LUIT

Pacific Seabird Group



DEDICATED TO THE STUDY AND CONSERVATION OF PACIFIC SEABIRDS AND THEIR ENVIRONMENT

22 May 1984

Dr. John C. Wiltshire
Dept. of Planning and Economic Development
P.O. Box 2359
Honolulu, HI 96804

Dear Dr. Wiltshire:

This letter concerns the proposed lease sale of cobalt-rich manganese crusts on the Hawaiian outer continental shelf, as noted in the Federal Register. We concur with the comments of the Oceanic Society.

While we do not oppose this development, we believe that a lease sale at this time is premature. The minerals are fairly close to shore and may affect the seabird resources of the Northwestern Hawaiian Islands. Many seabird species feed on mesopelagic species of fish, squid, and crustaceans. These include, but are not limited to, Laysan albatrosses, black-footed albatrosses, Bonin petrels, Bulwer's petrels, and sooty storm-petrels. Mining at depths of 800-2,400 meters could increase heavy metal concentrations in the water column and the food chain. Seabirds may be affected by diminished or polluted food supplies. We believe that these effects must be thoroughly investigated and that sufficient baseline data be acquired to understand and monitor these activities.

We also submit that the legal requirements for an EIS transcend domestic United States law. Many seabirds are migratory and originate in foreign nations. Article 206 of the Law of the Sea Convention, which even the Reagan Administration concedes is customary international law, requires an assessment where the potential effects of an activity may cause substantial pollution. We believe that the international responsibilities of the U.S. must be thoroughly discussed.

Sincerely,

Judith Latta Hand, chairman 1647 Michael Lane Pacific Palisades, CA 90272



THE OCEANIC SOCIETY

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-- DRAFT --

May 30, 1984

John C. Wiltshire
Department of Planning and
Economic Development
PO Box 2359
Honolulu, HI 96804

RE: Comments on Notice of Intent to Prepare an Environmental Impact Statement for a Proposed Lease Sale of Cobalt-Rich Manganese Crusts in the Pacific Ocean Offshore of Hawaii

Dear Mr. Wiltshire:

On March 5, 1984, the Department of Interior's Minerals Management Service (MMS) published a notice of intent to prepare an environmental impact statement (EIS) for a proposed lease sale of cobalt-rich manganese crusts in the Pacific Ocean offshore of Hawaii. 49 Fed. Reg. 8089, March 5, 1984. These comments are being submitted on behalf of environmental and other organizations that are listed at the close of this letter.

Working with the Oceanic Society, these organizations have commented on and addressed the Minerals Management Service's evolving federal role as it has sought to exercise lead-agency jurisdictional and regulatory responsibility over deep seabed hard rock minerals in the Exclusive Economic Zone (EEZ). During 1983-84, MMS initiated a slate of public pronouncements and actions concerning proposed lease sales of polymetallic sulfide minerals in the Gorda Ridge area off the Oregon and Northern California coasts. On numerous occasions during that Gorda Ridge-related process, we have expressed opposition to MMS' decision to initiate formally the regulatory process leading towards a lease sale, and the inadequacy of subsequent actions taken.*/

*/E.g., comments on the MMS Draft EIS on Gorda Ridge, prepared by the Oceanic Society, the Center for Law and Social Policy (CLASP), and Natural Resources Defense Council (NRDC) on behalf of 35 citizen organizations, March 14, 1984; testimony of numerous citizen organizations presented at the MMS public hearings in Eureka, CA, and Coos Bay, OR, February 1984; a report containing a preliminary scientific, legal, and technical analysis of the Draft EIS, prepared by the Oceanic Society, CLASP, and NRDC, February 1984; policy

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We were not and are not opposed to rational and sound development of offshore hard rock mineral resources, whether they be manganese nodules, polymetallic sulfides, cobalt crusts, or others. However, we do not support governmental actions that are designed to rush forward with leases in offshore areas when such actions are precipitous, unsound, and illegal.

