suitable for locating potential archaeological resources). The revised regulation stated: ''If the Regional Director has reason to believe that an archaeological resource may exist in the lease area, the

Regional Director will require in writing that your EP, DOCD, or DPP be accompanied by an archaeological report.'' In explaining the revision, the preamble to the 2006 final rule (71 FR 23858, April 25, 2006) clarified the basis upon which the Regional Director would invoke the requirement for an archaeological survey on a lease area:

> Because it cannot be determined whether it is ''likely'' that an archaeological resource exists on a specific lease area until the archaeological survey has first been conducted, the wording would be changed to state, ''if the Regional Director has reason to believe that an archaeological resource may exist.'' The ''reason to believe'' is established by a technical analysis of existing archaeological, geological, and other pertinent environmental data.

Under the regulations after 2006, if the Regional Director exercises the requirement for an archaeological survey on a lease area in accordance with 30 CFR 550.194(a), the lessee or operator must produce an archaeological report. If the archaeological report suggests that an archaeological resource may be present, then an operator or lessee must either: ''(1) Locate the site of any operation so as not to adversely affect the area where the archaeological resource may be; or (2) Establish to the satisfaction of the Regional Director that an archaeological resource does not exist or will not be adversely affected by operations.'' To meet this second option, further archaeological investigation must be conducted by a qualified marine archaeologist and a geophysicist, using survey equipment and techniques the Regional Director considers appropriate. Finally, for the Regional Director to confirm that an archaeological resource does not exist, the lessee and operator must submit the investigation report to the Regional Director for review.

The MMS tested the predictive model in 2003 and found that there was no significant difference in the likelihood of finding a shipwreck in lease blocks designated as high probability under the predictive model compared to lease blocks without that designation. That led BOEM's predecessor agency, the Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE), to implement a new seabed disturbance survey procedure, which BOEMRE presented to operators during a workshop in March 2011. This procedure involved conducting an environmental assessment under NEPA for all new and revised exploration and development plans in deep water. BOEM currently applies this approach, when appropriate, to plans in lease areas outside of OCS lease blocks designated by its predictive model as highly probable for containing archaeological resources. As discussed in the preamble to the 2023 proposed rule (88 FR at 9800), since implementation of the pre-seabed disturbance survey policy in 2011, over 100 new confirmed or potential shipwrecks have been identified, most of which are located in lease blocks that would not have been surveyed if BOEM had relied only on the predictive model. This includes three of the most historically significant shipwrecks ever found in the Gulf of Mexico.

After evaluating over 40 years of empirical evidence collected through research conducted by and for the oil and gas industry, academic institutions, and Federal and State agencies, BOEM has concluded that the model was at times incomplete and inaccurate and, therefore, unhelpful. BOEM's predictive model, despite several attempts at updating it, has often failed to accurately predict the presence or absence of ship or plane wrecks. In many cases, archaeological resources have been discovered in lease blocks where the model had not ''predicted'' any, and, conversely, operators surveyed lease blocks where the historical evidence suggested that a shipwreck should be located and found nothing. This problem is compounded by the fact that the scarcity of historical and archival materials correlates to the age of the shipwreck or archaeological resource, such that the resources least likely to be accurately identified in the models are sometimes the oldest and most important for understanding our Nation's history. BOEM determined that it was possible that previously undiscovered ship or plane wrecks could be present in any OCS lease block in any BOEM region regardless of the model's results. Because the model's accuracy is dependent on the availability and adequacy of the underlying historical data, and because such data is often neither available nor adequate for the offshore environment, BOEM determined that a better approach is necessary.

BOEM's existing regulations require operators [1] to submit an archaeological report with an Exploration Plan (EP), a Development Operations Coordination Document (DOCD), or a Development and Production Plan (DPP) (collectively, the ''plans'') seeking BOEM authorization to disturb the seafloor only if a BOEM Regional Director has a ''reason to believe'' that an archaeological resource may be present. The agency interpreted this ''reason to believe'' standard as requiring its Regional Directors either to have evidence that such a resource is present or to use a predictive model that indicates a resource is likely to be present in the area.

With this rule, BOEM is finalizing regulatory amendments to remove the ''reason to believe'' standard and to require lessees and operators to submit an archaeological report with all plans that propose seabed disturbance. This report must be based on a site-specific HRG survey that effectively identifies potential archaeological resources; HRG surveys are already required to identify shallow hazards in 30 CFR 550.214(e) and 550.244(e). HRG surveys are routinely used in the offshore environment to identify the presence or absence of potential geological and man-made hazards, sensitive biological habitats, and archaeological resources. In keeping with professional standards that have evolved since the existing regulations were adopted, this revision would define the minimum level of survey information necessary to support the conclusions in the archaeological report. These changes would facilitate BOEM's obligation to undertake a ''reasonable and good faith effort'' to carry out our appropriate historic property identification efforts under the NHPA (see 36 CFR 800.4(b)(1)) and its analysis of appropriate mitigation measures to avoid damaging historic and archaeological resources under NEPA.

Additionally, during oil and gas operations on the OCS, a lessee or operator may find or unearth unanticipated ''cultural items'' as defined in the Native American Graves Protection and Repatriation Act (NAGPRA), 25 U.S.C. 3001–3013. Lessees and operators are subject to the marine archaeology requirements provided for in this rule during their OCS operations, and they may also be subject to other laws, such as NAGPRA, in the event they discover cultural or other items. NAGPRA has its own regulatory requirements separate and distinct from this final rule.

C. Purpose of This Rulemaking

The purpose of this final rule is to address concerns that BOEM's existing regulatory requirements fail to adequately protect marine archaeological resources. This rule

[1] In some cases, lessees perform the functions of operators acting on their own behalf and, in other cases, operators are contracted to perform certain functions on behalf of the lessee(s). For the purposes of this preamble, any reference to the term ''operator'' should be considered to apply to lessee(s), as well, to the extent that they perform the functions that would typically be contracted to an operator.

implements new regulatory provisions that require lessees and operators to submit an archaeological report with any oil and gas exploration or development plan.

D. Summary of the February 15, 2023, Proposed Rule

On February 15, 2023, DOI published a notice of proposed rulemaking in the **Federal Register** at 88 FR 9797, which proposed amendments to 30 CFR part 550. The proposed rule would have required lessees and operators to submit an archaeological report with any oil and gas exploration or development plan they submit to BOEM for approval of proposed activities on the OCS. Under the existing regulations, an archaeological report was required only if the plan would cover an area that a BOEM Regional Director had reason to believe would contain an archaeological resource. The objective of the proposed rule was to increase protection of archaeological resources in compliance with section 106 of the NHPA by assuming that there is a greater likelihood that such resources exist, thereby increasing the probability that they are located and identified before they are inadvertently damaged by an OCS operator. Additionally, the proposed rule defined the minimum level of survey information necessary to support the conclusions in the archaeological report, the procedure for reporting possible archaeological resources, the procedure for continuing operations when a possible resource is present, and what to do if an unanticipated archaeological resource is discovered during operation.

III. Key Provisions of the Final Rule

The most important amendment made by this final rule to the Department's existing regulations is to eliminate the ''reason to believe'' standard from § 550.194, whereby lessees were required to conduct marine archaeological surveys only in cases where ''the Regional Director has reason to believe that an archaeological resource may exist in the lease area.'' Instead, the revised section of the regulations will require the submission, with all proposals for seabed disturbance in an EP, DOCD, or DPP, of an archaeological report based on a site-specific HRG survey designed in such a manner as to effectively identify potential archaeological resources.

This final rule, in § 550.194, provides for the following:

- Each HRG survey must be conducted using state-of-the-art instrumentation and methodology that meet or exceed scientific standards for conducting marine archaeological surveys.
- Lessees must comply with the outlined minimum scientific standards; however, BOEM recognizes that emerging technologies and methods may be used to achieve or exceed these standards. In these instances, BOEM may approve a departure from the standard provisions of the rule on a case-by-case basis if it meets the objectives specified in the regulations.
- The survey vessel's navigation system must continuously register its surface position, specify the logging position data, and specify the presentation of geodesy information.
- HRG surveys must use a total field magnetometer, gradiometer, or other similar instrument having equal or superior measurement capability for surveys conducted in waters of 100-meter depth or less. This rule also establishes the requirements for the collection of data necessary to assist in the identification of archaeological resources on the OCS. The sensor must be towed in such a manner that a magnetic field produced by ferrous metal associated with a historic shipwreck [2] (*e.g.,* a wooden ship's fasteners, anchors, and cannons) can be detected.
- For geophysical surveys conducted in water depths of 140 meters (459 ft) or less, a sub-bottom profiler system must be used to identify potential areas of prior human occupation that may exist within the horizontal and vertical Area of Potential Effect (APE), taking into account the geomorphology of the operational area and the parameters of the proposed project (including the maximum depth of disturbance from the proposed activities).
- Every survey on the OCS subject to this rule must meet various performance standards to ensure that archaeological resources are not overlooked. The results of every survey must be collected and analyzed by a qualified marine archaeologist who meets the Secretary of the Interior's Standards and Guidelines [3] and must have experience in conducting or overseeing HRG surveys and processing and interpreting the resulting data for archaeological potential.
- In all water depths, a side-scan sonar or equivalent system must be used to provide continuous planimetric imagery of the seafloor to identify potential archaeological resources partly embedded in the seafloor. To provide sufficient resolution of seafloor features, this rule requires the use of a system that operates at as high a frequency as practicable based on the factors of line spacing, instrument range, and water depth.
- In all water depths, an echo-sounder or equivalent system must be used to measure accurate water depths across the area. Where swath bathymetry data are acquired, BOEM recommends that backscatter values from the seabed returns are logged and processed for use in seabed characterization to support and complement the side-scan sonar data. Single beam echo sounder data should be used to verify the results of swath bathymetry data to check for gross error.
- Existing lessees and operators may, during the first year after the effective date of this final rule, apply the prior regulations and standards to surveys conducted during that time. New lessees and operators will be required to apply the requirements of this rule from the effective date of the rule.
- An archaeological survey conducted prior to the effective date of this rule may be used in lieu of conducting a new survey, subject to BOEM approval, provided the lessee or operator can demonstrate that such survey was conducted in such a manner as to meet the performance requirements of this rule.
- If a lessee or operator discovers any unanticipated archaeological resource while conducting operations on the lease or right-of-way area, they must immediately halt seafloor disturbing operations within at least 305 meters (1,000 feet) of the area of the discovery and report the discovery to the BOEM Regional Director within 72 hours.

The standards described above are generally defined in this rule in performance terms based on scientific standards, rather than using specific parameters. This will allow lessees and operators greater flexibility in determining how to conduct their surveys and how to produce the resulting archaeological reports.

IV. Summary of Public Comments and BOEM's Corresponding Responses

A. Overview of Comments

A total of 32 comments were received in response to the proposed rule. The majority of the comments (15) came from individual archaeologists and technical specialists. An additional 6 comments came from trade or cultural

[2] A metal hulled shipwreck or a wooden shipwreck with large anchors or iron cannon would most likely be recorded using a magnetometer. Most ships through history were wooden shipwrecks until the modern era. These wrecks are more difficult to locate using geophysical methods.

[3] Available at: *https://www.nps.gov/articles/series.htm?id=62144687-B082-538A-A0174FFF26496394.*

associations, 4 comments came from State government agencies, 2 came from individual Native American Tribes, and 5 came from offshore energy trade associations or companies. Specifically, commenting individuals and organizations consisted of the following:

TABLE 1—SUMMARY OF COMMENTERS

Organization type	Organization names	Count
Individual Archaeologists or General Members of the Public		15.
Archaeological/Cultural Association	American Cultural Resources Center Advisory Council on Underwater Archaeology. American Anthropological Association. Coalition for American Heritage. Society for Historical Archaeology Ocean Foundation.	6.
State Agency	Alaska Department of Natural Resources Alaska State Historic Preservation Office. State of Washington Dept. of Archaeology and History Preservation. Texas Historical Commission.	4.
Native American Tribe	Chickahominy Tribe Rappahannock Tribe.	2.
Industry Trade Association	American Petroleum Institute National Ocean Policy Coalition. Offshore Operators Committee.	3.
Offshore Operators of Surveying Equipment	Echo Offshore P&C Scientific.	2.

The vast majority of the responses (28 out of 32) were supportive of the proposed rule. All of the comments submitted by individuals were supportive of the rule, and several included technical suggestions related to archaeological reports, data collection, and data analysis. The two Native American Tribes submitted supportive comments and noted that the proposed rule was an important step in ensuring that Tribal cultural heritage is protected for future generations, and that BOEM should fully evaluate a project's potential effects on Tribes. All archaeological associations and societies that submitted comments on the proposed rule expressed support and provided clarifying recommendations for implementing the final rule, as well as technical suggestions related to archaeological reports and data collection. One individual supported the proposed rule and supported collaboration between BOEM and the National Park Service (NPS) to further specify the submerged archaeological resources professional qualification standard in the Secretary of the Interior's Professional Qualification Standards for Archaeology and Historic Preservation. One advocacy group (The Ocean Foundation) expressed support for the proposed rule, particularly the amendment to include historic resources on the National Register of Historic Places (NRHP) into the definition of archaeological resources. Two offshore operators of surveying equipment (Echo Offshore and P&C Scientific) provided technical suggestions related to archaeological reports, equipment specifications, and data collection. Multiple state agencies (Alaska State Historic Preservation Office (AKSHPO), Texas Historical Commission (TXHC), and the Washington State Department of Archaeology and Historic Preservation (WADAHP)) expressed support for the rulemaking and provided clarifying recommendations for implementing the final rule, as well as technical suggestions related to archaeological reports and data collection.

Four comments were received that were generally not supportive of the proposed rule. These consisted of one state agency and three offshore energy trade associations. The three offshore energy trade associations (American Petroleum Institute (API), National Ocean Policy Coalition (NOPC), and Offshore Operators Committee (OOC)) commented that the rule is too burdensome and that BOEM did not accurately represent the cost of the rulemaking. They requested that BOEM re-propose the rule and associated regulatory impact analysis (RIA) to allow for adequate stakeholder assessment and the opportunity to provide additional comments. API asserted that it was unclear what activities would be covered by the proposed rule and that more certainty is needed to adequately assess potential impacts to operations. One state agency (Alaska Department of Natural Resources (AKDNR)) did not support the rulemaking and stated that BOEM may not have the authority to require ''another expensive survey.'' This conclusion contrasted with that of another agency in the same state, the AKSHPO, which strongly supported the proposed rule.

B. General Comments

1. Regulatory Authority

Comment: The Ocean Foundation, Advisory Council on Underwater Archaeology (ACUA), American Anthropological Association (AAA), Coalition for American Heritage (CAH), and Society for Historical Archaeology (SHA) recommended that the final rule include references to the Secretary of the Interior's Guidelines, the NHPA, the Archaeological Resources Protection Act (ARPA), and the Antiquities Act under the legal authorities section.

