

**§ 1542. Regulations**

All regulations made with respect to this subchapter shall be promulgated no later than six months after June 30, 1980.

(Pub. L. 96-294, title VI, §644, June 30, 1980, 94 Stat. 770.)

**Editorial Notes****REFERENCES IN TEXT**

This subchapter, referred to in text, was in the original “this subtitle”, meaning subtitle D of title VI of Pub. L. 96-294, June 30, 1980, 94 Stat. 768, which enacted this subchapter and former sections 1146 and 1147 of this title and amended former sections 1141 and 1143 of this title and sections 796, 824a-3, 824i, and 824j of Title 16, Conservation.

**CHAPTER 28—MATERIALS AND MINERALS POLICY, RESEARCH, AND DEVELOPMENT**

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**§ 1601. Congressional statement of findings; “materials” defined**

(a) The Congress finds that—

(1) the availability of materials is essential for national security, economic well-being, and industrial production;

(2) the availability of materials is affected by the stability of foreign sources of essential industrial materials, instability of materials markets, international competition and demand for materials, the need for energy and materials conservation, and the enhancement of environmental quality;

(3) extraction, production, processing, use, recycling, and disposal of materials are closely linked with national concerns for energy and the environment;

(4) the United States is strongly interdependent with other nations through international trade in materials and other products;

(5) technological innovation and research and development are important factors which contribute to the availability and use of materials;

(6) the United States lacks a coherent national materials policy and a coordinated program to assure the availability of materials critical for national economic well-being, national defense, and industrial production, including interstate commerce and foreign trade; and

(7) notwithstanding the enactment of section 21a of this title, the United States does not have a coherent national materials and minerals policy.

(b) **DEFINITIONS.**—In this chapter:

(1) **CRITICAL MINERAL.**—The term “critical mineral” means any mineral, element, sub-

stance, or material designated as critical by the Secretary under section 1606(c) of this title.

(2) **MATERIALS.**—The term “materials” means substances, including minerals, of current or potential use that will be needed to supply the industrial, military, and essential civilian needs of the United States in the production of goods or services, including those which are primarily imported or for which there is a prospect of shortages or uncertain supply, or which present opportunities in terms of new physical properties, use, recycling, disposal or substitution, with the exclusion of food and of energy fuels used as such.

(Pub. L. 96-479, §2, Oct. 21, 1980, 94 Stat. 2305; Pub. L. 116-260, div. Z, title VII, §7002(b)(2), Dec. 27, 2020, 134 Stat. 2563.)

**Editorial Notes****AMENDMENTS**

2020—Subsec. (b). Pub. L. 116-260 inserted subsec. heading, substituted “In this chapter:” for “As used in this chapter,” designated remainder of existing provisions as par. (2), inserted heading, and substituted “The term” for “the term”, and added par. (1).

**Statutory Notes and Related Subsidiaries****SHORT TITLE**

Pub. L. 96-479, §1, Oct. 21, 1980, 94 Stat. 2305, provided: “That this Act [enacting this chapter] may be cited as the ‘National Materials and Minerals Policy, Research and Development Act of 1980’.”

**Executive Documents**

EX. ORD. NO. 13817. A FEDERAL STRATEGY TO ENSURE SECURE AND RELIABLE SUPPLIES OF CRITICAL MINERALS

Ex. Ord. No. 13817, Dec. 20, 2017, 82 F.R. 60835, as amended by Ex. Ord. No. 13953, §7, Sept. 30, 2020, 85 F.R. 62543, provided:

By the authority vested in me as President by the Constitution and the laws of the United States of America, it is hereby ordered as follows:

**SECTION 1. Findings.** The United States is heavily reliant on imports of certain mineral commodities that are vital to the Nation’s security and economic prosperity. This dependency of the United States on foreign sources creates a strategic vulnerability for both its economy and military to adverse foreign government action, natural disaster, and other events that can disrupt supply of these key minerals. Despite the presence of significant deposits of some of these minerals across the United States, our miners and producers are currently limited by a lack of comprehensive, machine-readable data concerning topographical, geological, and geophysical surveys; permitting delays; and the potential for protracted litigation regarding permits that are issued. An increase in private-sector domestic exploration, production, recycling, and reprocessing of critical minerals, and support for efforts to identify more commonly available technological alternatives to these minerals, will reduce our dependence on imports, preserve our leadership in technological innovation, support job creation, improve our national security and balance of trade, and enhance the technological superiority and readiness of our Armed Forces, which are among the Nation’s most significant consumers of critical minerals.

**SEC. 2. Definition.** (a) A “critical mineral” is a mineral identified by the Secretary of the Interior pursuant to subsection (b) of this section to be (i) a non-fuel mineral or mineral material essential to the economic and national security of the United States, (ii) the sup-

ply chain of which is vulnerable to disruption, and (iii) that serves an essential function in the manufacturing of a product, the absence of which would have significant consequences for our economy or our national security.

