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### MINING AND MINERAL POLICY AMENDMENTS ACT OF 1995

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JUNE 27, 1996.—Ordered to be printed

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Mr. MURKOWSKI, from the Committee on Energy and Natural Resources, submitted the following

### REPORT

[To accompany S. 1194]

The Committee on Energy and Natural Resources, to which was referred the bill (S. 1194) to amend the Mining and Mineral Policy Act of 1970 to promote the research, identification, assessment, and exploration of marine mineral resources, and for other purposes, having considered the same, reports favorably thereon with an amendment and an amendment to the title and recommends that the bill, as amended, do pass.

The amendments are as follows:

1. Strike out all after the enacting clause and insert in lieu thereof the following:

**SECTION 1. SHORT TITLE.**

This Act may be cited as the “Marine Mineral Resources Research Act of 1996”.

**SEC. 2. RESEARCH PROGRAM.**

The Mining and Minerals Policy Act of 1970 (30 U.S.C. 21a) is amended—

(1) by inserting after the first section the following:

**“TITLE I—MINING POLICY”;**

(2) by redesignating section 2 as section 101; and

(3) by adding at the end the following:

**“TITLE II—MARINE MINERAL RESOURCES RESEARCH PROGRAM**

**“SEC. 201. DEFINITIONS.**

“In this title:

“(1) The term ‘contract’ has the same meaning as ‘procurement contract’ in section 6303 of title 31, United States Code.

“(2) The term ‘cooperative agreement’ has the same meaning as in section 6305 of title 31, United States Code.

“(3) The term ‘eligible entity’ means—

“(A) a research or educational entity chartered or incorporated under Federal or State law;

“(B) an individual who is a United States citizen; or

“(C) a State or regional agency.

“(4) The term ‘grant’ has the same meaning as ‘grant agreement’ in section 6304 of title 31, United States Code.

“(5) The term ‘in-kind contribution’ means a non-cash contribution provided by a non-Federal entity that directly benefits and is related to a specific project or program. An in-kind contribution may include real property, equipment, supplies, other expendable property, goods, and services.

“(6) The term ‘marine mineral resource’ means—

“(A) sand and aggregates;

“(B) placers;

“(C) phosphates;

“(D) manganese nodules;

“(E) cobalt crusts;

“(F) metal sulfides; and

“(G) other marine resources that are not—

“(i) oil and gas;

“(ii) fisheries; or

“(iii) marine mammals.

“(7) The term ‘Secretary’ means the Secretary of the Interior.

**“SEC. 202. RESEARCH PROGRAM.**

“(a) IN GENERAL.—The Secretary shall establish and carry out a program of research on marine mineral resources.

“(b) PROGRAM GOAL.—The goal of the program shall be to—

“(1) promote research, identification, assessment, and exploration of marine mineral resources in an environmentally responsible manner;

“(2) assist in developing domestic technologies required for efficient and environmentally sound development of marine mineral resources;

“(3) coordinate and promote the use of technologies developed with Federal assistance, and the use of available Federal assets, for research, identification, assessment, exploration, and development of marine mineral resources; and

“(4) encourage academia and industry to conduct basic and applied research, on a joint basis, through grants, cooperative agreements, or contracts with the Federal Government.

“(c) RESPONSIBILITIES OF THE SECRETARY.—In carrying out the program, the Secretary shall—

“(1) promote and coordinate partnerships between industry, government, and academia to research, identify, assess, and explore marine mineral resources in an environmentally sound manner;

“(2) undertake programs to develop the basic information necessary to the long-term national interest in marine mineral resources (including seabed mapping) and to ensure that data and information are accessible and widely disseminated as needed and appropriate;

“(3) identify, and promote cooperation among agency programs that are developing, technologies developed by other Federal programs that may hold promise for facilitating undersea applications related to marine mineral resources, including technologies related to vessels and other platforms, underwater vehicles, survey and mapping systems, remote power sources, data collection and transmission systems, and various seabed research systems; and

“(4) foster communication and coordination between Federal and State agencies, universities, and private entities concerning marine mineral research on seabeds of the continental shelf, ocean basins, and arctic and cold water areas.

“In carrying out these responsibilities, the Secretary shall ensure the participation of nonfederal users of technologies and data related to marine mineral resources in planning and priority setting.