Response: In response to this comment, BOEM has modified the authority citation for part 550 to include the NHPA.[4] The commenters did not specify which Secretary of the Interior guidelines to reference for the legal authorities. In any event, BOEM does not include guidelines in the legal authorities section for Departmental regulations. Furthermore, while the Antiquities Act may be applicable (and this rulemaking makes no statement regarding the applicability of that act), OCSLA is the statute that provides the authority for DOI to issue this rule. The Antiquities Act does not require or authorize any activity that is cited in these regulations. Lastly, the ARPA explicitly excludes the OCS from the definition of public lands and should not be cited as an authority for this rule.

[4] National Historic Preservation Act Amendments Act of 2006, Public Law 109–453 (codified at 54 U.S.C. 300101 *et seq.*).

Comment: AKDNR expressed concern that the proposed rule was ''arbitrarily requiring private companies to do expensive archaeological surveys for all development activities'' and that ''[a]dding another expensive survey over an expansive area that does not serve any purpose other than to provide general archaeological survey data may not be justified under BOEM's authorities.''

Response: BOEM disagrees with the commenter's assertion for several reasons: (1) the surveys are not being required arbitrarily but only in the areas where oil and gas development activities proposed by the lease holder would disturb the seafloor and therefore would have the potential to affect historic properties, including archaeological resources; (2) BOEM is not proposing adding any surveys as a result of this rule but is only requiring that surveys that would already occur take place in a manner capable of identifying archaeological resources (*i.e.,* shallow hazards surveys); and (3) BOEM has evaluated the potential costs and concluded that this rule will not cause a substantial financial burden.

2. Cost Implications

Comment: The American Cultural Resources Association (ACRA) expressed support for the proposed rule and stated that the proposed ''approach also benefits lessees and operations as it reduces risk and potential mitigation costs related to the inadvertent discovery of a submerged cultural resource during the construction phase.''

Response: BOEM acknowledges the commenter's support and is finalizing regulatory amendments to address the protection of marine archaeological resources with this rulemaking.

Comment: NOPC expressed opposition to the proposed rule and stated it is ''concerned that the proposed rule as currently drafted could result in added costs, delays, and confusion that hinders domestic exploration and production of the nation's offshore energy resources, to the detriment of businesses, communities, and individuals throughout the United States who rely on access to affordable and reliable energy and the conservation and restoration activities that offshore energy development helps fund.''

Response: BOEM disagrees for the following reasons: (1) no additional surveys would be required by the rule compared to current practice because the rule does not mandate additional surveys but simply specifies the requirements that future surveys must adhere to; (2) the rule was crafted to specify clear performance standards that provide lessees with more flexibility to design and conduct archaeological surveys, thereby lessening confusion during domestic exploration and production of the Nation's offshore oil and gas resources; (3) the area covered by surveys under the rule will not increase because the final rule does not change the requirements for when surveys are required or where the surveys must be conducted; (4) BOEM has determined that the additional costs of implementing this rule, if any, are minimal (*i.e.,* all expected incremental costs of the rule are due to the requirement for HRG archaeological surveys in water depths of less than or equal to 100 meters, and for a magnetometer, gradiometer, or the equivalent towed at an altitude and line spacing sufficient to detect ferrous metals or other magnetically susceptible materials of at least 1,000 pounds); and, (5) BOEM does not agree that the requirements of this rule will delay projects to any meaningful extent and could even reduce delays by reducing the risk of unanticipated findings of resources that would halt operations once started. During the project planning process, lessees already include plans for conducting HRG surveys to satisfy engineering requirements and regulatory requirements, including the identification of archaeological resources.

Comment: AKDNR expressed concern regarding the potential impacts on Hilcorp in the Cook Inlet. Specifically, the department stated ''this proposed rule has the potential effect of burdening the sole current leaseholder . . . with millions of dollars of unnecessary and expensive survey requirements on top of what it would already be doing as a prudent operator of an oil and gas project. . . . the development of natural gas in Cook Inlet is the primary source of energy for most of the citizens of Alaska, and overly burdensome requirements for its development threaten energy security.''

Response: BOEM agrees with the commenter's assertion that the current leaseholders in Alaska will incur additional costs as a result of this rule, as some surveys are expected to require narrower liner spacing and therefore will take longer and cost more to conduct. Alaska's offshore oil and gas project economics are challenging, and BOEM finds that archaeological surveys there are generally more expensive than in the Gulf of Mexico. BOEM disagrees with the claim that the rule's archaeological survey requirements are unnecessary or overly burdensome because no additional surveys are required by this rule except in the very rare instance where a lessee wants to rely on the results of a very old survey (likely 20 or 30 years old) that was conducted in a manner that would not meet the current survey standards. The commenter did not provide any additional justification or cost estimates for its claim.

Comment: OOC expressed opposition to BOEM's assertion that the final rule will not have any additional burden on industry. Specifically, the organization refers to the following statement in the preamble ''[t]he burdens related to the submission of archaeological resource information are accounted for in OMB approved Control Number 1010–0151. Therefore, BOEM has determined there will likely not be an additional burden on industry with this proposed provision.'' It further states that ''the recent request for re-approval for the revised OMB approved Control Number 1010–0151 for Plans (issued 3/3/23) has not been approved yet. . . . In the request for re-approval—with revisions—BOEM provides burden hour estimates for 'shallow hazards surveys . . . G&G, archaeological surveys & reports (550.194)' (as well as for the time it takes an archaeologist to create reports). The burden hour estimates between this proposed rule and the re-approval of OMB approved Control Number 1010–0151 for Plans should be consistent.''

Response: BOEM reviews and considers all public comments related to the Paperwork Reduction Act (PRA) requirements. These comments allow BOEM to make adjustments and improvements to information collection burden estimates.

OOC indicated that BOEM's current information collection requirements underestimate the information collection burden. After considering this comment, BOEM is revising the information collection burden estimates with this rule to align with existing industry practice. As stated in the PRA section of the preamble, the new and revised information collections requirement for 30 CFR 550.194 and 550.195 would increase overall annual information submission burdens. BOEM plans to add the increases in annual burden hours to OMB approved Control Number 1010–0114, 30 CFR 550, subpart A, General and subpart K, Oil and Gas Production (expiration May 31, 2026), and not to OMB Control Number 1010–0151, 30 CFR 550, subpart B, Plans and Information.

Currently, OMB has approved 12 annual burden hours for preparation and submission of archaeological

reports and/or supporting evidence per response. BOEM believes this number is low and has increased the annual burden hours to 50 hours per response. The burden increase would revise OMB Control Number 1010–0114, and not OMB Control Number 1010–0151. When the final rule becomes effective and the related information collection request is approved by OMB, BOEM will add the burden increase to the correct OMB Control Number. If the annual burden hours should be adjusted in the future based on reported feedback from OCS operators, BOEM will work closely with OMB to revise the numbers accordingly.

BOEM finds that the method of quantifying burdens is dependent on the specific analysis and regulatory context. The cost factors associated with surveys in the RIA include the day rate of the survey vessel, the time required to complete the survey, and the resources spent processing and interpreting the survey results. While other documents may use hourly estimates, a dollar amount estimate was deemed appropriate for this analysis to capture an economic impact while taking into account various cost factors to fulfill the information collection. BOEM believes that this approach provides a sufficient evaluation of the incremental burdens resulting from this final rule.

3. Tribal Implications

Comment: The Chickahominy and the Rappahannock Indian Tribes expressed support for the proposed rule and stated that ''this proposed rule will reduce Federal conflicts with tribes, who have a particular interest in their cultural patrimony associated with pre-Contact submerged terrestrial sites. This proposed rule is an important step in ensuring that our cultural heritage is protected for future generations and that BOEM fully evaluates projects' potential effects on tribes.''

Response: BOEM acknowledges the commenter's support and agrees that the final rule will assist BOEM in obtaining information that will help it to evaluate projects' potential effects on Tribal interests.

Comment: The Society for American Archaeology (SAA) expressed support for the proposed rule, but also expressed concern that ''ways to further advance the involvement of Tribes and native Hawaiian organizations in the identification of sites that are culturally important sites'' were only discussed in the preamble and not in the regulatory text, ''even though Tribal consultation has influenced BOEM's protection of marine archaeological resources in past undertakings.'' Specifically, the group further states that ''[o]ther than giving acknowledgement to the special expertise of Indian Tribes and native Hawaiian organizations in the preamble, the proposed rules do not incorporate how their expertise will be applied by BOEM in decisions concerning the protection of marine archaeological resources. Greater clarity is needed on Tribal and native Hawaiian organization involvement throughout BOEM's presentation of the actual [regulatory text].''

Response: This rule is designed to strengthen the required methods for the identification of potential archaeological resources, including historic properties and submerged landforms that may have been habitable when that part of the OCS was above sea level and could potentially contain pre-contact archaeological sites. This rule does not change or impede the BOEM's or DOI's government-to-government consultations with Indian Tribes, Native Hawaiian Community through Native Hawaiian Organizations, and appropriate Alaska Native Claims Settlement Act (ANCSA) Corporation officials. This rule specifies the actions that OCS lessees and operators must perform to identify and protect archaeological resources during oil and gas exploration and development operations.

Comment: The WADAHP highlighted that the State of Washington's marine waters contain significant historic military aircraft and burial locations along the submerged coastal plains that reflect thousands of years of Native American occupancy and expressed concern that the focus of the proposed rule on archaeological resources is broadly referenced as shipwrecks. It noted that these resources also implicate BOEM's trust responsibilities with federally recognized Tribal Nations. Similarly, ACRA expressed concern related to the focus of shipwrecks in the preamble but were ''encouraged by the requirement for surveys that address the potential for precontact archaeological material.''

Response: BOEM acknowledges the commenters' concern but highlights that its archaeological requirements in 30 CFR part 550 (and previously part 250) have for over 40 years focused on the identification of historic properties, for example shipwrecks, submerged aircraft, archaeological resources, and submerged landforms that may have been habitable when that part of the OCS was above sea level and have implemented mitigations requiring avoidance when identified.

Comment: An independent marine archaeologist requested that BOEM standardize how underwater indigenous resources are referred to throughout the rule. ''For example, in section 550.194(c), the text variably reads, 'pre-European contact archaeological sites from the end of the last Ice Age,' 'pre-contact archaeological material,' and 'buried landforms that might have been habitable by indigenous Americans during the end of the last Ice Age.' '' The archaeologist recommended that BOEM define underwater indigenous resources as ''dating since the end of the last Ice Age.''

Response: BOEM appreciates the comment and notes that the discussion to which the commenter is referring is in the preamble and not in the regulatory text in § 550.194(c). The regulatory text in this final rule refers to these sites as ''potential areas of prior human occupation.'' BOEM also notes that there is a difference between an identified pre-contact archaeological site or material and a submerged landform that may have been habitable when that part of the OCS was above sea level. A submerged landform may or may not contain pre-contact archaeological sites and still have meaning to many Indian Tribes and Native American people indigenous to the United States. Furthermore, submerged landforms can be located through interpretation of the archaeological survey data, while pre-contact sites generally are only located through more rigorous archaeological methods that are outside the scope of this rulemaking.

4. Removal of the ''Reason to Believe'' Standard and the Use of Alternatives to Direct Sources

Comment: The Rappahannock and Chickahominy Indian Tribes, ACUA, SAA, AAA, CAH, and SHA expressed support for the removal of the ''reason to believe'' standard. The Tribes asserted the standard is ''outdated'' and ''ineffective . . . [at] identifying potential archaeological resources, while the proposed rule would be more 'proactive and precautionary.' '' They also expressed appreciation for BOEM's recognition that predictive models do not provide sufficiently accurate data to base decisions regarding underwater archaeological resource potential. The Tribes further expressed support for the proposed approach to archaeological surveying that accounts for the unique characteristics of each lease block and stated that ''projects that propose to disturb the ocean floor should be required to provide due diligence in the form of marine archaeological surveys as part of their permit review requirements.''

ACUA, SAA, AAA, CAH, and SHA asserted that eliminating the ''reason to believe'' standard would reduce ambiguity surrounding survey requirements and would constitute a reasonable and good faith effort to identify archaeological resources. ACRA expressed support for the proposal to use HRG surveys in lieu of the predictive models and stated that ''the predictive model approach does not provide detailed, site-specific survey or review for the potential of a lease area to contain ancient, submerged landform features.'' WADAHP expressed support for the proposal and asserted that a more robust effort is necessary to ensure identification of historic shipwrecks and aircraft, due to the uncertainty of their locations on the seafloor. It stated that rapid technological advancements would allow for this more robust effort.

The TXHC provided supportive context for the proposal to move away from predictive models and stated that in the TXHC marine archaeology program's experience, ''these predictability models do not work well in practice for any water depths, nearshore included, due to the unpredictable nature of shipwreck losses and wreck locations. Though the [TXHC] model is still helpful in defining areas that have a greater potential to contain underwater archeological resources, it is no longer used to preclude whole Texas State tracts from archeological remote-sensing survey, as had once been policy.'' Additionally, two independent marine archaeologists expressed support for the use of surveys in lieu of the predictive model.

Response: BOEM acknowledges the commenters' support and, in response to comments, is finalizing regulatory amendments, as proposed in § 550.194(a), to require the use of HRG surveys to identify archaeological resources. BOEM believes that the evidence on this point (see discussion in the Background section of this preamble), combined with BOEM's many years of experience in this field, is overwhelming and that retaining the existing approach is no longer a responsible option for BOEM to use to satisfy its obligations under the NHPA and OCSLA.

Comment: The OOC expressed opposition to the removal of the ''reason to believe'' standard and stated that ''[t]here is nothing under the current regulations preventing BOEM from identifying lease areas with potential archaeological resources that may exist in multiple lease areas, as they have done historically, while also excluding lease areas that, based on information BOEM has been provided over many decades, would not require additional reporting.'' NOPC also expressed opposition to the removal of the standard and stated that the ''expanded applicability of the proposed requirement threatens to add substantial burdens for activities supportive of domestic energy exploration and production that have either already been subject to surveying and/or constitute minor activities that would not impact archaeological resources in any event.''

Response: Both based on its historical experience (see discussion in the Background section of this preamble and the preamble to the 2023 proposed rule at 88 FR 9800) and the comments received, BOEM believes that there is no workable way to retain the ''reason to believe'' standard and comply with its obligations under the NHPA and OCSLA. In other words, in the context of the OCS, the ''reason to believe'' approach itself cannot meet the NHPA requirements for a reasonable and good faith effort to identify and protect archaeological resources. BOEM disagrees with the commenters' assertion that the rule adds substantial burdens for activities supportive of domestic energy exploration and production because it does not believe that the costs of the rule are substantial (see the memorandum titled *Protection of Marine Archaeological Resources: Benefit-Cost Analysis* in the docket for this rulemaking). The commenters did not provide any additional justification or cost estimates for its claim.

