

116TH CONGRESS
1ST SESSION

S. 1317

To facilitate the availability, development, and environmentally responsible production of domestic resources to meet national material or critical mineral needs, and for other purposes.

IN THE SENATE OF THE UNITED STATES

MAY 2, 2019

Ms. MURKOWSKI (for herself, Mr. MANCHIN, Mr. SULLIVAN, and Ms. MCSALLY) introduced the following bill; which was read twice and referred to the Committee on Energy and Natural Resources

A BILL

To facilitate the availability, development, and environmentally responsible production of domestic resources to meet national material or critical mineral needs, and for other purposes.

1 *Be it enacted by the Senate and House of Representa-*
2 *tives of the United States of America in Congress assembled,*

3 **SECTION 1. SHORT TITLE.**

4 This Act may be cited as the “American Mineral Se-
5 curity Act”.

6 **SEC. 2. DEFINITIONS.**

7 In this Act:

8 (1) CRITICAL MINERAL.—

1 (A) IN GENERAL.—The term “critical min-
2 eral” means any mineral, element, substance, or
3 material designated as critical by the Secretary
4 under section 4.

5 (B) EXCLUSIONS.—The term “critical
6 mineral” does not include—

7 (i) fuel minerals, including oil, natural
8 gas, or any other fossil fuels; or

9 (ii) water, ice, or snow.

10 (2) CRITICAL MINERAL MANUFACTURING.—The
11 term “critical mineral manufacturing” means—

12 (A) the exploration, development, mining,
13 production, processing, refining, alloying, sepa-
14 ration, concentration, magnetic sintering, melt-
15 ing, or beneficiation of critical minerals within
16 the United States;

17 (B) the fabrication, assembly, or produc-
18 tion, within the United States, of equipment,
19 components, or other goods with energy tech-
20 nology-, defense-, agriculture-, consumer elec-
21 tronics-, or health care-related applications; or

22 (C) any other value-added, manufacturing-
23 related use of critical minerals undertaken with-
24 in the United States.

1 (3) INDIAN TRIBE.—The term “Indian tribe”
 2 has the meaning given the term in section 4 of the
 3 Indian Self-Determination and Education Assistance
 4 Act (25 U.S.C. 5304).

5 (4) SECRETARY.—The term “Secretary” means
 6 the Secretary of the Interior.

7 (5) STATE.—The term “State” means—

8 (A) a State;

9 (B) the District of Columbia;

10 (C) the Commonwealth of Puerto Rico;

11 (D) Guam;

12 (E) American Samoa;

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

15 (G) the United States Virgin Islands.

16 **SEC. 3. POLICY.**

17 (a) IN GENERAL.—Section 3 of the National Mate-
 18 rials and Minerals Policy, Research and Development Act
 19 of 1980 (30 U.S.C. 1602) is amended in the second sen-
 20 tence—

21 (1) by striking paragraph (3) and inserting the
 22 following:

23 “(3) establish an analytical and forecasting ca-
 24 pability for identifying critical mineral demand, sup-
 25 ply, and other factors to allow informed actions to

1 be taken to avoid supply shortages, mitigate price
2 volatility, and prepare for demand growth and other
3 market shifts;”;

4 (2) in paragraph (6), by striking “and” after
5 the semicolon at the end; and

6 (3) by striking paragraph (7) and inserting the
7 following:

8 “(7) facilitate the availability, development, and
9 environmentally responsible production of domestic
10 resources to meet national material or critical min-
11 eral needs;

12 “(8) avoid duplication of effort, prevent unnec-
13 essary paperwork, and minimize delays in the ad-
14 ministration of applicable laws (including regula-
15 tions) and the issuance of permits and authoriza-
16 tions necessary to explore for, develop, and produce
17 critical minerals and to construct critical mineral
18 manufacturing facilities in accordance with applica-
19 ble environmental and land management laws;

20 “(9) strengthen—

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

1 “(B) workforce training for exploration
2 and development of critical minerals and critical
3 mineral manufacturing;

