

for “Federal Coordinating Council for Science, Engineering, and Technology”.

Subsec. (c). Pub. L. 116-260, §7002(m)(1)(C)(i), in introductory provisions, struck out “the Federal Emergency Management Administration, the Secretary of the Interior, the Secretary of Defense, the Director of the Central Intelligence Agency, and” before “such” and substituted “appropriate, shall—” for “appropriate shall—”.

Subsec. (c)(1). Pub. L. 116-260, §7002(m)(1)(C)(ii), (iii), (iv)(II), (III), redesignated par. (2) as (1), substituted “that assesses” for “which assesses” and “and that” for “in the case identified in paragraph (1) of this subsection, and which”, and struck out former par. (1) which read as follows: “within 3 months after October 21, 1980, identify and submit to the Congress a specific materials needs case related to national security, economic well-being and industrial production which will be the subject of the report required by paragraph (2) of this subsection;”.

Pub. L. 116-260, §7002(m)(1)(C)(iv)(I), which directed substitution of “not later than 1 year after the date of the enactment of the Energy Act of 2020” for “within 1 year after October 21, 1980”, was executed by substituting “not later than 1 year after December 27, 2020” for text in original which had read “within 1 year after the date of enactment of this Act” and had been translated to “within 1 year after October 21, 1980”, and by making such substitution prior to similar amendment by §7002(m)(1)(A), to reflect the probable intent of Congress. See first 2020 Amendment note above.

Subsec. (c)(2). Pub. L. 116-260, §7002(m)(1)(C)(v), added par. (2). Former par. (2) redesignated (1).

Subsec. (c)(3). Pub. L. 116-260, §7002(m)(1)(C)(ii), struck out par. (3) which read as follows: “continually thereafter identify and assess additional cases, as necessary, to ensure an adequate and stable supply of materials to meet national security, economic well-being and industrial production needs.”

Subsec. (e). Pub. L. 116-260, §7002(m)(1)(D), substituted “United States Geological Survey” for “Bureau of Mines” in pars. (1) and (2).

§ 1605. Applicability to other statutory national mining and minerals policies

Nothing in this chapter shall be interpreted as changing in any manner or degree the provisions of and requirements of section 21a of this title. For the purposes of achieving the objectives set forth in section 1602 of this title, the Congress declares that the President shall direct (1) the Secretary of the Interior to act immediately within the Department’s statutory authority to attain the goals contained in section 21a of this title and (2) the Executive Office of the President to act immediately to promote the goals contained in section 21a of this title among the various departments and agencies.

(Pub. L. 96-479, §6, Oct. 21, 1980, 94 Stat. 2309.)

§ 1606. Mineral security

(a) Definitions

In this section:

(1) Byproduct

The term “byproduct” means a critical mineral—

(A) the recovery of which depends on the production of a host mineral that is not designated as a critical mineral; and

(B) that exists in sufficient quantities to be recovered during processing or refining.

(2) Critical material

The term “critical material” means—

(A) any non-fuel mineral, element, substance, or material that the Secretary of Energy determines—

(i) has a high risk of a supply chain disruption; and

(ii) serves an essential function in 1 or more energy technologies, including technologies that produce, transmit, store, and conserve energy; or

(B) a critical mineral.

(3) Critical mineral

(A) In general

The term “critical mineral” means any mineral, element, substance, or material designated as critical by the Secretary under subsection (c).

(B) Exclusions

The term “critical mineral” does not include—

(i) fuel minerals;

(ii) water, ice, or snow;

(iii) common varieties of sand, gravel, stone, pumice, cinders, and clay.

(4) Indian Tribe

The term “Indian Tribe” has the meaning given the term in section 5304 of title 25.

(5) Secretary

The term “Secretary” means the Secretary of the Interior.

(6) State

The term “State” means—

(A) a State;

(B) the District of Columbia;

(C) the Commonwealth of Puerto Rico;

(D) Guam;

(E) American Samoa;

(F) the Commonwealth of the Northern Mariana Islands; and

(G) the United States Virgin Islands.

