example, the full Document ID number for the comment submitted by the Industrial Commission of Arizona (ICA) and the Arizona Division of Occupational Safety and Health (ADOSH), which is discussed in more detail below, is Document ID OSHA–2021–0012–0228. OSHA will identify this comment, and other comments in the rulemaking, by the term ''Document ID'' followed by the comment's unique four-digit code.

FOR FURTHER INFORMATION CONTACT:

For press inquiries: Francis Meilinger, OSHA Office of Communications, U.S. Department of Labor, Washington, DC 20210; telephone (202) 693–1999; email: *meilinger.francis2@dol.gov.*

For general and technical information: Douglas J. Kalinowski, Director, OSHA Directorate of Cooperative and State Programs, U.S. Department of Labor, Washington, DC 20210; telephone: (202) 693–2200; email: *kalinowski.doug@dol.gov.*

SUPPLEMENTARY INFORMATION: On April 21, 2022, OSHA published a **Federal Register** notice proposing reconsideration and revocation of OSHA's final approval of the Arizona State Plan for Occupational Safety and Health pursuant to 29 CFR 1902.32(f), 9 CFR 1902.44(b), and 29 CFR 1902.47–.48 due to fundamental deficiencies in the Arizona State Plan (87 FR 23783) (revocation proposal). The concerns prompting the notice, discussed at length in OSHA's revocation proposal, included Arizona's failure to adopt adequate maximum penalty levels, occupational safety and health standards, National Emphasis Programs and, most recently, the COVID–19 Healthcare Emergency Temporary Standard (ETS) (87 FR 23785–87). Consequently, OSHA proposed reconsideration and revocation of Arizona's 18(e) final approval determination until OSHA received satisfactory assurances that these fundamental deficiencies had been addressed and that Arizona remains committed to implementing a program for employee safety and health protection that meets the requirements of section 18(c) of the OSH Act.

Comments on OSHA's revocation proposal were initially due on May 26, 2022, and the notice tentatively scheduled an informal public hearing on the proposal to begin on August 16, 2022. However, OSHA extended the comment period to July 5, 2022 (87 FR 31442) in response to requests from the public. OSHA received 197 comments concerning the proposal during this initial comment period.

On July 5, 2022, the ICA and its subagency, the Arizona Division of Occupational Safety and Health (ADOSH) submitted a comment on the revocation proposal to advise OSHA that Arizona had completed several measures to address the concerns that OSHA identified (see Document ID 0228).

In response to this comment, on August 15, 2022, OSHA published a **Federal Register** notice that reopened the comment period on the revocation proposal to allow stakeholders further opportunity to comment on the proposed revocation in light of Arizona's efforts and postponed the informal public hearing (87 FR 50025). That extended comment period closed on October 14, 2022. OSHA received 28 additional comments during this extended comment period.

Arizona completed the following actions that address OSHA's concerns: adopted three outstanding final rules (Standards Improvement Project Phase-IV (''SIP–IV''), Beryllium in Construction and Shipyards, and Cranes and Derricks in Construction: Railroad Roadway Work); adopted an increase to its minimum penalties for serious and non-serious violations to match OSHA minimum penalty levels; passed a state law to ensure that Arizona's future maximum and minimum penalty levels will track OSHA's annual penalty level adjustments; passed a state law to authorize adoption of an ETS when either the ICA or OSHA deems the grave danger criteria met; and adopted the recordkeeping and COVID–19 log requirements in OSHA's COVID–19 Healthcare ETS as a permanent standard.

Additionally, in their comment on the revocation proposal, the ICA and ADOSH clarified that Arizona had adopted two National Emphasis Programs (NEPs) that OSHA had identified as not yet adopted by the State Plan, the NEP on Amputations in Manufacturing Industries, CPL 03–00–022 (adoption due June 10, 2020), and the NEP on Respirable Crystalline Silica, CPL 03–00–023 (adoption due August 4, 2020), and responded to OSHA's concerns regarding Arizona's failure to provide OSHA with the required documentation of adoption of the National Emphasis Program on Trenching and Excavation, as required by statute and regulations (Document ID 0228). OSHA now has the required documentation of Arizona's adoption of these measures. Finally, Arizona asserted that it had updated its State Plan Application (''SPA'') portal entries to accurately reflect adoption dates for NEPs and final rules (Document ID 0228).

Based on the foregoing, OSHA is withdrawing its proposal to reconsider the Arizona State Plan's final approval status.

Authority and Signature

Douglas L. Parker, Assistant Secretary of Labor for Occupational Safety and Health, U.S. Department of Labor, 200 Constitution Avenue NW, Washington, DC 20001 authorized the preparation of this notice. OSHA is issuing this notice under the authority specified by Section 18 of the Occupational Safety and Health Act of 1970 (29 U.S.C. 667), Secretary of Labor's Order No. 8–2020 (85 FR 58393 (Sept. 18, 2020)), and 29 CFR parts 1902, 1952, 1953, 1954, and 1955.

Signed at Washington, DC.

Douglas L. Parker,

Assistant Secretary of Labor for Occupational Safety and Health.

[FR Doc. 2023–03183 Filed 2–14–23; 8:45 am]

BILLING CODE 4510–26–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 (BOEM), Interior.

ACTION: Notice of proposed rulemaking and request for comment.

SUMMARY: BOEM proposes 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 activities proposed on the Outer Continental Shelf (OCS). An archaeological report is currently required only if the plan covers an area that a BOEM Regional Director has reason to believe may contain an archaeological resource. This proposed rule would increase the likelihood that archaeological resources are located and identified before they are inadvertently damaged by an OCS operator, thereby assuring compliance with section 106 of the National Historic Preservation Act (NHPA). This proposed rule would define 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.

DATES: Your comments on the substance of this rulemaking must be received by BOEM on or before April 17, 2023. BOEM may not consider comments received after this date. Your comments on the information collection (IC) burden in this rulemaking must be received by the Office of Management and Budget (OMB) and BOEM on or before March 17, 2023. The IC deadline does not affect the deadline for public comments on the substance of the proposed regulations.

ADDRESSES: You may submit comments on the rulemaking by any of the following methods. Please reference in your comment ''Protection of Marine Archaeological Resources, RIN 1010–AE11.''

- *Federal rulemaking portal: https://www.regulations.gov.* In the search box entitled ''Search for dockets and documents on agency actions,'' enter ''BOEM–2023–0012'' and click search. Follow the instructions to submit public comments and view supporting and related materials available for this rulemaking.
- *Mail, delivery service, or email:* Send comments to the Department of the Interior, Bureau of Ocean Energy Management, Office of Regulations, Attention: Peter Meffert, 1849 C Street NW, Mailstop DM5238, Washington, DC 20240; or email to: *Peter.Meffert@BOEM.gov.*

You may submit comments on the IC burden of this rulemaking at *www.reginfo.gov/public/do/PRAMain.* From this main web page, find and submit comments on this particular information collection by selecting ''Currently under Review—Open for Public Comments'' or by using the search function. Please provide a copy of your comments to the Information Collection Clearance Officer, Office of Regulations, Bureau of Ocean Energy Management, Attention: Anna Atkinson, 45600 Woodland Road, (Mail code VAE–ORP), Sterling, VA 20166; or by email to *anna.atkinson@boem.gov.* Please reference OMB Control Number 1010–NEW in the subject line of your comments.

Instructions: All comments must include the agency name and docket number or the regulatory information number (RIN) for this rulemaking. All comments received will be posted without change to *www.regulations.gov,* including any personal information provided. For detailed instructions on sending comments and additional information on the rulemaking process, see the ''Public Availability of Comments'' heading under the **SUPPLEMENTARY INFORMATION** section of this document.

Docket: For access to the docket to read background documents or comments received, go to *www.Regulations.gov* and search for the heading of BOEM–2023–0012 or contact BOEM at 1849 ''C'' Street NW, Washington, DC 20240, Attn: Bureau of Ocean Energy Management, Office of Regulations, ''Comments on the proposed Marine Archeology Rule.

FOR FURTHER INFORMATION CONTACT: For questions on any issues related to this rulemaking, contact Peter Meffert, Office of Regulations, Bureau of Ocean Energy Management (BOEM), at *peter.meffert@boem.gov* or at (703) 787–1610.