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

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

9 “(12) develop alternatives to critical minerals;
10 and

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

14 (b) CONFORMING AMENDMENT.—Section 2(b) of the
15 National Materials and Minerals Policy, Research and De-
16 velopment Act of 1980 (30 U.S.C. 1601(b)) is amended
17 by striking “(b) As used in this Act, the term” and insert-
18 ing the following:

19 “(b) DEFINITIONS.—In this Act:

20 “(1) CRITICAL MINERAL.—The term ‘critical
21 mineral’ means any mineral, element, substance, or
22 material designated as critical by the Secretary
23 under section 4 of the American Mineral Security
24 Act.

25 “(2) MATERIALS.—The term”.

1 **SEC. 4. CRITICAL MINERAL DESIGNATIONS.**

2 (a) DRAFT METHODOLOGY AND LIST.—The Sec-
3 retary, acting through the Director of the United States
4 Geological Survey (referred to in this section as the “Sec-
5 retary”), shall publish in the Federal Register for public
6 comment—

7 (1) a description of the draft methodology used
8 to identify a draft list of critical minerals; and

9 (2) a draft list of minerals, elements, sub-
10 stances, and materials that qualify as critical min-
11 erals.

12 (b) AVAILABILITY OF DATA.—If available data is in-
13 sufficient to provide a quantitative basis for the method-
14 ology developed under this section, qualitative evidence
15 may be used to the extent necessary.

16 (c) FINAL METHODOLOGY AND LIST.—After review-
17 ing public comments on the draft methodology and the
18 draft list of critical minerals published under subsection
19 (a) and updating the methodology and list as appropriate,
20 not later than 45 days after the date on which the public
21 comment period with respect to the draft methodology and
22 draft list closes, the Secretary shall publish in the Federal
23 Register—

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

1 (2) the final list of critical minerals.

2 (d) DESIGNATIONS.—

3 (1) IN GENERAL.—For purposes of carrying out
4 this section, the Secretary shall maintain a list of
5 minerals, elements, substances, and materials des-
6 ignated as critical, pursuant to the final method-
7 ology published under subsection (c), that the Sec-
8 retary determines—

9 (A) are essential to the economic or na-
10 tional security of the United States;

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

17 (C) serve an essential function in the man-
18 ufacturing of a product (including energy tech-
19 nology-, defense-, currency-, agriculture-, con-
20 sumer electronics-, and health care-related ap-
21 plications), the absence of which would have
22 significant consequences for the economic or na-
23 tional security of the United States.

24 (2) INCLUSIONS.—Notwithstanding the criteria
25 under subsection (c), the Secretary may designate

1 and include on the list any mineral, element, sub-
2 stance, or material determined by another Federal
3 agency to be strategic and critical to the defense or
4 national security of the United States.

5 (3) REQUIRED CONSULTATION.—The Secretary
6 shall consult with the Secretaries of Defense, Com-
7 merce, Agriculture, and Energy and the United
8 States Trade Representative in designating minerals,
9 elements, substances, and materials as critical under
10 this subsection.

11 (e) SUBSEQUENT REVIEW.—

12 (1) IN GENERAL.—The Secretary, in consulta-
13 tion with the Secretaries of Defense, Commerce, Ag-
14 riculture, and Energy and the United States Trade
15 Representative, shall review the methodology and list
16 under subsection (c) and the designations under sub-
17 section (d) at least every 3 years, or more frequently
18 as the Secretary considers to be appropriate.

19 (2) REVISIONS.—Subject to subsection (d)(1),
20 the Secretary may—

21 (A) revise the methodology described in
22 this section;

23 (B) determine that minerals, elements,
24 substances, and materials previously determined

1 to be critical minerals are no longer critical
2 minerals; and

3 (C) designate additional minerals, ele-
4 ments, substances, or materials as critical min-
5 erals.

6 (f) NOTICE.—On finalization of the methodology and
7 the list under subsection (c), or any revision to the meth-
8 odology or list under subsection (e), the Secretary shall
9 submit to Congress written notice of the action.