(7) Institution of higher education

The term “institution of higher education” means—

(A) an institution of higher education (as defined in section 1001(a) of title 20); or

(B) a postsecondary vocational institution (as defined in section 1002(c) of title 20).

(b) Omitted

(c) Critical mineral designations

(1) Draft methodology and list

The Secretary, acting through the Director of the United States Geological Survey (referred to in this subsection as the “Secretary”), shall publish in the Federal Register for public comment—

(A) a description of the draft methodology used to identify a draft list of critical minerals;

(B) a draft list of minerals, elements, substances, and materials that qualify as critical minerals; and

(C) a draft list of critical minerals recovered as byproducts and their host minerals.

(2) Availability of data

If available data is insufficient to provide a quantitative basis for the methodology devel-

oped under this subsection, qualitative evidence may be used to the extent necessary.

(3) Final methodology and list

After reviewing public comments on the draft methodology and the draft lists published under paragraph (1) and updating the methodology and lists as appropriate, not later than 45 days after the date on which the public comment period with respect to the draft methodology and draft lists closes, the Secretary shall publish in the Federal Register—

(A) a description of the final methodology for determining which minerals, elements, substances, and materials qualify as critical minerals;

(B) the final list of critical minerals; and

(C) the final list of critical minerals recovered as byproducts and their host minerals.

(4) Designations

(A) In general

For purposes of carrying out this subsection, the Secretary shall maintain a list of minerals, elements, substances, and materials designated as critical, pursuant to the final methodology published under paragraph (3), that the Secretary determines—

(i) are essential to the economic or national security of the United States;

(ii) the supply chain of which is vulnerable to disruption (including restrictions associated with foreign political risk, abrupt demand growth, military conflict, violent unrest, anti-competitive or protectionist behaviors, and other risks throughout the supply chain); and

(iii) serve an essential function in the manufacturing of a product (including energy technology-, defense-, currency-, agriculture-, consumer electronics-, and health care-related applications), the absence of which would have significant consequences for the economic or national security of the United States.

(B) Inclusions

Notwithstanding the criteria under paragraph (3), the Secretary may designate and include on the list any mineral, element, substance, or material determined by another Federal agency to be strategic and critical to the defense or national security of the United States.

(C) Required consultation

The Secretary shall consult with the Secretaries of Defense, Commerce, Agriculture, and Energy and the United States Trade Representative in designating minerals, elements, substances, and materials as critical under this paragraph.

(5) Subsequent review

(A) In general

The Secretary, in consultation with the Secretaries of Defense, Commerce, Agriculture, and Energy and the United States Trade Representative, shall review the methodology and list under paragraph (3) and the designations under paragraph (4) at

least every 3 years, or more frequently as the Secretary considers to be appropriate.

(B) Revisions

Subject to paragraph (4)(A), the Secretary may—

(i) revise the methodology described in this subsection;

(ii) determine that minerals, elements, substances, and materials previously determined to be critical minerals are no longer critical minerals; and

(iii) designate additional minerals, elements, substances, or materials as critical minerals.

(6) Notice

On finalization of the methodology and the list under paragraph (3), or any revision to the methodology or list under paragraph (5), the Secretary shall submit to Congress written notice of the action.

(d) Resource assessment

(1) In general

Not later than 4 years after December 27, 2020, in consultation with applicable State (including geological surveys), local, academic, industry, and other entities, the Secretary (acting through the Director of the United States Geological Survey) or a designee of the Secretary, shall complete a comprehensive national assessment of each critical mineral that—

(A) identifies and quantifies known critical mineral resources, using all available public and private information and datasets, including exploration histories; and

(B) provides a quantitative and qualitative assessment of undiscovered critical mineral resources throughout the United States, including probability estimates of tonnage and grade, using all available public and private information and datasets, including exploration histories.

(2) Supplementary information

In carrying out this subsection, the Secretary may carry out surveys and field work (including drilling, remote sensing, geophysical surveys, topographical and geological mapping, and geochemical sampling and analysis) to supplement existing information and datasets available for determining the existence of critical minerals in the United States.