5. Compliance With the National Historic Preservation Act

Comment: Several independent marine archaeologists expressed support for the proposed rule, stating that it would bring BOEM into compliance with the NHPA, but also noted it would align the agency with similar regulatory and policy requirements already promulgated by other Federal agencies, such as the U.S. Navy and National Oceanic and Atmospheric Administration (NOAA), as well as the historic preservation requirements of many coastal states. WADAHP, the Rappahannock and Chickahominy Indian Tribes, ACRA, ACUA, AAA, and CAH expressed support for the proposed changes and stated that they would improve BOEM's conformance with the NHPA section 106 compliance process. Additionally, the Rappahannock Indian Tribe commented that the ''proposed changes will improve BOEM's fulfillment of its 'reasonable and good faith identification effort' under the National Historic Preservation Act, enabling the avoidance of damage to historic and archaeological resources and the development of appropriate mitigation measures.''

Response: BOEM acknowledges the commenters' support and is finalizing regulatory amendments with this rulemaking, as proposed, to improve compliance with the NHPA.

Comment: An independent marine archaeologist suggested that BOEM add a maximum response time, such as 30 or 45 days, for BOEM archaeologists to complete their evaluation of a resource's eligibility for the NRHP.

Response: BOEM disagrees that the final rule should define a maximum response time for BOEM archaeologists to complete their evaluation of a resource's eligibility for the NRHP. The language in the rule states that ''If BOEM determines that the resource *may* be eligible . . .'', which is different from making an official determination of eligibility for listing on the NRHP. BOEM's historic preservation staff possess the experience and expertise necessary to make an expeditious determination about whether a resource may be eligible for listing on the NRHP. Making an official determination about a resource's eligibility for the NRHP can be a complex and time-consuming process in the marine environment and may not be necessary if damage to the potential archaeological resource can be avoided (*e.g.,* through changes to the footprint of the proposed activities).

C. Technical Comments

1. Use of Direct High Resolution Geophysical Surveys

Comment: WADAHP expressed support for using HRG surveys to effectively identify potential archaeological resources. It stated that ''HRG surveys are routinely used in the offshore environment to identify the presence or absence of potential geological and manmade hazards, sensitive biological habitats, and marine archaeological resources.'' ACRA also expressed support for the use of HRG surveys and stated that it will ''allow for the identification and delineation of cultural resources within a specific lease development area and for the protection of these resources prior to construction activities.''

Response: BOEM acknowledges the commenters' support and is finalizing regulatory amendments with this rulemaking, as proposed, to require the use of HRG surveys for archaeological purposes in § 550.194(a).

Comment: OOC commented that ''if an earlier survey was done that meets all requirements, then another survey

does not need to be done.'' It also requested that BOEM remove language suggesting that BOEM's judgment dictate whether a previous survey is valid for archaeological resource identification efforts ''considering, for example, the time elapsed since the prior survey'' because anything of archaeological interest would have been identified and an avoidance criterion could be applied. Additionally, it stated that the proposed rule lacks clear parameters to determine what constitutes a ''valid'' survey and how BOEM will make that determination. API also requested that BOEM ''provide explicit evaluation criteria for acceptability of previous archaeological surveys.'' P&C Scientific commented that a demonstration that a reasonable and good faith effort to identify archaeological resources within the APE has already been performed should only be allowed if the non-operator commissioned sources meet or exceed BOEM's archaeological survey requirements.

Response: The proposed rule specified when an operator may comply with § 550.194 by submitting a reference to an archaeological report based on an HRG survey of the APE that was previously submitted for the lease. BOEM is finalizing this provision, as proposed, in § 550.194(a)(2). BOEM has decided to retain the language providing discretion on determining when a previous survey is valid, as proposed, in § 550.194(a)(2). Time is not the only variable BOEM evaluates when making this determination; it also considers alterations in the seafloor from, for example, hurricanes, submarine mudslides, and seafloor instability events. Because of the many variables that may alter the analytical conclusions of a previous survey, BOEM is not providing explicit evaluation criteria for acceptability of previous archaeological surveys. BOEM welcomes discussion with lease holders on how best to meet the requirements of this rule on a case-by-case basis.

2. Technical Parameters for Conducting Direct Surveys

Comment: OOC noted that the proposed rule will establish the requirements for the navigation system to continuously register surface position of the survey vessel, specify the logging position data, and specify the presentation of geodesy information. OOC recommended that BOEM include a statement in the final rule to clarify that navigation systems meeting the criteria outlined in § 550.194(c)(1) do not require approval by BOEM.

Response: BOEM agrees and added ''Navigation systems meeting the criteria outlined in this section do not require prior approval by BOEM'' to § 550.194(c)(1).

Comment: ACRA, SHA, ACUA, AAA, and CAH recommended adding a requirement for acoustic tracking of towed sensors or autonomous underwater vehicles in deep water, consistent with the Shallow Hazards Notice to Lessees and Operators (NTL 2022–G01, part III.A).

Response: Tracking of towed sensors or autonomous underwater vehicles is required in the final rule, as proposed. It can be found under § 550.194(c)(1), which states, ''[a] state-of-the-art navigation system with sub-meter accuracy able to continuously determine the surface position of the survey vessel and in-water position of towed and autonomous survey sensors. Position fixes must be digitally and continuously logged along the vessel track. Geodesy information must be clearly presented and consistent across all data types. Navigation systems meeting the criteria outlined in this section do not require prior approval by BOEM.''

Comment: Echo Offshore asked for clarification for the line spacing requirements in over 100 meters of water when using a total field magnetometer, gradiometer, or other equivalent instrument. The company stated that ''[t]he current line spacing per NTL 2005–G05–Rev is 300m line spacing in depths over 300m,'' and asked, ''will this be retained, or since NTL 2022–G01 requires 150m line spacing throughout will this spacing be adopted in these depths?'' Additionally, it asked for clarification on ultra-short baseline acoustic tracking requirements in depths over 91 meters.

Response: This final rule requires the use of a total field magnetometer, gradiometer, or other instrument having equal or superior measurement capability for surveys conducted in waters of 100-meter depth or less in § 550.194(c)(2). For archaeological purposes, magnetometry is not being requested in water depths over 100 meters. This rule does not change the current guidance of NTL 2022–G01, which is for shallow hazard surveys. While previous BOEM guidance has specified various line spacing requirements, this final rule is based on data resolution requirements to allow the lessees flexibility in designing a survey necessary to identify potential archaeological resources. Tracking of towed or autonomous survey sensors is required in the final rule (30 CFR 550.194(c)(1)) irrespective of depth.

Comment: Echo Offshore stated that the ''new rules state that magnetometers must have an altimeter. In our experience magnetometer altimeters are not as reliable or as accurate as depth sensors. Depth sensor data can be subtracted from water depth data and integrated into the magnetometer data output to provide a more reliable altitude. The stated requirement seemingly precludes the ability to do this. It is recommended that the requirement be to record accurate altitude for the magnetometer, but the method be left up to the operator.''

Response: Section 550.194(c)(2) of the final rule has been modified from the proposed language to remove the altimeter requirement in favor of a more general requirement that an accurate measurement of the altitude of the magnetometer must be used. BOEM agrees that subtracting the value of the depth sensor from the water depth can be used to provide an altitude of the magnetometer provided that the water depth is also recorded. BOEM included a requirement in the final rule at § 550.194(c)(5) to collect accurate depth measurements throughout the survey area. These changes in the final rule provide more flexibility to the lessee in conducting surveys to meet the performance requirements.

Comment: An independent marine archaeologist requested clarification about whether prior surveys conducted on a lease at 50-meter spacing will still be viable or if the surveys will have to be conducted again at 30-meter lines spacing.

Response: This final rule includes a provision at § 550.194(a)(3) that allows the submission of previous surveys for review by BOEM to determine if a new survey will be required. BOEM will make this determination on a case-by-case basis.

Comment: ACRA stated that the wording of the proposed ''rule implies that BOEM will no longer require magnetometer survey[s] for archaeology in water depths more than 100 meters'' and asserted that magnetometer data have been safely and efficiently collected in these greater water depths under NTL 2005–G07. They also noted that magnetometer surveys at greater depths are currently recommended for Shallow Hazards under NTL 2022–G01 part III.C.1 and asked for BOEM's rationale for the measurement reduction for magnetometer data acquisition. Similarly, ACUA and SHA recommended that BOEM include magnetometer data acquisition in water depths up to 200 meters to ensure identification and protection of underwater cultural heritage in deeper

waters and consistency across standards.

Response: BOEM has been receiving data from surveys since the implementation of the original NTL 2005–G07. BOEM has observed, on most surveys, that it is extremely difficult to deploy magnetometers at depths greater than 100 meters water depth and maintain the appropriate height above the seafloor. This is exacerbated by extreme bathymetry fluctuation typical on the Gulf of Mexico OCS between 100 and 200 meters. BOEM has heard directly that numerous survey companies have struggled to comply with the previous guidance. Even though the previous guidance recommended the use of the magnetometer data for depths more than 100 meters, BOEM believes it is better to focus on improving performance standards for magnetometry in water depths where its use has proven consistently useful in identifying significant archaeological resources. No changes were made to the final rule as a result of this comment.

Comment: An independent marine archaeologist recommended that ''[w]hen a total field magnetometer, but not a gradiometer, is employed the survey should also utilize a base station magnetometer deployed within 20 kilometers of the survey (deployed over geologic material comparable to the geology of the survey area) and used to collect background magnetic field readings at a minimum of twice per minute to allow the investigators to correct for the diurnal variation of the earth's magnetic field.'' They also recommended that the magnetometer sampling rate not be specified, but rather the samples per meter along the survey track be the guiding requirement. Additionally, they stated that ''limiting the depth at which a magnetometer must be used to survey in less than 100 feet of water seems arbitrary from the point of view of archaeological site detection.''

Response: In response to this comment, BOEM has removed the magnetometer sampling rate stipulation from the final rule in § 550.194(c)(2) and replaced it with a samples per meter requirement. The potential for sites to be completely buried under sediment decreases substantially with increasing distance from the coast and depth of water. For most of the OCS, shipwrecks beyond the 100-meter mark are found to have a surface expression that is more effectively located via side-scan sonar and BOEM has no evidence, to date, to the contrary. Nothing, however, precludes the operator from using a magnetometer at deeper depths if they wish to have additional information related to surface anomalies.

Comment: OOC provided the following editorial suggestions for § 550.194(c)(2) to maintain consistency with the NTL 2005–G007 and the preamble: ''The magnetometer, gradiometer, or its equivalent must be towed [strikeout: as close to the seafloor as possible] no higher than 20 feet above the sea floor and sufficiently far from the vessel to isolate the sensor from the magnetic field of the survey vessel and the other survey instruments . . .''

Response: BOEM thanks the commenter for its suggestion but has chosen not to incorporate the suggested edit in the final rule in § 550.194(c)(2). The final rule has been crafted to specify clear performance standards that provide lessees with more flexibility to design and conduct archaeological surveys in a manner that meets those performance standards, including the altitude of the magnetometer, gradiometer, or its equivalent necessary to detect ferrous metals or other magnetically susceptible materials of at least 1,000 pounds (453 kilograms) in mass with a minimum magnetic deflection of 5 gamma (γ; 5 nanotesla [nT]).

Comment: In response to the proposed amendment in § 550.194(c)(3) to require the use of a sub-bottom profiler system for surveys conducted in water depths of less than 140 meters, P&C Scientific stated that sub-bottom profiler data should be required throughout the Gulf of Mexico.

Response: Sub-bottom profiler data can be used for various purposes, including locating potential areas of prior human occupation. BOEM believes that in the Gulf of Mexico, the 140-meter cutoff best encompasses the farthest likely extent of prior human occupation. This depth is based on information presented by submerged paleolandscape and submerged archaeological experts at the Paleo Workshop 2018: Reevaluating the Submerged Paleoindian Landscape of the Gulf of Mexico.[5] Similarly, a recent study for the Alaska region also recommended using sub-bottom profilers during archaeological surveys in waters 140 meters or less.[6] In the Pacific Region, studies have found that a 130-meter cutoff is appropriate.[7] After careful review and analysis by BOEM subject matter experts, BOEM concluded that these findings and recommendations were warranted and worthy of incorporation into this rule. BOEM has included in § 550.194(c)(3) in this final rule that the use of a sub-bottom profiler is required in water depths of 140 meters or less, unless BOEM specifies a different water depth based on its determination of the furthest likely extent of prior human occupation on the OCS. The depths are based on current scientific understanding of sea-level rise and could change in the future as additional information becomes available.

Comment: ACUA, SAA, CAH, AAA, and SHA expressed support for the proposal to require the use of a sub-bottom profiler system for surveys conducted in water depths of less than 140 meters but noted that the rule does not ''include any requirement for acquisition of bathymetry data which is necessary to calculate the total depth below sea level of interpreted horizons. This total depth below sea level is needed to identify the timing of subaerial exposure and marine inundation of the feature, based on depth within the context of a regionally accurate sea level curve.'' They asserted that this would ensure ''the most effective identification and protection of pre-contact submerged underwater cultural heritage.''

Response: Based on requests from multiple commenters, BOEM has incorporated a requirement in the final rule at § 550.194(c)(5) to acquire bathymetry data, which is similar to guidance found in the NTL 2022–G01. The addition of a bathymetry requirement is needed to ensure the accurate determination of the depth of the seafloor to interpret the geophysical data, as well as to determine the accurate height of the magnetometer and other sensors if a depth sensor is used instead of an altimeter. The latter gives the lessee additional flexibility in determining the best methods and deployment of survey instrumentation

[5] *https://www.boem.gov/environment/paleo-workshop-2018-agenda.*

[6] Sassorossi, W.S., Tuttle, M.C., Evans, A.M., Rawls, J., Holland, SE, Fadem, C.M., Stotts, I., Miller, H.L., Identifying Coastal and Submerged Cultural Heritage on the Alaska Outer Continental Shelf (Gray & Pape, Inc., Cincinnati, OH, 2023); U.S. Department of the Interior, Bureau of Ocean Energy Management, Anchorage, AK, Report No.: OCS Study BOEM 2024–011. Contract No.: 140M0121F0047, p.167.

[7] Clark J, Moitrovica J, Alder J., Coastal paleogeography of the California-Oregon-Washington and Bering Sea continental shelves during the latest Pleistocene and Holocene: implications for the archaeological record, Journal of Archaeological Science. 52:12–23 (2014), *https://doi:10.1016/j.jas.2014.07.030;* ICF International, Davis Geoarchaeological Research, and Southeastern Archaeological Research, Inventory and Analysis of Coastal and Submerged Archaeological Stie Occurrence on the Pacific Outer Continental Shelf (2013); U.S. Department of the Interior, Bureau of Ocean Energy Management, Pacific OCS Region, Camarillo, CA, OCS Study BOEM 2013–0115.

to meet the requirements specified in the rule.

Comment: An independent marine archaeologist expressed support for the inclusion of sub-bottom profilers and requested clarification if, based on changes in NTL 2022–G01, there would be any recommendations in the final rule regarding the use of a multibeam echosounder, which is a type of sonar that is used to map the seabed by emitting acoustic waves in a fan shape beneath its transceiver.

Response: Based on requests from multiple stakeholders, BOEM has incorporated the bathymetry data collection in line with guidance found in NTL 2022–G01. The bathymetry data collection requirement finalized in § 550.194(c)(5) is flexible enough to allow for a multibeam echosounder but does not require it; it requires an echosounder or equivalent system.

