



**United States Department of the Interior**  
MARINE MINERALS ADMINISTRATION  
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Washington, DC 20240-0001



Memorandum

To: Lanny E. Erdos  
Director, Office of Surface Mining, Reclamation, and Enforcement  
Exercising the Authority of the Assistant Secretary - Land and Minerals Management

From: Michael D. Olsen **MICHAEL OLSEN**  
Acting Director, Marine Minerals Administration

Subject: Recommendations for Decision on the Final Leasing Notice for the American Samoa Outer Continental Shelf Mineral Lease Sale (Lease Sale PACM-1)

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The Marine Minerals Administration (MMA)<sup>1</sup> requests your decision regarding the Final Leasing Notice (FLN) for the first Outer Continental Shelf (OCS) Mineral Lease Sale in the Pacific Territories offshore American Samoa (Lease Sale PACM-1). This decision includes the size, timing, and location, mineral rights, Information to Lessees (ITL) clauses, lease stipulations, and lease terms and economic conditions within the FLN package. Your decision will be noted by the choice of options and your signature below.

MMA plans to publish the FLN for the American Samoa OCS Mineral Lease Sale in the *Federal Register* on October 20, 2026.

## **I. LEASE SALE AREA AND RESOURCES**

### **Sale Area**

Lease Sale PACM-1 is MMA's first sale in the Pacific Territories. After receiving an unsolicited lease sale request from Impossible Metals, Inc. on April 8, 2025, MMA responded on May 23, 2025, indicating its decision to proceed with steps that may lead to a critical mineral lease sale offshore American Samoa. On June 16, 2025, MMA published a request for information and interest (RFI), initiating a 30-day public comment period (90 FR 25369). At the request of the Governor of American Samoa, this comment period was extended by an additional 30 days on August 15, 2025. The RFI Area identified the area of interest in the unsolicited lease sale request, located near the eastern limit of the American Samoa OCS bordering the Cook Islands Exclusive Economic Zone (EEZ) and comprising approximately 18.1 million acres with approximate water depths ranging from 4,600-20,000 feet. In accordance with 30 CFR 581.14, and after reviewing available OCS mineral resources, environmental data, and public comments

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<sup>1</sup> Secretary's Order 3451 established the Marine Minerals Administration (MMA), which replaced BOEM, and provided for a transition period during which existing BOEM officials retain operational authority necessary for the uninterrupted accomplishment of its mission. That transition period is ongoing. Accordingly, this memorandum references both BOEM and MMA but is issued under the authority of the MMA.

received on the RFI, MMA announced on November 10, 2025, the completion and availability of the Area Identification (Area ID) decision on its website. The Area ID identified all available blocks within the American Samoa RFI Area for potential leasing and environmental analysis, with the addition of a contiguous area to the southwest of the RFI Area that extends to the southern boundary of the EEZ. A Notice of Availability for the Proposed Leasing Notice (PLN) was published in the Federal Register on July 17, 2026. The PLN outlined the terms and conditions for the potential sale, including blocks under consideration, information to lessees, and proposed lease stipulations. The proposed lease areas were derived from the Area ID decision and covered approximately 5,777 whole and partial blocks, approximately 31,503,235 acres. These proposed lease areas were reduced in size from the Area ID Decision Memo due to removing blocks and aliquots within a 4,800-meter (length of one leasing block) buffer adjoining the Cook Island EEZ boundary and Rose Atoll Marine National Monument. From this remaining area, two lease areas were proposed in the PLN. MMA recommends offering in Lease Sale PACM-1 the two lease areas proposed in the PLN as listed below and described in Section II of this memorandum.

| Lease Areas      | Hectares   | Acres      | Km <sup>2</sup> | Block Count | Nearest Distance from Pago Pago (Approx.) |
|------------------|------------|------------|-----------------|-------------|-------------------------------------------|
| OCS-P 0568       | 6,609,456  | 16,332,256 | 66,095          | 3,001       |                                           |
| OCS-P 0569       | 6,139,502  | 15,170,979 | 61,395          | 2,776       |                                           |
| Both Lease Areas | 12,748,958 | 31,503,235 | 127,490         | 5,777       | 150 – 240 mi                              |

## Resources

Within the lease sale area, MMA is offering for development all marine minerals or metals found in polymetallic nodules and ferromanganese crust deposits discovered therein. Any lease(s) that are issued will grant rights to develop these deposit types and minerals produced incidental to and in direct association with production from these deposits. All other minerals will be reserved to the Lessor, including but not limited to oil, gas, sulphur, and source materials for fissionable materials, as required by 30 CFR 581.8.

The recommended areas for potential leasing are consistent with indications of interest and prospective seabed mineral regions identified by the U.S. Geological Survey (USGS) in and around the RFI Area for ferromanganese crusts and polymetallic nodules (*See USGS Coastal and Marine Hazards and Resources Program. Global Marine Mineral Prospective Regions Map. January 31, 2025. <https://www.usgs.gov/media/images/global-marine-mineral-prospective-regions-map> USGS Global Marine Mineral Prospective Regions Map*). Unlike more studied areas of the Clarion-Clipperton Zone, the seafloor near American Samoa has sparse geophysical and geological mapping data, making it challenging to characterize nodule or crust abundance, including sizes and mineral content or grade. Resource estimates would need to rely heavily on extrapolation from distant sites. The National Oceanic and Atmospheric Administration (NOAA) funded new geophysical and geological data collection to increase baseline understanding of the deep ocean environment, including knowledge of deep-sea minerals. This effort was completed in summer 2026, with a subsequent report and data being published. These results may help

potential lessees determine strategies for bidding and guide future site-specific survey efforts post-lease sale.

### **Fair Market Value**

The Outer Continental Shelf Lands Act (OCSLA; 43 U.S.C. §1331(o)) provides the following definition for Fair Market Value (FMV): “...the value of any mineral (1) computed at a unit price equivalent to the average unit price at which such mineral was sold pursuant to a lease during the period for which any royalty or net profit share is accrued or reserved to the United States pursuant to such lease, or (2) if there were no such sales, or if the Secretary finds that there were an insufficient number of such sales to equitably determine such value, computed at the average unit price at which such mineral was sold pursuant to other leases in the same region of the outer Continental Shelf during such period, or (3) if there were no sales of such mineral from such region during such period, or if the Secretary finds that there are an insufficient number of such sales to equitably determine such value, at an appropriate price determined by the Secretary.”

Lease Sale PACM-1 is the first of its kind, offering leases to explore and, pending plan approvals, develop all marine minerals or metals found in polymetallic nodules and ferromanganese crust deposits in the lease areas. Given the absence of cost and resource information for the government to estimate a value for the American Samoa lease areas, MMA is relying on open competitive bidding along with the lease and fiscal terms for Lease Sale PACM-1 to ensure the receipt of an appropriate price for the lease areas. This reliance is operationalized through MMA’s auction design, and its treatment of the resulting high bid is discussed below.

MMA’s competitive ascending auction, in conjunction with the other fiscal terms (e.g., royalties), is designed to assure FMV. Because all qualified bidders have an equal opportunity to bid on any lease area under the open ascending auction format, MMA considers the resulting high bid to reflect the market’s assessment of the lease area’s value and satisfy the OCSLA definition of FMV without a separate pre- or post-sale evaluation; MMA’s approach for this sale relies on open eligibility to bid, rather than the number of bids received, as the basis for adequate value. Accordingly, the FLN states that the competitive ascending auction represents MMA’s pre-lease assurance of FMV, and the highest bid will not undergo a further FMV assessment. This approach provides certainty for bidders, allowing them to base bids on their own economic evaluation of the lease area, in consideration of the established fiscal terms for the lease.

MMA will conduct a post-sale review of Lease Sale PACM-1 to evaluate auction outcomes and incorporate lessons learned into future decisions regarding leasing processes, fiscal terms, and valuation methodologies as informed by observed competition and other market or regulatory factors.

## **II. RANGE OF OPTIONS FOR THE FLN**

MMA identified four key components for Lease Sale PACM-1 and analyzed a recommended course of action and alternative approaches for each. The four key components of the sale are: (A) lease sale size, timing, and location, (B) ITLs, (C) lease stipulations, and (D) lease terms and economic conditions. In this document, MMA provides a discussion of the issues and recommendations followed by a set of options for your decision.

## A. LEASE SALE TIMING AND SIZE

MMA recommends offering two large lease areas of the OCS offshore American Samoa for an OCS Mineral Sale on November 19, 2026. The timing of the sale is consistent with Congressional policy under the Outer Continental Shelf Lands Act (OCSLA; 43 U.S.C. § 1332(3)) to make OCS resources “*available for expeditious and orderly development, subject to environmental safeguards, in a manner which is consistent with the maintenance of competition and other national needs.*”

The size of the recommended lease areas is consistent with license contracts for polymetallic nodule exploration issued by the International Seabed Authority (ISA), as described below. MMA recommends offering for lease all minerals or metals found in polymetallic nodules and ferromanganese crust deposits discovered within these lease areas. Any lease(s) granted will specify rights to these deposit types and any minerals produced in direct association with those specified deposits. Reserved minerals and materials include oil, gas, sulphur, and source materials for fissionable materials as required by 30 CFR 581.8.