(3) Public access

Subject to applicable law, to the maximum extent practicable, the Secretary shall make all data and metadata collected from the comprehensive national assessment carried out under paragraph (1) publically and electronically accessible.

(4) Technical assistance

At the request of the Governor of a State or the head of an Indian Tribe, the Secretary may provide technical assistance to State governments and Indian Tribes conducting critical mineral resource assessments on non-Federal land.

(5) Prioritization**(A) In general**

The Secretary may sequence the completion of resource assessments for each critical mineral such that critical minerals considered to be most critical under the methodology established under subsection (c) are completed first.

(B) Reporting

During the period beginning not later than 1 year after December 27, 2020, and ending on the date of completion of all of the assessments required under this subsection, the Secretary shall submit to Congress on an annual basis an interim report that—

- (i) identifies the sequence and schedule for completion of the assessments if the Secretary sequences the assessments; or
- (ii) describes the progress of the assessments if the Secretary does not sequence the assessments.

(6) Updates

The Secretary may periodically update the assessments conducted under this subsection based on—

- (A) the generation of new information or datasets by the Federal Government; or
- (B) the receipt of new information or datasets from critical mineral producers, State geological surveys, academic institutions, trade associations, or other persons.

(7) Additional surveys

The Secretary shall complete a resource assessment for each additional mineral or element subsequently designated as a critical mineral under subsection (c)(5)(B) not later than 2 years after the designation of the mineral or element.

(8) Report

Not later than 2 years after December 27, 2020, the Secretary shall submit to Congress a report describing the status of geological surveying of Federal land for any mineral commodity—

- (A) for which the United States was dependent on a foreign country for more than 25 percent of the United States supply, as depicted in the report issued by the United States Geological Survey entitled ‘Mineral Commodity Summaries 2021’; but
- (B) that is not designated as a critical mineral under subsection (c).

(e) Report of Small Business Administration

Not later than 1 year and 300 days after December 27, 2020, the Administrator of the Small Business Administration shall submit to the applicable committees of Congress a report that assesses the performance of Federal agencies with respect to—

- (1) complying with chapter 6 of title 5 (commonly known as the ‘Regulatory Flexibility Act’), in promulgating regulations applicable to the critical minerals industry; and
- (2) performing an analysis of the efficiency of regulations applicable to the critical minerals industry, including those that are disproportionately burdensome to small businesses.

(f) Federal Register process**(1) Departmental review**

Absent any extraordinary circumstance, and except as otherwise required by law, the Secretary and the Secretary of Agriculture shall ensure that each Federal Register notice described in paragraph (2) shall be—

- (A) subject to any required reviews within the Department of the Interior or the Department of Agriculture; and
- (B) published in final form in the Federal Register not later than 45 days after the date of initial preparation of the notice.

(2) Preparation

The preparation of Federal Register notices required by law associated with the issuance of a critical mineral exploration or mine permit shall be delegated to the organizational level within the agency responsible for issuing the critical mineral exploration or mine permit.

(3) Transmission

All Federal Register notices regarding official document availability, announcements of meetings, or notices of intent to undertake an action shall be originated in, and transmitted to the Federal Register from, the office in which, as applicable—

- (A) the documents or meetings are held; or
- (B) the activity is initiated.

(4) Application of certain provisions**(A) In general**

Subsection (f) shall also apply to—

- (i) an exploration project in which the presence of a byproduct is reasonably expected, based on known mineral companionship, geologic formation, mineralogy, or other factors; and
- (ii) a project that demonstrates that a byproduct is of sufficient grade that, when combined with the production of a host mineral, the byproduct is economic to recover, as determined by the applicable Secretary in accordance with subparagraph (B), and that the byproduct will be recovered in commercial quantities.

(B) Requirement

In making the determination under subparagraph (A)(ii), the applicable Secretary shall consider the cost effectiveness of the byproducts recovery.