To see a copy of the IC request submitted to OMB, go to *https://www.reginfo.gov* (select ''Information Collection Review'', then go to ''Currently under Review'' to search for the rule). You may obtain a copy of the supporting statement for BOEM's IC by contacting Information Collection Clearance Officer, Office of Regulations, Bureau of Ocean Energy Management, Attention: Anna Atkinson, 45600 Woodland Road, (Mail code VAE–ORP), Sterling, VA 20166, or by emailing: *Anna.Atkinson@BOEM.gov.*

SUPPLEMENTARY INFORMATION:

Public Availability of Comments: Please include your name, return address, and phone number or email address with your comment, so we may contact you if we have questions regarding it. BOEM may post all submitted comments to the docket for this rulemaking.

You should be aware that your entire comment—including your name, address, phone number, email address, and any other personally identifiable information that you include—may be made publicly available. In order for BOEM to withhold from disclosure your personally identifiable information, you must identify, in a cover letter, any information contained in your comment that, if released, would constitute a clearly unwarranted invasion of your personal privacy. You must also briefly describe in such cover letter any possible harmful consequences of the disclosure of information, such as embarrassment, injury, or other harm. While you can ask us in your comment to withhold your personally identifiable information from public review, we cannot guarantee that we will be able to do so. Even if we withhold your information in the context of this rulemaking, your comment is subject to the Freedom of Information Act (FOIA) and any relevant court orders. If your comment is requested under FOIA or such court order, your information will only be withheld if we determine that one of FOIA's exemptions to disclosure applies or if the relevant court order is challenged. Such a determination will be made in accordance with the Department of the Interior's FOIA regulations and applicable law.

I. Table of Acronyms and Terms

Several acronyms and terms are included in this preamble. To ease the reading of this preamble and for reference purposes, we list the following acronyms and their meanings here.

ACHP Advisory Council on Historic Preservation
ANCSA Alaska Native Claims Settlement Act
APE Area of Potential Effect
BOEM Bureau of Ocean Energy Management
BSEE Bureau of Safety and Environmental Enforcement
CHIRP Compressed High Intensity Radar Pulse
CFR Code of Federal Regulations
CRA Congressional Review Act
DM Department Manual (Interior)
DOI Department of the Interior
DOCD Development Operations Coordination Document
DPP Development and Production Plan
EA Environmental Assessment
E.O. Executive Order
EP Exploration Plan
FOIA Freedom of Information Act
FR Federal Register
GOM Gulf of Mexico
GPS Global Positioning System
HRG High Resolution Geophysical
IC Information Collection
MMS Minerals Management Service
NEPA National Environmental Policy Act
NHPA National Historic Preservation Act
nT Nano-tesla
NTL Notice to Lessees
OIRA Office of Information and Regulatory Affairs (a component of OMB)
OMB Office of Management and Budget
OCS Outer Continental Shelf
OCSLA Outer Continental Shelf Lands Act
PRA Paperwork Reduction Act
RIA Regulatory Impact Analysis
ROWs Rights-of-Way
SBA Small Business Administration
SHPO State Historic Preservation Office(r)
THPO Tribal Historic Preservation Office(r)
U.S.C. United States Code

II. Background

BOEM's existing regulations require operators [1] to submit an archaeological

[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 document, any reference to the term ''operator'' should be considered to apply to

report with an Exploration Plan (EP), a Development Operations Coordination Document (DOCD), a Development and Production Plan (DPP), or any other requests (*e.g.,* exploration permit requests) seeking BOEM authorization to disturb the seafloor (collectively, the ''plans'') only when a BOEM Regional Director has a ''reason to believe'' that an archaeological resource may be present. BOEM interprets this ''reason to believe'' standard as requiring its Regional Directors to either 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.

Prior to 2005, BOEM's predecessor agency, the Minerals Management Service's (MMS) regulation under 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 2005 to clarify the basis for requiring an archaeological survey, 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 2005 proposed rule 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. (70 FR 14607, 14608, March 23, 2005.) [2]

Under the regulations after 2005, if the Regional Director invokes 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.

Beginning in 1982, MMS, developed a predictive model to attempt to define where archaeological resources were ''likely'' to exist in the Gulf of Mexico. MMS and BOEM used the 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.

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 concluded the model is unhelpful. BOEM's predictive model, despite several attempts at updating, has often failed to accurately predict the presence or absence of marine archaeological resources. In many cases, shipwrecks have been discovered in lease blocks where the model had not ''predicted'' any, and, conversely, operators surveyed lease blocks where the historical evidence suggested 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 significant (see discussion in section III of this preamble). BOEM determined that previously undiscovered archaeological resources may be present in any OCS lease block in any BOEM region regardless of the model's results. Because the model's accuracy hinges on sufficiently accurate and robust underlying data and because such data is neither accurate nor robust for the offshore environment, BOEM determined that a better approach is necessary.

BOEM proposes to delete 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, high-resolution geophysical (HRG) survey that effectively identifies potential archaeological resources. 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 marine archaeological resources. In keeping with professional standards that have evolved since the existing regulations were adopted, this proposed revision would define the minimum level of survey information necessary to support the conclusions in the archaeological report. The proposed changes would improve BOEM's fulfillment of its ''reasonable and good faith identification effort'' under the NHPA and its development of appropriate mitigations to avoid damaging historic and archaeological resources under the National Environmental Policy Act (NEPA).

III. Critique of the Predictive Model and Other Alternatives to Direct Survey [3]

In 2003, MMS tested the accuracy of the predictive model, and ''it was found that many of the wrecks identified in offshore surveys are not located in designated high-probability blocks. Statistical analyses revealed that there is no significant difference in the likelihood of finding a shipwreck in a designated high-probability lease block and finding one in a lease block not so designated.'' [4] Because shipwrecks potentially may be found in all federally managed OCS acreage, BOEM's use of predictive models may be under-predicting shipwreck locations. Additional BOEM-funded studies [5] have

lessee(s), as well, to the extent that they perform the functions that would typically be contracted to a third party.

[2] *https://www.federalregister.gov/documents/2005/03/23/05-5678/oil-and-gas-and-sulphur-operations-in-the-outer-continental-shelf-ocs-data-release-and-definitions.*

[3] BOEM has additional models that focus on sea-level rise and where previously habitable lands may have existed during the last glacial maximum. These gross resolution models provide information related to the depths where the sub-bottom profiler data will be required.

[4] Pearson, C.E.; S.R. James, Jr., M.C. Krivor, S.D. El Darragi, and L. Cunningham. 2003. Refining and revising the Gulf of Mexico OCS Region High Probability Model for Historic Shipwrecks (Volume 1). URL: *https://espis.boem.gov/final%20reports/3033.pdf.*

[5] See: Enright, J.M., R. Gearhart II, D. Jones, and J. Enright. 2006. Study to Conduct National Register of Historic Places Evaluations of Submerged Sites on the Gulf of Mexico Outer Continental Shelf. U.S. Department of the Interior, Minerals Management Service, Gulf of Mexico OCS Region, New Orleans, LA. OCS Study MMS 2006–036. URL: *https://espis.boem.gov/final%20reports/3595.pdf.* 136 pp; Evans, A.M., M.E. Keith, E.E. Voisin, P. Hesp, G. Cook, M. Allison, G. da Silva, and E. Swanson. 2013. Archaeological analysis of submerged sites on

Continued

reinforced this conclusion, such as is demonstrated in a peer-reviewed article by Lugo-Fernández et al. (2007), which stated that this model has proven itself to be ineffective at predicting the location of shipwreck sites on the Gulf of Mexico OCS and in deep water.[6]

These conclusions led BOEM's predecessor agency, the Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE), to implement a new pre-seabed disturbance survey policy, which BOEMRE presented to operators during a workshop held in March 2011. BOEM currently applies this policy, when appropriate, to plans in lease areas outside of OCS lease blocks designated by its predictive model as highly probable for containing archaeological resources.

Under this policy, BOEM prepares an environmental assessment under NEPA for any plan that includes a subsea or floating blowout preventor.[7] These environmental assessments require an archaeological analysis regardless of whether the lease block had been designated as high probability. To provide the information necessary to complete the environmental assessment, BOEM applies the pre-seabed disturbance policy to plans for areas that are not the subject of an existing archaeological report or adequate HRG survey. Under the pre-seabed disturbance policy, before BOEM allows any bottom-disturbing activity on the OCS that could damage archaeological resources, operators are required to perform a HRG survey of the seafloor where the planned activities would take place and to prepare an archaeological assessment to inform the environmental assessment.