10 **SEC. 5. RESOURCE ASSESSMENT.**

11 (a) IN GENERAL.—Not later than 4 years after the
12 date of enactment of this Act, in consultation with applica-
13 ble State (including geological surveys), local, academic,
14 industry, and other entities, the Secretary shall complete
15 a comprehensive national assessment of each critical min-
16 eral that—

17 (1) identifies and quantifies known critical min-
18 eral resources, using all available public and private
19 information and datasets, including exploration his-
20 tories; and

21 (2) provides a quantitative and qualitative as-
22 sessment of undiscovered critical mineral resources
23 throughout the United States, including probability
24 estimates of tonnage and grade, using all available

1 public and private information and datasets, includ-
2 ing exploration histories.

3 (b) SUPPLEMENTARY INFORMATION.—In carrying
4 out this section, the Secretary may carry out surveys and
5 field work (including drilling, remote sensing, geophysical
6 surveys, topographical and geological mapping, and geo-
7 chemical sampling and analysis) to supplement existing in-
8 formation and datasets available for determining the exist-
9 ence of critical minerals in the United States.

10 (c) PUBLIC ACCESS.—Subject to applicable law, to
11 the maximum extent practicable, the Secretary shall make
12 all data and metadata collected from the comprehensive
13 national assessment carried out under subsection (a) pub-
14 lically and electronically accessible.

15 (d) TECHNICAL ASSISTANCE.—At the request of the
16 Governor of a State or the head of an Indian tribe, the
17 Secretary may provide technical assistance to State gov-
18 ernments and Indian tribes conducting critical mineral re-
19 source assessments on non-Federal land.

20 (e) PRIORITIZATION.—

21 (1) IN GENERAL.—The Secretary may sequence
22 the completion of resource assessments for each crit-
23 ical mineral such that critical minerals considered to
24 be most critical under the methodology established
25 under section 4 are completed first.

1 (2) REPORTING.—During the period beginning
2 not later than 1 year after the date of enactment of
3 this Act and ending on the date of completion of all
4 of the assessments required under this section, the
5 Secretary shall submit to Congress on an annual
6 basis an interim report that—

7 (A) identifies the sequence and schedule
8 for completion of the assessments if the Sec-
9 retary sequences the assessments; or

10 (B) describes the progress of the assess-
11 ments if the Secretary does not sequence the
12 assessments.

13 (f) UPDATES.—The Secretary may periodically up-
14 date the assessments conducted under this section based
15 on—

16 (1) the generation of new information or
17 datasets by the Federal Government; or

18 (2) the receipt of new information or datasets
19 from critical mineral producers, State geological sur-
20 veys, academic institutions, trade associations, or
21 other persons.

22 (g) ADDITIONAL SURVEYS.—The Secretary shall
23 complete a resource assessment for each additional min-
24 eral or element subsequently designated as a critical min-

1 eral under section 4(e)(2) not later than 2 years after the
2 designation of the mineral or element.

3 (h) REPORT.—Not later than 2 years after the date
4 of enactment of this Act, the Secretary shall submit to
5 Congress a report describing the status of geological sur-
6 veying of Federal land for any mineral commodity—

7 (1) for which the United States was dependent
8 on a foreign country for more than 25 percent of the
9 United States supply, as depicted in the report
10 issued by the United States Geological Survey enti-
11 tled “Mineral Commodity Summaries 2019”; but

12 (2) that is not designated as a critical mineral
13 under section 4.

