

 S.L.C.

114TH CONGRESS
1ST SESSION

S. _____

To facilitate the reestablishment of domestic, critical mineral designation, assessment, production, manufacturing, recycling, analysis, forecasting, workforce, education, and research capabilities in the United States, and for other purposes.

IN THE SENATE OF THE UNITED STATES

Ms. MURKOWSKI (for herself, _____) introduced the following bill; which was read twice and referred to the Committee on _____

A BILL

To facilitate the reestablishment of domestic, critical mineral designation, assessment, production, manufacturing, recycling, analysis, forecasting, workforce, education, and research capabilities in the United States, 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; TABLE OF CONTENTS.**

4 (a) SHORT TITLE.—This Act may be cited as the
5 “American Mineral Security Act of 2015”.

6 (b) TABLE OF CONTENTS.—The table of contents of
7 this Act is as follows:

- Sec. 1. Short title; table of contents.
Sec. 2. Definitions.

TITLE I—DESIGNATIONS AND SUPPLY CHAIN

- Sec. 101. Policy.
Sec. 102. Critical mineral designations.
Sec. 103. Resource assessment.
Sec. 104. Permitting.
Sec. 105. Application of Executive order.
Sec. 106. Federal Register process.
Sec. 107. Recycling, efficiency, and alternatives.
Sec. 108. Analysis and forecasting.
Sec. 109. Education and workforce.

TITLE II—ADMINISTRATION

- Sec. 201. Repeal.
Sec. 202. Savings clauses.

1 **SEC. 2. DEFINITIONS.**

2 In this Act:

3 (1) **CRITICAL MINERAL.**—

4 (A) **IN GENERAL.**—The term “critical min-
5 eral” means any mineral, element, substance, or
6 material designated as critical pursuant to sec-
7 tion 102.

8 (B) **EXCLUSIONS.**—The term “critical
9 mineral” does not include—

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

12 (ii) water, ice, or snow.

13 (2) **INDIAN TRIBE.**—The term “Indian tribe”
14 has the meaning given the term in section 4 of the
15 Indian Self-Determination and Education Assistance
16 Act (25 U.S.C. 450b).

1 (3) MINERAL MANUFACTURING.—The term
2 “mineral manufacturing” means—

3 (A) the production, processing, refining,
4 alloying, separation, concentration, magnetic
5 sintering, melting, or beneficiation of minerals
6 within the United States;

7 (B) the fabrication, assembly, or produc-
8 tion, within the United States, of equipment,
9 components, or other goods with energy tech-
10 nology-, defense-, agriculture-, consumer elec-
11 tronics-, or health care-related applications; or

12 (C) any other value-added, manufacturing-
13 related use of minerals undertaken within the
14 United States.

15 (4) STATE.—The term “State” means—

16 (A) a State;

17 (B) the District of Columbia;

18 (C) the Commonwealth of Puerto Rico;

19 (D) Guam;

20 (E) American Samoa;

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

23 (G) the United States Virgin Islands.

1 **TITLE I—DESIGNATIONS AND**
2 **SUPPLY CHAIN**

3 **SEC. 101. POLICY.**

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

8 (1) by striking paragraph (3) and inserting the
9 following:

10 “(3) establish an analytical and forecasting ca-
11 pability for identifying critical mineral demand, sup-
12 ply, and other factors to allow informed actions to
13 be taken to avoid supply shortages, mitigate price
14 volatility, and prepare for demand growth and other
15 market shifts;”;

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

18 (3) in paragraph (7), by striking the period at
19 the end and inserting a semicolon; and

20 (4) by adding at the end the following:

21 “(8) encourage Federal agencies to facilitate
22 the availability, development, and environmentally
23 responsible production of domestic resources to meet
24 national critical material or mineral needs;

1 “(9) avoid duplication of effort, prevent unnee-
2 cessary paperwork, and minimize delays in the ad-
3 ministration of applicable laws (including regula-
4 tions) and the issuance of permits and authoriza-
5 tions necessary to explore for, develop, and produce
6 critical minerals and to construct mineral manufac-
7 turing facilities in accordance with applicable envi-
8 ronmental and land management laws;

9 “(10) strengthen educational and research ca-
10 pabilities and workforce training;

11 “(11) bolster international cooperation through
12 technology transfer, information sharing, and other
13 means;

14 “(12) promote the efficient production, use, and
15 recycling of critical minerals;

16 “(13) develop alternatives to critical minerals;
17 and

18 “(14) establish contingencies for the production
19 of, or access to, critical minerals for which viable
20 sources do not exist within the United States.”.