### Sale Area and Size for Consideration

✓ **Option A (Recommended; Decision reflected in American Samoa PACM-1 Proposed Leasing Notice): MMA recommends leasing most of the acreage identified in the Area ID decision, divided into two lease areas as mapped on Figure 1.**

MMA is recommending that the area from the Area ID decision be reduced in size by removing lease blocks and aliquots within a 4,800-meter (one leasing block length) buffer adjacent to the Cook Island EEZ boundary and the Rose Atoll Marine National Monument. This reduction helps prevent accidental activities in areas that may be outside the jurisdiction of MMA (i.e., beyond the EEZ if the coastline shifts). This reduction still provides sufficiently large areas needed to identify mineable ore bodies, provides maximum opportunity to industry, and meets the purposes of OCSLA and the national need for domestic critical mineral supply in support of a series of Executive Orders (E.O.s), including E.O. 14156, “Declaring a National Energy Emergency” (January 20, 2025); E.O. 14154, “Unleashing American Energy” (January 20, 2025); and E.O. 14285, “Unleashing America’s Offshore Critical Minerals and Resources” (April 24, 2025), and Secretary’s Orders (SO), including SO 3417, “Addressing the National Energy Emergency” (February 3, 2025) and SO 3418, “Unleashing American Energy,” (February 3, 2025), which direct Department of the Interior bureaus to facilitate and expedite critical mineral permitting, leasing, and ultimately development of critical minerals on the OCS.

**Two Lease Option (Recommended).** Option A.1 would offer two lease areas in eastern portions of the OCS offshore American Samoa. This option consists of up to 12,748,958 hectares (ha) or 31,503,235 acres (ac) combined, for two lease areas shown on Figure 1. Lease OCS-P 0568 is 16,332,256 acres and Lease OCS-P 0569 is 15,170,979 acres. MMA received several indications of interest and therefore recommends offering up to two leases as the total number of lease sale areas to allow for competition while maintaining sufficient size to allow for exploration. According to USGS prospectivity maps referenced above, Lease OCS-P 0568 is prospective for polymetallic nodules, while Lease OCS-P 0569 is prospective for polymetallic nodules and ferromanganese crusts.

The lease area sizes are generally around 7,500,000 hectares (or approximately 18,500,000 acres) in size and are generally consistent with ISA exploration contracts for nodules. In comparison, ISA exploration contracts for ferromanganese crusts are typically more than an order of magnitude smaller. Since the two lease areas are prospective for nodules, this option adopts a larger lease area to account for both commercial interest in nodules and crusts.

The available blocks in the lease sale areas range from approximately 130 to 200 nautical miles east of Pago Pago, 52 nautical miles east of Rose Atoll, and in water depths ranging from 4,630 to 20,100 feet (1,412 to 6,127 meters). The lease areas are at least 4.8 kilometers from the Rose Atoll Marine National Monument.

**Figure 1**, below, shows the recommended lease areas for the American Samoa OCS Mineral Lease Sale.

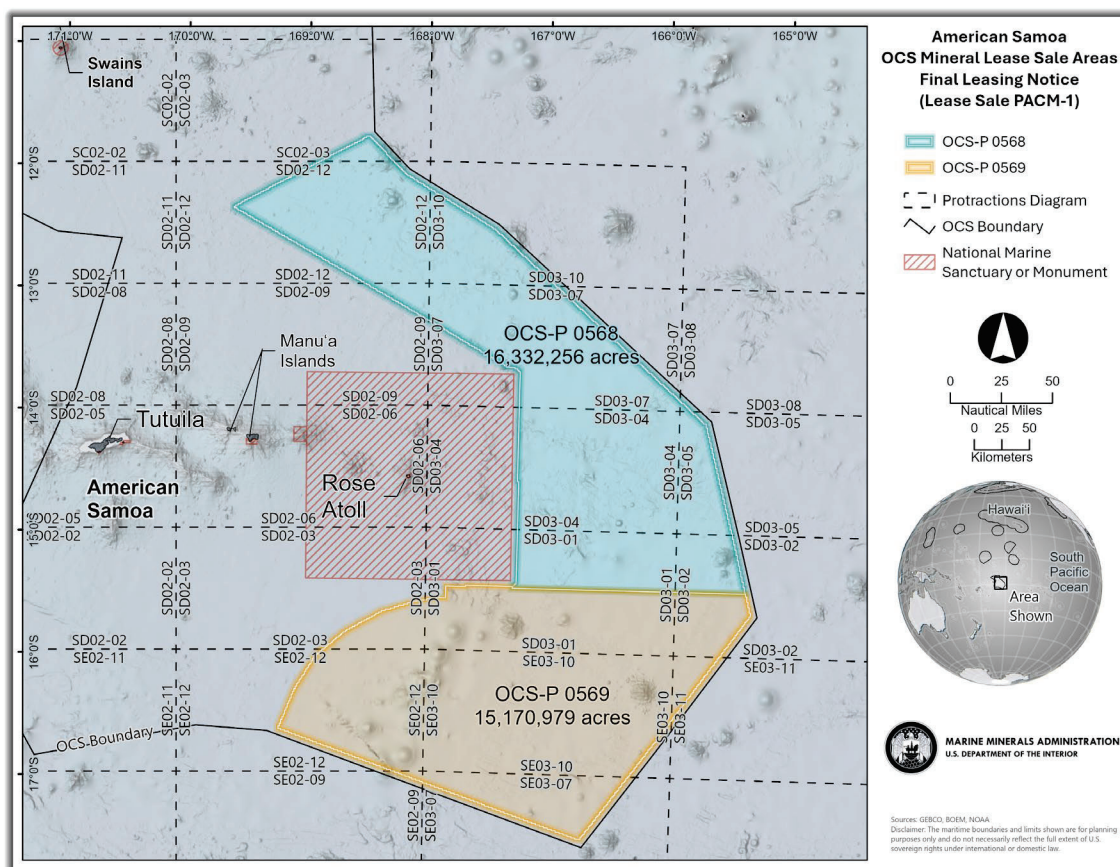


**Figure 1. Final Leasing Notice Lease Area Recommendations**

One Lease Option. Option A.2 is to lease the same acreage as identified in Option A, but as one lease area with issuance of only one lease. This option would not foster a more competitive OCS, nor attract greater industry interest and investment to thoroughly explore for, identify, and develop economically viable mineral deposits. However, this option would not have MMA differentiate between the resource potential and economic value of the one lease area that the USGS prospectivity model predicts to be mostly prospective for nodules and the other lease area

that is prospective for nodules and crusts depending on location and geologic setting. Given that the MMA recommendation is to allow a single bidder to win both lease areas (see Option D.3 below), MMA is not recommending Option A.2. MMA therefore recommends Option A.1., in conjunction with Option D.3.a allowing bidders to win one or both lease areas, while promoting industry options and fostering additional competition.

Data Collection Option. Option A.3 was considered at the PLN stage but was not ultimately selected. This option would place a hold on the leasing process until the additional data is made available to better characterize the seabed resources available in each lease area. This option would not expedite OCS leasing in the spirit of E.O. 14285. For these reasons, MMA does not recommend delaying issuance of the FLN or the sale to await further data.

### **SALE SIZE OPTIONS AND MMA’S RECOMMENDATION**

☒ **Option A.1 (Recommended; Decision reflected in American Samoa PACM-1 Proposed Leasing Notice). Offer for lease the acreage identified in the Proposed Leasing Notice as two lease areas, as mapped on Figure 1.**

☐ Option A.2 Offer for lease the acreage identified in the PLN, as one lease area.

☐ Option A.3 Place a hold on the FLN until new data is made available.

### **B. INFORMATION TO LESSEES**

The Information to Lessees (ITLs) are designed to inform potential bidders of select applicable Federal requirements and other information that may be of benefit to bidders participating in the Lease Sale PACM-1. The ITLs also contain certain requirements that may be further described in a number of future national and regional guidelines for marine minerals activities on the OCS or imposed as conditions of approval of plans submitted by the Lessee. The full text of the ITLs is provided in the FLN package.

### **ITL OPTIONS AND MMA’S RECOMMENDATION**

☒ **Option B.1. (Recommended; Decision reflected in American Samoa PACM-1 Proposed Leasing Notice)**

**Adopt the following thirteen ITLs**

- 1. Navigation Safety** - Identifies that some blocks may have charted hazards and restricted areas.
- 2. Geological and Geophysical Surveys** – Ensures that all vessels conducting preliminary activities comply with the standard operating procedures, and describe any unique or special features in the lease area.
- 3. Marine Archaeological Survey Requirements** - Identifies parameters for the required archaeological survey reports, and specifications for survey coverage.

4. **Environmental Monitoring** – Identifies that there may be required environmental monitoring strategies, and associated reporting of data.
5. **Mining Discharge Analysis** – Identifies requirements for submittal and review of the Mining Waste Discharge Plan prior to initiation of discharge related activities on the lease.
6. **Data and Metadata Standards** – Identifies preferred standards for the submittal of data and metadata.
7. **Low-Impact Collector Technology Rationale** – Identifies recommendations for the description of technologies employed to minimize sediment disturbance from seabed disturbing collection systems.
8. **Community Engagement Plan** – Identifies that the lessee may need to develop and implement a plan to reduce the potential for conflicts, misunderstandings, or avoidable impacts during preliminary activities providing opportunities for engagement with local communities in American Samoa.
9. **Dock Space** – Identifies requirement in plans to analyze the effects of its operations on use of local dock space.
10. **Notice of Assignment to the Committee on Foreign Investment in the United States (CFIUS)** - Requires the assignor and the proposed assignee to jointly provide notice of the proposed transaction to the Committee on Foreign Investment in the United States (CFIUS) in accordance with applicable regulations (subpart D of 31 CFR part 800) and provide a copy of the notice to the Department of War (DoW).
11. **Domestic Mineral Processing and Supply Chain** – Encourages the domestic processing of the critical minerals produced from this sale to help develop the U.S. critical mineral supply chain and workforce.
12. **Engagement** – Encourages Lessees to promote reasonable engagement between the lessee and the American Samoan government and local communities.
13. **Local Emergency Preparedness and Maritime Safety Support** – Encourages the Lessee to use reasonable efforts to coordinate and support the American Samoa Government to enhance the territories capability to support territorial maritime emergency response, marine rescue coordination, spill preparedness, communications systems, and related response capacity.