Comment: An independent marine archaeologist commented that the proposed rule will require a sub-bottom profiler out to 140 meters, but that the rule does not specify the line spacing requirements for that sensor. The archaeologist requested clarification as to whether the current maximum line spacing of 300 meters will remain the required line spacing for the sub-bottom profiler.

Response: This rule does not specify maximum line spacing for sub-bottom profilers. During an archaeological survey, lessees who deploy different sensors that are run concurrently will need to collect and process the data to meet the performance standards, which could entail different survey intervals. This final rule, as proposed, has been crafted to specify clear performance standards that provide lessees with more flexibility to design and conduct archaeological surveys in a manner that meets those performance standards, including spacing of survey transects.

Comment: OOC recommended that BOEM delete the proposed requirement for the use of a sub-bottom profiler system for surveys conducted in water depths of less than 140 meters because BOEM established in § 550.194(c) the sea change height as being 200 feet. It also requested clarification on the sea level change referenced in the preamble. The commenter stated that the preamble references 460 feet, but the BOEM guidance references a 200-foot change. The organization states ''this variation of definition is significant and the preamble to the proposed rule requires surveys in water depths where no material remains of human life existed.''

Response: BOEM could not find a reference to sea change height as being 200 feet in § 550.194(c). The reference to a sea change height of 200 feet may be from a BOEM website and has been changed to reflect our current understanding of sea-level rise and the peopling of the Americas. The website information was out of date and has been updated based on the information provided below (see *https://www.boem.gov/regions/gulf-mexico-ocs-region/office-environment/gulf-mexico-archaeological-information*).

Sub-bottom profiler data can be used for various purposes, including locating potential areas of prior human occupation. BOEM has concluded that, in the Gulf of Mexico, the 140-meter cutoff best encompasses the furthest likely extent of prior human occupation. As discussed earlier in this preamble, this depth is based on information presented by submerged paleolandscape and submerged archaeological experts at the Paleo Workshop 2018: Reevaluating the Submerged Paleoindian Landscape of the Gulf of Mexico. Similarly, a recent study for the Alaska region also recommended using sub-bottom profilers during archaeological surveys in waters 140 meters or less. In the Pacific Region, studies have found that a 130-meter cutoff is appropriate. After careful review and analysis by BOEM subject matter experts, BOEM concluded that the findings and recommendations from these experts and studies were warranted and worthy of incorporation into this rule. These depths are based on current scientific understanding of sea-level rise and could change in the future as additional information becomes available.

Comment: In response to the proposed amendment to § 550.194(c)(4) that would require the use of a side-scan sonar or equivalent system in all water depths, P&C Scientific commented that the statement ''Side-scan sonars may either be towed behind a ship or mounted in an autonomous underwater vehicle'' is too limiting. It clarified that in some shallow water areas, a bow mount or a pole mount for a sonar system may be required.

Response: There are flexibilities in the rule at § 550.194(d) that allow lessees to propose alternate methodologies to meet the performance standards specified in the rule. Lessees may reach out to staff to discuss, review, and approve innovative survey instrumentations and methodologies to meet both agency and lessee needs. Lessees may also formally request a departure under § 550.194(d).

Comment: ACUA, SAA, CAH, AAA, and SHA suggested that the language in the rule requiring a sonar survey in all water depths be clarified to indicate if archaeological surveys are required for all activities.

Response: The final rule is specific to oil and gas and sulfur operations in the OCS and is applicable for all EPs, DOCDs, or DPPs that involve disturbance of the seafloor. In such instances, § 550.194(a) specifies that, to protect archaeological resources, a plan or other request must be accompanied by or contain an archaeological report based on an HRG survey of the APE, a reference to an archaeological report based on an HRG survey of the APE previously submitted for the lease, or evidence demonstrating to BOEM's satisfaction that a reasonable and good faith effort to identify archaeological resources within the APE has already been performed. Because the final rule already states the types of plans, (*i.e.,* EP, DOCD, or DPP that propose activities involving seafloor disturbance) that require the submission of an archaeological report based on HRG surveys, BOEM does not feel that further clarification is warranted.

Comment: Echo Offshore requested clarification as to whether the preamble statement that side-scan sonar data is required to ''resolve small, discrete targets 0.5 meters in length at maximum range'' is intended for ''resolution'' or ''object detection.'' The company stated that ''resolution is the ability to discern one object from another, while detection is the ability to image an object'' and provided additional information needed for both ''resolution'' or ''object detection'' in the final rule. It explained that ''A better understanding of what is meant by the ability to resolve an object 0.5 meters in length is critical for our ability to operate under these proposed requirements. Depending on the definition, this may negate the ability to operate side-scan sonars at the higher altitudes and wider range settings that are typically utilized in deep water applications and may have substantial cost impacts . . .''

Similarly, OOC commented that the proposed rule requires ''the ability to 'resolve an object 0.5 meters in length' with side-scan sonar.'' It asserted that: ''First, the language is unclear on what criteria are to be used for this (resolution vs detection, number of pings, along track/cross track, etc.). Second, depending on the answers to the criteria, this may result in the wide line spacing surveys using 100kHz class side-scans on [autonomous underwater vehicles] and in deeper towed scenarios becoming unusable. In order for survey companies to detect an object of that size, it may be necessary to run upwards of 50-meter line spacing in deeper water depth depending on [autonomous underwater vehicle] speed, ping rate, etc.'' It also stated that there is no

mention regarding line spacing in depths over 100 meters.

Response: In response to this comment, BOEM has replaced the word ''resolve'' with the word ''detect'' in § 550.194(c) of the final rule. BOEM has not specified line spacing in depths over 100 meters with this final rule. During an archaeological survey, lessees who deploy different sensors that are run concurrently will need to collect and process the data to meet the performance standards, which could entail different survey intervals. The rule has been crafted to specify clear performance standards that provide lessees with more flexibility to design and conduct archaeological surveys in a manner that meets those performance standards, including spacing of survey transects.

Comment: ACUA, SAA, CAH, AAA, and SHA stated that the ''proposed rule requires that the sonar system must be able to 'resolve small, discrete targets 0.5 meters (1.6 feet) in length at maximum range,' but does not specify if this is in reference to the along-track detection or across-track resolution. These are significantly different but will have a fundamental impact on the line spacing and sonar frequency required to achieve the stated target detection while maintaining the specified sensor altitude to range necessary for 200 percent seafloor coverage. Clarification within the rule change is recommended.''

Response: In response to comments, BOEM has revised the phrasing to clarify that it refers to along-track detection and replaced the word ''resolve'' with the word ''detect'' in § 550.194 of the final rule.

Comment: An independent marine archaeologist stated that ''[c]urrently some areas (specifically in the Gulf of Mexico) designate side scan sonar to be run at a maximum line spacing of 50 meters for some areas and 300-meter line spacing for others (with stipulation regarding percentage of coverage).'' The commenter stated further that the proposed rule does not specify the maximum line spacing requirement for side scan sonar, but states that the ''instrument range must provide at least 100 percent overlapping coverage (*i.e.,* 200 percent seafloor coverage) between adjacent primary survey lines . . .'' The archaeologist requested clarification about whether the current line spacing designations remain in place, or if there will there be new line spacing requirements specified at a later date, or if the statement regarding percentage of survey coverage is a new guideline for all areas without a specific maximum line spacing requirement.

Response: This final rule does not contain any specific line spacing requirements, and no changes were made in response to this comment. During an archaeological survey, lessees who deploy different sensors that are run concurrently will need to collect and process the data to meet the performance standards, which could entail different survey intervals. BOEM has crafted the rule to specify clear performance standards that provide lessees with more flexibility to design and conduct archaeological surveys in a manner that meets those performance standards, including spacing of survey transects.

Comment: ACRA highlighted the proposed language in § 550.194(c)(4) that states ''The 0.5-meter resolution standard is consistent with the capabilities of modern sonar systems when operated at appropriate frequency and range settings'' and asked if this language refers to along-track detection or across-track resolution because the implications for each are significantly different.

Response: The intent of the regulation was to use along-track detection and, in response to comments, the final rule has been updated to state ''along-track'' detection in § 550.194(c).

Comment: OOC stated that the proposal to require the use of a base station or gradiometer during solar storms is unrealistic for Gulf of Mexico projects, and ''the gradiometer array is an added expense in both upfront costs, added redundancy costs, added maintenance costs, increased down time, increased processing analysis time costs, etc.''

Response: BOEM is not explicitly requiring the use of a gradiometer, but rather providing examples where its use may be more appropriate. BOEM has not made any revisions to the final rule as a result of this comment.

Comment: An independent marine archaeologist requested clarification on why the specific altitude for magnetometer collection was removed.

Response: During an archaeological survey, lessees who deploy different sensors that are run concurrently will need to collect and process the data to meet the performance standards, which could entail different survey intervals. The final rule has been crafted to specify clear performance standards that provide lessees with more flexibility to design and conduct archaeological surveys in a manner that meets those performance standards, including the altitude of the magnetometer, gradiometer, or its equivalent necessary to detect ferrous metals or other magnetically susceptible materials of at least 1,000 pounds (453 kilograms) in mass with a minimum magnetic deflection of 5 gamma (γ; 5 nanotesla [nT]).

Comment: ACRA remarked that the discussion of line spacing refers to prior NTL 2005–G07 recommendations for line spacing of 50 meters in water depths of 200 meters or less but fails to mention the recommendation for 300-meter line spacing in all water depths greater than 200 meter as specified in NTL 2011–JOINT–G01. The commenter requested clarification of these technical matters to avoid guidance issues in the future.

Response: BOEM has not specified line spacing requirements with this final rule. During an archaeological survey, lessees who deploy different sensors that are run concurrently will need to collect and process the data to meet the performance standards, which could entail different survey intervals. BOEM has crafted the rule to specify clear performance standards that provide lessees with more flexibility to design and conduct archaeological surveys in a manner that meets those performance standards, including spacing of survey transects.

3. Archaeological Reports

Comment: The TXHC recommended that BOEM provide additional guidance or requirements for the presentation of the data in the technical reports produced for the OCS surveys. It also recommended that BOEM require presentation of contoured magnetic data in the technical reports, including a discussion of processing parameters, data interpretation methodologies, and the selection criteria for ''significant magnetic targets.'' The TXHC discussed similar state-level requirements that are performed inconsistently due to a lack of in-depth experience conducting, processing, presenting, and interpreting archaeological surveys. The commenter asserted that these issues should be of concern to BOEM, because BOEM is introducing similar requirements without professional requirements for underwater archaeologists.

Response: BOEM may provide guidance for implementing the new rule, including recommendations for how best to present data in the archaeological reports. BOEM supports the idea of requiring contoured magnetic data in archaeological reports and has included a requirement in § 550.194(c)(2) of the final rule that data be post-processed and contoured. Requiring the contouring of magnetometer data for inclusion in the archaeological reports will facilitate the interpretation of potential

archaeological resources. The processing of magnetometer data is mainly automated through survey software already in use by industry, and this requirement simply ensures that the data is included in the archaeological report.

Comment: P&C Scientific expressed concerns that the proposed rule's requirement that the archaeological report be prepared and signed by a qualified marine archaeologist is too vague regarding how much experience and what level of experience is required. Additionally, it states the proposed rule ''must have a specific minimum amount of time listed for experience and must stipulate actual field experience, not field schools or projects where the individual was part of a larger team but was not responsible for project oversight.'' An individual commenter recommended that BOEM add specificity to the submerged archaeological resources professional qualification standard. It recommended that ''individuals overseeing archeological assessments possess at least one year of full-time professional experience at a supervisory level in the techniques and technologies of underwater archeology and the study of archeological resources in a maritime context.'' An independent marine archaeologist commented that it would ''be helpful if in addition to the SOI [8] years of experience and degree requirements that would apply, the rule was clearer as to (a) how many years of offshore archaeological experience were necessary at a minimum, (b) what area of technical expertise that experience was needed in, *e.g.,* technical archaeological diving expertise, desktop data collection and/or interpretation, or (c) what level of overall project experience is necessary for supervising projects of similar offshore complexity and size.''

Response: BOEM expects that there should be flexibility in the factors and how they are combined to ensure the marine archaeologist is qualified. The length and type of experience may be sufficient even without supervision of projects directly. As such, BOEM plans to issue guidance discussing factors and how they may be combined or substituted. There would be too many possible permutations (and those could change over time as marine archaeology continues to grow as a field of study and certification) to appropriately address in this rulemaking.

Comment: OOC commented that there ''should be a grandfathering exception or delayed implementation on areas which were surveyed prior to the final rule but where work is conducted after the rule is issued.''

Response: BOEM has included language in the final rule in § 550.194(a)(3), as proposed, to provide for this situation. Additionally, BOEM has included a one-year compliance period for implementation of these new standards for existing lessees, as provided in § 550.194(h) of this rule, in order to accommodate budgeting, existing survey agreements, and schedules for prior planned operations. New leases issued after the effective date of this final rule will be required to implement the new regulations immediately. Once the lease has expired and if new ownership or activity is planned, then new HRG survey data would be required for the latest lessee.

4. Seafloor Disturbing Operations

Comment: OOC, NOPC, and an independent marine archaeologist commented that NTL No. 2005–G07 states that notification of the discovery of an unanticipated archaeological resource while conducting operations should occur within 48 hours of those activities, while the proposed rule states 72 hours. OOC and NOPC asserted that ''[g]iven the conflicts with existing agency guidance, they recommend BOEM specifically address whether it intends to rescind (or revise, and if so, how) NTL No. 2005–G07 and its Guidance for Compliance with Mitigation 3.20.''

Response: The commenter is correct that previous BOEM guidance recommended notification of discovery within 48 hours. The requirements of this final rule supersede all previous NTLs issued concerning marine archaeology. BOEM intends to rescind those NTLs and any other outdated guidance to avoid confusion about BOEM's prior regulatory requirements and guidance. However, because there are lessees and operators that may come under the purview of 30 CFR 550.194(h) and be exempt from full compliance with the new regulatory changes for a period of time (*i.e.,* up to 365 days from the effective date of this rule), BOEM will ensure that the applicable NTLs remain on the website during that period so that those lessees and operators will have access to those NTLs to reference as they prepare to comply with the full regulatory amendments concerning marine archaeology in 30 CFR part 550. BOEM will include explanatory text on its website regarding these NTLs and their limited applicability to lessees and operators subject to 30 CFR 550.194(h).

Comment: An independent marine archaeologist suggested reducing the notification period in § 550.195(a) for notifying the BOEM Regional Director that a discovery of an unanticipated archaeological resource has occurred from 72 hours to 24 hours to minimize the lease owner's down time, allow BOEM to begin assessments sooner, and facilitate important conversations with consulting Native American Tribes.

Response: BOEM has determined that 72 hours is a reasonable time period for reporting the discovery of an unanticipated archaeological resource and gives the operator needed time to consult with a qualified marine archaeologist and analyze the data. As required in § 550.195(a), the 72-hour time period is a maximum time for reporting and does not preclude the operator from notifying the BOEM Regional Director earlier.