(b) The Secretary of the Interior, in coordination with the Secretary of Defense and in consultation with the heads of other relevant executive departments and agencies (agencies), shall publish a list of critical minerals in the *Federal Register* not later than 60 days after the date of this order, and disseminate such list to the appropriate agencies. This list shall be updated periodically, following the same process, to reflect current data on supply, demand, and concentration of production, as well as current policy priorities.

SEC. 3. *Policy.* It shall be the policy of the Federal Government to reduce the Nation's vulnerability to disruptions in the supply of critical minerals, which constitutes a strategic vulnerability for the security and prosperity of the United States. The United States will further this policy for the benefit of the American people and in a safe and environmentally responsible manner, by:

- (a) identifying new sources of critical minerals;
- (b) increasing activity at all levels of the supply chain, including exploration, mining, concentration, separation, alloying, recycling, and reprocessing critical minerals;
- (c) ensuring that our miners and producers have electronic access to the most advanced topographic, geologic, and geophysical data within U.S. territory to the extent permitted by law and subject to appropriate limitations for purposes of privacy and security, including appropriate limitations to protect critical infrastructure data such as those related to national security areas; and
- (d) streamlining leasing and permitting processes to expedite exploration, production, processing, reprocessing, recycling, and domestic refining of critical minerals.

SEC. 4. *Implementation.* (a) Within 180 days of the date that the Secretary of the Interior publishes a list of critical minerals under section 2 of this order, the Secretary of Commerce, in coordination with the Secretaries of Defense, the Interior, Agriculture, and Energy, and the United States Trade Representative, shall submit a report to the President through the Assistant to the President for Economic Policy, the Assistant to the President for National Security Affairs, the Director of the Office of Management and Budget, and the Director of the Office of Science and Technology Policy. The report shall include:

- (i) a strategy to reduce the Nation's reliance on critical minerals;
- (ii) an assessment of progress toward developing critical minerals recycling and reprocessing technologies, and technological alternatives to critical minerals;
- (iii) options for accessing and developing critical minerals through investment and trade with our allies and partners;
- (iv) a plan to improve the topographic, geologic, and geophysical mapping of the United States and make the resulting data and metadata electronically accessible, to the extent permitted by law and subject to appropriate limitations for purposes of privacy and security, to support private sector mineral exploration of critical minerals; and
- (v) recommendations to streamline permitting and review processes related to developing leases; enhancing access to critical mineral resources; and increasing discovery, production, and domestic refining of critical minerals.

(b) Agencies shall implement subsection (a) of this section in a manner consistent with, and when possible complementary to, implementation of Executive Order 13771 of January 30, 2017 (Reducing Regulation and Controlling Regulatory Costs), Executive Order 13783 of March 28, 2017 (Promoting Energy Independence and Economic Growth), Executive Order 13807 of August 15, 2017 (Establishing Discipline and Accountability in the

Environmental Review and Permitting Process for Infrastructure Projects), and Executive Order 12866 of September 30, 1993 (Regulatory Planning and Review).

SEC. 5. *General Provisions.* (a) Nothing in this order shall be construed to impair or otherwise affect:

- (i) the authority granted by law to an executive department or agency, or the head thereof;
- (ii) the functions of the Director of the Office of Management and Budget relating to budgetary, administrative, or legislative proposals; or
- (iii) existing treaties or international agreements relating to mineral production, imports, or exports.

(b) This order shall be implemented consistent with applicable law and subject to the availability of appropriations.

(c) This order is not intended to, and does not, create any right or benefit, substantive or procedural, enforceable at law or in equity by any party against the United States, its departments, agencies, or entities, its officers, employees, or agents, or any other person.

DONALD J. TRUMP.

EX. ORD. NO. 13953. ADDRESSING THE THREAT TO THE DOMESTIC SUPPLY CHAIN FROM RELIANCE ON CRITICAL MINERALS FROM FOREIGN ADVERSARIES AND SUPPORTING THE DOMESTIC MINING AND PROCESSING INDUSTRIES

Ex. Ord. No. 13953, Sept. 30, 2020, 85 F.R. 62539, provided:

By the authority vested in me as President by the Constitution and the laws of the United States of America, including the International Emergency Economic Powers Act (50 U.S.C. 1701 *et seq.*) (IEEPA), the National Emergencies Act (50 U.S.C. 1601 *et seq.*) (NEA), and section 301 of title 3, United States Code,

I, DONALD J. TRUMP, President of the United States of America, find that a strong America cannot be dependent on imports from foreign adversaries for the critical minerals that are increasingly necessary to maintain our economic and military strength in the 21st century. Because of the national importance of reliable access to critical minerals, I signed Executive Order 13817 of December 20, 2017 (A Federal Strategy To Ensure Secure and Reliable Supplies of Critical Minerals) [set out above], which required the Secretary of the Interior to identify critical minerals and made it the policy of the Federal Government “to reduce the Nation's vulnerability to disruptions in the supply of critical minerals.” Pursuant to my order, the Secretary of the Interior conducted a review with the assistance of other executive departments and agencies (agencies) that identified 35 minerals that (1) are “essential to the economic and national security of the United States,” (2) have supply chains that are “vulnerable to disruption,” and (3) serve “an essential function in the manufacturing of a product, the absence of which would have significant consequences for our economy or our national security.”