14 **SEC. 6. PERMITTING.**

15 (a) SENSE OF CONGRESS.—It is the sense of Con-
16 gress that—

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

20 (2) to the maximum extent practicable, the crit-
21 ical mineral needs of the United States should be
22 satisfied by minerals responsibly produced and recy-
23 cled in the United States; and

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

4 (b) PERFORMANCE IMPROVEMENTS.—To improve
5 the quality and timeliness of decisions, the Secretary (act-
6 ing through the Director of the Bureau of Land Manage-
7 ment) and the Secretary of Agriculture (acting through
8 the Chief of the Forest Service) (referred to in this section
9 as the “Secretaries”) shall, to the maximum extent prac-
10 ticable, with respect to critical mineral production on Fed-
11 eral land, complete Federal permitting and review proc-
12 esses with maximum efficiency and effectiveness, while
13 supporting vital economic growth, by—

14 (1) establishing and adhering to timelines and
15 schedules for the consideration of, and final deci-
16 sions regarding, applications, operating plans, leases,
17 licenses, permits, and other use authorizations for
18 mineral-related activities on Federal land;

19 (2) establishing clear, quantifiable, and tem-
20 poral permitting performance goals and tracking
21 progress against those goals;

22 (3) engaging in early collaboration among agen-
23 cies, project sponsors, and affected stakeholders—

24 (A) to incorporate and address the inter-
25 ests of those parties; and

1 (B) to minimize delays;

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

6 (5) engaging in early and active consultation
7 with State, local, and Indian tribal governments to
8 avoid conflicts or duplication of effort, resolve con-
9 cerns, and allow for concurrent, rather than sequen-
10 tial, reviews;

11 (6) providing demonstrable improvements in the
12 performance of Federal permitting and review proc-
13 esses, including lower costs and more timely deci-
14 sions;

15 (7) expanding and institutionalizing permitting
16 and review process improvements that have proven
17 effective;

18 (8) developing mechanisms to better commu-
19 nicate priorities and resolve disputes among agencies
20 at the national, regional, State, and local levels; and

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

23 (c) REVIEW AND REPORT.—Not later than 1 year
24 after the date of enactment of this Act, the Secretaries
25 shall submit to Congress a report that—

1 (1) identifies additional measures (including
2 regulatory and legislative proposals, as appropriate)
3 that would increase the timeliness of permitting ac-
4 tivities for the exploration and development of do-
5 mestic critical minerals;

6 (2) identifies options (including cost recovery
7 paid by permit applicants) for ensuring adequate
8 staffing and training of Federal entities and per-
9 sonnel responsible for the consideration of applica-
10 tions, operating plans, leases, licenses, permits, and
11 other use authorizations for critical mineral-related
12 activities on Federal land;

13 (3) quantifies the amount of time typically re-
14 quired (including range derived from minimum and
15 maximum durations, mean, median, variance, and
16 other statistical measures or representations) to
17 complete each step (including those aspects outside
18 the control of the executive branch, such as judicial
19 review, applicant decisions, or State and local gov-
20 ernment involvement) associated with the develop-
21 ment and processing of applications, operating
22 plans, leases, licenses, permits, and other use au-
23 thorizations for critical mineral-related activities on
24 Federal land, which shall serve as a baseline for the
25 performance metric under subsection (d); and

1 (4) describes actions carried out pursuant to
2 subsection (b).

3 (d) PERFORMANCE METRIC.—Not later than 90 days
4 after the date of submission of the report under subsection
5 (c), the Secretaries, after providing public notice and an
6 opportunity to comment, shall develop and publish a per-
7 formance metric for evaluating the progress made by the
8 executive branch to expedite the permitting of activities
9 that will increase exploration for, and development of, do-
10 mestic critical minerals, while maintaining environmental
11 standards.

12 (e) ANNUAL REPORTS.—Beginning with the first
13 budget submission by the President under section 1105
14 of title 31, United States Code, after publication of the
15 performance metric required under subsection (d), and an-
16 nually thereafter, the Secretaries shall submit to Congress
17 a report that—

18 (1) summarizes the implementation of rec-
19 ommendations, measures, and options identified in
20 paragraphs (1) and (2) of subsection (c);

21 (2) using the performance metric under sub-
22 section (d), describes progress made by the executive
23 branch, as compared to the baseline established pur-
24 suant to subsection (c)(3), on expediting the permit-

1 ting of activities that will increase exploration for,
2 and development of, domestic critical minerals; and
3 (3) compares the United States to other coun-
4 tries in terms of permitting efficiency and any other
5 criteria relevant to the globally competitive critical
6 minerals industry.