Comment: NOPC commented that ''the proposed rule's existing text would conflict with BOEM guidance on avoidance of archaeological resources, which notes that, '[i]n most cases, conditions of approval will not be applied in areas that have been heavily disturbed or to proposed activities where the disturbance is minimal such as cores and borings.' ''

Response: The language referenced in this comment refers to the Guidance for Compliance with Mitigation 3.20, which provides guidance to site-specific conditions of plan approval and not to the survey requirements for EPs, DOCDs, and DPPs that will be implemented with this rule. BOEM intends to rescind the referenced guidance document and any other outdated guidance, including NTLs, and then issue new NTLs as necessary to provide updated guidance on best practices for implementing this rule.

Comment: An independent marine archaeologist commented that the proposed rule would not address, ''impacts from pipelines and structure removals, both of which are under the permit authority of . . . [the Bureau of Safety and Environmental Enforcement (BSEE)] . . .'' The commenter added that, ''[u]nder MMS, numerous historically significant shipwrecks, such as the German U-Boat U–166 and the 'Mardi Gras Shipwreck,' were located during pipeline surveys.'' They also noted that the shipwrecks have been ''adversely impacted by pipeline construction as a result of inadequate identification efforts.'' They stated that

[8] The Secretary of the Interior's (SOI) historic preservation professional qualifications standards are described in the following: Archaeology and Historic Preservation; Secretary of the Interior's Standards and Guidelines, 48 FR 44716 (Sept. 29, 1983). Available at: *https://www.nps.gov/subjects/historicpreservation/upload/standards-guidelines-archeology-historic-preservation.pdf.*

''[w]ithout equivalent regulations promulgated by BSEE, significant historic resources remain at risk from the offshore oil and gas program. Since BOEM retains responsibility for conducting NEPA reviews of BSEE permitting actions, BOEM should make clear that these permit applications should be accompanied by an archaeological survey and report under 40 CFR 1502.21. . . .''

Similarly, Echo Offshore addressed the proposed requirement that BOEM refer a discovery to BSEE to determine if the resource may have been adversely impacted by operations. It asked BOEM to clarify whether there was an agreement between BOEM and BSEE to ensure that both bureaus use the same set of rules for evaluating resources. It also noted that many of the projects in the Gulf of Mexico are under BSEE jurisdiction and the applicability of current requirements is unclear.

Response: For pipeline operations (*e.g.,* installation, modification, or decommissioning of a pipeline) proposed under an approved EP, DOCD, or DPP, the lessee and operator are required to submit a permit application to BSEE, pursuant to 30 CFR 550.281(a) and 250.1007. Existing BSEE regulations also require submission of a shallow hazards survey report and potentially an archaeological resource report with any pipeline permit application and require all operations to immediately halt if an archaeological resource is discovered while conducting operations. *See* 30 CFR 250.1007(a)(5), 250.194(c), and 250.1010(c). The regulations likewise require that all pipeline removal applications include plans to protect archaeological features during removal operations. *Id.* at § 250.1752(a)(6). Although BSEE ultimately determines whether to approve or deny a pipeline operation permit, BOEM conducts the required environmental analyses on behalf of BSEE for any permit application proposing bottom disturbing activities (*e.g.,* installation of new or relocation of existing segments or components), which includes ensuring that the proposed activity does not adversely affect potential archaeological resources. BSEE subsequently uses BOEM's environmental analyses to fulfill its obligations under NEPA and section 106 of the NHPA. This final rule will enhance the capacity of both BOEM and BSEE to identify and protect potential archaeological resources that might be adversely affected by pipeline operations. Additionally, this rule does not directly apply to BSEE's authorizations under part 250, and does not amend those regulations.

Comment: OOC and NOPC recommended that if BOEM removes the ''reason to believe'' standard, it should remove the phrase ''or any other request to obtain an authorization or permit from BOEM that involves disturbance of the seafloor'' from the proposed § 550.194(a). They asserted that if BOEM is not willing to remove this phrase in the final rule, BOEM should define which authorizations and permits would be subject to the new requirement and revise the RIA if the definition includes all or most permits or authorizations associated with offshore exploration and production.

Response: In response to this comment, BOEM has revised § 550.195(a) to remove the phrase as recommended by the commenter. That section now states: ''To protect archaeological resources, your EP, DOCD, or DPP that proposes activities involving disturbance of the seafloor . . .''. BOEM agrees that the phrase is not needed to protect archaeological resources and could be misinterpreted to include activities not pertaining to this section.

5. Definitions

Comment: The Ocean Foundation expressed support for the inclusion of historic resources on the NRHP in the definition of archaeological resources. API and OOC requested clarification on the definition of an archaeological resource and how it would be interpreted moving forward.

Response: BOEM has amended the definition of the term ''Archaeological resource'' in § 550.105 of the final rule, as proposed, to clarify that any historic property, as described in the NHPA, is considered an archaeological resource for the purpose of BOEM's regulations. As discussed in the preamble to the proposed rule at 88 FR 9803, this revised definition would encompass historical properties, as defined in 36 CFR 800.16(l). These properties include any prehistoric or historic district, site, building, structure, or object included in or eligible for inclusion in the NRHP maintained by the Secretary of the Interior. The term ''historic property'' also includes artifacts, records, and remains that are related to and located within such properties, and properties of traditional religious and cultural importance to an Indian Tribe or Native Hawaiian organization and that meet the National Register criteria. BOEM has responded to the comments from API and OOC that were sufficiently specific, but API and OOC do not provide enough additional information about the aspects of the definition that they claim are ambiguous and require additional definitions and clarifications to enable further response.

Comment: An independent marine archaeologist stated that the term ''high resolution'' is not clearly defined. They also requested clarification regarding the phrase ''proposed seabed disturbance,'' specifically whether it will include permitted activity or whether it will also include supplemental activity, such as coring, rig moves, etc. Another marine archaeologist recommended that BOEM clarify whether there is a depth below the seafloor or type of disturbance that would be exempt from classification as a ''bottom disturbing activity.''

Response: In keeping with professional standards that have evolved since the existing regulations were adopted, this final rule defines the minimum level of survey information necessary to support the conclusions in the archaeological report. The rule has been crafted to specify clear performance standards that provide lessees with more flexibility to design and conduct archaeological surveys in a manner that meets those performance standards, and therefore BOEM believes it is not necessary to define ''high resolution'' as a distinct term. BOEM cannot clarify whether there is a depth below the seafloor or type of disturbance that would be exempt from classification as a ''bottom disturbing activity'' without knowing the depth or the type of disturbance. Section 550.194(d) of the final rule provides a process where the lessee may request a departure on a case-by-case basis. In response to the request to clarify if ''proposed seabed disturbance'' includes permitted activity only or also includes supplemental activity, the regulations state that all activities covered by an EP, DOCD, or a DPP that propose to disturb the seafloor would be covered.

V. Summary of Economic Impacts and Benefits

A. What are the economic impacts?

The costs and benefits of the final rule are compared against the baseline scenario. The baseline scenario, or status quo, represents BOEM's assessment of the current practices under the current regulatory framework, including current industry practices and standards that are consistent with that framework. To define the baseline, BOEM examined the best available information regarding the current regulatory requirements and industry standards for conducting an HRG survey, which is the procedure for identifying possible archaeological resources.

In 2011, BOEM's predecessor, BOEMRE, implemented a new pre-seabed disturbance survey policy, which BOEMRE presented to operators during a workshop held in March 2011. Those surveys were conducted, when appropriate, in lease areas that were not designated as highly probable for containing archaeological resource by the predictive model. BOEM advised that, prior to conducting any bottom-disturbing activity on the OCS that could damage archaeological resources, operators should perform a survey of the seafloor where the activities were to take place and prepare an archaeological assessment. Additionally, HRG surveys are already required to identify shallow hazards in 30 CFR 550.214(e) and 550.244(e).

Under the Gulf of Mexico region baseline scenario, HRG archaeological surveys are conducted, with very rare exceptions, using methods consistent with guidelines provided in NTL 2005–G07, titled, ''Archaeological Resource Reports and Surveys,'' [9] which recommends a maximum line spacing of 50 meters in water depths of 200 meters or less. As such, BOEM concludes that most operators are already in compliance with the requirements being codified in this final rule.

In the Alaska region, all HRG archaeological surveys completed since 2011 have been conducted using methods consistent with guidelines provided in NTL 2005–A01, titled, ''Shallow Hazards Survey and Evaluation for OCS Exploration and Development Drilling,'' [10] and NTL 2005–A03, titled, ''Archaeological Survey and Evaluation for Exploration and Development Activities.'' [11] These NTLs provide archaeological survey guidance that includes detailed coverage of 1,200 meters or greater in all directions from a proposed activity and survey line spacing of 150 meters by 300 meters or less. Alaska's offshore oil and gas project economics are challenging, and BOEM finds that archaeological surveys there are generally more expensive than in the Gulf of Mexico and therefore may incur additional cost as a result of this final rule.

Most of the revisions in this final rule will have no or negligible cost impacts for operators. All expected incremental costs of the final rule are due to the requirement for HRG archaeological surveys in water depths of less than or equal to 100 meters and for a magnetometer, gradiometer, or the equivalent towed at an altitude and line spacing sufficient to detect ferrous metals or other magnetically susceptible materials of at least 1,000 pounds. This additional cost is expected to be from the tighter line spacing required for the surveys as compared to the existing NTL. BOEM has determined that the performance standard necessary to detect ferrous metal of at least 1,000 pounds is met by conducting archaeological surveys with a maximum line spacing of 30 meters.[12]

BOEM estimates that the changes would increase total OCS archaeology survey costs over the next 20 years by $5.9 million (using a 3 percent discount rate). Most of the revisions in this final rule will have no or negligible cost impacts for lessees and operators. Table 1 presents a summary of the qualitative benefits and a quantitative estimate of the annualized and total costs for the rule. BOEM estimates that the changes would increase total OCS archaeology survey costs over the next 20 years by $5,925,770, using a 3 percent discount rate, or by $4,452,834, using a 7 percent discount rate.

TABLE 1—SUMMARY OF BENEFITS AND COSTS

Category	Estimate	Units			Notes
		Year dollars	Discount rate (%)	Period covered	
Benefits:					
Qualitative	Assures compliance with NHPA and strengthens archaeological resource protections. Reduces the likelihood of disturbing shipwrecks or other historical sites. Provides regulatory clarity and certainty for operators. Reduces risk and potential mitigation costs to O&G operators.				
Costs:					
Annualized Incremental Costs.	$398,305	2024	3	20 years	Increased compliance costs due to increased measurement capability requirements in water depths less than or equal to 100 meters.
	420,316		7		
Total Incremental Costs.	5,925,770		3		
	4,452,834		7		

[9] *https://www.boem.gov/sites/default/files/documents/newsroom/BOEM20NTL20No.202005-G07.pdf.*

[10] *https://www.bsee.gov/sites/bsee.gov/files/notices-to-lessees-ntl/drilling/05-a01.pdf.*

[11] *https://www.boem.gov/sites/default/files/documents/oil-gas-energy/BOEM20NTL20No.202005-A03.pdf.*

[12] The explanation for this statement is provided in section VII of the preamble of the proposed rule under § 550.194(c)(2), where it states: ''If the sensor is sensitive to detecting a variable of one gamma with no more than 3 gammas of interference, the ferrous mass that might be associated with an historic shipwreck should be detectable as a distinct anomaly from a horizontal distance of 50 feet (15 meters) or less from the sensor to the ferrous mass and a vertical distance of 20 ft (6 meters) or less from the sensor to the seafloor.'' Based on the reports cited above [in the preceding footnote], a survey design of no more than 30-meter line spacing and a magnetometer, gradiometer, or their equivalent towed no more than 6 meters from the seafloor should be sufficient to locate most historically significant shipwrecks on the OCS.

B. What are the benefits?

The estimated benefits associated with this final rulemaking are qualitative benefits and are as follows:

- Assures compliance with NHPA and strengthens archaeological resource protections;
- Reduces the likelihood of disturbing shipwrecks or other historical sites;
- Provides regulatory clarity and certainty for operators; and
- Reduces risk and potential mitigation costs to offshore oil and gas operators.

VI. Section-by-Section Analysis

Part 550—Oil and Gas and Sulfur Operations in the Outer Continental Shelf

Subpart A—General

Section 550.105 Definitions

The Department is finalizing, as proposed, amendments to the definition of the term ''Archaeological resource'' to clarify that any historic property described by the NHPA is considered an archaeological resource for the purpose of BOEM's regulations. The new definition of ''Archaeological resource'' reads as follows: ''the material remains of human life or activities that are at least 50 years of age and that are of archaeological interest, including any historic property described by the National Historic Preservation Act, as defined in 36 CFR 800.16(l).''

As discussed in the preamble to the proposed rule at 88 FR 9803, this revised definition will encompass the historic properties as defined in 36 CFR 800.16(l). These properties include any prehistoric or historic district, site, building, structure, or object included in, or eligible for, inclusion in the NRHP maintained by the Secretary of the Interior. The term ''historic property'' also includes artifacts, records, and remains that are related to and located within such properties, and properties of traditional religious and cultural importance to an Indian Tribe or Native Hawaiian organization and that meet the National Register criteria.

Section 550.194 How must I conduct my approved activities to protect archaeological resources?

The Department is finalizing, as proposed, the revision of the title of § 550.194 from ''How must I protect archaeological resources?'' to ''How must I conduct my approved activities to protect archaeological resources?'' to reflect that the response to a discovery of potential archaeological resources and the remediation process is no longer included in the content of § 550.194 but has been moved to a new section (*i.e.,* § 550.195).

The Department is finalizing, as proposed, amendments to § 550.194(a) to remove the ''reason to believe'' standard with respect to individual leases, as discussed in section II.B of this preamble. This final rule requires operators to submit to BOEM an archaeological report, refer to a previously submitted report meeting the necessary standards, or submit evidence demonstrating that a reasonable and good faith identification effort has already been performed. Operators must include these submissions with any EP, DOCD, or DPP that proposes activities involving disturbance of the seafloor.

The Department is finalizing, as proposed, amendments to § 550.194(a)(1). The existing regulation requires operations to be located at a site that would not adversely affect an area containing an archaeological resource if an archaeological report suggests that a resource may be present. This final rule relocates the requirements for a response to a discovery of potential archaeological resource to a new section (*i.e.,* § 550.195). This rule specifies that an archaeological report must be based on an HRG survey, as discussed in section II.B of this preamble. This final rule allows operators to submit an archaeological report based on an HRG survey of the APE as one option for complying with the requirement in § 550.194 to protect archaeological resources.

The Department is finalizing amendments to § 550.194(a)(2) to replace the text requiring an operator to establish that an archaeological resource does not exist in a proposed site of operation with text specifying that operators can submit a reference to an archaeological report based on an HRG survey of the APE that was previously submitted for the lease as a means to comply with the requirement in § 550.194. This amendment reflects the relocation of the requirements for a response to a discovery of potential archaeological resource to a new section (*i.e.,* § 550.195).