**“SEC. 203. GRANTS, CONTRACTS, AND COOPERATIVE AGREEMENTS.**

“(a) ASSISTANCE AND COORDINATION.—

“(1) IN GENERAL.—The Secretary shall award grants or contracts to, or enter into cooperative agreements with, eligible entities to support research for the development or utilization of—

“(A) methods, equipment, systems, and components necessary for the identification, assessment, and exploration of marine mineral resources in an environmentally responsible manner;

“(B) methods of detecting, monitoring, and predicting the presence of adverse environmental effects in the marine environment and remediating the environmental effects of marine mineral resource exploration, development, and production; and

“(C) education and training material in marine mineral research and resource management.

“(2) COST-SHARING FOR CONTRACTS OR COOPERATIVE AGREEMENTS.—

“(A) FEDERAL SHARE.—Except as provided in subparagraph (B)(ii), the Federal share of the cost of a contract or cooperative agreement carried out under this subsection shall not be greater than 80 percent of the total cost of the project.

“(B) NON-FEDERAL SHARE.—The remaining non-Federal share of the cost of a project carried out under this section may be—

“(i) in the form of cash or in-kind contributions, or both; and

“(ii) comprised of funds made available under other Federal programs, except that non-Federal funds shall be used to defray at least 10 percent of the total cost of the project.

“(C) CONSULTATION.—Not later than 180 days after the date of enactment of this Act, the Secretary shall establish, after consultation with other Federal agencies, terms and conditions under which Federal funding will be provided under this subsection that are consistent with the Agreement on Subsidies and Countervailing Measures referred to in section 101(d)(12) of the Uruguay Round Agreement Act (19 U.S.C. 3511(d)(12)).

“(b) COMPETITIVE REVIEW.—

“(1) IN GENERAL.—An entity shall not be eligible to receive a grant or contract, or participate in a cooperative agreement, under subsection (a) unless—

“(A) the entity submits a proposal to the Secretary at such time, in such manner, and accompanied by such information as the Secretary may reasonably require; and

“(B) the proposal has been evaluated by a competitive review panel under paragraph (3).

“(2) COMPETITIVE REVIEW PANELS.—

“(A) COMPOSITION.—A competitive review panel shall be chaired by the Secretary or by the Secretary’s designee and shall be composed of members who meet the following criteria:

“(i) APPOINTMENT.—The members shall be appointed by the Secretary.

“(ii) EXPERIENCE.—Not less than 50 percent of the members shall represent or be employed by private marine resource companies that are involved in exploration of the marine environment or development of marine mineral resources.

“(iii) INTEREST.—None of the members may have an interest in a grant, contract, or cooperative agreement being evaluated by the panel.

“(B) NO COMPENSATION.—A review panel member who is not otherwise a Federal employee shall receive no compensation for performing duties under this section, except that, while engaged in the performance of duties away from the home or regular place of business of the member, the member may be allowed travel expenses, including per diem in lieu of subsistence, in the same manner as a person employed intermittently in the Government service under section 5703 of title 5, United States Code.

“(3) EVALUATION.—A competitive review panel shall base an evaluation of a proposal on criteria developed by the Secretary that shall include—

“(A) the merits of the proposal;

“(B) the research methodology and costs of the proposal;

“(C) the capability of the entity submitting the proposal and any other participating entity to perform the proposed work and provide in-kind contributions;

“(D) the amount of matching funds provided by the entity submitting the proposal or provided by other Federal, State, or private entities;

“(E) the extent of collaboration with other Federal, State, or private entities;

“(F) in the case of a noncommercial entity, the existence of a cooperative agreement with a commercial entity that provides for collaboration in the proposed research;

“(G) whether the proposal promotes responsible environmental stewardship; and

“(H) such other factors as the Secretary considers appropriate.

“(c) LIMITATIONS.—

“(1) ADMINISTRATIVE EXPENSES.—Not more than 10 percent of the amount made available to carry out this section during a fiscal year may be used by the Secretary for expenses associated with administration of the program authorized by this section.

“(2) CONSTRUCTION COSTS.—None of the funds made available under this section may be used for the construction of a new building or the acquisition, expansion, remodeling, or alteration of an existing building (including site grading and improvement and architect fees).