\_\_\_\_\_ Option B.2 Adopt fewer than all ITLs. Delete the following ITLs:

\_\_\_\_\_ Option B.3 Adopt additional ITLs. The decision maker should include the additional ITLs in an attachment to this document.

## C. LEASE STIPULATIONS

MMA is proposing the adoption of the following 13 lease stipulations for all leases issued for Lease Sale PACM-1. The full text of each is provided in the “Stipulations” document included in the FLN Package. A brief discussion of each stipulation is provided below.

### Stipulation No. 1 – Lease Preliminary Activities and Survey Notices

*Adopt a stipulation* to define “Preliminary Activities” as those consistent with the activities

described in the Commercial Leasing for Minerals Offshore American Samoa Environmental Assessment (EA), and prevent other activities prior to submitting a Delineation, Testing and/or Mining Plan. The lessee must also provide written notice at least 30 days prior to initiating any Preliminary Activities describing those planned activities with enough detail to reasonably enable the Lessor's review for compliance with lease stipulations and applicable statutes. The Lessor has 30 days to comment on the sufficiency of the notice, and any comments must be addressed before proceeding.

The Lessor may request meetings with the Lessee regarding the proposed Preliminary Activities prior to commencement of the planned activities including relevant personnel.

## **Stipulation No. 2 – Endangered Species Act and Essential Fish Habitat Consultation Requirements**

*Adopt a stipulation* to ensure appropriate measures are taken to comply with Endangered Species Act (ESA) and Essential Fish Habitat (EFH) consultations, including:

### **Vessel Speed**

The Lessee must ensure that all vessels associated with Preliminary Activities reduce speeds to 10 knots or less when any ESA-protected marine mammal species are observed or suspected near a vessel.

### **Vessel Strike Avoidance Zone**

All vessels associated with Preliminary Activities must have a Protected Species Observer (PSO) or trained observer monitoring the vessel strike avoidance zone for protected species at all times, with further monitoring requirements when protected species are within specified distances of the vessel. The PSO will report any deviations or incidents.

### **Moon Pools**

When a vessel is equipped with a moon pool, measures are required to prevent ESA-protected species and marine mammals from entering during Preliminary Activities or related transit. Measure will also be taken to ensure any such species leave the moon pool with associated reporting requirements.

### **Equipment Deployment and Retrieval**

The Lessee must have a deployment plan for autonomous underwater vehicle and/or remotely operated vehicles (AUV/ROV) and configure all Preliminary Activities to reduce the risk of potential entanglement of ESA-protected and marine mammal species.

### **Protected Species Observers**

Defines standards for PSOs, when they are required, coverage they must provide, equipment needed, and training requirements. It also specifies the authorities PSOs will have for stopping activities, and notification and response measures.

### **Protected Species Reporting**

Requires immediate reporting to MMA and National Marine Fisheries Service (NMFS) of any incidents of serious harm, injury or death to an ESA-protected or marine mammal species observed during Preliminary Activities. In the case of incidental take, the lessee will notify MMA and NMFS to determine if additional ESA consultation or protective measures need to be taken, and requires final reports for any incidents.

### **Marine Trash and Debris Prevention**

Requires compliance with the marine trash and debris awareness and elimination terms and proposed action within the 2026 Endangered Species Act Letter of Concurrence and Essential Fish Habitat Response.

### **Protection of Biological Resources**

Requires avoidance of unnecessary or substantial disturbance to sensitive seabed habitats and biodiversity hotspots, including areas of high biological productivity. It also requires disclosure and reporting of any previously unidentified sensitive habitats or biological communities.

### **Fisheries and Wildlife Awareness Training**

Reduces potential conflicts with fishers and minimize adverse interactions with wildlife during lease activities by requiring Fisheries and Wildlife Awareness Training for all personnel prior to marine operations.

### **Communicating Protected Species Requirements**

Ensures compliance with the approved measures to safeguard ESA listed species and designated critical habitat included in the ESA Letter of Concurrence and Magnuson-Stevens Fishery Conservation and Management Act EFH Response, and any applicable Incidental Take Authorization issued by NMFS.

### **Stipulation No. 3 – Fisheries Communication Plan**

*Adopt a stipulation* to require the development and submission of a Fisheries Communication Plan (FCP) for Preliminary Activities to the Lessor, and be made publicly available, after consultation with NMFS, the Western Pacific Regional Fishery Management Council, and the American Samoa Department of Marine and Wildlife Resources. The FCP describes identification of potentially affected fisheries, procedures for communication and training among fishing communities, and conflict avoidance strategies. In accordance with the plan, the lessee will document interactions with fishing vessels and gear, and any avoidance or remedial actions taken.

### **Stipulation No. 4 – Protection of Birds**

*Adopt a stipulation* describing requirements on the use of lighting to minimize the potential for the attraction of birds to work areas. Any injured birds discovered on a vessel will be delivered to an approved wildlife care facility, and a log of all birds found on the vessel that may have been attracted to artificial light sources will be maintained and provided to MMA within 90 days following the completion of the activities.

**Stipulation No 5. Marine Archaeology Requirements for Preliminary Activities**

*Adopt a stipulation to prevent impacts to potential archaeological resources without the Lessor's prior consent, following appropriate compliance with the National Historic Preservation Act. The stipulation also directs procedures for the review and monitoring of activities by a Qualified Marine Archaeologist. In the case of an unanticipated discovery of archaeological resources, the stipulation directs appropriate actions for disclosure, and prevention of adverse impacts to the resource.*

**Stipulation No 6. Unanticipated Discovery Requirements**

*Adopt a stipulation requiring Lessee to take protective measures in the event of the unanticipated discovery of a potential archaeological resource by immediately halting seafloor disturbing activities and submitting a report by the QMA.*

**Stipulation No 7. Research Site Access**

*Adopt a stipulation to allow access on the lease to the Lessor and any associated entities on the site for research purposes, with efforts for notice specified and avoidance of space-use conflicts.*

**Stipulation No 8. Preliminary Activities Reporting**

*Adopt a stipulation to require submission of reports and data from Preliminary Activities, and results of environmental monitoring activities within 90 days after the completion of the Preliminary Activities. The Lessee must publicly share all collected environmental data, and associated metadata, except as provided under FOIA or other applicable law and regulation. The report must include a description of work performed, maps showing where activities were conducted, and other relevant information to characterize the information collected in compliance with the other stipulations.*

**Stipulation No 9. Confidential Information**

*Adopt a stipulation to protect confidential information, as authorized by FOIA, or other applicable statutes, by directing the lessee to clearly mark materials "Contains Privileged or Confidential Information" where the Lessee wishes to protect the confidentiality of information.*

**Stipulation No 10. Community Investment and Economic Development**

*Adopt a stipulation to require the Lessee to make reasonable efforts to encourage sustainable economic development in American Samoa through investments and support of local businesses and communities, workforce development, emergency response and maritime safety capacity building, and other potential initiatives identified through engagement with stakeholders.*

### **Stipulation No 11. Local Content and Labor Utilization**

*Adopt a stipulation* to require the Lessee to use reasonable efforts to maximize the utilization of local American Samoan labor, personnel, and contractors throughout the life of the lease, and to require submission of a “Local Content Report” detailing these efforts.

### **Stipulation No 12. Supply Chain Statement of Goals**

*Adopt a stipulation* to require the Lessee to submit a statement of goals describing the Lessee’s plans to contribute to the development of a robust and resilient U.S. based deep-sea mining supply chain.

### **Stipulation No 13. Port Utilization and Infrastructure Investment**

*Adopt a stipulation* to require the Lessee to make reasonable efforts for the use of, and investment in the Port of Pago Pago, American Samoa throughout the life of the lease and associated activities.

## **LEASE STIPULATION OPTIONS AND MMA’S RECOMMENDATION**

☒ **Option C.1 (Recommended; Decision reflected in American Samoa PACM-1 Proposed Leasing Notice)**

**Adopt all of the 13 Lease Stipulations (summarized above) in the FLN package.**

☐ **Option C.2**

Adopt fewer than all lease stipulations above. Delete the following stipulations: \_\_\_\_\_

☐ **Option C.3**

Adopt additional stipulations. The decision maker should include the additional stipulation(s) on an attachment to this document

## **D. LEASE TERMS AND ECONOMIC CONDITIONS**

MMA is recommending several options for Lease Sale PACM-1 lease and fiscal terms below. Each lease and fiscal term is individually discussed, and each section provides information on MMA’s recommended option and alternative options.