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 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.[8]

Subsequent guidance from the Advisory Council on Historic Preservation (ACHP) clarified that: ''Federal agencies should evaluate the reliability and accuracy of any past work [past planning, research, and studies in determining the appropriate level of effort for identification, as well as past consultation efforts] because that factor,[9] as well as changing perceptions of significance, may affect what is considered 'reasonable.'' [10] The ACHP also states on its website that the ''[r]eview of existing information also assists in determining the types of eligible archaeological sites that might be present and their possible location. The lack of published regional archaeological information does not necessarily mean no eligible archaeological sites are present in the [Area of Potential Effect].'' [11]

Archival material indicative of the suspected location of shipwrecks is an inherently flawed dataset. First, not all wrecks were reported, and thus the historic record is incomplete. Shipwrecks occurring far from shore likely had no witnesses or survivors to make a wreck report. The reports that are in the record are most often associated with more recent losses (*e.g.,* post-19th century), meaning the older the shipwreck, the less likely archival information of its loss exists. Of the shipwreck sites now identified in the Gulf of Mexico, for example, over 58 percent cannot conclusively be associated with any archival evidence whatsoever. Second, of those that were reported (typically by the surviving family or businesses making claims to insurance companies against losses), a majority were listed as ''somewhere in the Gulf of Mexico.'' Though evidence of these reported wrecks exists, useful information pertaining to their location is often limited or nonexistent. For those few wrecks with a location listed in the record, the reliability of the wreck location is necessarily suspect [12] given the obvious absence of modern navigational and communications technology (*e.g.,* GPS).[13] Subject matter experts have acknowledged this ''unreliability in the reported positions of loss for so many vessels. Because of the nature of the reports of loss on these vessels, it is impossible to entirely overcome this built-in error in the data.'' [14]

The predictive model approach may work onshore, where decades of development have resulted in extensive documentation of archaeological resources by State historic preservation offices (SHPOs), Tribal historic preservation offices (THPOs), Federal agencies, land records offices, academic researchers, and non-governmental organizations (NGOs), and where the onshore topography is readily accessible for analyzing past settlement patterns. In contrast, the OCS remains a frontier territory that has yet to be fully explored for archaeological resources. In most cases, cultural resource documentation

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the Gulf of Mexico Outer Continental Shelf. U.S. Department of the Interior, Bureau of Ocean Energy Management, Gulf of Mexico OCS Region, New Orleans, LA. OCS Study BOEM 2013–01110. URL: *https://espis.boem.gov/final%20reports/5332.pdf* 432 p.; and Krivor, M.C., J. de Bry, N.J. Linville, and D.J. Wells. 2011. Archival investigations for Colonial-era shipwrecks in ultra-deepwater within the Gulf of Mexico. U.S. Dept. of the Interior, Bureau of Ocean Energy Management, Regulation and Enforcement, Gulf of Mexico OCS Region, New Orleans, LA. OCS Study BOEMRE 2011–004. URL: *https://espis.boem.gov/final%20reports/5109.pdf* 166 pp.

[6] Horrell, C.E., D. Ball, M. Damour, and J.B. Irion. 2010. Issue of Historic Preservation in the Gulf of Mexico Region. U.S. Dept. of the Interior, Bureau of Ocean Energy Management Gulf of Mexico OCS Region, New Orleans, LA. OCS Study BOEM 2010–000. 17 pp.

See also: Lugo-Fernández, A., D.A. Ball, M. Gravois, C. Horrell, and J.B. Irion. 2007. Analysis of the Gulf of Mexico's Veracruz-Havana route of La Flota de La Nueva España. Journal of Maritime Archaeology 2:24–47. URL: *https://link.springer.com/article/10.1007/s11457-007-9015-5.*

See also: Damour 2011.

[7] A blowout preventer (BOP) is a specialized valve or similar mechanical device, used to seal, control and monitor oil and gas wells to prevent blowouts, the uncontrolled release of crude oil or natural gas from a well. Blowout preventers were developed to cope with extreme erratic pressures and uncontrolled flow (formation kick) emanating from a well reservoir during drilling, which could lead to a potentially catastrophic event known as a blowout.

[8] Brennan, M., J. Irion, F. Cantelas, J. Delgado, A. Borgens, F. Hanselmann, C. Horrell, The Monterrey Shipwrecks: Characterization of Three Early 19th Century Shipwrecks in the Gulf of Mexico, *Oceanography* 27(1) Supplement: 30–32.

[9] The factor is the reliability and accuracy of any past work, as defined by the brackets. See the guidance questions cited in subsequent footnote for additional information.

[10] *https://www.achp.gov/Section_106_Archaeology_Guidance/Questions%20and%20Answers/Determining_which_archaeological_sites_are_significant_identification.*

[11] *https://www.achp.gov/Section_106_Archaeology_Guidance/Questions%20and%20Answers/Determining_which_archaeological_sites_are_significant_identification. Response* to question 24.

[12] Navigation accuracy is one factor that impacts the reliability of a wreck location: As the ship sinks, sea state and currents act on it. As a result, the wreck does not necessarily settle intact immediately under its surface location. Over time, geo and hydro forces may act on the wreck to further move its location. Another factor is the ability to communicate the floundering ship's location to other, off-ship people.

[13] Although the Global Positioning System (GPS) was not initially envisioned for worldwide civilian use, the U.S. Government redefined the mission of GPS to include international civilian uses in 1983. Until May 2000, the GPS service provider intentionally degraded the signal to deny accurate positioning service to U.S. adversaries. For this reason, reports of shipwreck losses made and wreck locations identified prior to May 2000 will be of limited utility, even if the report or wreck occurred after the advent of GPS. In all cases, the older the wreck, the less accurate the archival information pertaining to its location. U.S. Department of Transportation. 2009. Global Positioning System (GPS) Civil Monitoring Performance Specification. Available at: *https://www.gps.gov/technical/ps/2009-civil-monitoring-performance-specification.pdf.*

[14] Pearson et al. 2003 (Volume II: Technical Narrative).

does not exist unless or until a lessee or operator chooses to develop a lease area.

Regardless of whether archival information exists, BOEM's subject matter experts, consultations, and scientific studies have demonstrated that extensive empirical evidence supports the proposition that shipwrecks potentially may be found within any lease block on the OCS. In 2021, BOEM undertook a study to compile maps of historic ship routes through the Gulf of Mexico over the past 400 years. The study conclusively determined that every part of the Gulf of Mexico potentially could contain a shipwreck site.[15] Therefore, any seabed-disturbing activities conducted in the Gulf of Mexico have the potential to cause an effect on historic properties, and, pursuant to 36 CFR 800.3(a)(1), that potential requires BOEM to comply with section 106 of the NHPA.

IV. National Historic Preservation Act

Section 106 of NHPA requires Federal agencies to consider the impacts its undertakings will have on historic properties. The ACHP is responsible for overseeing the Federal historic preservation review process established by section 106. Based on authority granted by NHPA, ACHP issued regulations (36 CFR part 800) that direct how Federal agencies, such as BOEM, should meet their section 106 responsibilities efficiently and effectively while giving due consideration to the historic properties that communities value. Notably, 36 CFR 800.4(b)(1) establishes the level of effort that agencies must exercise to identify potentially impacted historical resources. Agencies must make a ''reasonable and good faith effort'' to identify historic properties within the areas potentially affected by their actions. 36 CFR 800.4(b)(1). This effort may include the use of historical evidence, consultations, field samples, and surveys. Id.

In accordance with these regulations and the ACHP's updated advisory guidance, Federal agencies must define the ''area of potential effect'' (APE) when determining what is a reasonable and good faith effort to identify potentially affected historic properties. The ''identification effort [to identify historic properties] is reasonable when it is logically designed to identify eligible properties that may be affected by the undertaking, without being excessive or inadequate in light of [the background research, consultation, oral history interviews, sample field investigations, and field surveys].'' [16]

BOEM's determination that it should use a better method than the predictive model stems from the culmination of its past planning, research, studies, and findings that the predictive model is unreliable, as described in section II of this preamble.

Locating historic shipwrecks offshore present unique issues compared to locating terrestrial archaeological sites. Onshore, historic properties, including archaeological sites, are generally located where they are for a discernible cultural or practical purpose. Therefore, the location of these sites can often be determined through historical records, consultation with Tribes and SHPOs, or by examining the landscape itself. Conversely, historic shipwrecks are a result of unintended catastrophic events often occurring at random locations in the open ocean. Therefore, as discussed in section II, records of shipwrecks are scarce, and the records that do exist are often highly inaccurate. Where historical records or surveys fail to identify a historical resource onshore, an operator is typically onsite and can see and halt operations upon an unanticipated discovery. In contrast, offshore operations are underwater in locations that are not readily accessible and that have no sunlight. Compounding this problem, in many cases shipwrecks are partially or completely buried in sand and sediment below the seabed. As a result, they are not easily identified and may suffer extensive potential damage during offshore operations before the operator notices the site, if it is noticed at all.