Under § 550.194(a)(2) of the final rule, an operator may submit a reference to an archaeological report if the previously submitted survey complies with the parameters identified in the final rule and if the results of that previous survey reasonably remain valid, as determined by BOEM. This provision is designed to minimize duplicative surveys by allowing operators to use the data from previously conducted surveys, such as certain shallow hazard reports. The amendments in this final rule specify that BOEM may consider a previous survey and its associated report invalid if BOEM suspects that the seafloor environment has changed sufficiently to warrant a new HRG survey (*e.g.,* time elapsed since prior survey, change from a geological event such as a mudslide).

The Department is finalizing, as proposed, new § 550.194(a)(3), to allow operators to comply with the requirement in § 550.194 by demonstrating that a reasonable and good faith effort to identify archaeological resources within the APE has already been performed. This provision is designed to minimize duplicative surveys by allowing operators to use, for example, previously collected data from non-operator commissioned sources, such as NOAA coastal surveys. BOEM will allow the use of such data if BOEM determines these sources are sufficient to identify possible marine archaeological resources at a degree of certainty reasonably similar to or better than an HRG survey.

The Department is finalizing amendments in § 550.194(b) to replace the text stating that the Regional Director will notify an operator if they determine that an archaeological resource is likely to be present with the requirement that the archaeological report or evidence required by § 550.194(a) be prepared and signed by a qualified marine archaeologist. This amendment reflects the relocation of the requirements for a response to a discovery of potential archaeological resource to § 550.195. The requirement that the report or evidence must be prepared and signed by a qualified marine archaeologist applies regardless of which option described in § 550.194(a) is used as the basis of the archaeological report or evidence. As a result of public comment, this final rule further defines a qualified marine archaeologist as one who meets the Secretary of the Interior's ''Standards and Guidelines for Historic Preservation Projects: Professional Qualification Standards'' and any subsequent updates to those standards and guidelines and has experience in conducting or overseeing HRG surveys and processing and interpreting the resulting data for archaeological potential.

The Department is finalizing, as proposed, amendments to § 550.194(c) to replace the requirement to immediately halt operations if an archaeological resource is discovered while conducting operations with text establishing the minimum standards for conducting the geophysical survey upon

which the archaeological report is based. This amendment reflects the relocation of the requirements for a response to a discovery of potential archaeological resource to § 550.195.

Section 550.194(c) of this final rule requires that geophysical surveys must be conducted using state-of-the-art instrumentation and methodology that meets or exceeds scientific standards for conducting marine archaeological surveys. While BOEM outlines the minimum scientific standards in paragraph (c), BOEM recognizes that emerging technologies and methods may be used to achieve or exceed these standards. In these instances, BOEM may approve a departure from the provisions of paragraph (c) of § 550.194 on a case-by-case basis if it meets the requirements in paragraph (d).

The Department is finalizing § 550.194(c)(1) to establish the requirements for the survey vessel's navigation system to continuously register its surface position, specify the logging position data, and specify the presentation of geodesy information. With this rulemaking, the regulatory text in § 550.194(c)(1) includes a statement added based on public comments that navigation systems meeting the criteria outlined in § 550.194 do not require prior approval by BOEM.

The Department is finalizing § 550.194(c)(2) to require the use of a total field magnetometer, gradiometer, or other similar instrument having equal or superior measurement capability for surveys conducted in waters of 100-meter depth or less. It also establishes the requirements for the collection of data necessary to assist in the identification of archaeological resources on the OCS. The sensor will be required to be towed in such a manner that a magnetic field produced by ferrous metal associated with a historic shipwreck (*e.g.,* a wooden ship's fasteners, anchors, and cannons) can be detected. The data must be post-processed and contoured in a manner to best facilitate the interpretation of potential archaeological resources. Additionally, requiring the contouring of magnetometer data for inclusion in the archaeological reports will facilitate the interpretation of potential archaeological resources. *See* the preamble to the proposed rule at 88 FR 9804 for more details. Based on public comment, BOEM has removed the altimeter requirement as proposed § 550.194(c)(2) in favor of a more general requirement that an accurate measurement of the altitude of the magnetometer must be used.

The Department is finalizing § 550.194(c)(3) to require the use of a sub-bottom profiler system for surveys conducted to locate potential areas of prior human occupation. BOEM believes that in the Gulf of Mexico and the Alaska OCS, the 140-meter cutoff best encompasses the furthest likely extent of prior human occupation, as discussed in section III of this preamble. To establish a default water depth applicable to the requirement to use a sub-bottom profiler, this rule requires the sub-bottom profiler in water depths of 140 meters or less. The depths are based on current scientific understanding of sea-level rise and could change in the future as additional information becomes available.

The Department is finalizing § 550.194(c)(4) to require the use of a side-scan sonar or equivalent system in all water depths. It also establishes the technical requirements for the use of this equipment and for the post-processing of data. To ensure that the nadir is imaged, the sonar should have overlapping coverage between the right and left channels on adjacent survey transects. A 100 percent overlapping coverage of the seafloor (*i.e.,* 200 percent seafloor coverage) ensures that significant archaeological resources are not missed in the survey. Greater than 200 percent overlapping coverage may be necessary to guarantee nadir coverage and account for survey vessel drift between lines, which may be an important consideration when surveying in deep water. The sonar system must be able to detect small, discrete targets 0.5 meters (1.6 feet) in length at maximum range, along the track. Post-processing can improve sonar data quality by, for example, adjusting for slant range effects and variable speed along line. This provision requires post-processing to ensure that the data is useful for interpretation and mapping. For more details, see the preamble to the proposed rule at 88 FR 9805. Based on public comment, this section has been revised to replace ''resolve'' with ''detect'' and to clarify that the sonar detection is ''along the track.''

The Department is finalizing § 550.194(c)(5) as proposed to require the use of an echo sounder or equivalent system in all water depths. This new provision also establishes the technical requirements for the use of this equipment and for the post-processing of data.

Bathymetric surveys are conducted using an echo sounder attached to or towed by a survey boat or sometimes mounted to an autonomous underwater vehicle. As the boat moves across the water, the echo sounder generates electrical signals. These are then converted into soundwaves by an under-water transducer. A single-beam sonar uses just one transducer to map the seafloor, while multibeam sonar sends out multiple, simultaneous sonar beams (or sound waves) at once in a fan-shaped pattern. This covers the space both directly under the ship and out to each side.

Bathymetry data must be acquired to measure accurate water depths across the area. Where swath bathymetry data are acquired, it is recommended that backscatter values from the seabed returns are logged and processed for use in seabed characterization to support and complement the side scan sonar data. Single beam echo sounder data (or data from the equivalent system) should be used to verify the results of swath bathymetry data to check for gross error.

The bathymetry systems must be set up to accurately record data across the range of water depths expected in the survey area. Care should be taken in selection of operating frequencies such that the individual systems do not interfere with each other. The bathymetry systems must be used in conjunction with an accurate motion sensor to compensate for vessel motion. Water column sound velocity should be determined as a minimum at the start and end of data acquisition, and at suitable intervals throughout the project, by use of a conductivity, salinity, and temperature depth probe or a direct reading sound-velocity probe suitable for use in the maximum water depths expected within the survey area. Water depths should be corrected for vessel draft, tidal level, and referenced to the appropriate vertical datum (LAT, MSL, etc.). The final processed digital terrain model data cell size covering the entire survey area, without gaps, should reflect the frequency of the system being used, data density, and altitude above seabed of the transducer head.

The Department is finalizing § 550.194(c)(6) as proposed to allow BOEM to accept the results of an archaeological survey conducted prior to the effective date of these regulations in lieu of conducting a new survey, provided the lessee or operator can demonstrate that such survey was conducted in such a manner as to meet the objectives of § 550.194(c). Some OCS lessees and operators have conducted OCS surveys using advanced techniques and technologies, such that any new survey would be highly unlikely to yield substantially different results. In those situations, subject to BOEM approval, a lessee or operator may be able to use an existing survey that meets

or exceeds the requirements in the final rule, rather than conduct a new survey.

The Department is finalizing, as proposed, new § 550.194(d) to provide that the Regional Director may approve departures, on a case-by-case basis, from the performance standards outlined in § 550.194(c). The Regional Director will determine if the departure is necessary because ordinary application of those standards would be impractical or unduly burdensome; would be unnecessary to achieve the intended objectives of the marine archaeology program; would fail to conserve the natural resources of the OCS; would fail to protect life (including human and wildlife), property, or the marine, coastal, or human environment; or would fail to protect sites, structures, or objects of historical or archaeological significance.

The Department is finalizing, as proposed, new § 550.194(e) to provide that any departures approved under § 550.194(d) must be documented in writing and must be: consistent with OCSLA; protect the archaeological resources to the same degree as if there was no approved departure from the regulations; satisfy NHPA section 106 and achieve results for identifying archaeological resources as if there was no approved departure from the regulations; and not impair the rights of third parties. This will allow BOEM to ensure that its archaeological report requirements remain in compliance with the NHPA.

The Department is finalizing, as proposed, new § 550.194(f) to provide that BOEM may reject any archaeological report if the survey was not prepared in accordance with the requirements of § 550.194(c) or any BOEM-approved departure to the survey requirements. This final rule also provides that BOEM may reject any archaeological report if the results produced from the survey do not meet the data and resolution requirements specified in § 550.194(c), regardless of whether the survey was otherwise conducted appropriately. For more details, see the preamble to the proposed rule at 88 FR 9806.

The Department is finalizing, as proposed, new § 550.194(g) to provide specifications for what must be done if the archaeological report or evidence mentioned in § 550.194(a) suggests that an archaeological resource may be present. This final rule establishes the two courses of action for operators to proceed with operations if the archaeological report or evidence required by § 550.194(a) suggests that an archaeological resource may be present.

The Department is finalizing, as proposed, new § 550.194(g)(1) to provide operators the option of relocating operations so as not to adversely affect an area where known or suspected archaeological resources exist.

The Department is finalizing, as proposed, relocated § 550.194(a)(2) as § 550.194(g)(2) to provide an alternative to § 550.194(g)(1). This alternative provides operators the option of establishing, to the satisfaction of the Regional Director, that an archaeological resource does not exist or will not be affected by operations or that the operator will take measures determined by the Regional Director to protect the archaeological resource during operations. If the Regional Director requires additional investigations, the operator will be required to submit a report documenting the investigation to the Regional Director for review.

The Department is finalizing, as proposed in new § 550.194(g)(2)(i), that if further investigation cannot establish to the satisfaction of the Regional Director that an archaeological resource is not likely to be present at the operational site, the lessee or operator must demonstrate to the satisfaction of the Regional Director either that its operations will not adversely affect the suspected resource or else commit to undertaking the steps required in § 550.194(g)(2)(ii).

This final rule replaces the existing § 550.194(b) with § 550.194(g)(2)(ii), as proposed, and emphasizes that the operator must take no action that may adversely affect an archaeological resource until the Regional Director specifies measures the operator must take to protect the resource.

The Department is finalizing, as proposed in new § 550.194(g)(3), that if the Regional Director determines that an archaeological resource is likely to be present in the lease area and is likely to be adversely affected by operations, and if the Regional Director determines that there is no feasible means to avoid this adverse effect, the Regional Director will be allowed to prohibit operations in the APE.

The Department is finalizing, based on public comments discussed in section III of this preamble, a new § 550.194(h) to allow that any lessee or operator that has an existing lease executed prior to the effective date of this final rule to apply the regulations in effect prior to the effective date with respect to the provisions of this section for a period of time not to exceed 365 days after the effective date of this final rule. The intent of this new provision is to avoid forcing lessees and operators to renegotiate existing agreements with companies that will be providing archaeological surveys where a survey contract has already been negotiated for future survey activities.

Section 550.195 What must I do if I discover a potential archaeological resource while conducting operations on the lease or right-of-way area?

The Department is finalizing, as proposed, amendments to move existing 30 CFR 550.194(c) to a new section at 550.195, titled ''What must I do if I discover a potential archaeological resource while conducting operations on the lease or right-of-way area?'' Moving the provisions to a separate section will improve the overall organization of the regulations. In addition to moving the provision to a stand-alone section, BOEM is expanding on the specificity of the requirements. The existing regulations require that operations be halted immediately within the area of the discovery and that the discovery be reported to the BOEM Regional Director.

The Department is finalizing, as proposed, new § 550.195(a) to require the operator to immediately halt seafloor disturbing operations within at least 305 meters (1,000 feet) of the area of the discovery and report the discovery to the Regional Director within 72 hours. This final rule establishes these requirements to minimize the potential for risk to the resource.

The Department is finalizing, as proposed, new § 550.195(b) to clarify that if BOEM determines that the resource is eligible for listing on the NRHP in accordance with the applicable regulations, the Regional Director will specify measures that the lessee and operator must take to protect the resource during operations and activities. The final regulations in § 550.194(g) state that if the resource is present, the Regional Director will determine how to protect it. If BOEM were to determine that the resource is eligible for listing on the NRHP, and the operations and activities are under the jurisdiction of BSEE, BOEM will inform the BSEE Regional Director that the resource has been determined to be historically significant and advise BSEE on the appropriate means to protect it.[13]

[13] This is BOEM's current practice. When BOEM is notified of a National Register-eligible archaeological discovery, it will notify BSEE's archaeologists, particularly if the discovery happens during post-permit-approved activities that are within BSEE's area of jurisdiction. Both agencies share the same GIS database of known NRHP eligible sites, so this information is further available for review as a routine part of each agency's review processes.

The Department is finalizing, as proposed, new § 550.195(c) that provides, for activities and operations under BSEE jurisdiction, that BOEM will refer the discovery to BSEE to determine if the resource may have been adversely impacted by operations. The BSEE Regional Director will specify measures the lessee or operator must take either to demonstrate that no adverse impacts have occurred or to document the adverse impacts. BSEE may specify additional measures that it determines are necessary to remediate adverse impacts to any archaeological resources resulting from operations that have been discovered and will relay to BOEM both the results of its investigation and any further measures it has imposed to remediate the adverse impacts that may have occurred.

VII. Statutory and Executive Order Reviews

A. Executive Order 12866: Regulatory Planning and Review, as Amended by Executive Order 14094: Modernizing Regulatory Review, and Executive Order 13563: Improving Regulation and Regulatory Review

Executive Order (E.O.) 12866, as amended by E.O. 14094, provides that the Office of Information and Regulatory Affairs (OIRA) in OMB will review all significant rules. OIRA has determined that this final rule is not a significant action under E.O. 12866.

E.O. 13563 reaffirms the principles of E.O. 12866 while calling for improvements in the Nation's regulatory system to promote predictability, reduce uncertainty, and to use the best, most innovative, and least burdensome tools for achieving regulatory ends. E.O. 13563 directs agencies to consider regulatory approaches that reduce burdens and maintain flexibility and freedom of choice for the public where these approaches are relevant, feasible, and consistent with regulatory objectives. BOEM has developed this rule in a manner consistent with these requirements.