These critical minerals are necessary inputs for the products our military, national infrastructure, and economy depend on the most. Our country needs critical minerals to make airplanes, computers, cell phones, electricity generation and transmission systems, and advanced electronics. Though these minerals are indispensable to our country, we presently lack the capacity to produce them in processed form in the quantities we need. American producers depend on foreign countries to supply and process them. For 31 of the 35 critical minerals, the United States imports more than half of its annual consumption. The United States has no domestic production for 14 of the critical minerals and is completely dependent on imports to supply its demand. Whereas the United States recognizes the continued importance of cooperation on supply chain issues with international partners and allies, in many cases, the aggressive economic practices of certain non-market foreign producers of critical minerals have destroyed vital mining and manufacturing jobs in the United States.

Our dependence on one country, the People's Republic of China (China), for multiple critical minerals is particularly concerning. The United States now imports 80 percent of its rare earth elements directly from China, with portions of the remainder indirectly sourced from China through other countries. In the 1980s, the United States produced more of these elements than any other country in the world, but China used aggressive economic practices to strategically flood the global market for rare earth elements and displace its competitors. Since gaining this advantage, China has exploited its position in the rare earth elements market by coercing industries that rely on these elements to locate their facilities, intellectual property, and technology in China. For instance, multiple companies were forced to add factory capacity in China after it suspended exports of processed rare earth elements to Japan in 2010, threatening that country's industrial and defense sectors and disrupting rare earth elements prices worldwide.

The United States also disproportionately depends on foreign sources for barite. The United States imports over 75 percent of the barite it consumes, and over 50 percent of its barite imports come from China. Barite is of critical importance to the hydraulic fracturing ("fracking") industry, which is vital to the energy independence of the United States. The United States depends on foreign sources for 100 percent of its gallium, with China producing around 95 percent of the global supply. Gallium-based semiconductors are indispensable for cellphones, blue and violet light-emitting diodes (LEDs), diode lasers, and fifth-generation (5G) telecommunications. Like for gallium, the United States is 100 percent reliant on imports for graphite, which is used to make advanced batteries for cellphones, laptops, and hybrid and electric cars. China produces over 60 percent of the world's graphite and almost all of the world's production of high-purity graphite needed for rechargeable batteries.

For these and other critical minerals identified by the Secretary of the Interior, we must reduce our vulnerability to adverse foreign government action, natural disaster, or other supply disruptions. Our national security, foreign policy, and economy require a consistent supply of each of these minerals.

I therefore determine that our Nation's undue reliance on critical minerals, in processed or unprocessed form, from foreign adversaries constitutes an unusual and extraordinary threat, which has its source in substantial part outside the United States, to the national security, foreign policy, and economy of the United States. I hereby declare a national emergency to deal with that threat.

In addition, I find that the United States must broadly enhance its mining and processing capacity, including for minerals not identified as critical minerals and not included within the national emergency declared in this order. By expanding and strengthening domestic mining and processing capacity today, we guard against the possibility of supply chain disruptions and future attempts by our adversaries or strategic competitors to harm our economy and military readiness. Moreover, additional domestic capacity will reduce United States and global dependence on minerals produced in countries that do not endorse and pursue appropriate minerals supply chain standards, leading to human rights violations, forced and child labor, violent conflict, and health and environmental damage. Finally, a stronger domestic mining and processing industry fosters a healthier and faster-growing economy for the United States. Mining and mineral processing provide jobs to hundreds of thousands of Americans whose daily work allows our country and the world to "Buy American" for critical technology.

I hereby determine and order:

SECTION 1. (a) To address the national emergency declared by this order, and pursuant to subsection 203(a)(1)(B) of IEEPA (50 U.S.C. 1702(a)(1)(B)), the Secretary of the Interior, in consultation with the Secretary of the Treasury, the Secretary of Defense, the

Secretary of Commerce, and the heads of other agencies, as appropriate, shall investigate our Nation's undue reliance on critical minerals, in processed or unprocessed form, from foreign adversaries. The Secretary of the Interior shall submit a report to the President, through the Assistant to the President for National Security Affairs, the Assistant to the President for Economic Policy, and the Assistant to the President for Trade and Manufacturing Policy, within 60 days of the date of this order [Sept. 30, 2020]. That report shall summarize any conclusions from this investigation and recommend executive action, which may include the imposition of tariffs or quotas, other import restrictions against China and other non-market foreign adversaries whose economic practices threaten to undermine the health, growth, and resiliency of the United States, or other appropriate action, consistent with applicable law.

(b) By January 1, 2021, and every 180 days thereafter, the Secretary of the Interior, in consultation with the heads of other agencies, as appropriate, shall inform the President of the state of the threat posed by our Nation's reliance on critical minerals, in processed or unprocessed form, from foreign adversaries and recommend any additional actions necessary to address that threat.