Additional guidance from the Secretary of the Interior's standards and guidelines for identification of historical sites also highlights the unique circumstances posed by marine archaeology. The guidelines state that ''[s]pecial survey techniques may be needed in certain situations. [Specifically,] [r]emote sensing techniques may be the most effective way to gather background environmental data, plan more detailed field investigations, discover certain classes of properties, map sites, locate and confirm the presence of predicted sites, and define features within properties. Remote sensing techniques include aerial, subsurface and underwater techniques.'' [17]

V. Why the Proposed Standard Constitutes a Reasonable and Good Faith Effort

The ACHP has prepared regulations and guidance that outline what is required to meet the ''reasonable and good faith'' identification standard as part of the section 106 review process.[18] Before beginning the identification stage in the section 106 process, the ACHP regulations (36 CFR 800.4) require each Federal agency to:

(1) Determine and document the APE in order to define where the agency will look for historic properties that may be directly or indirectly affected by the undertaking;

(2) Review existing information on known and potential historic properties within the APE, so the agency will have current data; and

(3) Seek information from others who may have knowledge of historic properties in the area. This includes the SHPO, THPO and, as appropriate, Indian Tribes or Native Hawaiian organizations who may have concerns about historic properties of religious and cultural significance to them within the APE. BOEM has and continues to follow these steps, as appropriate, in areas where surveys will be conducted.

Following these initial steps, the ACHP regulations set out several factors an agency must consider in determining what is a ''reasonable and good faith effort'' to identify historic properties. 36 CFR 800.4(b)(1). The regulations call for the agency to ''take into account past planning, research and studies, the magnitude and nature of the undertaking and the degree of Federal involvement, the nature and extent of potential effects on historic properties, and the likely nature and location of historic properties within the area of potential effects.'' *Id.* The Secretary of the Interior's standards and guidelines for identification provide guidance on this subject.[19] Although the ACHP standards note that the agency should also consider other applicable professional, State, Tribal, and local laws, standards, and guidelines, most of these materials do not apply in the OCS environment.

As noted, there are two prongs to the section 106 identification effort for historic properties, including archeological resources: reasonableness and good faith. As to reasonableness, the ACHP notes in a guidance document

[15] *https://www.boem.gov/oil-gas-energy/mapping-and-data/map-gallery/historic-sailing-routes-gulf-mexico-application.*

[16] *https://www.achp.gov/sites/default/files/guidance/2018-05/reasonable_good_faith_identification.pdf.*

[17] *https://www.nps.gov/articles/sec-stds-identification-guidelines.htm.*

[18] *https://www.achp.gov/sites/default/files/guidance/2018-05/reasonable_good_faith_identification.pdf.*

[19] *https://www.achp.gov/sites/default/files/guidance/2018-05/reasonable_good_faith_identification.pdf.*

that a reasonable identification plan is one that includes consideration of the following factors:

- Documentation of the horizontal and vertical extent of the APE that accounts for direct and indirect effects;
- An explanation of how the factors cited above inform the content and intensity of the identification plan. This could include information on past work in the area, scope of Federal involvement in the undertaking, and the undertaking's magnitude and anticipated effects on any historic properties that might exist in the APE;
- A review of existing information on historic properties within the APE, including information about possible historic properties not yet identified;
- A cognizance of applicable professional, State, Tribal, and local laws, standards, and guidelines;
- A familiarity with methodologies used in other historic property surveys in the area that have been effective in terms of time and cost;
- A clear description of the steps that will be taken during field investigations, during the analysis of field results, and in the subsequent reporting and consultation, to determine the presence or absence of historic properties within the APE.[20]

Of these factors, the last two have the greatest relevance to the unique and largely unexplored OCS environment that BOEM manages.

Based on its review of all the applicable data and resources available, BOEM has concluded that modifying the existing survey requirements would be the most effective method for complying with the ACHP guidelines, including the reasonableness prong of the section 106 identification effort for historical properties and other archeological resources. BOEM believes this proposed rule is not excessively burdensome given the minimal incremental cost to operators. Requiring HRG surveys would not impose an excessive burden on operators because the archaeological survey would constitute only a minor addition to the other survey activities currently required and would impose a negligible cost relative to that of the overall operation.

Additionally, under the reasonableness prong, NHPA requires BOEM to consider the effects of the agency's actions on significant archaeological and cultural sites and take steps to eliminate or mitigate adverse effects. This proposed rule would help protect significant historical sites, such as shipwrecks, which may be difficult to impossible to remediate after the fact if damaged or harmed, by requiring operators to submit an archaeological report or other evidence based on an HRG survey. Due to higher resolution data from HRG surveys and increased confidence in determining the locations of potential archaeological sites, the proposed rule would enhance survey requirements and would likely result in more accurate location data and, thus, in generally less restrictive conditions of approval or areas of avoidance. The current policy risks disrupting oil and gas operations indefinitely in the case of an unanticipated discovery of an historic property during exploration, development, and production.

The second prong of the ACHP analysis is the good faith standard. According to the ACHP, an identification plan that is appropriate to the nature and scale of the undertaking is carried out in good faith when it meets the following criteria:

- The plan is carried out in consultation with, as appropriate, the SHPO, THPO, and any Indian tribe or Native Hawaiian organization that might attach religious and cultural significance to historic properties within the APE;
- Is initiated in a timely manner that allows for appropriate analysis and reporting, with adequate time for review by the consulting parties;
- Is carried out by a qualified individual or individuals who meet the Secretary of the Interior's qualification standards and have a demonstrated familiarity with the range of potentially historic properties that may be encountered and their characteristics;
- Acknowledges the special expertise possessed by Indian Tribes and Native Hawaiian organizations in assessing the eligibility of historic properties that may possess religious and cultural significance to them (regardless of whether or not such Tribes and organizations meet the Secretary's qualification standards);
- Is fully supported by adequate funding and other necessary resources; and
- Is not compromised by lack of integrity or omission, such as manipulating or ignoring evidence.[21]

The proposed rule would fully comply with these criteria to satisfy the good faith prong of the section 106 identification effort for historical properties and other archeological resources. To the extent that BOEM is aware of any potential offshore resources that may be of concern to any Tribes or other Native American populations, those Tribes would be notified of any relevant survey activities in their areas of interest. The survey requirements, which BOEM proposes to modify, would be implemented during the plan or application process when an operator requests approval to engage in any activity that would involve potential site disturbance. The approval would be contingent on the site evaluation activities described below and would necessarily precede any operational or development activity at the proposed site. The qualification requirements for those conducting and evaluating the surveys are currently, and would continue to be, aligned with the Secretary's standards. The data used to prepare the relevant archaeological reports would be retained for BOEM's further review and analysis in accordance with sections 30 CFR 550.201(b) and 550.210(b).

VI. Implications for Lessees and Operators

As discussed in the RIA, the archaeological analysis and reporting requirements represent an extremely small marginal addition to the survey activities that BOEM already requires, and an even smaller portion of the overall OCS oil and gas development costs. The HRG survey data, from which archaeological assessments and reports are prepared, would be part of the same dataset that is already required of operators to identify shallow hazards (such as unexploded ordinance, shallow gas, pipelines, and other seafloor and sub-seafloor hazards) and to look for seafloor compatibility for oil and gas development activities.

If a potential archaeological resource is identified, the operator may be required to amend the project design to avoid the resource. However, this contingency is not substantially different from the current practice of modifying a project to find a more suitable substrate or to avoid shallow drilling hazards. Operators and lessees often reposition their planned construction or installation activities for reasons other than the presence of archaeological resources. Currently, pre-development surveys occasionally identify natural, geological, and modern anthropomorphic features through which operators do not wish to drill or lay a pipeline. In addition, the costs of conducting HRG surveys and archaeological assessments have been reduced significantly in recent years

[20] *https://www.achp.gov/sites/default/files/guidance/2018-05/reasonable_good_faith_identification.pdf.*

[21] *https://www.achp.gov/sites/default/files/guidance/2018-05/reasonable_good_faith_identification.pdf.*

with the improvement of remote sensing and navigation technologies. Furthermore, the benefits to industry of performing archaeological surveys and assessments before disturbing the seafloor are widely known and understood, and currently represent the common industry practice. Most operators understand that these surveys and reporting activities are necessary and that performing them is in their best interest. These surveys help avoid unanticipated delays caused by the discovery of archaeological resources after exploration and development activities commence.[22] If an operator discovers a seafloor hazard or archaeological site too late, it would be in danger of damaging it; this could cause the operator or lessee to incur significant costs while ''standing down'' expensive equipment.