“(d) REPORTS.—An eligible entity that receives a grant or contract or enters into a cooperative agreement under this section shall submit an annual progress report and a final technical report to the Secretary that—

“(1) describes project activities, implications of the project, the significance of the project to marine mineral research, identification, assessment, and exploration, and potential commercial and economic benefits and effects of the project; and

“(2) in the case of an annual progress report, includes a project plan for the subsequent year.

**“SEC. 204. MARINE MINERAL RESEARCH CENTERS.**

“(a) IN GENERAL.—No later than 90 days after the date of enactment of this section, the Secretary shall designate 3 centers for marine mineral research and related activities.

“(b) CONCENTRATION.—One center shall concentrate primarily on research in the continental shelf regions of the United States, one center shall concentrate primarily on research in deep seabed and near-shore environments of islands, and one center shall concentrate primarily on research in arctic and cold water regions.

“(c) CRITERIA.—In designating a center under this section, the Secretary shall give priority to a university that—

“(1) administers a federally funded center for marine minerals research;

“(2) matriculates students for advanced degrees in marine geological sciences, nonenergy natural resources, and related fields of science and engineering;

“(3) is a United States university with established programs and facilities that primarily focus on marine mineral resources;

“(4) has engaged in collaboration and cooperation with industry, governmental agencies, and other universities in the field of marine mineral resources;

“(5) has demonstrated significant engineering, development, and design experience in two or more of the following areas:

“(A) seabed exploration systems;

“(B) marine mining systems; and

“(C) marine mineral processing systems; and

“(6) has been designated by the Secretary as a State Mining and Mineral Resources Research Institute.

“(d) CENTER ACTIVITIES.—A center shall—

“(1) provide technical assistance to the Secretary concerning marine mineral resources;

“(2) advise the Secretary on pertinent international activities in marine mineral resources development;

“(3) engage in research, training, and education transfer associated with the characterization and utilization of marine mineral resources; and

“(4) promote the efficient identification, assessment, exploration, and management of marine mineral resources in an environmentally sound manner.

“(e) ALLOCATION OF FUNDS.—In distributing funds to the centers designated under subsection (a), the Secretary shall, to the extent practicable, allocate an equal amount to each center

“(f) LIMITATIONS.—

“(1) ADMINISTRATIVE EXPENSES.—Not more than 5 percent of the amount made available to carry out this section during a fiscal year may be used by the Secretary for expenses associated with administration of the program authorized by this section.

“(2) CONSTRUCTION COSTS.—None of the funds made available under this section may be used for the construction of a new building or the acquisition, expansion, remodeling, or alteration of an existing building (including site grading and improvement and architect fees).

“SEC 205. AUTHORIZATION OF APPROPRIATIONS.

“There is authorized to be appropriated such sums as are necessary to carry out this title.”.

2. Amend the title so as to read: “To promote the research, identification, assessment, and exploration of marine mineral resources, and for other purposes.”.

PURPOSE OF THE MEASURE

S. 1194, a bill to amend the Mining and Minerals Policy Act of 1970 to promote the research, identification, assessment, and exploration of marine mineral resources, and for other purposes.

SUMMARY OF THE MAJOR PROVISIONS

The bill reauthorizes a program of applied research on marine mineral resources. It authorizes the Secretary of the Interior to foster partnerships among the industry, academia, and the Government for research, identification, assessment, and exploration of marine mineral resources in an environmentally responsible manner. It further authorizes the Secretary of the Interior to promote the development of domestic technologies needed for efficient and environmentally sound development of marine mineral resources. It authorizes the Secretary of the Interior to implement this program through grants, contracts, and other cooperative arrangements and the designation of marine mineral research centers.

BACKGROUND AND NEED

In 1983, President Ronald Reagan established the 200-mile exclusive economic zone (EEZ). The U.S. EEZ covers more than 2.5 billion acres, an area larger than that of the United States. The U.S. EEZ is the largest under any nation’s jurisdiction and contains a resource base estimated to exceed one trillion dollars. This includes near-shore deposits such as sand, gravel and placer metals in ocean sediments, and ocean resources such as manganese oxides, and polymetallic sulfides and phosphorites.

The EEZ is largely unexplored. Since its designation, the U.S. has performed a detailed reconnaissance of less than 5 percent of the EEZ.