(g) Recycling, innovation, efficiency, and alternatives**(1) Establishment**

The Secretary of Energy (referred to in this subsection as the ‘Secretary’) shall conduct a program (referred to in this subsection as the ‘program’) of research, development, demonstration, and commercialization—

- (A) to develop alternatives to critical materials that do not occur in significant abundance in the United States;
- (B) to promote the efficient production, use, and recycling of critical materials, with special consideration for domestic critical materials, throughout the supply chain;

(C) to ensure the long-term, secure, and sustainable supply of critical materials; and
 (D) to prioritize work in areas that the private sector by itself is not likely to undertake due to financial or technical limitations.

(2) Cooperation

In carrying out the program, the Secretary shall cooperate with appropriate—

- (A) Federal agencies, including the Department of the Interior;
- (B) the National Laboratories;
- (C) critical material producers, processors, and manufacturers;
- (D) trade associations;
- (E) academic institutions (including students and postdoctoral staff at institutions of higher education);
- (F) small businesses;
- (G) nongovernmental organizations; and
- (H) other relevant entities or individuals.

(3) Energy Innovation Hub

In carrying out the program, the Secretary may use an Energy Innovation Hub authorized under section 18632 of title 42.

(4) Activities

Under the program, the Secretary shall carry out activities that include the identification and development of—

- (A) alternative materials, particularly materials available in abundance within the United States and not subject to potential supply restrictions, that lessen the need for critical materials;
- (B) alternative energy technologies or alternative designs of existing energy technologies, particularly technologies or designs that use materials that—
 - (i) occur in abundance in the United States; and
 - (ii) are not subject to potential supply restrictions;
- (C) technologies or process improvements that minimize the use and content, or lead to more efficient use, of critical materials across the full supply chain;
- (D) innovative technologies and practices to diversify commercially viable and sustainable domestic sources of critical materials, including technologies for recovery from waste streams;
- (E) technologies, process improvements, or design optimizations that facilitate the recycling of critical materials, and options for improving the rates of collection of products and scrap containing critical materials from post-consumer, industrial, or other waste streams;

(F) advanced critical material extraction, production, separation, alloying, or processing technologies that decrease the energy consumption, environmental impact, and costs of those activities, including—

- (i) efficient water and wastewater management strategies;
- (ii) technologies and management strategies to control the environmental impacts of radionuclides in ore tailings;
- (iii) technologies for separation and processing; and

(iv) technologies for increasing the recovery rates of coproducts and byproducts from host metal ores;

(G) commercial markets, advanced storage methods, energy applications, and other beneficial uses of critical materials; and

(H) advanced theoretical, computational, and experimental tools necessary to support the crosscutting research and development needs of diverse critical minerals stakeholders.

(5) Plan

(A) In general

Not later than 1 year after December 27, 2020, the Secretary shall submit to Congress a plan to carry out the program.

(B) Inclusions

The plan under subparagraph (A) shall include a description of—

- (i) the research and development activities to be carried out under the program during the subsequent 2 years;
- (ii) the expected contributions under the program to the creation of innovative methods and technologies for the efficient and sustainable provision of critical materials to the domestic economy;
- (iii) the expected activities under the program to mitigate the environmental and health impacts of the extraction, processing, manufacturing, use, recovery, and recycling of critical materials; and
- (iv) how the program will promote the broadest possible participation by academic, industrial, and other contributors and the public.

(6) Coordination and nonduplication

To the maximum extent practicable, the Secretary shall ensure that the activities carried out under this subsection are coordinated with, and do not duplicate the efforts of, other programs within the Federal Government, including the work underway by the Critical Materials Institute and the National Minerals Information Center.

(7) Standard of review

Not later than 2 years after December 27, 2020, the Secretary shall conduct a review of activities carried out under the program to determine the achievement of the technical milestones identified under paragraph (8)(D)(i)(I).

(8) Critical materials consortium

(A) In general

Not later than 1 year after December 27, 2020, the Secretary shall establish and operate a Critical Materials Consortium (referred to in this paragraph as the “Consortium”) for the purpose of supporting the program by providing, to the maximum extent practicable, a centralized entity for multidisciplinary, collaborative, critical materials research and development.