The current regulations (which would be revised and redesignated as § 550.195 under this proposed rule) require operators to cease operations in the event an unanticipated archaeological resource is discovered. Existing 30 CFR 550.194(c). The ensuing cost from these delays have been high and have exceeded the annualized incremental direct costs that would be imposed by this proposed rule. The proposed rule is intended precisely to avoid such unanticipated discoveries, expenses, and delays.

Under the current regulations, lessees and operators also risk paying for costly mitigation. For instance, in 2001, one operator paid $250,000 to mitigate impacts to the Mica shipwreck, a post-installation discovery, after placing a pipeline through the center of the wreck.[23] Finally, impacting a site, damaging equipment, or both can cause adverse environmental impacts through contaminant releases or discharges, such as fuel, oil, and lubricants, from a shipwreck,[24] or by compromising pipeline integrity where a pipeline is placed unknowingly across an archaeological resource. For example, a pipeline inadvertently placed across a shipwreck may affect the wreck and the pipeline's integrity, especially if the pipeline was not designed for additional stresses from the potential shifting of the wreck as it is degraded by the presence and weight of the pipeline.

An HRG survey would reduce operator risk downstream in the project development, would enhance operator confidence that its activities would be conducted safely, and would lead to a better experience during the build or drill phases. Therefore, BOEM expects the incremental cost increase to industry of this proposed rule would be outweighed by the reduction in risks of unexpected delay and avoidable site damage.

VII. Section-by-Section Analysis

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

Subpart A—General

§ 550.105 Definitions

The proposed rule would amend the definition of the term ''Archeological resources'' to clarify that any historic property, as described in the National Historic Preservation Act (NHPA), would be considered an archeological resource for the purpose of BOEM's regulations. The new definition of Archeological resource would read as follows:

Archeological 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).

This definition would encompass the following historical properties, as defined in 36 CFR 800.16(l):

(1) Historic property means any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in, the National Register of Historic Places maintained by the Secretary of the Interior. This term includes artifacts, records, and remains that are related to and located within such properties. The term includes properties of traditional religious and cultural importance to an Indian tribe or Native Hawaiian organization and that meet the National Register criteria.

(2) The term *eligible for inclusion in the National Register* includes both properties formally determined as such in accordance with regulations of the Secretary of the Interior and all other properties that meet the National Register criteria.

This change is made to clarify that BOEM's use of the term archeological resource is meant encompass any property covered by the NHPA.

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

The title of this section has been updated to reflect the fact that the response to an archeological discovery, and the remediation process, is no longer included in the content of this section but has been moved to the subsequent section.

§ 550.194(a)

The proposed rule would eliminate the ''reason to believe'' standard in the current regulations with respect to individual leases. It would recognize that universal performance of field surveys is necessary to identify potential archaeological resources and to assist BOEM in better meeting its NHPA section 106 obligations to make a ''reasonable and good faith effort'' to identify archaeological resources under ACHP's regulations. The proposed rule would require 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 would include these submissions with any EP, DOCD, or DPP, or other authorization permit requests that require disturbance of the seafloor.

§ 550.194(a)(1)

The proposed rule would also clarify that an archaeological report must be based on an HRG survey, because an HRG survey is the most scientifically sound means of obtaining the data for the archaeological report. The proposed rule would allow 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.

§ 550.194(a)(2)

The proposed rule would allow operators to 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. Such a reference would be allowed if the previously submitted survey complies with the parameters identified in the proposed 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. BOEM

[22] ''One of the reasons the ACHP's regulation contains a post-review discovery provision [36 CFR 800.13] is that the level of effort is reasonable and in good faith, not 100 percent or exhaustive. The costs attendant with work stoppage because of a[n unanticipated] discovery should be reason enough for a Federal agency to put forth a competent professional effort at the identification stage.'' See *https://www.achp.gov/Section_106_Archaeology_Guidance/Questions%20and%20Answers/Determining_which_archaeological_sites_are_significant_identification.* Response to question 18.

[23] Atauz AD, Bryant W, Jones T, Phaneuf B. 2006. Mica shipwreck project deepwater archaeological investigation of a 19th century shipwreck in the Gulf of Mexico. 142 p. OCS Study 2006–072. Obligation No.: 14–35–01–01–CA–31178.

[24] *https://sanctuaries.noaa.gov/protect/ppw/welcome.html.*

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.

§ 550.194(a)(3)

The proposed rule would 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 would allow the use of such data it BOEM determines these sources are sufficient to identify possible marine archaeological resources at a degree of certainty reasonably similar or better than an HRG survey.

§ 550.194(b)

The proposed rule would require that the archaeological report or evidence required by § 550.194(a) be prepared and signed by a qualified marine archaeologist. This requirement would apply regardless of which option described in § 550.194(a) is used as the basis of the archaeological report or evidence. The proposed rule would further define a qualified marine archaeologist as one who meets the Secretary of the Interior's (Historic Preservation) professional qualifications standards [25] and has experience in conducting HRG surveys and processing and interpreting the resulting data for archaeological potential.[26]

§ 550.194(c)

The proposed rule would establish the minimum standards for conducting the geophysical survey upon which the archaeological report is based. It would also recognize that this survey would likely identify anomalous features on the seafloor that may not readily be identified, or excluded, as an archaeological resource. Archaeological resources on the OCS are likely to consist of either

(1) post-European contact shipwrecks or aircraft, or

(2) pre-European contact archaeological sites from the end of the last Ice Age,[27] when sea levels were about 460 feet (140 meters) lower than the present day and much of the OCS was exposed as dry land.

The proposed rule would require that geophysical surveys 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 proposed 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 this section on a case-by-case basis if it meets the requirements in proposed paragraph (d).

§ 550.194(c)(1)

The proposed rule would 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.

§ 550.194(c)(2)

The proposed rule would 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 would also establish the requirements for the collection of data necessary to assist in the identification of archaeological resources on the OCS. The sensor would be required to be towed in such a manner that a magnetic field produced by ferrous metal associated with a historic shipwreck [28] (*e.g.,* a wooden ship's fasteners, anchors, and cannons) can be detected.

The size of the magnetic field is directly related to the mass of ferrous material present. Magnetometers, gradiometers, or their equivalent are commonly used to detect historic shipwrecks because of the presence of ferrous material (*e.g.,* iron or iron alloy) associated with such shipwrecks. Although iron hulls only became popular beginning in the middle of the 19th century, even wooden ships contain ferrous materials. This material produces a magnetic field of varying size and intensity that is detectable by a magnetometer, gradiometer, or their equivalent as a distinct anomaly from the ambient magnetic field of the earth.

The magnetometer, gradiometer, or an equivalent sensor must collect data at a sufficient rate and pass through a shipwreck's magnetic field to register a reading. Therefore, the closer the sensor is to the source of the magnetism, the more readily it is detectable. The sensor's height above the seafloor should balance the proximity necessary to detect the presence of a shipwreck with ferrous materials on the one hand, and, on the other, the risk of snagging the instrument on the seafloor. In addition, it is important to minimize ''noise'' from extraneous electrical interference that produces false readings and impedes the sensor's ability to accurately register the magnetic signature of a shipwreck or other historic property. 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 feet (6 meters) or less, measured from the sensor to the seafloor.[29]

Because magnetometers measure total magnetic field strength, they may not be suitable in the vicinity of large structures, such as oil and gas platforms, pipelines, or wind turbine foundations, which mask the magnetic signature of smaller features. A gradiometer system, which measures gradient between two or more closely spaced magnetometers, or other comparable or novel technologies, should be considered for more precise results (*e.g.,* in identifying historically significant wooden merchant shipwrecks in the vicinity of the survey area) and for surveys close to large structures.

A wide array of archaeological resources might be encountered during a marine magnetic survey. At the extremes of this range, the largest

[25] Archeology and Historic Preservation; Secretary of the Interior's Standards and Guidelines, 48 FR 44716 (Sept. 29 1983) *https://www.nps.gov/subjects/historicpreservation/upload/standards-guidelines-archeology-historic-preservation.pdf.*

[26] Id.