7 (f) INDIVIDUAL PROJECTS.—Using data from the
8 Secretaries generated under subsection (e), the Director
9 of the Office of Management and Budget shall prioritize
10 inclusion of individual critical mineral projects on the
11 website operated by the Office of Management and Budget
12 in accordance with section 1122 of title 31, United States
13 Code.

14 (g) REPORT OF SMALL BUSINESS ADMINISTRA-
15 TION.—Not later than 1 year and 300 days after the date
16 of enactment of this Act, the Administrator of the Small
17 Business Administration shall submit to the applicable
18 committees of Congress a report that assesses the per-
19 formance of Federal agencies with respect to—

20 (1) complying with chapter 6 of title 5, United
21 States Code (commonly known as the “Regulatory
22 Flexibility Act”), in promulgating regulations appli-
23 cable to the critical minerals industry; and

24 (2) performing an analysis of regulations appli-
25 cable to the critical minerals industry that may be

1 outmoded, inefficient, duplicative, or excessively bur-
 2 densome.

3 (h) APPLICATION.—Section 41001(6)(A) of the
 4 FAST Act (42 U.S.C. 4370m(6)(A)) is amended in the
 5 matter preceding clause (i) by inserting “(including crit-
 6 ical mineral manufacturing (as defined in section 2 of the
 7 American Mineral Security Act))” after “manufacturing”.

8 **SEC. 7. FEDERAL REGISTER PROCESS.**

9 (a) DEPARTMENTAL REVIEW.—Absent any extraor-
 10 dinary circumstance, and except as otherwise required by
 11 law, the Secretary and the Secretary of Agriculture shall
 12 ensure that each Federal Register notice described in sub-
 13 section (b) shall be—

14 (1) subject to any required reviews within the
 15 Department of the Interior or the Department of
 16 Agriculture; and

17 (2) published in final form in the Federal Reg-
 18 ister not later than 45 days after the date of initial
 19 preparation of the notice.

20 (b) PREPARATION.—The preparation of Federal Reg-
 21 ister notices required by law associated with the issuance
 22 of a critical mineral exploration or mine permit shall be
 23 delegated to the organizational level within the agency re-
 24 sponsible for issuing the critical mineral exploration or
 25 mine permit.

1 (c) TRANSMISSION.—All Federal Register notices re-
 2 garding official document availability, announcements of
 3 meetings, or notices of intent to undertake an action shall
 4 be originated in, and transmitted to the Federal Register
 5 from, the office in which, as applicable—

6 (1) the documents or meetings are held; or

7 (2) the activity is initiated.

8 **SEC. 8. RECYCLING, EFFICIENCY, AND ALTERNATIVES.**

9 (a) ESTABLISHMENT.—The Secretary of Energy (re-
 10 ferred to in this section as the “Secretary”) shall conduct
 11 a program of research and development—

12 (1) to promote the efficient production, use,
 13 and recycling of critical minerals throughout the
 14 supply chain; and

15 (2) to develop alternatives to critical minerals
 16 that do not occur in significant abundance in the
 17 United States.

18 (b) COOPERATION.—In carrying out the program, the
 19 Secretary shall cooperate with appropriate—

20 (1) Federal agencies and National Laboratories;

21 (2) critical mineral producers;

22 (3) critical mineral processors;

23 (4) critical mineral manufacturers;

24 (5) trade associations;

25 (6) academic institutions;

1 (7) small businesses; and

2 (8) other relevant entities or individuals.