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

1 “(b) DEFINITIONS.—In this Act:

2 “(1) CRITICAL MINERAL.—The term ‘critical
3 mineral’ means any mineral or element designated
4 as a critical mineral pursuant to section 102 of the
5 American Mineral Security Act of 2015.

6 “(2) MATERIALS.—The term”.

7 **SEC. 102. CRITICAL MINERAL DESIGNATIONS.**

8 (a) DRAFT METHODOLOGY.—Not later than 90 days
9 after the date of enactment of this Act, the Director of
10 the United States Geological Survey (referred to in this
11 title as the “Director”), in consultation with relevant Fed-
12 eral agencies and entities, shall publish in the Federal
13 Register for public comment a draft methodology for de-
14 termining which minerals qualify as critical minerals
15 based on an assessment of whether the minerals are—

16 (1) subject to potential supply restrictions (in-
17 cluding restrictions associated with foreign political
18 risk, abrupt demand growth, military conflict, violent
19 unrest, anti-competitive or protectionist behaviors,
20 and other risks throughout the supply chain); and

21 (2) important in use (including energy tech-
22 nology-, defense-, currency-, agriculture-, consumer
23 electronics-, and health care-related applications).

24 (b) AVAILABILITY OF DATA.—If available data is in-
25 sufficient to provide a quantitative basis for the method-

1 ology developed under this section, qualitative evidence
2 may be used to the extent necessary.

3 (c) FINAL METHODOLOGY.—After reviewing public
4 comments on the draft methodology under subsection (a)
5 and updating the draft methodology as appropriate, not
6 later than 270 days after the date of enactment of this
7 Act, the Director shall publish in the Federal Register a
8 description of the final methodology for determining which
9 minerals qualify as critical minerals.

10 (d) DESIGNATIONS.—

11 (1) IN GENERAL.—For purposes of carrying out
12 this title, the Director shall maintain a list of min-
13 erals and elements designated as critical, pursuant
14 to the methodology under subsection (c).

15 (2) INITIAL LIST.—Subject to paragraph (1),
16 not later than 1 year after the date of enactment of
17 this Act, the Director shall publish in the Federal
18 Register an initial list of minerals designated as crit-
19 ical pursuant to the final methodology under sub-
20 section (c) for the purpose of carrying out this title.

21 (3) INCLUSIONS.—Notwithstanding the criteria
22 under subsection (a), any mineral or element deter-
23 mined by another Federal agency to be strategic and
24 critical to the defense or national security of the
25 United States may be—

1 (A) considered to be a critical mineral; and
2 (B) included on the list developed by the
3 Director under this subsection.

4 (e) **SUBSEQUENT REVIEW.**—

5 (1) **IN GENERAL.**—The Director shall review
6 the methodology and designations under subsections
7 (e) and (d) at least every 2 years, or more frequently
8 as the Director considers to be appropriate.

9 (2) **REVISIONS.**—Subject to subsection (d)(1),
10 the Director may—

11 (A) revise the methodology described in
12 this section;

13 (B) determine that minerals or elements
14 previously determined to be critical minerals are
15 no longer critical minerals; and

16 (C) designate additional minerals or ele-
17 ments as critical minerals.

18 (f) **NOTICE.**—On finalization of the methodology
19 under subsection (e), the list under subsection (d), or any
20 revision to the methodology or list under subsection (e),
21 the Director shall submit to Congress written notice of the
22 action.

23 **SEC. 103. RESOURCE ASSESSMENT.**

24 (a) **IN GENERAL.**—Not later than 4 years after the
25 date of enactment of this Act, in consultation with applica-

1 ble State (including geological surveys), local, academic,
2 industry, and other entities, the Director shall complete
3 a comprehensive national assessment of each critical min-
4 eral that—

5 (1) identifies and quantifies known critical min-
6 eral resources, using all available public and private
7 information and datasets, including exploration his-
8 tories; and

9 (2) provides a quantitative and qualitative as-
10 sessment of undiscovered critical mineral resources
11 throughout the United States, including probability
12 estimates of tonnage and grade, using all available
13 public and private information and datasets, includ-
14 ing exploration histories.