[27] The last glacial period began about 100,000 years ago and lasted until 25,000 years ago.

[28] A metal hulled shipwreck would most likely be recorded using a magnetometer. Most of ships through history were wooden shipwrecks until the modern era. These wrecks are more difficult to locate via geophysical methods.

[29] See Gearhart, II, R., D. Jones, A. Borgens, S. Laurence, T. DeMunda, and J. Shipp. 2011. Impacts of recent hurricane activity on historic shipwrecks in the Gulf of Mexico Outer Continental Shelf. U.S. Dept. of the Interior, Bureau of Ocean Energy Management, Regulation and Enforcement, Gulf of Mexico OCS Region, New Orleans, LA. OCS Study BOEMRE 2011–003. URL: *https://espis.boem.gov/final%20reports/5111.pdf.* 202 pp., and Camidge, K., P. Holt, C. Johns, L. Randall and A. Schmidt. 2009 Developing magnetometer techniques to identify submerged archaeological sites: Theoretical study report. Cornwall, UK: Cornwall Council 2009 Report Number: 2010R012. URL: *https://archaeologydataservice.ac.uk/catalogue/adsdata/arch-983-1/dissemination/pdf/Report/Developing_Magnetometer_Techniques_Theoretical_Study_Final_Report_Rev_02.pdf.*

resources should prove easy to identify, whereas the smallest would only be detected by the highest resolution magnetic surveys. However, a survey designed to resolve anomalies of at least 1,000 pounds (453 kilograms), with a minimum detectable deflection of 5 gamma (γ; 5 nanotesla [nT]), can be expected to identify archaeological material, such as a ship's guns, anchors, and concreted amalgamations of fastenings and fittings. Based on the reports cited above, 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 would typically be sufficient to locate most historically significant shipwrecks on the OCS.

§ 550.194(c)(3)

The proposed rule would require the use of a sub-bottom profiler system for surveys conducted in water depths of less than 140 meters (459 feet). It would also establish the technical requirements for the use of this equipment. For all sub-bottom systems used to comply with this paragraph, data produced from the system must be digitally recorded to allow signal processing to improve data quality and to export data to a workstation for integrated interpretation and mapping. BOEM requests comment on whether modifications to this provision should be considered in situations where the proposed activity has the potential to disturb pre-contact archaeological material. The Gulf of Mexico (GOM) may contain areas where the sediment overlying any potential archaeological resources may be so thick that the proposed activity would not have the potential to affect a site even if one were present.

Sub-bottom profilers work by transmitting sound energy in the form of a short pulse towards the seabed. The reflected energy intensity depends on the different densities of the sediments. The denser (harder) the sediments, the stronger the reflected signal. The principal use of sub-bottom profilers in archaeology is identifying submerged and buried landforms that might have been habitable by indigenous Americans during the end of the last Ice Age. The reflected energy can identify buried river channels, levees, point bars, and lake and marsh margins that are known to have been favored sites for settlement based on studies of analogous sites located on land. Imaging a vertical bed separation of 0.3 meters (1 foot) in the upper 10 to 15 meters (33 to 50 feet) of sediment allows for reconstruction of the paleo-landscape and identification of possible human habitation, which in turn provides the data necessary to avoid harming sites of potential scientific and Tribal interest. For example, high frequency Compressed High Intensity Radar Pulse (CHIRP) and parametric systems alone may be used to achieve this level of resolution and depth of penetration to adequately image the APE, and thereby provide suitable archaeological information.

§ 550.194(c)(4)

The proposed rule would require the use of a side-scan sonar or equivalent system in all water depths. It would also establish the technical requirements for the use of this equipment and for the post-processing of data.

The side-scan sonar is an acoustic instrument that uses reflected sound waves to image the seafloor. Side-scan sonars may either be towed behind a ship or mounted in an autonomous underwater vehicle. Pulsed signals are transmitted from each side of the instrument and are reflected back from the seafloor and objects on it. The sonar signal is concentrated in narrow beams on both sides of the instrument. Sensitive hydrophones receive the returning sound. The signals from the hydrophone are sent to the ship for processing, and an image shows the strength of the returned sound. The darker parts of the image represent greater echo strength.

A higher frequency sonar will emit many pulses of sound per second, resulting in many more reflections being returned to the hydrophone. Like pixels in a photograph, more sound reflections result in a higher resolution image of the object reflecting the sound waves. A trade-off exists between resolution and range: given how sound travels in water, the higher the frequency of the sound, the shorter the distance over which it will travel. The greater the range, the fewer passes are needed to image the seafloor, but the less resolute the resulting image may be. Apart from this range versus resolution trade-off, a gap or ''nadir'' exists directly below the instrument, where no sound waves were directed.

Deploying the sensor at a height above the seafloor of 10 to 20 percent of the range ensures that the nadir is minimized and that objects at the farthest extreme of the range are detected. To ensure that the nadir is imaged, the sonar should have overlapping coverage between the right and left channels on adjacent survey transects. One hundred percent overlapping coverage of the seafloor (*i.e.,* 200 percent seafloor coverage) ensures that significant resources are not missed in the survey. (For comparison, 150 percent seafloor coverage only extends half-way across the swath coverage from an adjacent line.) Greater than 200 percent overlapping coverage may be recommended to guarantee nadir coverage and account for survey vessel drift between lines, which may be an important consideration when surveying in deep water. The 0.5-meter resolution standard is consistent with the capabilities of modern sonar systems when operated at appropriate frequency and range settings. This resolution is also consistent with current BOEM survey guidelines for shallow hazards.

Post-processing can improve sonar data quality by, for example, adjusting for slant range effects and variable speed along line. This provision would require post-processing in order to ensure that the data useful for interpretation and mapping.

§ 550.194(d)

The proposed rule would 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 would 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 not conserve the natural resources of the OCS; would not protect life (including human and wildlife), property, or the marine, coastal, or human environment; or would not protect sites, structures, or objects of historical or archaeological significance.

§ 550.194(e)

Any departures approved under proposed § 550.194(d) must be documented in writing, consistent with the OCS Lands Act, protect the archaeological resources to the same degree as if there was no approved departure from the regulations, meet the same reasonable and good faith identification effort required by NHPA section 106, and not impair the rights of third parties. This would allow BOEM to ensure that its archaeological report requirements remain in compliance with the NHPA.

§ 550.194(f)

The proposed rule would permit BOEM to reject any archeological 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. The proposed rule would

also permit BOEM to reject any archaeological report if the results produced from the survey do not meet the data and resolution requirements specified in paragraph (c), regardless of whether the survey was otherwise conducted appropriately.

BOEM recognizes that a properly conducted survey may fail to identify potential archaeological resources as a result of equipment failure, processing errors, instrument interference, adverse weather, or other non-survey parameter related failure. For example, geomagnetic storms occurring during an archaeological survey can produce false positives when using a magnetometer (*i.e.,* produce a magnetic signature that can easily be mistaken as a potential archaeological resource). Survey designs should avoid the collection of data during geomagnetic storms or incorporate a base station or gradiometer, as these configurations are effective at removing temporal variance and isolating spatial variance in magnetic data.[30] The operators are responsible for following the standards in § 550.194(c) to obtain useable information. Operators must ensure that any factors affecting the quality of the data are avoided and addressed, or areas resurveyed as necessary.

§ 550.194(g)

This provision specified what must be done if the archaeological report or evidence mentioned in paragraph (a) of this regulation suggests that an archaeological resource may be present. The proposed rule would establish 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.

§ 550.194(g)(1)

The proposed rule would provide operators the option of relocating operations so as not to adversely affect an area where known or suspected archaeological resources exist.

§ 550.194(g)(2)

The proposed rule would, in the alternative to paragraph (g)(1), also provide 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. The rule would further specify that, if high-resolution remote sensing alone is not sufficient to determine whether a seabed anomaly is an archaeological resource, the Regional Director may require the operator to conduct further archaeological investigation, under the supervision of a qualified marine archaeologist, using equipment and techniques the Regional Director considers appropriate.

In the event that the Regional Director requires additional investigations, the operator would be required to submit a report documenting the investigation to the Regional Director for review.

§ 550.194(g)(2)(ii)

The proposed rule would provide that, if, based on the information in the archaeological report or other evidence, the Regional Director determines that an archaeological resource is likely to be present in the lease area and may be adversely affected by operations, the Regional Director will notify the operator immediately of the steps to be taken to protect the archaeological resource.

The proposed rule would replace the current § 550.194(b) and emphasize 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.