(B) Leadership

If an Energy Innovation Hub authorized under section 18632 of title 42 that is focused

on critical materials exists on December 27, 2020, the Secretary shall leverage the personnel and expertise of the Energy Innovation Hub to manage the Consortium for not less than 3 years following the date on which the Consortium is established.

(C) Membership

The members of the Consortium shall be representatives from relevant Federal agencies, the National Laboratories, the National Minerals Information Center, institutions of higher education, private sector entities, multiinstitutional collaborations, and other appropriate entities.

(D) Responsibilities

The Consortium shall—

(i) develop and implement a multiyear plan that—

(I) identifies technical goals and milestones for the program;

(II) utilizes the high performance computing capabilities of the Department; and

(III) leverages the expertise of the National Laboratories and the United States Geological Survey; and

(ii) submit an annual report to the Secretary summarizing the activities of the Consortium, including an evaluation of the role of the Consortium in the achievement of the technical milestones identified under clause (i)(I).

(E) Sunset; termination

(i) In general

The Secretary may provide support to the Consortium for a period of not more than 10 years, subject to the availability of appropriations.

(ii) Merit review

Not later than 5 years after the date on which the Consortium is established, the Secretary shall conduct a rigorous merit review to determine whether the Consortium helped the program achieve the technical milestones identified under subparagraph (D)(i)(I).

(iii) Termination

If the Secretary determines that the Consortium has not helped the program achieve the technical milestones identified under subparagraph (D)(i)(I), the Secretary may terminate any financial or technical support that the Department provides to the Consortium.

(9) Reports

Not later than 2 years after December 27, 2020, and annually thereafter, the Secretary shall submit to Congress a report summarizing the activities, findings, and progress of the program.

(10) Authorization of appropriations

There are authorized to be appropriated to the Secretary to carry out this subsection—

(A) \$125,000,000 for fiscal year 2021;

(B) \$105,000,000 for fiscal year 2022;

(C) \$100,000,000 for fiscal year 2023;

(D) \$135,000,000 for fiscal year 2024; and

(E) \$135,000,000 for fiscal year 2025.

(h) Critical Materials Supply Chain Research Facility

(1) In general

The Secretary of Energy (referred to in this subsection as the “Secretary”) shall support construction of a Critical Materials Supply Chain Research Facility (referred to in this subsection as the “facility”).

(2) Requirements

The facility—

(A) shall be used to further enable research, development, demonstration, and commercialization activities throughout the supply chain for critical materials; and

(B) shall provide an integrated, rapidly reconfigurable research platform.

(3) Authorization of appropriations

There are authorized to be appropriated to the Secretary to fund the design and construction of the facility, to remain available until expended—

(A) \$10,000,000 for fiscal year 2021;

(B) \$30,000,000 for fiscal year 2022; and

(C) \$35,000,000 for fiscal year 2023.

(i) Critical Materials Research Database and Information Portal

(1) In general

In carrying out the program established under subsection (g)(1), the Secretary and the Secretary of Energy (referred to in this subsection as the “Secretaries”), in consultation with the Director of the National Science Foundation, shall establish and operate a Critical Materials Information Portal (referred to in this subsection as the “Portal”) to collect, catalogue, disseminate, and archive information on critical materials.

(2) Cooperation

In carrying out paragraph (1), the Secretaries shall leverage the expertise of the National Minerals Information Center, the Office of Scientific and Technical Information, and the Critical Materials Consortium established under subsection (g)(8)(A).

(3) Purpose

The purpose of the Portal is to support the development of a web-based platform to provide public access to a database of computed information on known and predicted critical materials and related material properties and computational tools in order—

(A) to accelerate breakthroughs in critical materials identification and design;

(B) to strengthen the foundation for technologies that will enable more sustainable recycling, substitution, use, and recovery and minimize the environmental impacts of methods for extraction, processing, and manufacturing of critical materials; and

(C) to drive the development of advanced materials for applications that span the missions of the Department of Energy and the Department of the Interior (referred to in this subsection as the “Departments”) in energy, environment, and national security.