3 (c) ACTIVITIES.—Under the program, the Secretary
4 shall carry out activities that include the identification and
5 development of—

6 (1) advanced critical mineral extraction, pro-
7 duction, separation, alloying, or processing tech-
8 nologies that decrease the energy consumption, envi-
9 ronmental impact, and costs of those activities, in-
10 cluding—

11 (A) efficient water and wastewater man-
12 agement strategies;

13 (B) technologies and management strate-
14 gies to control the environmental impacts of
15 radionuclides in ore tailings; and

16 (C) technologies for separation and proc-
17 essing;

18 (2) technologies or process improvements that
19 minimize the use, or lead to more efficient use, of
20 critical minerals across the full supply chain;

21 (3) technologies, process improvements, or de-
22 sign optimizations that facilitate the recycling of
23 critical minerals, and options for improving the rates
24 of collection of products and scrap containing critical

1 minerals from post-consumer, industrial, or other
2 waste streams;

3 (4) commercial markets, advanced storage
4 methods, energy applications, and other beneficial
5 uses of critical minerals processing byproducts;

6 (5) alternative minerals, metals, and materials,
7 particularly those available in abundance within the
8 United States and not subject to potential supply re-
9 strictions, that lessen the need for critical minerals;
10 and

11 (6) alternative energy technologies or alter-
12 native designs of existing energy technologies, par-
13 ticularly those that use minerals that—

14 (A) occur in abundance in the United
15 States; and

16 (B) are not subject to potential supply re-
17 strictions.

18 (d) REPORTS.—Not later than 2 years after the date
19 of enactment of this Act, and annually thereafter, the Sec-
20 retary shall submit to Congress a report summarizing the
21 activities, findings, and progress of the program.

22 **SEC. 9. ANALYSIS AND FORECASTING.**

23 (a) CAPABILITIES.—In order to evaluate existing crit-
24 ical mineral policies and inform future actions that may
25 be taken to avoid supply shortages, mitigate price vola-

1 tility, and prepare for demand growth and other market
 2 shifts, the Secretary, in consultation with the Energy In-
 3 formation Administration, academic institutions, and oth-
 4 ers in order to maximize the application of existing com-
 5 petencies related to developing and maintaining computer-
 6 models and similar analytical tools, shall conduct and pub-
 7 lish the results of an annual report that includes—

8 (1) as part of the annually published Mineral
 9 Commodity Summaries from the United States Geo-
 10 logical Survey, a comprehensive review of critical
 11 mineral production, consumption, and recycling pat-
 12 terns, including—

13 (A) the quantity of each critical mineral
 14 domestically produced during the preceding
 15 year;

16 (B) the quantity of each critical mineral
 17 domestically consumed during the preceding
 18 year;

19 (C) market price data or other price data
 20 for each critical mineral;

21 (D) an assessment of—

22 (i) critical mineral requirements to
 23 meet the national security, energy, eco-
 24 nomic, industrial, technological, and other

1 needs of the United States during the pre-
2 ceding year;

3 (ii) the reliance of the United States
4 on foreign sources to meet those needs
5 during the preceding year; and

6 (iii) the implications of any supply
7 shortages, restrictions, or disruptions dur-
8 ing the preceding year;

9 (E) the quantity of each critical mineral
10 domestically recycled during the preceding year;

11 (F) the market penetration during the pre-
12 ceding year of alternatives to each critical min-
13 eral;

14 (G) a discussion of international trends as-
15 sociated with the discovery, production, con-
16 sumption, use, costs of production, prices, and
17 recycling of each critical mineral as well as the
18 development of alternatives to critical minerals;
19 and

20 (H) such other data, analyses, and evalua-
21 tions as the Secretary finds are necessary to
22 achieve the purposes of this section; and

23 (2) a comprehensive forecast, entitled the “An-
24 nual Critical Minerals Outlook”, of projected critical

1 mineral production, consumption, and recycling pat-
2 terns, including—

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

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

9 (C) an assessment of—

10 (i) critical mineral requirements to
11 meet projected national security, energy,
12 economic, industrial, technological, and
13 other needs of the United States;

14 (ii) the projected reliance of the
15 United States on foreign sources to meet
16 those needs; and

17 (iii) the projected implications of po-
18 tential supply shortages, restrictions, or
19 disruptions;

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

23 (E) the market penetration of alternatives
24 to each critical mineral projected to take place

1 over the subsequent 1-year, 5-year, and 10-year
2 periods;

3 (F) a discussion of reasonably foreseeable
4 international trends associated with the dis-
5 covery, production, consumption, use, costs of
6 production, and recycling of each critical min-
7 eral as well as the development of alternatives
8 to critical minerals; and

9 (G) such other projections relating to each
10 critical mineral as the Secretary determines to
11 be necessary to achieve the purposes of this sec-
12 tion.