§ 550.194(g)(3)

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 would be allowed to prohibit operations in the APE.

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

BOEM proposes to move the current 30 CFR 550.194(c) to the new § 550.195. Moving the provisions to a separate section would improve the overall organization of the regulations. In addition to moving the provision to its own section, BOEM proposes expanding on the specificity of the requirements. The existing regulations simply require that operations be halted immediately within the area of the discovery and that the discovery be reported to the BOEM Regional Director.

§ 550.195(a)

Paragraph (a) of the proposed rule would 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 proposed rule would establish these requirements to minimize the potential for risk to the resource.

§ 550.195(b)

Paragraph (b) would clarify that if BOEM determines that the resource is eligible for listing on the National Register of Historic Places 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 current regulations in § 550.194(c) state that if the resource is significant, the Regional Director will determine how to protect it. If BOEM were to determine that the resource is eligible for listing on the National Register of Historic Places, 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 significant and advise BSEE on the appropriate means to protect it.[31]

§ 550.195(c)

Paragraph (c) would require that BOEM 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 to either demonstrate that no adverse impacts have occurred or to document the adverse impacts. BSEE would have the ability to take any additional measures that it determines are necessary to protect, or remediate damage to, any archeological resources that have been discovered.

VIII. Procedural Matters

A. Regulatory Planning and Review (Executive Order (E.O.) 12866 and 13563)

E.O. 12866 provides that the Office of Information and Regulatory Affairs

[30] Carrier, B. and M. Heinz. 2017. Geomagnetic Storms in Marine Magnetometer Data at Low Latitudes. Offshore Technology Conference. Houston, Texas, USA. May 1–4, 2017. Carrier, B. M., A. Pulkkinen, and M. Heinz. 2016. Recognizing Geomagnetic Storms in Marine Magnetometer Data: Toward Improved Archaeological Resources Identification Practices. STAR: Science & Technology of Archaeological Research. 2:1. URL: *https://www.tandfonline.com/doi/full/10.1080/20548923.2015.1099375.*

[31] 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 National Register of Historic Places eligible sites, so this kind of information is further available there for review as a routine part of each agency's review processes.

(OIRA) in OMB will review all significant rules. OIRA has reviewed this proposed rule and determined that it 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 use the best, most innovative, and least burdensome tools for achieving regulatory ends. The E.O. 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. E.O. 13563 emphasizes that regulations must be based on the best available science and that the rulemaking process must allow for public participation and open exchange of ideas. BOEM has developed this rule in a manner consistent with these requirements.

The costs and benefits of the proposed rulemaking 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 a 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 of containing archaeological resource by the predictive model. These requirements included guidance 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. Under the GOM region baseline scenario, HRG archaeological surveys are conducted using methods consistent with guidelines provided in Notice to Lessee (NTL) 2005–G07, entitled ''Archaeological Resource Reports and Surveys,'' [32] which recommends a maximum line spacing of 50 meters in water depths of 200 meters or less.

In the Alaska region, all HRG archaeological surveys completed since 2011 have been conducted using methods consistent with guidelines provided in NTL 2005–A01, ''Shallow Hazards Survey and Evaluation for OCS Exploration and Development Drilling,'' [33] and NTL 2005–A03, ''Archaeological Survey and Evaluation for Exploration and Development Activities.'' [34] These NTLs create 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.

Most of the revisions in the proposed rule would have no or negligible cost impacts for operators. All expected incremental costs of the proposed 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 lane spacing sufficient to detect ferrous metals or other magnetically susceptible materials of at least 1,000 pounds. 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 lane spacing of 30 meters.[35]

Table 1 presents a summary of the qualitative benefits and an quantitative estimate of the annualized and total costs for the proposed rule. BOEM estimates that the proposed changes would increase total OCS archaeology survey costs over the next 10 years by $4,109,599, using a 3% discount rate or by $3,463,520, using a 7% discount rate.

TABLE 1—SUMMARY OF BENEFITS AND COSTS

Category	Estimate	Units			Notes
		Year dollars	Discount rate (percent)	Period covered (years)	
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.				
Costs: Annualized Incremental Costs.	$410,960 346,352	2022	3 7	10	Increased compliance costs due to increased measurement capability requirements in water depths less than or equal to 100 meters.
Total Incremental Costs.	4,109,599 3,463,520	2022	3 7		

[32] *https://www.boem.gov/sites/default/files/documents/newsroom/BOEM%20NTL%20No.%202005-G07.pdf.*

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

[34] *https://www.boem.gov/sites/default/files/documents/oil-gas-energy/BOEM%20NTL%20No.%202005-A03.pdf.*

[35] The explanation for this statement is provided in section VII of the preamble under § 550.194(c)(2), where it states: ''If the sensor 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.

BOEM welcomes comments on the regulatory impact analysis (RIA) for this proposed rule. The initial RIA can be found in the rulemaking docket at *www.regulations.gov.*

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 there is likely to be a significant economic impact on a substantial number of small entities 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 proposed rulemaking, the RFA requires the agency to ''prepare and make available for public comment an initial regulatory flexibility analysis'' which will ''describe the impact of the proposed rule on small entities.'' (5 U.S.C. 603(a)).

BOEM has determined that this proposed rule would affect a substantial number of small entities. Operators under this proposed 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 proposed 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 archeological report under the proposed rule. BOEM estimates that of the 70 OCS lease operators, 21 are large and 49 are small.

The regulatory changes in this proposed rule are primarily clarifications, codifying existing practice, or reflect BOEM regulatory updates to maintain consistency with NHPA regulations. Most operators have been conducting HRG surveys and the archeological analysis consistent with the regulatory requirements in this proposed 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 proposed rule derive from the proposed 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 lane spacing sufficient to detect ferrous metals or other magnetically susceptible materials of at least 1,000 pounds. This performance standard is met by the requirement that operators conduct archaeological surveys with a maximum lane spacing of 30 meters.

BOEM estimates that the proposed changes would increase OCS archaeology survey costs by $4,725,000 over the next 10 years. The GOM archaeological survey costs are estimated to increase by $1,680,000, the Alaska costs by $3,045,000, depending on activity and cost factors discussed in section II of the initial RIA.

BOEM's estimate of the proposed rule's 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. Operators that meet the definition of a small entity dominate the oil and gas industry on the GOM OCS, which is submerged generally under waters 200 meters or less in depth. Therefore, BOEM estimates most of the increased GOM compliance cost for survey lane 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 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 various discount rates. BOEM does not expect new archaeological surveys in other OCS regions over the next decade.

TABLE 2—SMALL BUSINESS 10 YEAR COMPLIANCE COST ASSOCIATED WITH PROPOSED RULE

	Undiscounted cost	Discounted at 3%	Discounted at 7%
Large Business Total Incremental Costs (AK OCS Region)	$3,045,000	$2,633,533	$2,200,961
Small Business Total Incremental Costs (GOM OCS Region)	1,680,000	1,476,066	1,262,559

C. Small Business Regulatory Enforcement Fairness Act

This proposed rule is not a major rule under 5 U.S.C. 804(2), the Small Business Regulatory Enforcement Fairness Act, because it: (a) will not have an annual effect on the economy of $100 million or more; (b) will not cause a major increase in costs or prices for consumers, individual industries, Federal, State, or local government agencies, or geographic regions; and (c) will not have significant adverse effects on competition, employment, investment, productivity, innovation, or the ability of U.S.-based enterprises to compete with foreign-based enterprises.

D. Unfunded Mandates Reform Act of 1995

This proposed rule does not impose an unfunded mandate on State, local, or Tribal governments, or the private sector of more than $100 million per year. This rule does not have a significant or unique effect on State, local, or Tribal governments or the private sector. Moreover, the proposed rule would not have disproportionate budgetary effects on these governments. BOEM has also determined that this proposed rule would not impose costs on the private sector of more than $100 million in a single year. A statement containing the information required by the Unfunded Mandates Reform Act (2 U.S.C. 1531 *et seq.*) is not required and BOEM has chosen not to prepare such a statement.

E. Takings Implication Assessment (E.O. 12630)

This proposed rule does not effect a taking of private property or otherwise have takings implications under E.O. 12630. Therefore, a takings implication assessment is not required.

F. Federalism (E.O. 13132)

Under the criteria in section 1 of E.O. 13132, this proposed rule does not have sufficient federalism implications to warrant the preparation of a federalism summary impact statement. Therefore, a federalism summary impact statement is not required.