(c) The Secretary of the Interior, in consultation with the heads of other agencies, as appropriate, is hereby authorized to submit recurring and final reports to the Congress on the national emergency declared in this order, consistent with section 401(c) of the NEA (50 U.S.C. 1641(c)) and section 204(c) of IEEPA (50 U.S.C. 1703(c)).

SEC. 2. (a) It is the policy of the United States that relevant agencies should, as appropriate and consistent with applicable law, prioritize the expansion and protection of the domestic supply chain for minerals and the establishment of secure critical minerals supply chains, and should direct agency resources to this purpose, such that:

(i) the United States develops secure critical minerals supply chains that do not depend on resources or processing from foreign adversaries;

(ii) the United States establishes, expands, and strengthens commercially viable critical minerals mining and minerals processing capabilities; and

(iii) the United States develops globally competitive, substantial, and resilient domestic commercial supply chain capabilities for critical minerals mining and processing.

(b) Within 30 days of the date of this order, the heads of all relevant agencies shall each submit a report to the President, through the Director of the Office of Management and Budget, the Assistant to the President for National Security Affairs, and the Assistant to the President for Economic Policy, that identifies all legal authorities and appropriations that the agency can use to meet the goals identified in subsection (a) of this section.

(c) Within 60 days of the date of this order, the heads of all relevant agencies shall each submit a report as provided in subsection (b) of this section that details the agency's strategy for using the legal authorities and appropriations identified pursuant to that subsection to meet the goals identified in subsection (a) of this section. The report shall explain how the agency's activities will be organized and how it proposes to coordinate relevant activities with other agencies.

(d) Within 60 days of the date of this order, the Director of the Office of Science and Technology Policy shall submit a report to the President, through the Director of the Office of Management and Budget, the Assistant to the President for National Security Affairs, the Assistant to the President for Economic Policy, and the Assistant to the President for Trade and Manufacturing Policy, that describes the current state of research and development activities undertaken by the Federal Government that relate to the mapping, extraction, processing, and use of minerals and that identifies future research and development needs and fund-

ing opportunities to strengthen domestic supply chains for minerals.

(e) Within 45 days of the date of this order, the Secretary of State, in consultation with the United States Trade Representative, shall submit a report to the President, through the Assistant to the President for National Security Affairs, the Assistant to the President for Economic Policy, and the Assistant to the President for Trade and Manufacturing Policy, that details existing and planned efforts and policy options to:

(i) reduce the vulnerability of the United States to the disruption of critical mineral supply chains through cooperation and coordination with partners and allies, including the private sector;

(ii) build resilient critical mineral supply chains, including through initiatives to help allies build reliable critical mineral supply chains within their own territories;

(iii) promote responsible minerals sourcing, labor, and business practices; and

(iv) reduce the dependence of the United States on minerals produced using methods that do not adhere to responsible mining standards.

SEC. 3. The Secretary of the Interior, in consultation with the Secretary of Defense, shall consider whether the authority delegated at section 306 of Executive Order 13603 of March 16, 2012 (National Defense Resources Preparedness) [50 U.S.C. 4553 note] can be used to establish a program to provide grants to procure or install production equipment for the production and processing of critical minerals in the United States.

SEC. 4. (a) Within 30 days of the date of this order, the Secretary of Energy shall develop and publish guidance (and, as appropriate, shall revoke, revise, or replace prior guidance, including loan solicitations) clarifying the extent to which projects that support domestic supply chains for minerals are eligible for loan guarantees pursuant to Title XVII of the Energy Policy Act of 2005, as amended (42 U.S.C. 16511 *et seq.*) (“Title XVII”), and for funding awards and loans pursuant to the Advanced Technology Vehicles Manufacturing incentive program established by section 136 of the Energy Independence and Security Act of 2007, as amended (42 U.S.C. 17013) (“the ATVM statute”). In developing such guidance, the Secretary:

(i) shall consider whether the relevant provisions of Title XVII can be interpreted in a manner that better promotes the expansion and protection of the domestic supply chain for minerals (including the development of new supply chains and the processing, remediation, and reuse of materials already in interstate commerce or otherwise available domestically);

(ii) shall examine the meaning of the terms “avoid, reduce, or sequester” and other key terms in section 16513(a) of title 42, United States Code, which provides that the Secretary “may make guarantees under this section only for projects that—(1) avoid, reduce, or sequester air pollutants or anthropogenic emissions of greenhouse gases; and (2) employ new or significantly improved technologies as compared to commercial technologies in service in the United States at the time the guarantee is issued”;

(iii) shall consider whether relevant provisions of the ATVM statute may be interpreted in a manner that better promotes the expansion and protection of the domestic supply chain for minerals (including the development of new supply chains and the processing, remediation, and reuse of materials already in interstate commerce or otherwise available domestically), including in such consideration the application of these provisions to minerals determined to be components installed for the purpose of meeting the performance requirements of advanced technology vehicles; and

(iv) shall examine the meaning of the terms “qualifying components” and other key terms in subsection 17013(a) of title 42, United States Code.