B. Regulatory Flexibility Act

The Regulatory Flexibility Act (RFA), 5 U.S.C. 601–612, requires agencies to analyze the economic impact of regulations when a significant economic impact on a substantial number of small entities is likely and to consider regulatory alternatives that will achieve the agency's goals while minimizing the burden on small entities. When an agency issues a notice of rulemaking, the RFA requires the agency to ''prepare a final regulatory flexibility analysis'' that will give ''a description of and an estimate of the number of small entities to which the rule will apply'' (5 U.S.C. 604(a)).

BOEM has determined that this rule will affect a substantial number of small entities. Operators under this rule primarily fall under the Small Business Administration's (SBA) North American Industry Classification System (NAICS) codes 211120 (crude petroleum extraction) and 211130 (natural gas extraction). For NAICS classifications 211120 and 211130, SBA defines a small business as one with fewer than 1,251 employees. All 70 OCS operating companies would be impacted by the rule if they engage in activities disturbing the seafloor in areas that have not been previously surveyed and that would require an HRG survey and an archaeological report under the rule. BOEM estimates that of the 70 OCS lease operators, 21 are large and 49 are small.

The regulatory changes in this rule are primarily clarifications, codifications of existing practice, or reflections of NHPA regulations. Most operators have been conducting HRG surveys and the archaeological analysis consistent with the regulatory requirements in this rule since at least 2011. Therefore, BOEM does not anticipate that these regulatory updates will have a significant economic impact on small or large operators. The expected incremental compliance costs of the rule derive from the requirement that HRG archaeological surveys in water depths less than or equal to 100 meters have a magnetometer, gradiometer, or the equivalent towed at an altitude and line spacing sufficient to detect ferrous metals or other magnetically susceptible materials of at least 1,000 pounds. This performance standard typically can be met by operators conducting archaeological surveys with a maximum line spacing of 30 meters at a height of no more than 6 meters from the seafloor.

BOEM estimates that the changes would increase OCS archaeology survey costs by $7,595,000 over the next 20 years. The Gulf of Mexico archaeological survey costs are estimated to increase by $2,520,000, while the Alaska costs increase by $5,075,000, depending on activity and cost factors discussed in section II of the Benefit-Cost Analysis.

BOEM's estimate of the rule's economic impact on small entities would vary depending on the OCS region where the archaeological surveys occur. Typically, the increased compliance cost would impact operators conducting activities in water depths of 100 meters or less. Small entity operators account for the vast majority of activity in the Gulf of Mexico OCS's shallow water depths. Therefore, BOEM estimates that up to 100 percent of the increased Gulf of Mexico compliance cost for survey line spacing of 30 meters would be borne by operators that are small entities. In the Alaska region, all archaeological surveys are expected to be conducted by large entities. On the Alaska OCS, one company currently holds all OCS oil and gas leases. This company is considered a large entity under the SBA's definition. Therefore, BOEM estimates the increased compliance cost in Alaska would be borne by an operator that is a large entity. Compliance costs by business size can be seen in Table 2 with discount rates. BOEM does not expect new archaeological surveys in other OCS regions over the next 20 years.

TABLE 2—20 YEAR COMPLIANCE COST ASSOCIATED WITH RULE BY BUSINESS SIZE

	Undiscounted cost	Discounted at 3%	Discounted at 7%
Large Business Total Incremental Costs	$5,075,000	$3,959,525	$2,972,956
Small Business Total Incremental Costs	2,520,000	1,966,245	1,479,878

C. Small Business Regulatory Enforcement Fairness Act

The Small Business Regulatory Enforcement Fairness Act (SBREFA), 5 U.S.C. 804(2), requires BOEM to perform a regulatory flexibility analysis, provide guidance, and help small businesses comply with statutes and regulations for major rulemakings. This action is not subject to the SBREFA because it does not have an annual effect on the economy of $100 million or more.

D. Unfunded Mandates Reform Act

The Unfunded Mandates Reform Act (UMRA), 2 U.S.C. 1531–1538, requires

BOEM, unless otherwise prohibited by law, to assess the effects of regulatory actions on State, local, and Tribal governments, and the private sector. Section 202 of UMRA generally requires BOEM to prepare a written statement, including a cost-benefit analysis, for each proposed and final rule with ''Federal mandates'' that may result in expenditures by State, local, and Tribal governments, in the aggregate, or to the private sector, of $100 million or more in any one year. This action does not contain a Federal mandate under UMRA that may result in expenditures of $100 million or more for State, local and Tribal governments, in the aggregate, or the private sector in any one year. Accordingly, a statement containing the information required by the UMRA is not required.

This action is not subject to the requirements of section 203 of UMRA because it contains no regulatory requirements that might substantially or uniquely affect small governments.

E. Executive Order 12630: Governmental Actions and Interference With Constitutionally Protected Property Rights

E.O. 12630 ensures that government actions affecting the use of private property are undertaken on a well-reasoned basis with due regard for the potential financial impacts imposed by the government. This action does not effect a taking of private property or otherwise have taking implications under E.O. 12630, and therefore, a takings implication assessment is not required. Additionally, no comments were received on E.O. 12630 during the public comment period.

F. Executive Order 13132: Federalism

Regulatory actions that have substantial direct effects on the States, on the relationship between the National Government and the States, or on the distribution of power and responsibilities among the various levels of government are subject to E.O. 13132. Under the criteria in section 1 of E.O. 13132, this final rule does not have sufficient federalism implications to warrant the preparation of a federalism summary impact statement. It will not have substantial direct effects on the States, on the relationship between the National Government and the States, or on the distribution of power and responsibilities among the various levels of government. No comments were received on E.O. 13132 during the public comment period.

G. Executive Order 12988: Civil Justice Reform

This final rule complies with the requirements of E.O. 12988. Specifically, this rule:

(1) Meets the criteria of section 3(a) requiring that all regulations be reviewed to eliminate errors and ambiguity and be written to minimize litigation; and

(2) Meets the criteria of section 3(b)(2) requiring that all regulations be written in clear language and contain clear legal standards.

No comments were received on E.O. 12988 during the public comment period.

H. Executive Order 13175: Consultation and Coordination With Indian Tribal Governments

E.O. 13175 defines polices that have Tribal implications as regulations, legislative comments or proposed legislation, and other policy statements or actions that will or may have a substantial direct effect on one or more Indian Tribes, or on the relationship between the Federal Government and one or more Indian Tribes. Additionally, the DOI's consultation policy for Tribal Nations and ANCSA Corporations, as described in Departmental Manual part 512 chapter 4, expands on the above definition from E.O. 13175 and requires that BOEM invite Indian Tribes and ANCSA Corporations ''early in the planning process to consult whenever a Departmental plan or action with Tribal Implications arises.'' BOEM strives to strengthen its government-to-government relationships with Tribal Nations through a commitment to consultation with Tribes, recognition of their right to self-governance and Tribal sovereignty, and honoring BOEM's trust responsibilities for Tribal Nations. BOEM also is respectful of its responsibilities for consultation with corporations established pursuant to ANCSA, 43 U.S.C. 1601 *et seq.*

As discussed in the preamble to the 2023 proposed rule (88 FR 9809), BOEM evaluated the proposed rule under DOI's consultation policy and under the criteria in E.O. 13175 and determined that this rule may have Tribal implications.

BOEM sent letters to all Tribes and ANCSA Corporations on March 3, 2023, to ensure they were aware of the proposed rulemaking, to answer any immediate questions they may have, and to invite formal consultation if they would like to consult. Only one request for consultation was received; consultation was held with the Mashpee Wampanoag on March 14, 2024, and meeting notes are included in the docket (memorandum titled *Tribal Outreach: Mashpee Wampanoag*). For more details on E.O. 13175, the DOI's consultation policy for Tribal Nations and ANCSA Corporations, and the consultations conducted regarding this rulemaking, see the memo in the docket titled, *Tribal Outreach: Summary of Engagement Activities.* BOEM can consult at any time with federally recognized Tribes as sovereign nations.

I. Paperwork Reduction Act

This final rule references existing and new IC requirements for regulations at 30 CFR part 550, subpart A. Submission to OMB for review under the PRA of 1995 (44 U.S.C. 3501 *et seq.*) is required. Therefore, BOEM submitted an IC request to OMB for review and approval and requested a new OMB control number. The information collections relative to this rule are assigned OMB Control Number 1010–0196, Protection of Marine Archaeological Resources Final Rulemaking. Once the 1010–AE11 final rule is effective, BOEM will transfer the hour burden from 1010–0196 to existing OMB Control Number 1010–0114, which covers other information collections for this part and expires on May 31, 2026, then discontinue the new number associated with this rulemaking. The IC related to this rulemaking concerns requirements under 30 CFR 550.194 and 550.195. BOEM may neither conduct nor sponsor, nor are respondents required to respond to, a collection of information unless it displays a currently valid OMB control number.

BOEM is revising its IC burden estimates with the final rule to align with the regulations that codify existing industry practice. The new and revised IC requirements for 30 CFR 550.194 and 550.195 identified below require approval by OMB. BOEM would increase the overall annual burden by 505 hours. The burden hours related to this rulemaking are shown in the following table, and burden hour changes are discussed below.

Citation 30 CFR 550 subpart A and related forms/NTLs	Reporting or recordkeeping requirement	Hour burden	Average number of annual responses	Annual burden hours
		Non-hour cost burdens		
Information and Reporting Requirements				
194(a), (c)	Prepare and/or submit archaeological reports or evidence. Submit archaeological and follow-up reports and additional information.	50	10 submissions	500
194(g)	Locate and protect archaeological sites. Submit archaeological and follow-up reports and additional information*.	Requirement not considered IC under 5 CFR 1320.3(b)(2).		
195(a)	Report archaeological discoveries to the Regional Director	1	3 reports	3
194	Request departures from conducting archaeological resources surveys and/or submitting reports**.	1	2 requests	2
Total burden			15 responses	505
			$0 Non-hour cost burdens	

* The time and financial resources necessary to comply with this requirement would be incurred in the normal course of business using existing contracts already in place by the operator.

** Departure requests do not occur often but are included in burden calculation to allow for the rare occurrence when a company would request a departure from conducting a survey or submitting a report.

• 30 CFR 550.194(a): This final rule will require that any EP, DOCD, or DPP that proposes activities involving disturbance of the seafloor must be accompanied by or contain an archaeological report and supporting evidence. BOEM proposes to increase the estimated annual burden hours related to this subsection to 500 hours (+500 annual burden hours over the currently approved burden).

• 30 CFR 550.194(c): This final rule will require that archaeological reports must be based on an HRG survey of the APE. The HRG requirements described in 30 CFR 550.194(c) are also part of the requirements used for geological and geophysical IC (*i.e.,* shallow hazards surveys) under 30 CFR 550.214 and 550.244 that OMB approved in Control Number 1010–0151. Therefore, no additional burdens are expected to be placed on industry.

• 30 CFR 550.194(g): If an archaeological resource is likely to be present,[14] this final rule will require an operator to either relocate the proposed operations to avoid adversely affecting the resource or establish that the resource does not exist, will not be adversely affected by the operations, or will be protected by mitigation measures during the operations. The likelihood that operators would establish the archaeological resource is not present is low. If operators relocate the project to avoid the known archaeological resource, they could use resources already contracted and available on the project (without the delay of additional investigation). The operator likely will submit information related to archaeological resources to BOEM. The burdens related to the submission of archaeological resource information are accounted for in OMB approved Control Number 1010–0151. Therefore, BOEM has determined there will likely not be an additional burden on industry with this final rule provision.

• 30 CFR 550.195(a): This final rule will require the operator to notify the BOEM Regional Director of any unanticipated archaeological resource discovery. This notification would likely occur during the operator's remote sensing phase or during deployment by a remotely operated vehicle for surveys related to hydrophones. BOEM expects that the occurrence will be low, so BOEM estimates the annual burden hours to equal 3 hours (1 hour x 3 responses) (+3 annual burden hours above the currently approved burden).

• The annual burden hours for departure requests will be 2 annual burden hours. (+2 annual burden hours above the currently approved burden).

Title of Collection: Protection of Marine Archaeological Resources (Notice of Proposed Rulemaking).

OMB Control Number: 1010–0196.

Form Numbers: None.

Type of Review: New.

Total Estimated Number of Annual Responses: 15 responses.

Total Estimated Number of Annual Burden Hours: 505 hours.

Respondent's Obligations: Mandatory.

Frequency of Collection: On occasion.

Once this final rule becomes effective and OMB approves the IC request 1010–0196, BOEM will revise the existing OMB Control Number 1010–0114 for the affected subpart discussed above and will adjust the annual burden hours accordingly. The IC related to 30 CFR part 550 does not include questions of a sensitive nature. BOEM will continue to protect proprietary information according to the Freedom of Information Act and the Department of the Interior's implementing regulations.

In addition, the PRA requires agencies to estimate the total annual reporting and recordkeeping non-hour cost burdens resulting from the collection of information. BOEM solicits your comments regarding non-hour cost burdens arising from this final rule. For reporting and recordkeeping only, your response should split the cost estimate into two components: (1) total capital and startup costs, and (2) annual operation, maintenance, and disclosure costs to provide the information. You should describe the methods you use to estimate your cost components, including system and technology acquisition, expected useful life of capital equipment, discount rates, and the period over which you incur costs. Generally, your estimates should not include equipment or services purchased: (1) before October 1, 1995; (2) to comply with requirements not associated with the IC arising from this final rule; (3) for reasons other than to provide information or to keep records for the U.S. Government; or (4) as part

[14] Often, based on the archaeological report, a sonar signature or magnetic anomaly will likely represent an archaeological resource, but that fact can only be confirmed through more in-depth study. Thus, an option available to the operator is to avoid it or to show that their operations will be designed not to harm the potential archaeological resources identified by the HRG survey.

of customary and usual business or private practices.

As part of BOEM's continuing effort to reduce paperwork and respondent burdens, BOEM invites the public and other Federal agencies to comment on any aspect of this IC, including:

(1) Whether or not the collection of information is necessary, including whether or not the information will have practical utility;

(2) The accuracy of our estimate of the burden for this collection of information;

(3) Ways to enhance the quality, utility, and clarity of the information to be collected; and

(4) Ways to minimize the burden of the collection of information on respondents.

J. National Environmental Policy Act

This final rule does not constitute a major Federal action significantly affecting the quality of the human environment. A detailed environmental analysis under NEPA is not required because this final rule is covered by a categorical exclusion (*see* 43 CFR 46.205). This final rule meets the criteria set forth at 43 CFR 46.210(e) for a Departmental categorial exclusion in that this action is ''nondestructive data collection, inventory, study, research, and monitoring activities'' and the criteria set forth at 43 CFR 46.210(i) for a Departmental categorical exclusion in that this action is ''of an administrative, financial, legal, technical, or procedural nature.'' Additionally, these activities meet the criteria for a categorical exclusion based on the Department Manual in sections 15.4(A)(1), (C)(1), and (C)(13). BOEM has also determined that the final rule does not involve any of the extraordinary circumstances listed in 43 CFR 46.215 that would require further analysis under NEPA.