(4) Activities

In carrying out this subsection, the Secretaries shall—

(A) conduct cooperative research with industry, academia, and other research institutions to facilitate the design of novel materials, including critical materials and substitutes for critical materials;

(B) leverage existing high-performance computing systems to conduct high throughput calculations and develop computing and data mining algorithms for the prediction of material properties, including a focus on critical materials;

(C) leverage and support research in mineralogy and mineral chemistry to enhance the understanding, prediction, and manipulation of critical materials;

(D) assist scientists and engineers in making the fullest possible use of the relevant data holdings of the Departments, including the scientific and technical data generated by the research and development activities funded under subsection (g);

(E) seek and incorporate other information on critical materials to enhance the Departments' utility for program participants and other users; and

(F) manage and make available to researchers and the public accessible, curated, standardized, secure, and privacy-protected data sets from the public and private sectors for the purposes of critical materials research and development activities.

(5) Proprietary information

In carrying out this subsection, the Secretaries shall ensure, consistent with section 1604(f) of this title, that—

(A) no person uses the information and data collected for the Portal for a purpose other than the development of, or reporting of, aggregate data in a manner such that the identity of the person or firm who supplied the information is not discernible and is not material to the intended uses of the information;

(B) no person discloses any information or data collected for the Portal unless the information or data has been transformed into a statistical or aggregate form that does not allow the identification of the person or firm who supplied particular information; and

(C) procedures are established to require the withholding of any information or data collected for the Portal if at least 1 of the Secretaries determines that the withholding is necessary to protect proprietary information, including any trade secrets or other confidential information.

(j) Analysis and forecasting**(1) Capabilities**

In order to evaluate existing critical mineral policies and inform future actions that may be taken to avoid supply shortages, mitigate price volatility, and prepare for demand growth and other market shifts, the Secretary (acting through the Director of the United States Geological Survey) or a designee of the Secretary, in consultation with the Energy In-

formation Administration, academic institutions, and others in order to maximize the application of existing competencies related to developing and maintaining computer-models and similar analytical tools, shall conduct and publish the results of an annual report that includes—

(A) as part of the annually published Mineral Commodity Summaries from the United States Geological Survey, a comprehensive review of critical mineral production, consumption, and recycling patterns, including—

(i) the quantity of each critical mineral domestically produced during the preceding year;

(ii) the quantity of each critical mineral domestically consumed during the preceding year;

(iii) market price data or other price data for each critical mineral;

(iv) an assessment of—

(I) critical mineral requirements to meet the national security, energy, economic, industrial, technological, and other needs of the United States during the preceding year;

(II) the reliance of the United States on foreign sources to meet those needs during the preceding year; and

(III) the implications of any supply shortages, restrictions, or disruptions during the preceding year;

(v) the quantity of each critical mineral domestically recycled during the preceding year;

(vi) the market penetration during the preceding year of alternatives to each critical mineral;

(vii) a discussion of international trends associated with the discovery, production, consumption, use, costs of production, prices, and recycling of each critical mineral as well as the development of alternatives to critical minerals; and

(viii) such other data, analyses, and evaluations as the Secretary finds are necessary to achieve the purposes of this subsection; and

(B) a comprehensive forecast, entitled the "Annual Critical Minerals Outlook", of projected critical mineral production, consumption, and recycling patterns, including—

(i) the quantity of each critical mineral projected to be domestically produced over the subsequent 1-year, 5-year, and 10-year periods;

(ii) the quantity of each critical mineral projected to be domestically consumed over the subsequent 1-year, 5-year, and 10-year periods;

(iii) an assessment of—

(I) critical mineral requirements to meet projected national security, energy, economic, industrial, technological, and other needs of the United States;

(II) the projected reliance of the United States on foreign sources to meet those needs; and

(III) the projected implications of potential supply shortages, restrictions, or disruptions;

(iv) the quantity of each critical mineral projected to be domestically recycled over the subsequent 1-year, 5-year, and 10-year periods;

(v) the market penetration of alternatives to each critical mineral projected to take place over the subsequent 1-year, 5-year, and 10-year periods;

(vi) a discussion of reasonably foreseeable international trends associated with the discovery, production, consumption, use, costs of production, and recycling of each critical mineral as well as the development of alternatives to critical minerals; and

(vii) such other projections relating to each critical mineral as the Secretary determines to be necessary to achieve the purposes of this subsection.