A systematic approach to the identification, assessment, and exploration of the seabeds will be of great value in the orderly and environmentally sound development of the nations offshore minerals resources. This requires a range of advanced technologies such as: sensors for detection and characterization of ocean resources; extraction techniques; high resolution large area ocean floor imaging systems; digital ocean mapping information processing systems; chemical and radiological sensors for environmental site assessment and monitoring; in-situ and satellite-deployed large ocean sensors; and power sources, propulsion systems, pressure vessel and mechanical systems for underwater vehicles.

Investigations to determine the linkages between the marine mineral resources and the ocean ecosystems are necessary. Research to characterize and describe the geologic processes that shape and control the distribution of minerals on and in the ocean

bed is needed. Identification of potential environmental challenges is also required.

Several countries are deeply involved in this area of research; the United Kingdom, France, Japan, Korea, and China being the most important. They have major institutions devoted to developing ocean technologies. They have extensive private industry support and have Government planning mechanisms that clearly define national ocean policies. The United States is seriously at risk of being left behind other nations that are aggressively investing in EEZ research and development. S. 1194 will enhance our competitive stance in a number of areas of EEZ research and ocean technology.

#### LEGISLATIVE HISTORY

S. 1194 was introduced by Senators Akaka and Lott on August 11, 1995, The Committee on Energy and Natural Resources held a hearing on May 2, 1996.

#### COMMITTEE RECOMMENDATIONS AND TABULATION OF VOTES

The Senate Committee on Energy and Natural Resources, in open business session on June 19, 1996, by a voice vote of a quorum present, recommends that the Senate pass S. 1194, if amended as described herein.

#### SECTION-BY-SECTION ANALYSIS

Section 1 identifies this Act as the "Marine Mineral Resources Research Act of 1996"

Section 2 amends the Mining and Minerals Policy Act by adding a new title which defines a program of marine mineral resources research.

Section 201 of the new title defines certain terms used in the Act.

Section 202 establishes a program of research on marine mineral resources and defines the program goals and the responsibilities of the Secretary of the Interior for carrying out this research program.

Subsection 202(a) requires the Secretary of the Interior to establish a marine mineral research program within 180 days of the enactment of this Act.

Subsection 202(b) establishes the following program goals:

- (1) the promotion of marine mineral resources research;
- (2) the development of technologies necessary to develop these resources;
- (3) the improved coordination of federal research; and
- (4) the promotion of cooperative research among federal agencies, academia, and the private sector.

The Secretary of the Interior is directed to pursue these goals in an environmentally responsible manner.

Subsection 202(c) defines the responsibilities of the Secretary of the Interior in carrying out the provisions of this Act. It requires the Secretary of the Interior to promote partnerships between industry, academia, and the Government in the conduct of the research program, with emphasis on the safety of the environment.

This subsection requires the Secretary of the Interior to develop basic information that will be needed to define and pursue long-

term national interests developing the marine mineral resources. It also requires the Secretary of the Interior to ensure widespread accessibility of the information and data developed under this program as well as its wide dissemination.

The Secretary of the Interior is required to promote cooperation and coordination between various Federal agencies that are involved in research related to marine mineral resources.

The Secretary of the Interior is also required to foster communication and coordination, and partnerships between industry, academia, and Federal and State agencies.

Because the marine mineral resource research program is an applied research program, the users of information and technologies developed under this program need a voice in the prioritizing and planning of the program's activities. Therefore, in carrying out the marine mineral resource research program, the Secretary of the Interior is required to ensure the participation of non-Federal users of data and technologies in planning and prioritizing the activities of the program.

Section 203 authorizes the Secretary of the Interior to award research contracts and grants, and to enter into cooperative agreements. Subsection 203(a) authorizes grants to develop technologies and methodologies for the identification, assessment, and exploration of marine mineral resources.

The subsection caps the Federal contribution to any contract or cooperative agreement at 80 percent.

Subsection 203(b) requires competitive review of grant proposals. It also provides for the establishment of a review panel consisting of members with appropriate qualifications and experience.

Subsection 103(c) directs that no more than 10 percent of the funds available to carry out this section may be used for administrative expenses. To obtain maximum value from the funds being expended for research and development, this subsection prohibits the use of funds for construction of new buildings or for the acquisition or refurbishing of existing buildings.