(b) Within 30 days of the date of this order, the Secretary of Energy shall review the Department of Energy’s regulations (including any preambles thereto) interpreting Title XVII and the ATVM statute, including

the regulations published at 81 *Fed. Reg.* 90,699 (Dec. 15, 2016) and 73 *Fed. Reg.* 66,721 (Nov. 12, 2008), and shall identify all such regulations that may warrant revision or reconsideration in order to expand and protect the domestic supply chain for minerals (including the development of new supply chains and the processing, remediation, and reuse of materials already in interstate commerce or otherwise available domestically). Within 90 days of the date of this order, the Secretary shall propose for notice and comment a rule or rules to revise or reconsider any such regulations for this purpose, as appropriate and consistent with applicable law.

SEC. 5. The Secretary of the Interior, the Secretary of Agriculture, the Secretary of Commerce, the Administrator of the Environmental Protection Agency, the Secretary of the Army (acting through the Assistant Secretary of the Army for Civil Works), and the heads of all other relevant agencies shall, as appropriate and consistent with applicable law, use all available authorities to accelerate the issuance of permits and the completion of projects in connection with expanding and protecting the domestic supply chain for minerals.

SEC. 6. The Secretary of the Interior, the Secretary of Energy, and the Administrator of the Environmental Protection Agency shall examine all available authorities of their respective agencies and identify any such authorities that could be used to accelerate and encourage the development and reuse of historic coal waste areas, material on historic mining sites, and abandoned mining sites for the recovery of critical minerals.

SEC. 7. *Amendment.* [Amended Ex. Ord. No. 13817, set out above.]

SEC. 8. *Definitions.* As used in this order:

(a) the term “critical minerals” means the minerals and materials identified by the Secretary of the Interior pursuant to section 2(b) of Executive Order 13817, as amended by this order; and

(b) the term “supply chain,” when used with reference to minerals, includes the exploration, mining, concentration, separation, alloying, recycling, and reprocessing of minerals.

SEC. 9. *General Provisions.* (a) Nothing in this order shall be construed to impair or otherwise affect:

(i) the authority granted by law to an executive department or agency, or the head thereof; or

(ii) the functions of the Director of the Office of Management and Budget relating to budgetary, administrative, or legislative proposals.

(b) This order shall be implemented consistent with applicable law and subject to the availability of appropriations.

(c) This order is not intended to, and does not, create any right or benefit, substantive or procedural, enforceable at law or in equity by any party against the United States, its departments, agencies, or entities, its officers, employees, or agents, or any other person.

DONALD J. TRUMP.

## § 1602. Congressional declaration of policies

It is the continuing policy of the United States to promote an adequate and stable supply of materials necessary to maintain national security, economic well-being and industrial production with appropriate attention to a long-term balance between resource production, energy use, a healthy environment, natural resources conservation, and social needs. Implementation of this policy requires that the President shall, through the Executive Office of the President, coordinate the responsible departments and agencies to, among other measures—

(1) identify materials needs and assist in the pursuit of measures that would assure the availability of materials critical to commerce, the economy, and national security;

(2) establish a mechanism for the coordination and evaluation of Federal materials pro-

grams, including those involving research and development so as to complement related efforts by the private sector as well as other domestic and international agencies and organizations;

(3) establish an analytical and forecasting capability for identifying critical mineral demand, supply, and other factors to allow informed actions to be taken to avoid supply shortages, mitigate price volatility, and prepare for demand growth and other market shifts;

(4) promote a vigorous, comprehensive, and coordinated program of materials research and development consistent with the policies and priorities set forth in the National Science and Technology Policy, Organization, and Priorities Act of 1976 (42 U.S.C. 6601 et seq.);

(5) promote cooperative research and development programs with other nations for the equitable and frugal use of materials and energy;

(6) promote and encourage private enterprise in the development of economically sound and stable domestic materials industries;

(7) facilitate the availability, development, and environmentally responsible production of domestic resources to meet national material or critical mineral needs;

(8) avoid duplication of effort, prevent unnecessary paperwork, and minimize delays in the administration of applicable laws (including regulations) and the issuance of permits and authorizations necessary to explore for, develop, and produce critical minerals and to construct critical mineral manufacturing facilities in accordance with applicable environmental and land management laws;

(9) strengthen—

(A) educational and research capabilities at not lower than the secondary school level; and

(B) workforce training for exploration and development of critical minerals and critical mineral manufacturing;

(10) bolster international cooperation through technology transfer, information sharing, and other means;

(11) promote the efficient production, use, and recycling of critical minerals;

(12) develop alternatives to critical minerals; and

(13) establish contingencies for the production of, or access to, critical minerals for which viable sources do not exist within the United States.

(Pub. L. 96-479, §3, Oct. 21, 1980, 94 Stat. 2305; Pub. L. 116-260, div. Z, title VII, §7002(b)(1), (m)(2), Dec. 27, 2020, 134 Stat. 2563, 2576.)