While cobalt crusts in Hawaiian island areas are very different from the polymetallic sulfide minerals that might exist in the Gorda Ridge area, many of our concerns remain the same in both situations. Basic scientific and technical information and research is lacking in relation to the crust deposits, the surrounding marine and coastal environments, and the technology that would be required for exploitation. In addition, MMS' assertion that "(t)he crusts represent potential sources of critical minerals" (49 Fed. Reg. at 8089) is fine, as is, but the existing assessments of hard rock minerals, including cobalt crusts, in the context of strategic needs appear woefully inadquate; nor do those assessments give adequate regard to the availability and stability of alternative sources of supply, substitution, recycling and/or potential development of other new technologies that will play a significant role in reducing or replacing many of the current uses for strategic minerals.

Given these and other basic information deficiencies, going forward with an EIS at this time makes no sense. Directing limited federal resources to preparation of an EIS now places the proverbial cart before the horse, reflecting a disregard by MMS for the National Environmental Policy Act (NEPA) and the Council of Environmental Quality's regulations which provide the prescriptive guidelines for compliance with that law. These same concerns are supported by the Administrative Procedures Act (APA) which disallows governmental decisions, such as the proposed lease sale, when such an action is "arbitrary and capricious." The issuance of an EIS without this knowledge would be contrary to procedures established by law and a denial of the public's right to meaningful disclosure of the environmental issues that is essential to informed and effective participation in the decisionmaking process.

Compounding these problems, as with the polymetallic sulfides on the Gorda Ridge, MMS is asserting jurisdiction over the cobalt crusts under the Outer Continental Shelf Lands Act (OCSLA), even though portions of the proposed lease

^{*/} letter to Secretary William Clark from CLASP on behalf of seven environmental organizations, with special focus on MMS' jurisdictional deficiencies, December 8, 1983; and scoping notice comments on the Draft EIS, prepared by CLASP on behalf of seven environmental organizations, May 26, 1983.

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area lie seaward of the geomorphological shelf. The Department of Interior's legal rationale for asserting OCSLA jurisdiction over such minerals is not sound. It is our view that, under existing laws, no agency currently has statutory authority over cobalt crusts that might be found on sea mounts or in other areas beyond the geomorphological shelf. The OCSLA only applies to resources found on that shelf. Jurisdiction over the development of hard rock minerals beyond the shelf needs to be resolved through a rational assessment of the responsibilities of pertinent federal agencies. With such an assessment in hand, existing legislation could then be modified (or new legislation enacted) to clarify federal jurisdiction.

For each of the above reasons, as well as other Gorda Ridge-related concerns that we have previously communicated to you which are equally applicable here, we would urge you to decide against going forward with the preparation of a Draft EIS at this time. Sufficient time exists to proceed with due regard for the requirements of NEPA and the APA, and to establish clear jurisdictional authority. Directing federal resources to coordinated interagency research programs, in combination with the scientific and technology-related R & D within the scientific community and industry, would represent a much better use of everyone's time and resources at this early stage.

In the event that MMS does go forward with the preparation of a Draft EIS in relation to the crusts in Hawaiian Island areas, we urge MMS to address the concerns which are noted as an Appendix to this letter.

Respectfully submitted.

Michael J. Herz, PhD

Christopher Roosevelt

Clifton E. Curtis

Appendix

Technical Comments on the Scope of the MMS

Draft EIS on Cobalt Crusts in the Pacific Ocean

Offshore of Hawaii

Because much of the area to be considered in the DEIS has been subjected to little detailed scientific study or analysis, extensive, pre-lease studies shiould be completed on basic geology/geophysics, geochemistry, physical, chemical and biological oceanography, physiology, ecology, population, dynamics, etc of the area. Such research must also involve precise identification of the location of mineral deposits of interest and their composition. This research must include a systematic program for geological, biological and water column sampling, as well as manned submersible dives. Without such basic information, detailed analyses and projected impacts of anticipated mining operations will be impossible. In addition, the following specific concerns should be considered in the DEIS:

I. At Sea Concerns

- A. In relation to surface and bottom currents (At Sea (i)), the DEIS should provide information on and analysis of diurnal and seasonal variation, vertical mixing, velocities and direction. Such information should be used to develop worst case scenarios on the rates and distances (horizontal and vertical) of movement and duration of turbidity plumes resulting from exploration and development phases of mining operations.
- B. In relation to multiple-use concerns (At Sea (ii)), the DEIS should provide information not only on principal commercial species, but also on principal species caught by recreational fishermen. Consideration should be given to potential impacts of worst case scenarios on these species and related food chains as well as the potential economic impacts on the industries (both commercial and recreational) that utilize these waters.
- C. In relation to benthic organisms (At Sea (iv)), the DEIS should present information on the relationship between such species, and the communities which support and/or are dependent upon them, and cobalt crusts. If, as is the case with polymetallic sulfides, possibly unique species are dependent for thermal conditions and nutrients on the conditions which produce the minerals of interest, special studies should be undertaken to characterize these areas prior to leasing. The DEIS should consider the potential impacts of mining operations on benthic organisms, e.g., toxicity, smothering, destruction of food sources and habitats, etc.
- D. Under fishing vessel/gear conflicts (At Sea (v)), the DEIS should present information regarding the seasonality of fisheries that might utilize the area to be leased and, if

serious conflicts appear likely, mitigation measures, such as cessation of mining operations during such seasons, should be proposed.

- E. Consideration also should be given to potential conflicts between recreational uses (sailing, boating, fishing, diving, etc) and leasing activities.
- F. Because so little is known about the location and composition of Hawaiian cobalt crust deposits, their associated metals and their behavior in seawater relative to mining techniques and bottom currents, much additional information will be needed to assess the potential toxicity of mining operations on all organisms that inhabit the bottom sediment and water column. Information necessary to perform an adequate environmental analysis and DEIS include lethal and sub-lethal effects of heavy metals; rates of recovery following acute and chronic exposure to heavy metals and suspended particulate material; and life history information such as growth rates, reproduction rates and feeding rates of Hawaiian populations.
- G. The DEIS must present meteorolgic information on the archipelago so that the potential effects of wind and wave action on mining operations can be calculated.
- H. Consideration must be given to potential impacts of mining and transportation on the coastal zone of the state. Areas of concern include the toxicity resulting from accidents or spills in the coastal zone, especially in harbors.
- I. In the preparation of the DEIS, scientific, legal and technical experts from outside of federal and state agencies should be used as contributors and reviewers. Since much of the information regarding these minerals and the related biota exists in academic and private research institutions, these sources should be heavily relied on during DEIS preparation. II. Shoreside Processing Concerns
- A. Environmental and health impacts on water and air quality in navigable waterways, harbors, wetlands or other critical habitats. Spills or accidents resulting from offloading accidents.
- B. Impacts of processing activities and/or resulting waste materials on state economics, e.g., on tourism, recreational uses of the coastal zone.

III. Other Concerns

- A. The DEIS should consider Hawaiian cobalt crusts in relation to the issue of strategic minerals and national security. Information regarding the national need for these minerals, as well as alternate sources (such as existing domestic reserves) and their costs should be presented. Consideration should also be given to substitution of other materials as an alternative to mining.
- B. DEIS should consider the impact of the severely depressed metals markets on leasing and mining. Discussions should include the legal requirement for obtaining "fair market value" in leasing, relative to these market conditions.
- C. The DEIS should discuss the current status of technology relative to mining operations and present estimates of the time that will be required to develop the necessary equipment to mine

and process these minerals.

D. The DEIS should discuss the implications of Law of the Sea Treaty, as well as other international conventions and domestic legislation, on planned mining activities both inside and outside the 200 mile Exclusive Economic Zone. This discussion also should address the agency jurisdiction question which as not yet been resolved.

[Other concerns can be added to this list.]