Subsection 203(d) contains requirements for periodic reporting on research accomplishments.

Section 204 requires the Secretary of the Interior to designate marine mineral research centers.

Subsection 204(a) directs the Secretary of the Interior to designate 3 centers for marine mineral research. The Committee intends that all funds appropriated to carry out Section 204, other than amounts available under subsection 204(f), be distribute directly to the designated research centers. These funds are to be used by research centers to develop and implement a program in marine mineral resources research as authorized in subsection 204(d).

Subsection 204(b) specifies the areas of concentration for each of the centers.

Subseciton 204(c) enumerates the criteria for designating the centers.

Subsection 204(d) specifies the activities of the marine mineral research centers. The centers are to provide technical assistance concerning marine mineral resources. The centers are to advise the Secretary on marine mineral resources development. The centers

are to engage in research, training, and education transfer. The centers are to promote efficient identification, assessment, exploration, and management of marine mineral resources in an environmentally safe manner.

Subsection 204(e) directs the Secretary of the Interior to allocate funds to the three centers, to the extent possible, equally.

Subsection 204(f) establishes a 5 percent limit on amount made available for administrative expenses. It also prohibits use of funds for building construction.

Section 205 authorizes for appropriations the funds to implement this title.

#### COST AND BUDGETARY CONSIDERATIONS

The Congressional Budget Office estimates of the costs of this measure has been requested but was not received at the time the report was filed. When the report is available, the Chairman will request it to be printed in the Congressional Record for the advice of the Senate.

#### REGULATORY IMPACT EVALUATION

In compliance with the paragraph 11(b) of rule XXVI of the Standing Rules of the Senate, the Committee makes the following evaluation of the regulatory impact which would be incurred in carrying out S.1194. The bill is not a regulatory measure in the sense of imposing Government-established standards or significant economic responsibilities on private individuals and businesses. No personal information would be collected in administering the program. Therefore, there could be no impact on personal privacy. Little, if any, additional paperwork would result from the enactment of S.1194, as ordered reported.

#### EXECUTIVE COMMUNICATIONS

The Department of the Interior submitted testimony for the record on S.1194 to amend the Mining and Minerals Policy Act of 1970. This statement is included in the record of the hearing held by the Subcommittee on Forests and Public Land Management, Committee on Energy and Natural Resources on May 2, 1996.

#### CHANGES IN EXISTING LAW

In compliance with paragraph 12 of rule XXVI of the Standing Rules of the Senate, changes in existing law made by the bill S. 1194, as ordered reported, are shown as follows (existing law proposed to be omitted is enclosed in black brackets, new matter is printed in italic, existing law in which no changes is proposed is shown in roman):

#### AN ACT

To establish a national mining and minerals policy.

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That this Act may be cited as the "Mining and Minerals Policy Act of 1970".*

## TITLE I—MINING POLICY

**[SEC. 2.]** *SEC. 101.* The Congress declares that it is the continuing policy of the Federal Government in the national interest to foster and encourage private enterprise in (1) the development of economically sound and stable domestic mining, minerals, metal and mineral reclamation industries, (2) the orderly and economic development of domestic mineral resources, reserves, and reclamation of metals and minerals to help assure satisfaction of industrial, security and environmental needs, (3) mining, mineral, and metallurgical research, including the use and recycling of scrap to promote the wise and efficient use of our natural and reclaimable mineral resources, and (4) the study and development of methods for the disposal, control, and reclamation of mineral waste products, and the reclamation of mined land, so as to lessen any adverse impact of mineral extraction and processing upon the physical environment that may result from mining or mineral activities.

For the purpose of this Act “minerals” shall include all minerals and mineral fuels including oil, gas, coal, oil shale and uranium.

It shall be the responsibility of the Secretary of the Interior to carry out this policy when exercising his authority under such programs as may be authorized by law other than this Act. For this purpose the Secretary of the Interior shall include in his annual report to the Congress a report on the state of the domestic mining, minerals, and mineral reclamation industries, including a statement of the trend in utilization and depletion of these resources, together with such recommendations for legislative programs as may be necessary to implement the policy of this Act.

Approved December 31, 1970.

## ***TITLE II—MARINE MINERAL RESOURCES RESEARCH PROGRAM***

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