(2) Proprietary information

In preparing a report described in paragraph (1), the Secretary shall ensure, consistent with section 1604(f) of this title, that—

(A) no person uses the information and data collected for the report for a purpose other than the development of or reporting of aggregate data in a manner such that the identity of the person or firm who supplied the information is not discernible and is not material to the intended uses of the information;

(B) no person discloses any information or data collected for the report unless the information or data has been transformed into a statistical or aggregate form that does not allow the identification of the person or firm who supplied particular information; and

(C) procedures are established to require the withholding of any information or data collected for the report if the Secretary determines that withholding is necessary to protect proprietary information, including any trade secrets or other confidential information.

(k) Education and workforce

(1) Workforce assessment

Not later than 1 year and 300 days after December 27, 2020, the Secretary of Labor (in consultation with the Secretary, the Director of the National Science Foundation, institutions of higher education with substantial expertise in mining, institutions of higher education with significant expertise in minerals research, including fundamental research into alternatives, and employers in the critical minerals sector) shall submit to Congress an assessment of the domestic availability of technically trained personnel necessary for critical mineral exploration, development, assessment, production, manufacturing, recycling, analysis, forecasting, education, and research, including an analysis of—

(A) skills that are in the shortest supply as of the date of the assessment;

(B) skills that are projected to be in short supply in the future;

(C) the demographics of the critical minerals industry and how the demographics will evolve under the influence of factors such as an aging workforce;

(D) the effectiveness of training and education programs in addressing skills shortages;

(E) opportunities to hire locally for new and existing critical mineral activities;

(F) the sufficiency of personnel within relevant areas of the Federal Government for achieving the policies described in section 1602 of this title; and

(G) the potential need for new training programs to have a measurable effect on the supply of trained workers in the critical minerals industry.

(2) Curriculum study

(A) In general

The Secretary and the Secretary of Labor shall jointly enter into an arrangement with the National Academy of Sciences and the National Academy of Engineering under which the Academies shall coordinate with the National Science Foundation on conducting a study—

(i) to design an interdisciplinary program on critical minerals that will support the critical mineral supply chain and improve the ability of the United States to increase domestic, critical mineral exploration, development, production, manufacturing, research, including fundamental research into alternatives, and recycling;

(ii) to address undergraduate and graduate education, especially to assist in the development of graduate level programs of research and instruction that lead to advanced degrees with an emphasis on the critical mineral supply chain or other positions that will increase domestic, critical mineral exploration, development, production, manufacturing, research, including fundamental research into alternatives, and recycling;

(iii) to develop guidelines for proposals from institutions of higher education with substantial capabilities in the required disciplines for activities to improve the critical mineral supply chain and advance the capacity of the United States to increase domestic, critical mineral exploration, research, development, production, manufacturing, and recycling; and

(iv) to outline criteria for evaluating performance and recommendations for the amount of funding that will be necessary to establish and carry out the program described in paragraph (3).

(B) Report

Not later than 2 years after December 27, 2020, the Secretary shall submit to Congress a description of the results of the study required under subparagraph (A).

(3) Program

(A) Establishment

The Secretary and the Secretary of Labor shall jointly conduct a competitive grant

program under which institutions of higher education may apply for and receive 4-year grants for—

(i) startup costs for newly designated faculty positions in integrated critical mineral education, research, innovation, training, and workforce development programs consistent with paragraph (2);

(ii) internships, scholarships, and fellowships for students enrolled in programs related to critical minerals;

(iii) equipment necessary for integrated critical mineral innovation, training, and workforce development programs; and

(iv) research of critical minerals and their applications, particularly concerning the manufacture of critical components vital to national security.

(B) Renewal

A grant under this paragraph shall be renewable for up to 2 additional 3-year terms based on performance criteria outlined under paragraph (2)(A)(iv).