#### Editorial Notes

##### REFERENCES IN TEXT

The National Science and Technology Policy, Organization, and Priorities Act of 1976, referred to in par. (4), is Pub. L. 94-282, May 11, 1976, 90 Stat. 459, which is classified principally to chapter 79 (§6601 et seq.) of Title 42, The Public Health and Welfare. For complete classification of this Act to the Code, see Short Title note set out under section 6601 of Title 42 and Tables.

#### AMENDMENTS

2020—Pub. L. 116-260, §7002(m)(2), in introductory provisions, substituted “It” for “The Congress declares that it” and “Implementation” for “The Congress further declares that implementation”.

Par. (3). Pub. L. 116-260, §7002(b)(1)(A), added par. (3) and struck out former par. (3) which read as follows: “establish a long-range assessment capability concerning materials demands, supply and needs, and provide for the policies and programs necessary to meet those needs;”.

Pars. (7) to (13). Pub. L. 116-260, §7002(b)(1)(B), (C), added pars. (7) to (13) and struck out former par. (7) which read as follows: “encourage Federal agencies to facilitate availability and development of domestic resources to meet critical materials needs.”

#### § 1603. Implementation of policies

The President shall, through the Executive Office of the President, coordinate the responsible departments and agencies to implement the policy described in section 1602 of this title and shall—

(1) direct that the responsible departments and agencies identify, assist, and make recommendations for carrying out appropriate policies and programs to ensure adequate, stable, and economical materials supplies essential to national security, economic well-being, and industrial production;

(2) support basic and applied research and development to provide for, among other objectives—

(A) advanced science and technology for the exploration, discovery, and recovery of nonfuel materials;

(B) enhanced methods or processes for the more efficient production and use of renewable and nonrenewable resources;

(C) improved methods for the extraction, processing, use, recovery, and recycling of materials which encourage the conservation of materials, energy, and the environment; and

(D) improved understanding of current and new materials performance, processing, substitution, and adaptability in engineering designs;

(3) provide for improved collection, analysis, and dissemination of scientific, technical and economic materials information and data from Federal, State, and local governments and other sources as appropriate;

(4) assess the need for and make recommendations concerning the availability and adequacy of supply of technically trained personnel necessary for materials research, development, extraction, harvest and industrial practice, paying particular regard to the problem of attracting and maintaining high quality materials professionals in the Federal service;

(5) establish early warning systems for materials supply problems;

(6) recommend to the Congress appropriate measures to promote industrial innovation in materials and materials technologies;

(7) encourage cooperative materials research and problem-solving by—

(A) private corporations performing the same or related activities in materials industries; and

(B) Federal and State institutions having shared interests or objectives;

(8) assess Federal policies which adversely or positively affect all stages of the materials cycle, from exploration to final product recycling and disposal including but not limited to, financial assistance and tax policies for recycled and virgin sources of materials and make recommendations for equalizing any existing imbalances, or removing any impediments, which may be created by the application of Federal law and regulations to the market for materials; and

(9) assess the opportunities for the United States to promote cooperative multilateral and bilateral agreements for materials development in foreign nations for the purpose of increasing the reliability of materials supplies to the Nation.

(Pub. L. 96-479, §4, Oct. 21, 1980, 94 Stat. 2306; Pub. L. 116-260, div. Z, title VII, §7002(m)(3), Dec. 27, 2020, 134 Stat. 2576.)

#### Editorial Notes

##### AMENDMENTS

2020—Pub. L. 116-260, in introductory provisions, substituted “The” for “For the purpose of implementing the policies set forth in section 1602 of this title and the provisions of section 1604 of this title, the Congress declares that the” and “departments and agencies to implement the policy described in section 1602 of this title” for “departments and agencies,”.

#### § 1604. Program administration

##### (a) President; preparation of plan and submission to Congress of report

Within 1 year after December 27, 2020, the President shall submit to the Congress—

(1) a program plan to implement such existing or prospective proposals and organizational structures within the executive branch as he finds necessary to carry out the provisions set forth in sections 1602 and 1603 of this title. The plan shall include program and budget proposals and organizational structures providing for the following minimum elements:

(A) policy analysis and decision determination within the Executive Office of the President;

(B) continuing long-range analysis of materials use to meet national security, economic, industrial and social needs; the adequacy and stability of supplies; and the industrial and economic implications of supply shortages or disruptions;

(C) continuing private sector consultation in Federal materials programs; and

(D) interagency coordination at the level of the President's Cabinet;

(2) recommendations for the collection, analysis, and dissemination of information concerning domestic and international long-range materials demand, supply and needs, including consideration of the establishment of a separate materials information agency patterned after the Bureau of Labor Statistics; and

(3) recommendations for legislation and administrative initiatives necessary to reconcile

policy conflicts and to establish programs and institutional structures necessary to achieve the goals of a national materials policy.