The final lease and fiscal terms for Lease Sale PACM-1 sale reflect the emerging nature of seabed mineral harvesting. Developing deep-sea mineral resources requires significant upfront investment in exploration, environmental studies, and technology before commercial harvesting can begin. Lease and fiscal terms that are not overly burdensome and provide sufficient time for development are essential to building industry confidence and supporting long-term investment.

Clear, predictable terms reduce uncertainty and help ensure projects have a realistic path to profitability. By establishing a stable regulatory and fiscal framework, MMA can create conditions that incentivize resource commitment and advance U.S. leadership in deep-sea mineral development.

MMA's recommendations for final lease terms and stipulations in this sale align with the policy objectives of OCSLA including maintenance of competition, expeditious and orderly development, assuring fair market value, and safeguarding the environment. The final terms reflect priorities in the E.O. 14285, "*Unleashing America's Offshore Critical Minerals and Resources*," which directs federal agencies to accelerate domestic capabilities for seabed mineral exploration and processing, support investment in deep-sea science and technology, and establish the nation as a global leader in responsible seabed mineral development. These objectives emphasize creating a robust domestic supply chain for critical minerals to support economic growth, reindustrialization, and military preparedness, underscoring the link between resource development and U.S. economic and national security.

Balancing these objectives involves tradeoffs. Lease terms designed to incentivize production may reduce immediate financial returns to the Treasury, yet moderate terms may be necessary to yield any returns at all. Accordingly, the selection of final lease and fiscal terms must weigh:

- Policy goals under OCSLA and E.O.s prioritizing expeditious and orderly development and domestic critical mineral supply chains;
- The reasonable sharing of returns from resource development between the public and lessees;
- Broader nonfinancial benefits that advance the nation's interest in critical mineral economic and national security, and technological advancements.

Key benefits of offshore critical mineral exploration and development include:

- **Economic Benefits:** Job creation and local economic activity through wages and spending, alongside national benefits such as reducing the critical mineral trade deficit and strengthening supply chain resilience—critical to economic and national security.
- **Informational Benefits:** The OCS areas currently lack comprehensive information from bathymetry and visual imaging or box core samples. Exploration and related data gathering will expand knowledge of OCS critical mineral potential, nodule and crusts collection technologies, and environmental impacts.
- **Private Sector Investments:** Currently, no commercial critical mineral mining occurs on the Federal OCS. Leasing empowers industry to lead in marine mineral development, aligning with national policy to reduce import dependence and enhance supply chain security.
- **Technological Development:** Exploration and deep-sea gathering of nodules, crusts, or other seabed minerals will drive innovation in seabed technologies, supporting extraction of strategic minerals essential for U.S. economic and national security.

**Lease Form.** The lease form is posted to the MMA OCS Operation Forms webpage at <https://www.boem.gov/about-boem/procurement-business-opportunities/boem-ocs-operation-forms>.

## D.1 Primary Lease Term

Under 30 CFR § 581.19, a lease for OCS minerals other than sand and gravel must have a minimum primary term of not less than 20 years. The lease continues beyond the specified primary term for so long thereafter as leased OCS minerals are being produced in accordance with an approved Mining Plan and the Lessee remains in compliance with lease provisions and applicable regulations.

### ✓ **Option D.1.a. A 20-year primary term (Recommended; Decision reflected in American Samoa PACM-1 Proposed Leasing Notice)**

The recommended 20-year primary term meets MMA’s regulatory minimum under 30 CFR § 581.19 and provides sufficient time for exploration, environmental compliance, and preparation for commercial development. This term offers flexibility to respond to commodity price fluctuations and is consistent with the OCSLA policy objective to make the OCS “available for expeditious and orderly development, subject to environmental safeguards, in a manner which is consistent with the maintenance of competition and other national needs.” (43 U.S.C. § 1332(3)). Offering the minimum primary term of 20 years would best facilitate expeditious and orderly development of the lease areas.

The recommended escalating rental structure described in Option D.7.a is closely linked to the proposed 20-year primary term. While the primary term provides sufficient time for exploration and development, the recommended rental escalation incentivizes lessees to relinquish less prospective areas and concentrate efforts on the most promising acreage.

### Option D.1.b. A primary term exceeding 20 years

MMA could offer a primary term exceeding 20 years as permitted under the regulations at 30 CFR § 581.19. A longer term would provide the lessee with option value and greater flexibility to address technological challenges, adapt to commodity price fluctuations, and manage risks. It would also allow more time for exploration, compliance with environmental requirements, and resolution of expected litigation. However, a longer term than necessary would be contrary to OCSLA’s expeditious and orderly development goals and could lead to companies speculatively holding acreage. For these reasons, MMA does not recommend a primary term exceeding 20 years.

### Option D.1.c. A primary term of 20 years with mandatory lease contraction

MMA could offer a 20-year primary term with a mandatory lease area contraction clause. Under this option, MMA would issue leases with a 20-year primary term and require relinquishment of a set percentage of acreage based on time or performance milestones. This approach would prevent a lessee from holding acreage they do not intend to productively develop. While this approach offers programmatic benefits, hardcoding specific lease contraction values is difficult to forecast and may lead to unintended consequences, including:

- Reduced flexibility for lessees who would have ultimately developed the acreage that was required to be relinquished;
- Increased administrative burdens for MMA and lessees;
- Potential to discourage investment and lead to inefficient site selection due to limited

- mineral density data; and
- Less ability to accommodate unforeseen delays, including litigation.

The following table illustrates a potential lease contraction schedule that would reduce a lease to 15 percent of the original acreage by year 16 based on an initial 15,170,979 million acre lease. Once production begins under an approved Mining Plan, no further forced contraction would occur.

| Lease Year | Lease Area Retained | Remaining Acreage |
|------------|---------------------|-------------------|
| 1–5        | 100%                | 15,170,979        |
| 6–7        | 100%                | 15,170,979        |
| 8–15       | 40%                 | 6,068,392         |
| 16+        | 15%                 | 2,275,647         |

While mandatory contraction ensures uniform acreage reductions, MMA considers voluntary relinquishment incentivized through escalating rental rates (see recommended Option D.7.a below) a more effective approach and thus is not recommending the mandatory contraction option.

#### PRIMARY LEASE TERM AND MMA’S RECOMMENDATION

☒ **Option D.1.a. (Recommended; Decision reflected in American Samoa PACM-1 Proposed Leasing Notice) Offer a 20-year primary term.**

\_\_\_\_\_ Option D.1.b. Offer a primary lease term of more than 20 years, as specified by the decisionmaker.

\_\_\_\_\_ Option D.1.c. Offer a 20-year primary term with mandatory lease contraction, with a contraction system specified by the decisionmaker.

#### D.2. Auction Format

Section 8(k) of OCLSA requires mineral leases to be awarded based on the “highest cash bonuses on a basis of competitive bidding.” (43 USC 1337(k)(1)) MMA regulations provide leases may be awarded in a competitive sale for upfront bidding through either sealed or oral bids.

Seabed mining is a nascent industry with notable uncertainties regarding the revenues and costs associated with bringing these mineral commodities to a marketable condition. Given these uncertainties, the auction format should facilitate price discovery. MMA recommends use of an established auction format with rules that are understandable, transparent, and auditable to maintain public confidence in the process.

MMA has considered two auction formats for this sale, both designed to comply with statutory requirements including supporting fair competition. Of the two, MMA is recommending an oral ascending auction format to assist in assuring FMV is obtained.

**✓ Option D.2.a – Sequential Oral Ascending Clock Auction (Recommended; Decision reflected in American Samoa PACM-1 Proposed Leasing Notice)**

Under this option, MMA will conduct two oral ascending clock auctions, one for each lease area, in a sequential format. The first auction will offer OCS-P 0569, the southern lease area, followed immediately by a second ascending oral auction for OCS-P 0568, the northern lease area. In an oral ascending clock auction, bidders submit progressively higher bids until no further bids are offered, ensuring transparency and price discovery for each lease area. This format allows bidders to assess the competition in each round and react accordingly. Each oral auction would begin with the minimum bid adopted in D.5 below. This format is straightforward, familiar to participants, and easy to implement.

**Option D.2.b. Sealed Bid Auction**

Under this option, MMA will announce the minimum bid prior to the auction and each bidder will submit a sealed bonus bid. After all bids are submitted, they will be opened publicly, and the highest bid for each lease area will be the provisional winner.

Sealed bidding is a well-established auction format and easy to implement. It is particularly useful when leasing multiple tracts, as in OCS oil and gas sales, and may be appropriate when there is a risk of having only one bidder.

However, sealed bidding does not allow for price discovery, which is valuable when asset values are uncertain. It is also susceptible to the “winner’s curse,” where the most optimistic bidder overpays, and can result in winning bids far above the second-highest bid. While this may increase revenue in the short term, this is less likely when there are fewer bidders, as is expected this American Samoa lease sale, and this outcome can create perceptions of unfairness.

## **AUCTION FORMAT AND MMA’S RECOMMENDATION**

**✓ Option D.2.a. MMA will hold an oral ascending clock auction. (Recommended; Decision reflected in American Samoa PACM-1 Proposed Leasing Notice)**

\_\_\_\_\_ Option D.2.b. MMA will hold a sealed bid auction.

### **D.3. Number of Lease Areas A Bidder Can Win**

With two lease areas offered in this sale, MMA considered whether bidders could potentially win both areas or whether each bidder will be limited to winning only one lease area.