(l), (m) Omitted

(n) Administration

(1), (2) Omitted

(3) Savings clauses

(A) In general

Nothing in this section or an amendment made by this section modifies any requirement or authority provided by—

(i) the matter under the heading “geological survey” of the first section of the Act of March 3, 1879 (43 U.S.C. 31(a)); or

(ii) the first section of Public Law 87–626 (43 U.S.C. 31(b)).

(B) Effect on Department of Defense

Nothing in this section or an amendment made by this section affects the authority of the Secretary of Defense with respect to the work of the Department of Defense on critical material supplies in furtherance of the national defense mission of the Department of Defense.

(C) Secretarial order not affected

This section shall not apply to any mineral described in Secretarial Order No. 3324, issued by the Secretary on December 3, 2012, in any area to which the order applies.

(o) Authorization of appropriations

There is authorized to be appropriated to the Secretary to carry out this section \$50,000,000 for each of fiscal years 2021 through 2029.

(Pub. L. 116–260, div. Z, title VII, §7002, Dec. 27, 2020, 134 Stat. 2562.)

Editorial Notes

REFERENCES IN TEXT

An amendment made by this section, referred to in subsec. (n)(3)(A), (B), means an amendment made by subsec. (b), (l), (m), or (n)(1) and (2) of this section which are omitted from text. See Codification note below.

CODIFICATION

Section was enacted as part of the Energy Act of 2020, and not as part of the National Materials and Minerals

Policy, Research and Development Act of 1980 which comprises this chapter.

Section is comprised of section 7002 of div. Z of Pub. L. 116–260. Subsec. (b) of section 7002 amended sections 1601 and 1602 of this title. Subsec. (l) of section 7002 amended section 15908 of Title 42, The Public Health and Welfare. Subsec. (m) of section 7002 amended sections 1602 to 1604 of this title. Subsec. (n)(1) of section 7002 repealed chapter 30 (§1801 et seq.) of this title. Subsec. (n)(2) of section 7002 amended section 5202 of Title 15, Commerce and Trade.

Statutory Notes and Related Subsidiaries

DEPARTMENT OF DEFENSE RESEARCH AND DEVELOPMENT PRIORITIES

Pub. L. 117–81, div. A, title VIII, §845, Dec. 27, 2021, 135 Stat. 1842, provided that: “The Secretary of Defense shall cooperate with the Secretary of Energy to ensure that the priorities of the Department of Defense with respect to the research and development of alternative technologies to, and methods for the extraction, processing, and recycling of, critical minerals (as defined in section 2(b) of the National Materials and Minerals Policy, Research, and Development Act of 1980 (30 U.S.C. 1601(b))) are considered and included where feasible in the associated research and development activities funded by the Secretary of Energy pursuant to the program established under paragraph [probably should be “subsection”] (g) of section 7002 of division Z of the Consolidated Appropriations Act, 2021 (Public Law 116–260) [30 U.S.C. 1606(g)].”

§ 1607. Critical minerals supply chains and reliability

(a) Definition of critical mineral

In this section, the term “critical mineral” has the meaning given the term in section 1606(a) of this title.

(b) Sense of Congress

It is the sense of Congress that—

(1) critical minerals are fundamental to the economy, competitiveness, and security of the United States;

(2) many critical minerals are only economic to recover when combined with the production of a host mineral;

(3) to the maximum extent practicable, the critical mineral needs of the United States should be satisfied by minerals responsibly produced and recycled in the United States; and

(4) the Federal permitting process has been identified as an impediment to mineral production and the mineral security of the United States.

(c) Federal permitting and review performance improvements

To improve the quality and timeliness of Federal permitting and review processes with respect to critical mineral production on Federal land, the Secretary of the Interior, acting through the Director of the Bureau of Land Management, and the Secretary of Agriculture, acting through the Chief of the Forest Service (referred to in this section as the “Secretaries”), to the maximum extent practicable, shall complete the Federal permitting and review processes with maximum efficiency and effectiveness, while supporting vital economic growth, by—

(1) establishing and adhering to timelines and schedules for the consideration of, and