G. Civil Justice Reform (E.O. 12988)

This proposed 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.

H. Consultation With Indian Tribes (E.O. 13175 and Departmental Policy)

BOEM strives to strengthen its government-to-government relationship with American Indian and Alaska Native tribes through a commitment to consultation with the Tribes and recognition of their right to self-governance and Tribal sovereignty. BOEM also is respectful of its responsibilities for consultation with corporations established pursuant to the Alaska Native Claims Settlement Act, 43 U.S.C. 1601 *et seq.* (ANCSA). BOEM has evaluated this proposed rule under the criteria in E.O. 13175, DOI's consultation policy, as described in the Department of the Interior Departmental Manual, part 512, chapters 4 [36] and 5 [37] (December 1, 2022), and BOEM's tribal consultation guidance (outlined in the Memorandum from William Y. Brown, Chief Environmental Officer, Bureau of Ocean Energy Management, to Bureau Program Chiefs and Regional Directors (June 29, 2018)).[38] BOEM has determined that the proposed rule may have tribal implications. BOEM has begun outreach to the Tribes and ANCSA corporations, and will follow Departmental and Bureau procedures for consultation during the development of this action.

I. Paperwork Reduction Act (PRA)

This proposed rule references existing and new IC requirements for regulations at 30 CFR part 550, subpart A. Submission to OMB for review under the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 *et seq.*) is required. Therefore, BOEM will submit an IC request to OMB for review and approval and will request a new OMB control number, designated in this discussion as ''1010–NEW.'' Once the 1010–AE11 final rule is effective, BOEM will transfer the hour burden from 1010–NEW to OMB Control Number 1010–0114, which expires February 28, 2023, then discontinue the new number associated with this rulemaking. The ICs related to this rulemaking concern requirements under 30 CFR 550.194 and proposed 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.

The new and revised information collection requirements for 30 CFR 550.194 and proposed 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	Non-hour cost burdens		
		Hour burden	Average number of annual responses	Annual burden hours
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 hours.
194	Request departures from conducting archaeological resources surveys and/or submitting reports.[**].	1	2 requests	2 hours.
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.

• *Proposed 30 CFR 550.194(a):* The proposed rule would require that any EP, DOCD, or DPP, or any other request to conduct activities that may disturb the seafloor be accompanied by or contain an archaeological report and supporting evidence. BOEM proposes to increase the estimated annual burden hours to 500 hours (+500 annual burden hours over the currently approved burden).

• *Proposed 30 CFR 550.194(c):* The proposed rule would require that archaeological reports be based on a HRG survey of the APE. The high-resolution geophysical requirements proposed 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.

• *Proposed 30 CFR 550.194(g):* If an archaeological resource is likely to be present, the proposed rule would require an operator to either relocate the proposed operations to avoid adversely

[36] Available at *https://www.doi.gov/sites/doi.gov/files/elips/documents/512-dm-4_2.pdf.*

[37] Available at *https://www.doi.gov/sites/doi.gov/files/elips/documents/512-dm-5_2.pdf.*

[38] Available at *https://www.boem.gov/BOEM-Tribal-Consultation-Guidance/.*

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 proposed provision.

- *Proposed 30 CFR 550.195(a):* The proposed rule would require the operator to notify the BOEM Regional Director of any 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 would be low, so BOEM estimates the annual burden hours to equal 3 hours (1 hour × 3 responses) (+3 annual burden hours above the currently approved burden).
- The annual burden hours for departure requests would 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–NEW.

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.

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

In addition, 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 proposed 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 proposed rule; (3) for reasons other than to provide information or to keep records for the U.S. Government; or (4) as part 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

BOEM proposes to comply with NEPA by relying on an existing categorical exclusion.[39] This proposed rule, if finalized, meets the criteria for categorical exclusion because the proposed activities fall within the bounds of 516 DM 15.4.C(1) and 43 CFR 46.210(e), which address regulatory functions ''for which the impacts are limited to administrative, economic, or technical effects and the environmental impacts are minimal.'' (516 DM 15.4(C)(1) The actions required by this rule are fundamentally administrative and technical and do not have the potential to cause significant individual or cumulative effects on the quality of the human environment. In addition, 516 DM 15.4.C(13) covers the category of actions required by this rule:

> Preliminary activities conducted on a lease prior to approval of an exploration or development/production plan or a Development Operations Coordination Plan. These are activities such as geological, geophysical, and other surveys necessary to develop a comprehensive exploration plan, development/production plan, or Development Operations Coordination Plan.

BOEM preliminarily has determined that this proposed rule, if finalized, would not involve any of the extraordinary circumstances that require further analysis under NEPA.[40] The final decision on the appropriate level of NEPA analysis will be made at the final rule stage.

K. Data Quality Act

In developing this proposed rule, we 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).

L. Effects on the Nation's Energy Supply (E.O. 13211)

Under E.O. 13211, agencies are 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 have no effect on the production, supply, distribution, or use of energy and is not expected to have any effect on the energy industry.

M. Congressional Review Act (CRA)

This action is subject to the CRA, 5 U.S.C. 801 *et seq.* BOEM will submit a rule report to each House of the Congress and to the Comptroller General of the United States along with the final version of this rule. This action is not a ''major rule'' as defined by 5 U.S.C. 804(2).

N. Clarity of This Regulation

BOEM is required by E.O. 12866, E.O. 12988, and by the Presidential memorandum of June 1, 1998, to write all rules in plain language. This means that each rule BOEM publishes must:

(1) Be logically organized;

(2) Use the active voice to address readers directly;

(3) Use clear language rather than jargon;

[39] See 43 CFR 46.205.

[40] *See* 43 CFR 46.215.

(4) Be divided into short sections and sentences; and

(5) Use lists and tables wherever possible.

If you feel that BOEM has not met these requirements, send comments by one of the methods listed in the **ADDRESSES** section. To better help BOEM revise the proposed rule, your comments should be as specific as possible. For example, you should specify the number of the sections or paragraphs that you find unclear, which sections or sentences are too long, the sections where you feel lists or tables would be useful, etc.

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, Reporting and recordkeeping requirements, Rights-of-way, Sulfur.

Laura Daniel-Davis,

Principal Deputy Assistant Secretary, Land and Minerals Management.

For the reasons discussed in the preamble, the Bureau of Ocean Energy Management proposes to amend 30 CFR part 550 as follows:

Title 30—Mineral Resources

CHAPTER V—BUREAU OF OCEAN ENERGY MANAGEMENT, DEPARTMENT OF THE INTERIOR

SUBCHAPTER B—OFFSHORE

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

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

Authority: 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 Archeological resource as follows:

§ 550.105 Definitions.

* * * * *

Archeological 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, or any other request to obtain an authorization or permit from BOEM that involves disturbance of the seafloor, must be accompanied by or contain one of the following:

(1) an archaeological report based on a high-resolution geophysical survey of the Area of Potential Effects (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 a high-resolution geophysical 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

(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 be prepared and signed by a qualified marine archaeologist. A qualified marine archaeologist must meet ''the Secretary of the Interior's (Historic Preservation) Professional Qualifications Standards'' and must have experience in conducting high-resolution geophysical 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.

(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 kg) in mass with a minimum magnetic deflection of 5 gamma (γ; 5 nanotesla [nT]), conducting archaeological surveys with a maximum lane spacing of 30 meters. An altimeter 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 1.0 γ (1.0 nT) or less. Background noise level must not exceed a total of 3.0 γ peak to peak. The data sampling rate must be greater than 4.0 Hz to ensure sufficient data point density of at least 2 points per meter. 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.

(3) For geophysical surveys conducted in water depths of 140 meters (459 ft) or less, 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 sub-bottom 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). 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 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 resolve small, discrete targets 0.5 meters (1.6 feet) in length at maximum range. 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.

(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 archeological 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 archeological report if the survey was not prepared in accordance with the requirements of paragraph (c) of 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) of this section, 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; or,

(i) if the further investigation cannot establish to the satisfaction of the Regional Director that an archeological resource it 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.

■ 4. Add § 550.195 to read as follows:

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

(a) If you discover any unanticipated archaeological resource 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) of this section. 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 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.

[FR Doc. 2023–02903 Filed 2–14–23; 8:45 am]

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ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 52

[EPA–R09–OAR–2023–0035; FRL–10594–01–R9]

Finding of Failure To Attain the 1987 24-Hour PM_{10} Standards; Pinal County, Arizona

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed rule.

SUMMARY: The Environmental Protection Agency (EPA) is proposing to determine