**✓ Option D.3.a. A bidder can win both lease areas (Recommended; Decision reflected in American Samoa PACM-1 Proposed Leasing Notice)**

Allowing bidders to win both lease areas enables the competitive ascending auction to more fully test the market and supports receipt of FMV. Bidders are able to bid on either or both lease areas, allowing the auction to reveal bidders' actual valuations. Permitting bids on both areas provides the greatest assurance for FMV, since it does not artificially constrain the bidders eligible to compete for either lease area. This format could increase competition, the high bonus bids received, and the likelihood that both lease areas are sold.

Allowing one bidder to win both areas may result in all acreage being held by a single bidder. This may be more acreage than they are able to fully develop. The lessee may hold the acreage speculatively delaying exploration and development and withholding the associated economic and informational benefits from the public. Ultimately, MMA recommends selecting this option given that it would both facilitate competition in the lease sale and the receipt of FMV, and, when coupled with the rental requirements and voluntary contraction options, should reduce the risk that acreage would be held speculatively over the long term.

#### Option D.3.b – A bidder can only win one lease area

If bidders can win only one lease area, the winning bidder of the first lease area cannot bid for the second lease area. This rule will prevent a single entity from controlling acreage beyond what they can reasonably develop. However, this approach may result in the second lease area receiving no bids, or result in a scenario where a lease sells at the minimum bid to a single bidder, despite a second company being willing but unable to compete for it. By introducing a non-market factor (i.e., a restriction on the number of lease areas a bidder can win) into the auction, this rule could diminish MMA's ability to assure the receipt of FMV through the competitive auction format. For these reasons, MMA recommends that bidders be able to successfully bid on both of the lease sale areas and recommends against choosing Option D.3.b.

### NUMBER OF AREAS A BIDDER CAN WIN AND MMA'S RECOMMENDATION

☒ **Option D.3.a. MMA will allow a bidder to win both lease areas. (Recommended; Decision reflected in American Samoa PACM-1 Proposed Leasing Notice)**

☐ Option D.3.b. MMA will allow a bidder to only win one lease area.

#### D.4. Bonus Bid Deposit

MMA's regulations at 30 CFR 581.26 require that, in an oral auction, the bonus bid deposit must be a specified percentage of the total amount bid, submitted at the completion of the oral bidding. In this context, the bonus bid deposit serves to ensure that the provisionally winning bidders follow through the remaining lease execution steps, including the payment of the outstanding balance of the bonus bid.

The bid deposit also serves a second purpose, which is to encourage participation from only serious bidders with an intention to and the financial capability to pursue exploration and development.

MMA is recommending for this sale that, in accordance with its discretion under 30 CFR 581.16(a), a two-part bid deposit be required as outlined in Option D.4.a.

The bid deposit should be set at a level to reduce speculative behavior and screen bidders to only those that have the capital resources to explore and develop the deep-sea mineral resources offshore American Samoa without being so high as to be prohibitive for genuinely qualified bidders.

**✓ Option D.4.a. MMA will require bidders to submit an initial bonus bid deposit equal to 20% of the minimum bid for each lease area they wish to win, and the provisional winning bidder will then be required to submit a final bonus bid deposit such that the total bid deposit is equal to 20% of the high bid. (Recommended; Decision reflected in American Samoa PACM-1 Proposed Leasing Notice)**

Under this option, a bid deposit would be payable in two parts. To participate in the auction, bidders must submit an initial deposit equal to 20% of the minimum bid for each lease area they wish to win. This means that if Option D.5.a is selected (a minimum bid of \$3 million per lease area), a bidder will be required to submit an initial deposit of \$600,000 to bid in the auction. If Option D.3.a is selected (allowing a bidder to win both areas), a bidder will have to submit two bid deposits of \$600,000 each in order to win both lease areas. This initial bid deposit level provides an effective financial screen to ensure participation by serious, well-capitalized companies while avoiding an excessive burden that could deter qualified bidders. The initial bonus bid deposit(s) will be required to be received by November 5, 2026, and must be electronically deposited into an interest-bearing account in the U.S. Treasury.

MMA will require the provisional winning bidder for each lease sale to submit a final bid deposit by 2:00 p.m. on the first business day after the auction. The total bid deposit will be 20 percent of the winning high bid. The amount owed in the final bonus bid deposit will be 20 percent of the winning high bid less the initial bonus bid deposit already paid. For example, if the winning high bid is \$10 million dollars, the final bid deposit is \$2 million. The provisional winner will be required to pay the final bid deposit less the initial bid deposit (\$2 million - \$600,000 = \$1,400,000). The final bid deposit requirement satisfies 30 CFR 581.26(b), which specifies that the bid deposit must be submitted following the completion of the oral bidding.

Option D.4.b. A bonus bid deposit of another percentage

Setting the bid deposit significantly higher or lower than 20% of the high bid may introduce risks. A lower deposit may encourage speculative participation by undercapitalized companies, increasing program risk and administrative burden. Conversely, a substantially higher deposit might create an unnecessary barrier to entry and reduce competition. MMA still recommends a two-part submission of the bonus bid, requiring the chosen percentage of the minimum bonus bid be received by November 5, 2026.

## BONUS BID DEPOSIT AND MMA’S RECOMMENDATION



**Option D.4.a. MMA will require bidders to submit an initial bid deposit equal to 20% of the minimum bid per each lease area they wish to win, and the provisional winning bidder will then be required to submit a final bid deposit equal to 20% of the high bid. The initial bonus bid deposit(s) must be received by November 5, 2026. (Recommended; Decision reflected in American Samoa PACM-1 Proposed Leasing Notice)**

\_\_\_\_\_ Option D.4.b. A bid deposit of another percentage as specified by the decisionmaker.

### D.5. Minimum Bid Amounts

The minimum bid establishes the lowest amount the federal government will accept for granting OCS mineral leasing rights. MMA is recommending an ascending oral clock auction that will start at the minimum bid. The preferred outcome is an auction in which multiple bidders exceed the minimum bid, allowing competitive forces and price discovery to determine the high bid. However, if there is only one bidder, they would be awarded the lease for the minimum bid. If a lease sells for the minimum bid, FMV at the lease sale stage is attained since other companies had the opportunity to offer more but chose not to.

A well-calibrated minimum bid serves dual purposes:

- Ensures a meaningful monetary return for public resources; and
- Signals financial capability, indicating that bidders have the resources to pursue exploration and development.

Given the uncertainty associated with the resource endowment or economic viability of critical minerals harvesting on the OCS, MMA recommends the minimum bid be set at a level that provides a reasonable indication of financial capability and encourages participation in the auction. The main risk associated with the minimum bid is setting the level too high and thereby discouraging bidder participation in the lease sale. This is a particular concern given the nascent state of the critical minerals industry and MMA’s limited data regarding the value of critical mineral resources on the OCS.

MMA’s recommended minimum bid balances the above factors.

**✓ Option D.5.a. A minimum bid of \$3,000,000 (Recommended; Decision reflected in American Samoa PACM-1 Proposed Leasing Notice)**

MMA recommends a minimum bid of \$3,000,000 per lease area. This value reflects a balanced approach that accounts for the strategic importance of critical minerals, signals genuine commercial interest by well-capitalized companies, and provides a sufficient return to the federal government for the leasing rights conveyed. Qualified bidders with technical and financial capabilities should be able to meet this minimum bid through available financing or existing capital reserves.

#### Option D.5.b – A minimum bid of \$5,000,000

A slightly higher minimum bid amount may result in less competitive interest in the American Samoa lease areas and would increase the capital burden on companies to participate in the lease sale. Increasing the minimum bid to \$5 million may result in additional money to the Treasury in the event there is some, but limited auction participation. However, it may discourage competition and could result in areas going unsold.

#### Option D.5.c – A Higher or Lower Minimum Bid

Setting the minimum bid higher than recommended may discourage participation and reduce competition, which would undermine several OCSLA and E.O. policy objectives. Conversely, setting the minimum bid lower than the recommended level might attract more bidders but may increase the likelihood of participation by undercapitalized or speculative companies, increasing risk to the program and that the minerals on the lease are not ultimately mined.

### MINIMUM BID AND MMA'S RECOMMENDATION

☒ **Option D.5.a. MMA will require a minimum bid of \$3,000,000 per lease area.**

**(Recommended; Decision reflected in American Samoa PACM-1 Proposed Leasing Notice)**

☐ Option D.5.b. MMA will require a minimum bid of \$5,000,000 per lease area.

☐ Option D.5.c. MMA will require a minimum bid of a different amount as specified by the decisionmaker.

#### D.6. Lessee Bonus Bid Payment Options

Section 8(k) of OCSLA requires mineral leases to be awarded based on the highest cash bonus bid. MMA regulations allow two payment methods: full upfront payment or deferred payment under specific conditions. The choice of payment structure relates to revenue certainty, administrative complexity, and the financial strength of participating companies. MMA recommends full upfront payment as the preferred approach for this sale because it ensures immediate revenue and helps screen out undercapitalized bidders.

☒ **Option D.6.a – Full Bonus Payment Before Lease Execution (Recommended; Decision reflected in American Samoa PACM-1 Proposed Leasing Notice)**

Under this option, the winning bidder pays the entire bonus bid before the lease is executed. This approach is consistent with MMA's standard practice in other OCS leasing programs and ensures immediate revenue to the Treasury. Full upfront payment serves as a financial hurdle that screens out undercapitalized companies, reducing the risk of defaults and delays. This is an important safeguard given the technical and financial challenges of deep seabed mining. This approach also complements MMA's recommendation to not charge rent during the first five years of the lease, which provides lessees time to focus resources on exploration and environmental compliance. By requiring full payment upfront, MMA minimizes program risk, promotes transparency and fairness, minimizes administrative complexity, and provides certainty for both MMA and the lessee.