##### (b) Director of Office of Science and Technology Policy; coordination, etc., activities

In accordance with the provisions of the National Science and Technology Policy, Organization, and Priorities Act of 1976 (42 U.S.C. 6601 et seq.), the Director of the Office of Science and Technology Policy shall:

(1) through the National Science and Technology Council coordinate Federal materials research and development and related activities in accordance with the policies and objectives established in this chapter;

(2) place special emphasis on the long-range assessment of national materials needs related to scientific and technological concerns and the research and development, Federal and private, necessary to meet those needs; and

(3) prepare an assessment of national materials needs related to scientific and technological changes over the next five years. Such assessment shall be revised on an annual basis. Where possible, the Director shall extend the assessment in 10- and 25-year increments over the whole expected lifetime of such needs and technologies.

##### (c) Secretary of Commerce; consultative, etc., requirements; identification and assessment activities

The Secretary of Commerce, in consultation with such other members of the Cabinet as may be appropriate, shall—

(1) not later than 1 year after December 27, 2020, submit to the Congress a report that assesses critical materials needs and that recommends programs that would assist in meeting such needs, including an assessment of economic stockpiles; and

(2) assess the adequacy and stability of the supply of materials necessary to maintain national security, economic well-being, public health, and industrial production.

##### (d) Secretary of Defense and other Cabinet members; assessment, etc., activities

The Secretary of Defense, together with such other members of the Cabinet as are deemed necessary by the President, shall prepare a report assessing critical materials needs related to national security and identifying the steps necessary to meet those needs. The report shall include an assessment of the Defense Production Act of 1950 (50 U.S.C. App. 2061 et seq.) [now 50 U.S.C. 4501 et seq.], and the Strategic and Critical Materials Stock Piling Act (50 U.S.C. App. 98 et seq.) [50 U.S.C. 98 et seq.]. Such report shall be made available to the Congress within 1 year after December 27, 2020, and shall be revised periodically as deemed necessary.

##### (e) Secretary of the Interior; initiation of actions; report

The Secretary of the Interior shall promptly initiate actions to—

(1) improve the capacity of the United States Geological Survey to assess international minerals supplies;

(2) increase the level of mining and metallurgical research by the United States Geo-

logical Survey in critical and strategic minerals; and

(3) improve the availability and analysis of mineral data in Federal land use decision-making.

A report summarizing actions required by this subsection shall be made available to the Congress within 1 year after December 27, 2020.

**(f) Secretary of the Interior; collection, evaluation, and analysis activities concerning information**

In furtherance of the policies of this chapter, the Secretary of the Interior shall collect, evaluate, and analyze information concerning mineral occurrence, production, and use from industry, academia, and Federal and State agencies. Notwithstanding the provisions of section 552 of title 5, data and information provided to the Department by persons or firms engaged in any phase of mineral or mineral-material production or large-scale consumption shall not be disclosed outside of the Department of the Interior in a nonaggregated form so as to disclose data and information supplied by a single person or firm, unless there is no objection to the disclosure of such data and information by the donor: *Provided, however,* That the Secretary may disclose nonaggregated data and information to Federal defense agencies, or to the Congress upon official request for appropriate purposes.

(Pub. L. 96-479, §5, Oct. 21, 1980, 94 Stat. 2307; Pub. L. 116-260, div. Z, title VII, §7002(m)(1) Dec. 27, 2020, 134 Stat. 2575.)

**Editorial Notes**

**REFERENCES IN TEXT**

The National Science and Technology Policy, Organization, and Priorities Act of 1976, referred to in subsec. (b), is Pub. L. 94-282, May 11, 1976, 90 Stat. 459, which is classified principally to chapter 79 (§6601 et seq.) of Title 42, The Public Health and Welfare. For complete classification of this Act to the Code, see Short Title note set out under section 6601 of Title 42 and Tables.

The Defense Production Act of 1950, referred to in subsec. (d), is act Sept. 8, 1950, ch. 932, 64 Stat. 798, which was classified to section 2061 et seq. of the former Appendix to Title 50, War and National Defense, prior to editorial reclassification and renumbering as chapter 55 (§4501 et seq.) of Title 50. For complete classification of this Act to the Code, see Tables.

The Strategic and Critical Materials Stock Piling Act, referred to in subsec. (d), is act June 7, 1939, ch. 190, as revised generally by Pub. L. 96-41, §2, July 30, 1979, 93 Stat. 319, which is classified generally to subchapter III (§98 et seq.) of chapter 5 of Title 50. For complete classification of this Act to the Code, see section 98 of Title 50 and Tables.

**AMENDMENTS**

2020—Pub. L. 116-260, §7002(m)(1)(A), which directed substitution of “date of enactment of the Energy Act of 2020” for “date of enactment of this Act” wherever appearing, was executed by substituting “December 27, 2020” for “October 21, 1980” in subssecs. (a), (d), and (e). Substitutions in subssecs. (d) and (e) were made for original text reading “enactment of this Act” and “the enactment of this Act”, to reflect the probable intent of Congress.

Subsec. (b)(1). Pub. L. 116-260, §7002(m)(1)(B), substituted “National Science and Technology Council” 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 developed 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 crit-

ical 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 Sec-

retary 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 companionality, 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 Information 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).