K. Data Quality Act

In promulgating this rule, BOEM did not conduct or use a study, experiment, or survey requiring peer review under the Data Quality Act (Pub. L. 106–554, app. C, sec. 515, 114 Stat. 2763, 2763A–153–154). In accordance with the Data Quality Act, the Department has issued guidance regarding the quality of information that it relies upon for regulatory decisions. This guidance is available at the Department's website at: *https://www.doi.gov/ocio/policy-mgmt-support/information-and-records-management/iq.*

No comments were received on the Data Quality Act during the public comment period.

L. Executive Order 13211: Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use

Under E.O. 13211, BOEM is required to prepare and submit to OMB a ''Statement of Energy Effects for significant energy actions.'' This should include a detailed statement of any adverse effects on energy supply, distribution, or use (including a shortfall in supply, price increases, and increased use of foreign supplies) expected to result from the action and a discussion of reasonable alternatives and their effects. This rulemaking will not have an effect on the production, supply, distribution, or use of energy and is not expected to have any effect on the energy industry.

No comments were received on E.O. 13211 during the public comment period.

M. Congressional Review Act

This action is subject to the Congressional Review Act (CRA), 5 U.S.C. 801 *et seq*. BOEM will submit a rule report to each chamber of Congress and to the Comptroller General of the United States. This action does not meet the criteria in 5 U.S.C. 804(2).

List of Subjects in 30 CFR Part 550

Administrative practice and procedure, Air pollution control, Continental shelf, Environmental impact statements, Environmental protection, Federal lands, Government contracts, Investigations, Mineral resources, Oil and gas exploration, Oil pollution, Outer continental shelf, Penalties, Pipelines, Public lands—rights-of-way, Reporting and recordkeeping requirements, Rights-of-way, Sulfur.

This action by the Principal Deputy Assistant Secretary is taken herein pursuant to an existing delegation of authority.

Steven H. Feldgus,

Principal Deputy Assistant Secretary, Land and Minerals Management.

For the reasons stated in the preamble, BOEM amends 30 CFR part 550 as follows:

PART 550—OIL AND GAS AND SULFUR OPERATIONS IN THE OUTER CONTINENTAL SHELF

■ 1. The authority citation for part 550 is revised to read as follows:

Authority: 25 U.S.C. 3001 *et seq.;* 30 U.S.C. 1751; 31 U.S.C. 9701; 43 U.S.C. 1334.

Subpart A—General

■ 2. Amend § 550.105 by revising the definition of ''Archaeological resource'' to read as follows:

§ 550.105 Definitions.

* * * * *

Archaeological resource means the material remains of human life or activities that are at least 50 years of age and that are of archaeological interest, including any historic property described by the National Historic Preservation Act, as defined in 36 CFR 800.16(l).

* * * * *

■ 3. Revise § 550.194 to read as follows:

§ 550.194 How must I conduct my approved activities to protect archaeological resources?

(a) To protect archaeological resources, your EP, DOCD, or DPP that proposes activities involving disturbance of the seafloor must be accompanied by or contain one of the following:

(1) An archaeological report based on a high-resolution geophysical (HRG) survey of the APE defined, pursuant to 36 CFR 800.16(d) of the Advisory Council on Historic Preservation's regulations implementing section 106 of the NHPA, as the depth and breadth of the seabed that could potentially be impacted by proposed activities;

(2) A reference to an archaeological report based on an HRG survey of the APE that you previously submitted for your lease, provided that any previously submitted survey complies with the survey parameters identified in these regulations and the results of the survey are, in BOEM's judgment, valid. BOEM may consider a survey or the resulting report to be invalid if BOEM suspects that changes to the seafloor environment warrant acquiring additional data, considering, for example, the time elapsed since the prior survey or change in seafloor from a geological event such as a mudslide; or

(3) Evidence demonstrating to BOEM's satisfaction that a reasonable and good faith effort to identify archaeological resources within the APE has already been performed, provided that the past efforts are sufficient to identify possible marine archaeological resources at a degree of certainty reasonably similar to or better than an HRG survey.

(b) The archaeological report and evidence described in paragraph (a) of this section must have been or be prepared and signed by a qualified marine archaeologist. A qualified marine archaeologist must meet the

Secretary of the Interior's ''Standards and Guidelines for Historic Preservation Projects: Professional Qualifications Standards'' as developed per the National Historic Preservation Act (54 U.S.C. 306131), and any subsequent updates to those standards and guidelines, and must have experience in conducting or overseeing HRG surveys and processing and interpreting the resulting data for archaeological potential.

(c) The geophysical survey resolution for the surveys described in paragraph (a) of this section must be sufficiently detailed to identify potential archaeological resources and must be performed using instrumentation and methodology that is state-of-the-art and that meets or exceeds scientific standards for conducting marine archaeological surveys. The surveys must, at a minimum, adhere to the following operational requirements and performance standards:

(1) A state-of-the-art navigation system with sub-meter accuracy able to continuously determine the surface position of the survey vessel and in-water position of towed and autonomous survey sensors. Position fixes must be digitally and continuously logged along the vessel track. Geodesy information must be clearly presented and consistent across all data types. Navigation systems meeting the criteria outlined in this section do not require prior approval by BOEM.

(2) For geophysical surveys conducted in water depths of 100 meters (328 feet) or less, the survey must employ a total field magnetometer, gradiometer, or other similar instrument having equal or superior measurement capability. The magnetometer, gradiometer, or its equivalent must be towed as close to the seafloor as possible and sufficiently far from the vessel to isolate the sensor from the magnetic field of the survey vessel and the other survey instruments. The magnetometer, gradiometer, or its equivalent must be towed at a sufficient altitude to detect ferrous metals or other magnetically susceptible materials of at least 1,000 pounds (453 kilograms) in mass with a minimum magnetic deflection of 5 gamma (γ; 5 nanotesla [nT]). An accurate method must be used to record the height of the magnetometer, gradiometer, or its equivalent in the water column. The altitude of the magnetometer, gradiometer, or its equivalent must be continuously recorded during data acquisition along the survey. The instrument's sensitivity must be 1 γ (1 nT) or less. Background noise level must not exceed a total of 3 γ peak to peak with data samples of at least 2 points per meter along the survey track. All collected data must be recorded on a digital medium that can be linked electronically to the positioning data. Survey line, time, position, altitude, and speed must be annotated on all output data. The data must be post-processed and contoured in a manner to best facilitate the interpretation of potential archaeological resources.

(3) For geophysical surveys conducted to locate potential areas of prior human occupation, a sub-bottom profiler system must be used to identify and map buried geomorphological features of archaeological potential that may exist within the horizontal and vertical APE, taking into account the geomorphology of the operational area and the parameters of the proposed project (including the maximum depth of disturbance from the proposed activities). The use of a sub-bottom profiler is required in water depths of 140 meters or less, unless BOEM specifies a different water depth based on its determination of the furthest extent of prior human occupation on the OCS. The sub-bottom profiler system must be capable of achieving a depth of penetration and resolution of vertical bed separation that is sufficient to allow for the identification and cross-track mapping of features of archaeological potential (*e.g.,* shell middens, paleochannels, levees, inset terraces, paleolagoon systems, and other relict landforms). The sub-bottom profiler system employed must be capable of achieving a resolution of vertical bed separation of at least 0.3 meters (1 foot) in the uppermost 10 to 15 meters (33 to 50 feet) of sediments, depending on the substrate.

(4) In all water depths, a side-scan sonar or equivalent system must be used to provide continuous planimetric imagery of the seafloor to identify potential archaeological resources on and partly embedded in the seafloor. To provide sufficient resolution of seafloor features, BOEM requires the use of a system that operates at as high a frequency as practicable based on the factors of line spacing, instrument range, and water depth. The sonar system must detect small, discrete targets 0.5 meters (1.6 feet) in length at maximum range, along the track. The instrument range must provide at least 100 percent overlapping coverage (*i.e.,* 200 percent seafloor coverage) between adjacent primary survey lines. Greater than 200 percent overlapping coverage may be necessary to guarantee nadir coverage and account for survey vessel drift between lines, which may be an important consideration when surveying in deep water. The side-scan sonar sensor must be towed above the seafloor at a height that is 10 to 20 percent of the range of the instrument. Data must be digitally recorded and visually displayed to monitor data quality and identify targets of interest during acquisition. The data must be post-processed to improve data quality by, for example, adjusting for slant range effects and variable speed along line.

(5) In all water depths, an echo sounder or equivalent system must be used to measure accurate water depths across the area. Where swath bathymetry data are acquired, it is recommended that backscatter values from the seabed returns are logged and processed for use in seabed characterization to support and complement the side scan sonar data. Single beam echo sounder data (or data from the equivalent system) must be used to verify the results of swath bathymetry data to check for gross error. The bathymetry systems must be set up to accurately record data across the range of water depths expected in the survey area. Care must be taken in selection of operating frequencies such that the individual systems do not interfere with each other. The bathymetry systems must be used in conjunction with an accurate motion sensor to compensate for vessel motion. Water column sound velocity must be determined as a minimum at the start and end of data acquisition, and at suitable intervals throughout the project, by use of a conductivity, salinity, and temperature depth probe or a direct reading sound velocity probe suitable for use in the maximum water depths expected within the survey area. Water depths must be corrected for vessel draft, tidal level, and referenced to the appropriate vertical datum (LAT, MSL, etc.). The final processed digital terrain model data cell size covering the entire survey area, without gaps, must reflect the frequency of the system being used, data density, and altitude above seabed of the transducer head.

(6) An archaeological survey conducted prior to the effective date of these regulations may be used in lieu of conducting a new survey, subject to BOEM approval, provided the lessee or operator can demonstrate that such survey was conducted in such a manner as to meet the objectives of this paragraph (c).

(d) The Regional Director may approve a departure from the provisions of paragraph (c) of this section on a case-by-case basis if the Regional Director deems the departure necessary because the applicable requirements, as applied to a specific circumstance:

(1) Are impractical or unduly burdensome;

(2) Are not necessary to achieve the intended objectives of the marine archaeology program;

(3) Fail to conserve the natural resources of the OCS;

(4) Fail to protect life (including human and wildlife), property, or the marine, coastal, or human environment; or

(5) Fail to protect sites, structures, or objects of historical or archaeological significance.

(e) Any departure approved under this section must:

(1) Be consistent with requirements of the OCS Lands Act;

(2) Protect the archaeological resources to the same degree as if there was no approved departure from the regulations;

(3) Satisfy section 106 of the National Historic Preservation Act and achieve results for identifying archaeological resources as if there was no approved departure from the regulations;

(4) Not impair the rights of third parties; and

(5) Be documented in writing.

(f) BOEM may reject any archaeological report if the survey was not prepared in accordance with the requirements of paragraph (c) in this section or any BOEM-approved departure to the survey requirements. BOEM may also reject any archaeological report if the results produced from the survey do not meet the data and resolution requirements specified under paragraph (c), regardless of whether the survey was otherwise conducted appropriately.

(g) If the archaeological report or evidence mentioned in paragraph (a) of this section suggests that an archaeological resource may be present, you must:

(1) Situate your operations so as not to adversely affect the area where the known or suspected archaeological resource may be located; or,

(2) Establish, to the satisfaction of the Regional Director, that an archaeological resource does not exist by conducting further archaeological investigation, under the supervision of a qualified marine archaeologist, using equipment and techniques the Regional Director considers appropriate. You must submit a report documenting the further investigation to the Regional Director for review;

(i) If the further investigation cannot establish to the satisfaction of the Regional Director that an archaeological resource is not likely to be present at the operational site, you must demonstrate to the satisfaction of the Regional Director that your operations will not adversely affect the suspected resource; or,

(ii) If, based on the additional archaeological investigation, the Regional Director determines that an archaeological resource is likely to be present in the operational site and may be adversely affected by operations, you must take whatever additional steps are specified by the Regional Director to protect the archaeological resource before you conduct any further operations at the operational site; or,

(3) If the Regional Director determines that an archaeological resource is likely to be present in the lease area, that it is likely to be adversely affected by your operations, and that there are no feasible means to avoid this adverse effect, the Regional Director may prohibit your operations in the APE.

(h) Any lessee or operator that has an existing lease in effect prior to October 3, 2024 may apply the regulations in effect prior to this date with respect to the provisions of this section for such lease for a period of time not to exceed September 3, 2025.

■ 4. Add § 550.195 to read as follows:

§ 550.195 What must I do if I discover a potential archaeological resource while conducting operations on the lease or right-of-way area?

(a) If you discover any unanticipated archaeological resources while conducting operations on the lease or right-of-way area, you must immediately halt seafloor disturbing operations within at least 305 meters (1,000 feet) of the area of the discovery and report the discovery to the Regional Director within 72 hours.

(b) If BOEM determines that the resource may be eligible for listing on the National Register of Historic Places in accordance with the applicable regulations, the Regional Director will specify measures you must take to protect the resource during operations and activities.

(c) For activities and operations under BSEE jurisdiction, BOEM will refer the discovery to BSEE to determine if the resource may have been adversely impacted by your operations and activities prior to or during its discovery in paragraph (a). The Regional Director of BSEE will specify measures you must take to either demonstrate that no adverse impacts have occurred or to document the extent of adverse impacts that have occurred. BSEE may further specify measures you must take to remediate adverse impacts to any archaeological resources resulting from your operations and activities and will relay to BOEM both the results of its investigation and any further measures it has imposed to remediate the adverse impacts that may have occurred.

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DEPARTMENT OF HOMELAND SECURITY

Coast Guard

33 CFR Part 117

[Docket No. USCG–2022–0222]

RIN 1625–AA09

Drawbridge Operation Regulation; Okeechobee Waterway, Stuart, FL; Correction

AGENCY: Coast Guard, DHS.

ACTION: Temporary interim rule; correction.

SUMMARY: The Coast Guard is correcting a temporary interim rule with request for comments that appeared in the **Federal Register** on August 7, 2024. The temporary interim rule temporarily modifies the operating schedule that governs the Florida East Coast Railroad Bridge, across the Okeechobee Waterway, mile 7.41, at Stuart, FL. The temporary interim rule had a typographical error in one of the amendatory instructions. This document corrects that error.

DATES: Effective September 3, 2024.

FOR FURTHER INFORMATION CONTACT: For information about this document call or email Ms. Jennifer Zercher, Bridge Management Specialist, Seventh Coast Guard District; telephone 571–607–5951, email *Jennifer.N.Zercher@uscg.mil.*

SUPPLEMENTARY INFORMATION: In FR Doc. 2024–17452 appearing on page 64369 in the **Federal Register** of Wednesday, August 7, 2024, the following correction is made:

§ 117.317 [Corrected]

■ 1. On page 64369, at the bottom of the first column, in part 117, in amendment 2, the instruction ''Section 117.261 is amended by staying paragraph (c) and adding paragraph (k).'' is corrected to read ''Section 117.317 is amended by staying paragraph (c) and adding paragraph (k).''

Dated: August 28, 2024.

Michael. T. Cunningham,

Chief, Office of Regulations and Administrative Law, U.S. Coast Guard.

[FR Doc. 2024–19697 Filed 8–30–24; 8:45 am]

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