## Option D.6.b – Deferred Bonus Payment

MMA regulations at 30 CFR § 581.18(d) allow deferral of up to 80% of the bonus bid, with the following schedule:

- 20% paid prior to lease issuance,
- At least 60% due by the 5th lease anniversary, and
- Remaining balance due by the 10th lease anniversary.

The Lessee must provide a bond with a guarantee of payment of the deferred portion, as required by 30 CFR § 581.33. While this option offers flexibility for lessees to manage early-stage costs, it introduces significant administrative and compliance complexities, including monitoring, enforcement, and potential disputes. Most importantly, combining deferred payments with the existing five-year rent holiday (see option D.7 below) could attract undercapitalized companies, increasing program risk. For these reasons, MMA does not recommend deferring any portion of the high bonus bid payment for the American Samoa lease sale.

### **BONUS BID PAYMENT OBLIGATIONS AND MMA’S RECOMMENDATION**

☒ **Option D.6.a. Require full payment before lease execution (Recommended; Decision reflected in American Samoa PACM-1 Proposed Leasing Notice)**

☐ Option D.6.b. Allow for deferred payment

## **D.7. Rental Rate**

The lessee pays rent annually for non-producing leases. Rental payments are designed to encourage diligent exploration and development.

With regard to this recommendation, MMA’s annual rental requirements are specified in 30 CFR § 581.27(b), which provides that: “*Unless otherwise specified in the leasing notice and subsequently issued lease, no annual rental payment shall be due during the first 5 years in the life of a lease.*” Providing lessees with rent-free access for the first five years enables them to conserve capital and focus their resources on exploration and related activities. This 5-year rental payment waiver supports early-stage development by minimizing initial fiscal burdens.

MMA recommends an escalating rental rate strategy to incentivize voluntary lease contraction, while providing flexibility for different lessee exploration strategies. By initially offering large lease areas, MMA allows lessees to identify high-value acreage within the lease area. Increasing rental costs over time creates a financial incentive to relinquish non-viable or low-prospectivity acreage, ensuring that lessees focus resources on areas most likely to advance to development.

The escalating rental structure serves several policy objectives:

- **Efficient Resource Management:** Returns idle acreage to MMA’s inventory for future leasing;
- **Environmental Stewardship:** Reduces the potential mining footprint and streamlines environmental reviews; and
- **Stakeholder Confidence:** Demonstrates MMA’s commitment to responsible development

and transparency.

Voluntary relinquishment encouraged through escalating rentals offers flexibility while achieving programmatic goals more effectively than mandatory contraction provisions (discussed under Option D.1.c).

✓ **Option D.7.a. Escalating Rental Rates (Recommended; Decision reflected in American Samoa PACM-1 Proposed Leasing Notice).** Under this option, rent will increase over time depending on the proportion of acreage retained. This structure incentivizes seabed exploration and encourages the lessee to relinquish less-prospective acreage. The recommended annual rental rates, per acre or fraction thereof, are shown in the table below.

| Lease Year | Rent per acre if 0 to <15 percent of Initial Lease Area Acreage is Retained | Rent per acre if 15 to <50 percent of Initial Lease Area Acreage is Retained | Rent per acre if 50+ Percent of Initial Lease Area Acreage is Retained |
|------------|-----------------------------------------------------------------------------|------------------------------------------------------------------------------|------------------------------------------------------------------------|
| 0-5        | \$0.00                                                                      | \$0.00                                                                       | \$0.00                                                                 |
| 6-10       | \$0.30                                                                      | \$0.60                                                                       | \$1.20                                                                 |
| 11-15      | \$1.25                                                                      | \$2.50                                                                       | \$5.00                                                                 |
| 16-20      | \$2.50                                                                      | \$5.00                                                                       | \$10.00                                                                |

The rental rate escalation is designed to encourage lessees to reduce to 50 percent of their lease before year six, and then reduce to around 15 percent of their lease area before year 11. These rental rates are designed to incentivize lessees to relinquish acreage and expedite development, while still providing the option for lessees to hold more acreage if warranted.

Rental payments will continue until the first lease anniversary date following the commencement of royalty payments on leasehold production (meaning production that occurs under the first approved Mining Plan).

Lease segregation is not a substitute for relinquishment of a portion of a lease to achieve a lower rental rate. If the lease is subsequently segregated, the acreage percentages will be recalculated based on the size of each new lease area, and will still represent the same portion of the Initial Lease Area. For example, if the lease was segregated into two leases, one of which was 25% of the Initial Lease Area and the other was 75% of the Initial Lease Area, the 25% lease area would need to relinquish acreage down to <3.75% (15% \* 25%) of the Initial Lease Area in order to pay the rental rates in the first column. They would need to relinquish down to 3.75 to < 12.5% in order to pay the middle rates. The person with 75% of the lease would need to relinquish down to 11.25% (15% \* 75%) of the Initial Lease Area.

Option D.7.b. Flat rental rate of \$1.00/acre. This rate is fixed on a per-acre basis from years six through 20, or until the lessee commences production under an approved Mining Plan and royalties are paid. A flat annual rate is administratively simple, provides fiscal certainty for the lessee, and is attractive for investors, but does not provide a mechanism to encourage relinquishment through the life of the lease. The constant rental rate could result in lessees holding large portions of acreage with no intention to develop those resources.

| <b>Lease Year</b> | <b>Rental Rate<br/>(per acre)</b> |
|-------------------|-----------------------------------|
| <b>0-5</b>        | \$0.00                            |
| <b>6-20</b>       | \$1.00                            |

## **RENTAL RATE AND MMA’S RECOMMENDATION**

**✓ Option D.7.a. Include escalating rental rates based on the share of original lease acreage retained. (Recommended; Decision reflected in American Samoa PACM-1 Proposed Leasing Notice)**

Option D.7.b. Include a flat rental rate of \$1.00/acre.

### **D.8. Minimum Royalty**

MMA must establish a minimum royalty for OCS mineral leases to ensure that the government receives a baseline payment once production under a Mining Plan begins. Under 30 CFR § 581.30, each lease must include a specified minimum annual royalty beginning in the year when OCS minerals are first produced, whether sold, transferred, used, or otherwise disposed of from the leasehold. If ad valorem royalties calculated on production under an approved Mining Plan exceed the minimum royalty, the minimum royalty does not apply.

A minimum royalty serves an important policy function. It ensures that the government receives FMV for the public resources once production begins, even if actual royalties based on production volumes are low or if the lease does not produce during a given lease year. This mechanism discourages lessees from marginal production solely to hold acreage and reinforces MMA’s statutory obligation to assure fair market value for OCS resources.

MMA must balance and consider tradeoffs for different minimum royalty approaches or levels. If set at a level too high, minimum royalties may increase financial risk and reduce a lessee’s flexibility to respond to market conditions. MMA recommends adopting a structure that minimizes administrative complexity while ensuring the public receives a minimum benefit once production begins under an approved Mining Plan.

Two approaches for setting the minimum royalty are:

- Fixed Amount – A simple, predetermined annual payment regardless of production levels.
- Rental-Based Amount – An amount equal to the annual rental rate, consistent with the approach used for OCS oil and gas leases.

Each method has trade-offs. A rental-based structure aligns with existing OCS oil and gas lease practices and provides predictability, while a fixed amount offers simplicity and ease of administration.

✓ **Option D.8.a – Minimum Royalty Equal to Rental Rate (Recommended; Decision reflected in American Samoa PACM-1 Proposed Leasing Notice)**

Under this option, the minimum royalty will equal the rental rates discussed in Section D.7. The minimum royalty rates will depend on the year that production begins under an approved Mining Plan and on how much of the lessee’s original acreage it holds when production begins, according to the following schedule:

| <b>Mining Plan<br/>Production Start Year</b> | <b>Lease area<br/>contracted to less<br/>than 15% of<br/>Initial Lease<br/>Area?</b> | <b>Minimum Royalty<br/>(per acre)</b> |
|----------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------|
| <b>0–15</b>                                  | Yes                                                                                  | \$1.25                                |
| <b>0–15</b>                                  | No                                                                                   | \$2.50                                |
| <b>16–20</b>                                 | Yes                                                                                  | \$2.50                                |
| <b>16–20</b>                                 | No                                                                                   | \$5.00                                |

The minimum royalty rate is locked in based on the lease year when production under an approved Mining Plan begins. For example, if production begins in year 13 and the lessee has contracted the lease to less than 15% of the original lease, the minimum royalty will be \$1.25 per acre.

By linking minimum royalties to rental rates, MMA simplifies administration, maintains consistency across fiscal terms, and reinforces incentives for efficient and expeditious development. This structure safeguards FMV while minimizing complexity for lessees.

**Option D.8.b – A Different Minimum Royalty**

Under this option, the decisionmaker will establish a minimum royalty at another rate per acre or amount certain independent of rental rates. While this method offers simplicity, it could impose undue financial burden if set too high or fail to assure fair market value if set too low. For these reasons, MMA does not recommend this approach and instead supports a rental-linked minimum royalty as outlined in Option D.8.a.