### **(I), (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), (I), (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. (I) 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 final decisions regarding, applications, operating plans, leases, licenses, permits, and other use authorizations for critical mineral-related activities on Federal land;

(2) establishing clear, quantifiable, and temporal permitting performance goals and tracking progress against those goals;

(3) engaging in early collaboration among agencies, project sponsors, and affected stakeholders—

(A) to incorporate and address the interests of those parties; and

(B) to minimize delays;

(4) ensuring transparency and accountability by using cost-effective information technology to collect and disseminate information regarding individual projects and agency performance;

(5) engaging in early and active consultation with State, local, and Tribal governments—

(A) to avoid conflicts or duplication of effort;

(B) to resolve concerns; and

(C) to allow for concurrent, rather than sequential, reviews;

(6) providing demonstrable improvements in the performance of Federal permitting and review processes, including lower costs and more timely decisions;

(7) expanding and institutionalizing Federal permitting and review process improvements that have proven effective;

(8) developing mechanisms to better communicate priorities and resolve disputes among agencies at the national, regional, State, and local levels; and

(9) developing other practices, such as preapplication procedures.

**(d) Review and report**

Not later than 1 year after November 15, 2021, the Secretaries shall submit to Congress a report that—

(1) identifies additional measures, including regulatory and legislative proposals, if appropriate, that would increase the timeliness of permitting activities for the exploration and development of domestic critical minerals;

(2) identifies options, including cost recovery paid by permit applicants, for ensuring adequate staffing and training of Federal entities and personnel responsible for the consideration of applications, operating plans, leases, licenses, permits, and other use authorizations for critical mineral-related activities on Federal land;

(3) quantifies the period of time typically required to complete each step associated with the development and processing of applications, operating plans, leases, licenses, permits, and other use authorizations for critical mineral-related activities on Federal land, including by—

(A) calculating the range, the mean, the median, the variance, and other statistical measures or representations of the period of time; and

(B) taking into account other aspects that affect the period of time that are outside the control of the Executive branch, such as judicial review, applicant decisions, or State and local government involvement; and

(4) describes actions carried out pursuant to subsection (c).

**(e) Performance metric**

Not later than 90 days after the date of submission of the report under subsection (d), and after providing public notice and an opportunity to comment, the Secretaries, using as a baseline

the period of time quantified under paragraph (3) of that subsection, shall develop and publish a performance metric for evaluating the progress made by the Executive branch to expedite the permitting of activities that will increase exploration for, and development of, domestic critical minerals, while maintaining environmental standards.

**(f) Annual reports**

Not later than the date on which the President submits the first budget of the President under section 1105 of title 31, after publication of the performance metric required under subsection (e), and annually thereafter, the Secretaries shall submit to Congress a report that—

(1) summarizes the implementation of recommendations, measures, and options identified in paragraphs (1) and (2) of subsection (d);

(2) using the performance metric developed under subsection (e), describes progress made by the Executive branch, as compared to the baseline developed pursuant to subsection (d)(3), in expediting the permitting of activities that will increase exploration for, and development of, domestic critical minerals; and

(3) compares the United States to other countries in terms of permitting efficiency and any other criteria relevant to the globally competitive critical minerals industry.

**(g) Individual projects**

Each year, using data contained in the reports submitted under subsection (f), the Director of the Office of Management and Budget shall prioritize inclusion of individual critical mineral projects on the website operated by the Office of Management and Budget in accordance with section 1122 of title 31.

(Pub. L. 117–58, div. D, title II, § 40206, Nov. 15, 2021, 135 Stat. 961.)

**Editorial Notes**

**CODIFICATION**

Section was enacted as part of the Infrastructure Investment and Jobs Act, and not as part of the National Materials and Minerals Policy, Research and Development Act of 1980 which comprises this chapter.

**Statutory Notes and Related Subsidiaries**

**WAGE RATE REQUIREMENTS**

For provisions relating to rates of wages to be paid to laborers and mechanics on projects for construction, alteration, or repair work funded under div. D or an amendment by div. D of Pub. L. 117–58, including authority of Secretary of Labor, see section 18851 of Title 42, The Public Health and Welfare.

**CHAPTER 29—OIL AND GAS ROYALTY MANAGEMENT**

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**§ 1701. Congressional statement of findings and purposes**

(a) Congress finds that—

(1) the Secretary of the Interior should enforce effectively and uniformly existing regulations under the mineral leasing laws providing for the inspection of production activities on lease sites on Federal and Indian lands;

(2) the system of accounting with respect to royalties and other payments due and owing on oil and gas produced from such lease sites is archaic and inadequate;

(3) it is essential that the Secretary initiate procedures to improve methods of accounting for such royalties and payments and to provide for routine inspection of activities related to the production of oil and gas on such lease sites; and

(4) the Secretary should aggressively carry out his trust responsibility in the administration of Indian oil and gas.

(b) It is the purpose of this chapter—

(1) to clarify, reaffirm, expand, and define the responsibilities and obligations of lessees, operators, and other persons involved in transportation or sale of oil and gas from the Federal and Indian lands and the Outer Continental Shelf;