13 (b) PROPRIETARY INFORMATION.—In preparing a re-
14 port described in subsection (a), the Secretary shall en-
15 sure, consistent with section 5(f) of the National Materials
16 and Minerals Policy, Research and Development Act of
17 1980 (30 U.S.C. 1604(f)), that—

18 (1) no person uses the information and data
19 collected for the report for a purpose other than the
20 development of or reporting of aggregate data in a
21 manner such that the identity of the person or firm
22 who supplied the information is not discernible and
23 is not material to the intended uses of the informa-
24 tion;

1 (2) no person discloses any information or data
 2 collected for the report unless the information or
 3 data has been transformed into a statistical or ag-
 4 gregate form that does not allow the identification of
 5 the person or firm who supplied particular informa-
 6 tion; and

7 (3) procedures are established to require the
 8 withholding of any information or data collected for
 9 the report if the Secretary determines that with-
 10 holding is necessary to protect proprietary informa-
 11 tion, including any trade secrets or other confiden-
 12 tial information.

13 **SEC. 10. EDUCATION AND WORKFORCE.**

14 (a) **WORKFORCE ASSESSMENT.**—Not later than 1
 15 year and 300 days after the date of enactment of this Act,
 16 the Secretary of Labor (in consultation with the Secretary,
 17 the Director of the National Science Foundation, institu-
 18 tions of higher education with substantial expertise in
 19 mining, institutions of higher education with significant
 20 expertise in minerals research, including fundamental re-
 21 search into alternatives, and employers in the critical min-
 22 erals sector) shall submit to Congress an assessment of
 23 the domestic availability of technically trained personnel
 24 necessary for critical mineral exploration, development, as-
 25 sessment, production, manufacturing, recycling, analysis,

1 forecasting, education, and research, including an analysis
2 of—

3 (1) skills that are in the shortest supply as of
4 the date of the assessment;

5 (2) skills that are projected to be in short sup-
6 ply in the future;

7 (3) the demographics of the critical minerals in-
8 dustry and how the demographics will evolve under
9 the influence of factors such as an aging workforce;

10 (4) the effectiveness of training and education
11 programs in addressing skills shortages;

12 (5) opportunities to hire locally for new and ex-
13 isting critical mineral activities;

14 (6) the sufficiency of personnel within relevant
15 areas of the Federal Government for achieving the
16 policies described in section 3 of the National Mate-
17 rials and Minerals Policy, Research and Develop-
18 ment Act of 1980 (30 U.S.C. 1602); and

19 (7) the potential need for new training pro-
20 grams to have a measurable effect on the supply of
21 trained workers in the critical minerals industry.

22 (b) CURRICULUM STUDY.—

23 (1) IN GENERAL.—The Secretary and the Sec-
24 retary of Labor shall jointly enter into an arrange-
25 ment with the National Academy of Sciences and the

1 National Academy of Engineering under which the
2 Academies shall coordinate with the National
3 Science Foundation on conducting a study—

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

11 (B) to address undergraduate and grad-
12 uate education, especially to assist in the devel-
13 opment of graduate level programs of research
14 and instruction that lead to advanced degrees
15 with an emphasis on the critical mineral supply
16 chain or other positions that will increase do-
17 mestic, critical mineral exploration, develop-
18 ment, production, manufacturing, research, in-
19 cluding fundamental research into alternatives,
20 and recycling;

21 (C) to develop guidelines for proposals
22 from institutions of higher education with sub-
23 stantial capabilities in the required disciplines
24 for activities to improve the critical mineral
25 supply chain and advance the capacity of the

1 United States to increase domestic, critical min-
2 eral exploration, research, development, produc-
3 tion, manufacturing, and recycling; and

4 (D) to outline criteria for evaluating per-
5 formance and recommendations for the amount
6 of funding that will be necessary to establish
7 and carry out the program described in sub-
8 section (c).