**MINIMUM ROYALTY AND MMA’S RECOMMENDATION**

✓ **Option D.8.a. (Recommended; Decision reflected in American Samoa PACM-1 Proposed Leasing Notice).** The sale will include a minimum royalty as identified in the table below, dependent on the portion of the Initial Lease Area that is retained and the production start year.

| <b>Mining Plan Production<br/>Start Year</b> | <b>Lease contracted to<br/>less than 15% of<br/>Initial Lease Area?</b> | <b>Minimum Royalty<br/>(per acre)</b> |
|----------------------------------------------|-------------------------------------------------------------------------|---------------------------------------|
| <b>0–15</b>                                  | Yes                                                                     | \$1.25                                |
| <b>0–15</b>                                  | No                                                                      | \$2.50                                |
| <b>16–20</b>                                 | Yes                                                                     | \$2.50                                |
| <b>16–20</b>                                 | No                                                                      | \$5.00                                |

\_\_\_\_\_ Option D.8.b. A minimum royalty of an amount as specified by the decisionmaker.

## **D.9. Royalty Rates**

The federal government reserves a royalty interest in OCS mineral leases, which represents a share of the value of production once a lease begins producing. Royalties are the primary mechanism through which the public shares the risk and receives compensation for the extraction of nonrenewable resources.

The royalty rate directly shapes a potential lessee’s assessment of a lease area’s commercial viability. If a royalty rate is set too high, it may discourage companies from bidding on leases or developing otherwise economic discoveries. Unlike bonus bids, royalties enable the public to share in both the financial risk and the ultimate success of offshore critical mineral projects. If a project fails, the public forfeits royalty revenue; if it succeeds, the public benefits proportionally from production value. Importantly, royalty payments require no upfront capital investment, rather, they are derived from revenues generated by the sale of the lessee’s marketable production.

Royalties provide a financial return to the federal government and contribute to its receipt of fair market value. However, it may serve the public interest to accept a reduced share of the economic rent to incentivize broader policy goals, such as fostering technological innovation, facilitating a domestic supply chain for critical minerals, and promoting responsible resource development.

Under 30 CFR § 581.28, the royalty due on OCS minerals produced from a lease must be specified in the leasing notice and included in the lease terms. This regulatory provision allows a royalty to be structured as:

- A percentage of the value (*ad valorem*),
- A fixed sum assessed per unit of product, or
- Another method prescribed by the Secretary in the leasing notice.

The regulations at 30 CFR § 581.28(b) also permit royalty reductions for up to five consecutive years during the first 15 years of the lease, as specified by the lessee prior to production (option D.9.d). During any royalty-free year, the lessee must pay the annual rental or the applicable minimum royalty.

A fixed dollar value royalty per unit of product will not adjust to market commodity changes. In contrast, ad valorem royalties are calculated as a percentage of the value of minerals produced and best align royalty payments with market conditions. Therefore, MMA recommends an *ad valorem royalty* for deep-sea mineral development. This approach ensures that the government's share reflects commodity price fluctuations, which can be advantageous during periods of high prices but will reduce revenues if prices fall. Ad valorem royalties follow the ONRR regulations in 30 CFR part 1206. MMA has evaluated the ad valorem royalty options described in subsequent sections.

All of the royalty options outlined here are for production under an approved Mining Plan. For any of the options, MMA would also require lessees to pay a 5 percent royalty on any mineral production under a Delineation or Testing Plan that is processed to a marketable condition or sold. If mineral material gathered under an approved plan is not processed into a marketable condition or otherwise sold, no royalty is due. This provision will require lessees to pay the highest royalty rate on any testing production that is processed or sold. However, lessees would not be required to pay royalties on any production that is not processed or sold. This requirement would apply to any of the royalty options.

MMA coordinated with ONRR and has included language in the FLN at their request to describe marketable condition, allowances, transportation, and beneficiation beyond marketable condition. These terms will be included in the lease addendum.

**✓ Option D.9.a Two-step royalty with steps of 2 percent and 5 percent (Recommended; Decision reflected in American Samoa PACM-1 Proposed Leasing Notice)**

Under this option, MMA will offer a two-step royalty rate to balance early-stage development needs with long-term public return. A lower royalty rate will apply for the first five years of Mining Plan production, then a higher royalty rate will apply for each year thereafter. This approach recognizes that the early years of production under an approved Mining Plan are expected to be less profitable due to upfront capital costs. A lower royalty rate will allow companies to retain more revenue during this early period, when processing facilities will need to be developed, and operations are still scaling up.

After the initial Mining Plan production years, increasing the royalty rate would help assure the government receives FMV. A maximum five percent royalty rate aligns with both the standard Interior onshore minerals rate and is the same rate offered in the 1991 Norton Gold Sale. Ideally, the fiscal terms of DOI's OCS leases for potential nodule resources would also align with Deep Seabed Hard Mineral Resources Act (DSHMRA) licenses to help prevent market distortions. While NOAA's DSHMRA licenses, which apply only to polymetallic nodule collection, contain no royalty provisions, the proposed two-step royalty rate for OCS leases is not so onerous that it would be expected to create market distortions.

| <b>Mining Plan<br/>Production Year</b> | <b>Royalty Rate</b> |
|----------------------------------------|---------------------|
| <b>1-5</b>                             | 2%                  |
| <b>6+</b>                              | 5%                  |

Option D.9.b Three-step royalty with steps of 2, 5, and 7 percent (not recommended)

Under this option, MMA will offer a three-step royalty by adding on to the two-step royalty with a higher royalty rate in later years. A higher royalty rate during later years will allow the public to receive a greater return during periods of expected higher production and profitability. However, this would lessen financial returns for lessees, which could lower bonus bids and participation in the lease sale. It could also affect decisions regarding if and how much of the lease to produce, potentially leaving otherwise marketable minerals stranded on the lease.

| <b>Mining Plan Production<br/>Year</b> | <b>Royalty Rate</b> |
|----------------------------------------|---------------------|
| <b>1-5</b>                             | 2%                  |
| <b>6-10</b>                            | 5%                  |
| <b>11+</b>                             | 7%                  |

Option D.9.c Flat royalty of 5 percent (not recommended)

MMA can offer a flat royalty rate of 5 percent or another rate identified by the decisionmaker. This approach is the most administratively simple and provides the greatest certainty to lessees. This is also the most common royalty structure across energy and non-energy minerals on public lands. However, a flat royalty does not account for the significant upfront capital costs to explore and develop deep-sea mineral resources, a nascent industry on the OCS. If the royalty rate is set too high it could discourage investment in marginal areas, or if set too low, could fail to capture an appropriate share of the economic rent.

Option D.9.d Reduced Royalty Periods based on Lease Year (not recommended)

Reduced royalty periods can be used as incentives to encourage exploration and production when costs are expected to be high, profits are expected to be marginal, or technology needs to be developed. A reduced royalty may be most effective when royalty rates are high. This royalty option increases the royalty based on the lease year rather than the beginning of production under a Mining Plan. This option may encourage earlier transition to Mining Plan production.

The regulations at 30 CFR 581.28(b) permit a royalty reduction of 50 to 100 percent for up to any five consecutive years during the first through the fifteenth year of the lease.<sup>2</sup> Under this option, no royalty will be due in any year of the specified 5-year period that occurs during the 1<sup>st</sup> through the 10<sup>th</sup> years of the lease, and a royalty of one-half of the amount specified in the lease would be due in any year of the specified 5-year period that occurs in the 11<sup>th</sup> through the 15<sup>th</sup> year in the life of the lease. The lessee will still pay the minimum royalty, as determined in D.8. For example, if five percent is the royalty rate on the face of the lease, and the royalty reduction started in the sixth year, the schedule would be:

| <b>Lease Year</b> | <b>Applicable Royalty</b>                                         |
|-------------------|-------------------------------------------------------------------|
| <b>0-5</b>        | 5 percent (assume rental status most likely for first five years) |
| <b>6-10</b>       | 0 percent, minimum royalty only*                                  |
| <b>11-15</b>      | 2.5 percent                                                       |
| <b>16+</b>        | 5 percent                                                         |

\*Minimum royalty equal to rent applies.

This approach offers the following advantages:

- A reduced royalty based on the year of the lease allows the government to achieve certain policy goals like incentivizing exploration, development, and production during the 20-year lease term. This encourages lessees to expeditiously explore, develop technology, gather and recover mineral resources.

This approach may have the following disadvantages:

- A maximum five percent royalty is unlikely to be enough of a fiscal incentive to materially speed up the exploration and development of an OCS mineral lease.
- Basing royalty rates on the lease year rather than on the start of production could be problematic because some determinants of the production start year are not in the lessee's control, for example, federal review and approval timelines.
- This approach may lead to lower aggregate royalty payments.

Ultimately, MMA believes that other lease term and fiscal levers, such as the escalating rental structure described in D.7.a., are better suited to expedite exploration and development of a mineral lease than a reduced royalty based on lease year.

## **ROYALTY RATES AND MMA'S RECOMMENDATION**

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<sup>2</sup> 30 CFR § 581.28(b) provides: When prescribed in the leasing notice and subsequently issued lease, royalty due on OCS minerals produced from a leasehold will be reduced for up to any 5 consecutive years, as specified by the lessee prior to the commencement of production, during the 1st through 15th year in the life of the lease. No royalty shall be due in any year of the specified 5-year period that occurs during the 1st through 10th years in the life of the lease, and a royalty of one-half the amount specified in the lease shall be due in any year of the specified 5-year period that occurs in the 11th through 15th year in the life of the lease. The lessee shall pay the amount specified in the lease rental for any royalty free year. The minimum royalty specified in the lease shall apply during any year of reduced royalty.

☒ **Option D.9.a. Two-step royalty rate of 2% for Mining Plan production years 1-5 and 5% for each production year thereafter. (Recommended; Decision reflected in American Samoa PACM-1 Proposed Leasing Notice)**

☐ Option D.9.b. Three-step royalty rate of 2% for Mining Plan production years 1-5 and 5% for Mining Plan production years 6-10 and 7% for Mining Plan production years 11 and each production year thereafter.

☐ Option D.9.c. Flat royalty rate of 5% or other rate as specified by the decisionmaker.

☐ Option D.9.d Reduced Royalty based on Lease Year in the following table:

| Lease Year | Applicable Royalty                                                |
|------------|-------------------------------------------------------------------|
| 0-5        | 5 percent (assume rental status most likely for first five years) |
| 6-10       | 0 percent, minimum royalty only*                                  |
| 11-15      | 2.5 percent                                                       |
| 16+        | 5 percent                                                         |

\*Minimum royalty equal to rent applies.

### **III. CONSULTATIONS RELATED TO THE AMERICAN SAMOA OCS MINERAL LEASE SALE**

#### **60-day Governors Consultation (30 CFR 581.16)**

In accordance with 30 CFR § 581.16(b), on July 16, 2026, MMA sent the Proposed Leasing Notice to the adjacent state Governor for this lease sale. Written comments from the Governor of American Samoa submitted within 60 days after publication of the Notice of Availability (NOA) of the Proposed Leasing Notice were considered by MMA. Prior to publication of the FLN, MMA's regulations at 30 CFR § 581.16(d) require MMA to respond in writing to the comments of the Governor stating the reasons for accepting or rejecting the Governor's recommendations, "or for implementing any alternative mutually acceptable approach identified in consultation with the Governor(s) as a means to provide a reasonable balance between the National interest and the wellbeing of the citizens of the adjacent State."

Pursuant to MMA's regulations at 30 CFR 581.16(d), MMA will send a letter in response to comments of the Governor of American Samoa prior to the publication of the FLN.

#### **Coastal Zone Management Consistency Determinations**

Pursuant to the Coastal Zone Management Act and the Coastal Zone Reauthorization Amendments of 1990, all Federal activities, including OCS mineral lease sales, must be consistent to the maximum extent practicable with the enforceable policies of an affected State's coastal zone management program (see 16 U.S.C. § 1456(c)(1) and (2)). MMA prepared a negative determination (ND) and sent it to the American Samoa Coastal Management Program (ASCMP) on February 23, 2026, documenting that OCS mineral lease sale offshore American

Samoa that the proposed federal action of issuing up to two leases in the tracts identified in the Area ID lease process step, which would authorize the lease holder to conduct only preliminary activities, will not affect the coastal zone of American Samoa, and therefore, does not require a consistency determination. The ND includes MMA's analysis of potential coastal effects as they pertain to the ASCMP's enforceable policies and demonstrates that the Proposed Action would not result in reasonably foreseeable adverse effects to coastal resources or uses. Coastal effects are not expected given the extreme distance offshore where preliminary activities would occur, lack of spatial overlap with activities and the coastal zone, and requirements under 30 CFR 582.21(d) that preliminary activities must have no significant adverse impact on the natural resources of the OCS. After the ND is received by the Territory, the Territory has 60 days to respond to MMA. In addition to the 60-day review period, the Territory can request a 15-day extension for further review, which MMA must grant. The Territory is not obligated to respond. A response was not received within the 60-day period; therefore, concurrence is presumed under 15 CFR 930.35(c).

### **Government-to-Government Tribal Consultations**

Pursuant to [E.O. 13175](#) and the [Department of the Interior Policy on Consultation with Indian Tribes](#), MMA engages in formal government-to-government consultations with federally recognized Tribes on any Departmental action that may have Tribal implications. There are no federally recognized Tribes with current or historic interests in coastal areas of American Samoa. However, nearly all residents of American Samoa are indigenous Samoans, including elected officials. MMA has coordinated with the Secretary of Samoan Affairs and elected officials of American Samoa to ensure engagement with the indigenous Samoan and Pacific Islander community. The Secretary of Samoan Affairs is appointed by the Governor from among the leading registered matais and heads the Department of Local Government. In conjunction with the District Governors, the Secretary of Samoan Affairs coordinates the administration of the district, county, and village affairs, and in conjunction with the District Governors supervises all ceremonial functions.

## **IV. POTENTIAL ENVIRONMENTAL EFFECTS OF AMERICAN SAMOA MINERAL LEASE SALE ACTIVITIES**

### **Analysis related to the National Environmental Policy Act (NEPA; 42 U.S.C. §§ 4321-4347)**

On July 16, 2026, MMA published the Commercial Leasing for Minerals Offshore American Samoa Environmental Assessment (EA) for offshore critical mineral activities in American Samoa.

### **A. SUMMARY OF POST-LEASE ENVIRONMENTAL EFFECTS AND CONSULTATIONS**

MMA conducted an environmental review and consultations to support OCS mineral leasing activities (i.e., preliminary activities) in the American Samoa OCS. Additional details are provided below.

**National Environmental Policy Act.** MMA completed environmental review of proposed commercial leases for critical minerals in the form of an environmental assessment pursuant to the National Environmental Policy Act. The EA analyzes the action of leasing and authorization of preliminary activities, the only activities permitted under the lease without additional required federal approvals and analyses. These preliminary activities are limited to data collecting activities to be used and necessary for future reviews and the lessee's submission of Delineation, Testing, and/or Mining Plans in the American Samoa Sale Area. Based on MMA's evaluation of the Proposed Action, the EA, and all supporting documentation, MMA concludes that the preliminary activities anticipated to occur following lease issuance will not significantly affect the quality of the human environment within the meaning of Section 102(2)(C) of the National Environmental Policy Act of 1969 and therefore warrants a Finding of No Significant Impact (FONSI). The FONSI will be published on or before publication of the FLN. MMA will conduct additional NEPA as necessary when reaching decisions on whether to approve, deny or approve with conditions any Delineation, Testing, and/or Mining Plans.

**Endangered Species Act.** The Endangered Species Act of 1973 (ESA, 16 U.S.C. §§ 1531 *et seq.*, as amended) establishes a national policy designed to protect and conserve threatened and endangered species and the ecosystems upon which they depend. Section 7(a)(2) of the ESA requires each Federal agency to ensure that any action that the agency authorizes, funds, or carries out is not likely to jeopardize the continued existence of a listed species or result in the adverse modification of designated critical habitat. MMA provided a Biological Assessment on January 16, 2026. NMFS responded with the ESA Letter of Concurrence (LOC) on February 17, 2026. MMA wrote a no effect memo to file for species under USFWS jurisdiction.

**Essential Fish Habitat.** Pursuant to Section 305(b) of the Magnuson-Stevens Fishery Conservation and Management Act, Federal agencies are required to consult with NMFS on any action that may result in adverse effects to EFH. NMFS published the final rule implementing the EFH provisions of the Magnuson-Stevens Fisheries Conservation and Management Act (50 CFR part 600) on January 17, 2002. MMA prepared an EFH assessment to identify any adverse effects to designated EFH from potential post-lease preliminary activities in the lease sale area. MMA provided a Biological Assessment on January 16, 2026. NMFS responded with the EFH response letter on February 11, 2026.

**National Historic Preservation Act (NHPA).** Section 106 of the NHPA (54 U.S.C. § 306108) requires that Federal agencies with direct or indirect jurisdiction over a proposed Federal undertaking take into account the effect of the undertaking on any district, site, building, structure, or object included in or eligible for inclusion in the National Register of Historic Places. This must occur prior to approval of the expenditure of funds or the issuance of a license. The Advisory Council on Historic Preservation (ACHP), which administers section 106 of the NHPA, issued implementing regulations at 36 CFR part 800, "Protection of Historic Properties," defining how Federal agencies are to meet the statutory responsibilities. MMA recognizes that this lease sale and subsequent preliminary activities constitute an undertaking under section 106 of the NHPA. Consultation with the State Historical Preservation Office and other related parties was requested on January 4, 2026. A findings document was released and finalized, on August 10, 2026, as an appendix to the EA.

## V. NEXT STEPS

To hold the sale as scheduled on November 19, 2026, the Final Leasing Notice is planned to publish in the *Federal Register* on October 20, 2026.

## VI. DECISION ACTION

Pursuant to my authority to exercise the delegable functions and duties of the Assistant Secretary for Land and Minerals Management, I have reached the following decision:

☒ I concur with the recommendations. Please continue with preparations for Lease Sale PACM-1.

☐ I have made edits and/or included attachments to indicate changes. Otherwise, I concur with the recommendations; please continue with preparations for Lease Sale PACM-1.

☐ Please stop preparations for Lease Sale PACM-1.

LANNY  
ERDOS

Digitally signed by LANNY  
ERDOS  
Date: 2026.10.16  
13:09:42 -04'00'

\_\_\_\_\_  
Lanny E. Erdos  
Director, Office of Surface Mining, Reclamation, and Enforcement  
Exercising the Authority of the Assistant Secretary - Land and Minerals Management

\_\_\_\_\_  
Date