9 (2) REPORT.—Not later than 2 years after the
10 date of enactment of this Act, the Secretary shall
11 submit to Congress a description of the results of
12 the study required under paragraph (1).

13 (c) PROGRAM.—

14 (1) ESTABLISHMENT.—The Secretary and the
15 Secretary of Labor shall jointly conduct a competi-
16 tive grant program under which institutions of high-
17 er education may apply for and receive 4-year grants
18 for—

19 (A) startup costs for newly designated fac-
20 ulty positions in integrated critical mineral edu-
21 cation, research, innovation, training, and work-
22 force development programs consistent with
23 subsection (b);

1 (B) internships, scholarships, and fellow-
 2 ships for students enrolled in programs related
 3 to critical minerals;

4 (C) equipment necessary for integrated
 5 critical mineral innovation, training, and work-
 6 force development programs; and

7 (D) research of critical minerals and their
 8 applications, particularly concerning the manu-
 9 facture of critical components vital to national
 10 security.

11 (2) RENEWAL.—A grant under this subsection
 12 shall be renewable for up to 2 additional 3-year
 13 terms based on performance criteria outlined under
 14 subsection (b)(1)(D).

15 **SEC. 11. NATIONAL GEOLOGICAL AND GEOPHYSICAL DATA**
 16 **PRESERVATION PROGRAM.**

17 Section 351(k) of the Energy Policy Act of 2005 (42
 18 U.S.C. 15908(k)) is amended by striking “\$30,000,000
 19 for each of fiscal years 2006 through 2010” and inserting
 20 “\$5,000,000 for each of fiscal years 2020 through 2029,
 21 to remain available until expended”.

22 **SEC. 12. ADMINISTRATION.**

23 (a) IN GENERAL.—The National Critical Materials
 24 Act of 1984 (30 U.S.C. 1801 et seq.) is repealed.

1 (b) CONFORMING AMENDMENT.—Section 3(d) of the
 2 National Superconductivity and Competitiveness Act of
 3 1988 (15 U.S.C. 5202(d)) is amended in the first sentence
 4 by striking “, with the assistance of the National Critical
 5 Materials Council as specified in the National Critical Ma-
 6 terials Act of 1984 (30 U.S.C. 1801 et seq.),”.

7 (c) SAVINGS CLAUSES.—

8 (1) IN GENERAL.—Nothing in this Act or an
 9 amendment made by this Act modifies any require-
 10 ment or authority provided by—

11 (A) the matter under the heading “**GEO-**
 12 **LOGICAL SURVEY**” of the first section of the
 13 Act of March 3, 1879 (43 U.S.C. 31(a)); or

14 (B) the first section of Public Law 87–626
 15 (43 U.S.C. 31(b)).

16 (2) EFFECT ON DEPARTMENT OF DEFENSE.—
 17 Nothing in this Act or an amendment made by this
 18 Act affects the authority of the Secretary of Defense
 19 with respect to the work of the Department of De-
 20 fense on critical material supplies in furtherance of
 21 the national defense mission of the Department of
 22 Defense.

23 (3) SECRETARIAL ORDER NOT AFFECTED.—
 24 This Act shall not apply to any mineral described in
 25 Secretarial Order No. 3324, issued by the Secretary

1 of the Interior on December 3, 2012, in any area to
2 which the order applies.

3 **SEC. 13. AUTHORIZATION OF APPROPRIATIONS.**

4 There is authorized to be appropriated to carry out
5 this Act \$50,000,000 for each of fiscal years 2020 through
6 2029.