15 (b) SUPPLEMENTARY INFORMATION.—In carrying
16 out this section, the Director may carry out surveys and
17 field work (including drilling, remote sensing, geophysical
18 surveys, geological mapping, and geochemical sampling
19 and analysis) to supplement existing information and
20 datasets available for determining the existence of critical
21 minerals on—

22 (1) Federal land;

23 (2) Indian tribal land, at the request or with
24 the consent of the Indian tribe; and

1 (3) State land, at the request or with the con-
2 sent of the Governor of the State.

3 (e) TECHNICAL ASSISTANCE.—At the request of the
4 Governor of a State or the head of an Indian tribe, the
5 Director may provide technical assistance to State govern-
6 ments and Indian tribes conducting critical mineral re-
7 source assessments on non-Federal land.

8 (d) PRIORITIZATION.—

9 (1) IN GENERAL.—The Director may sequence
10 the completion of resource assessments for each crit-
11 ical mineral such that critical minerals considered to
12 be most critical under the methodology established
13 under section 102 are completed first.

14 (2) REPORTING.—During the period beginning
15 not later than 1 year after the date of enactment of
16 this Act and ending on the date of completion of all
17 of the assessments required under this section, the
18 Director shall submit to Congress on an annual
19 basis an interim report that—

20 (A) identifies the sequence and schedule
21 for completion of the assessments if the Direc-
22 tor sequences the assessments; or

23 (B) describes the progress of the assess-
24 ments if the Director does not sequence the as-
25 sessments.

1 (e) UPDATES.—The Director may periodically update
2 the assessments conducted under this section based on—

3 (1) the generation of new information or
4 datasets by the Federal Government; or

5 (2) the receipt of new information or datasets
6 from critical mineral producers, State geological sur-
7 veys, academic institutions, trade associations, or
8 other entities or individuals.

9 (f) ADDITIONAL SURVEYS.—The Director shall com-
10 plete a resource assessment for each additional mineral
11 or element subsequently designated as a critical mineral
12 under section 102(e)(2) not later than 2 years after the
13 designation of the mineral or element.

14 (g) REPORT.—Not later than 2 years after the date
15 of enactment of this Act, the Director shall submit to Con-
16 gress a report describing the status of geological surveying
17 of Federal land for any mineral commodity—

18 (1) for which the United States was dependent
19 on a foreign country for more than 25 percent of the
20 United States supply, as depicted in the report
21 issued by the United States Geological Survey enti-
22 tled “Mineral Commodity Summaries 2015”; but

23 (2) that is not designated as a critical mineral
24 under section 102.

1 **SEC. 104. PERMITTING.**

2 (a) PERFORMANCE IMPROVEMENTS.—To improve
3 the quality and timeliness of decisions, the Secretary of
4 the Interior (acting through the Director of the Bureau
5 of Land Management) and the Secretary of Agriculture
6 (acting through the Chief of the Forest Service) (referred
7 to in this section as the “Secretaries”) shall, to the max-
8 imum extent practicable, with respect to critical mineral
9 production on Federal land, complete Federal permitting
10 and review processes with maximum efficiency and effec-
11 tiveness, while supporting vital economic growth, by—

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

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

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

22 (A) to incorporate and address the inter-
23 ests of those parties; and

24 (B) to minimize delays;

25 (4) ensuring transparency and accountability by
26 using cost-effective information technology to collect

1 and disseminate information regarding individual
2 projects and agency performance;

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

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

12 (7) expanding and institutionalizing permitting
13 and review process improvements that have proven
14 effective;

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

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

20 (b) REVIEW AND REPORT.—Not later than 1 year
21 after the date of enactment of this Act, the Secretaries
22 shall submit to Congress a report that—

23 (1) identifies additional measures (including
24 regulatory and legislative proposals, as appropriate)
25 that would increase the timeliness of permitting ac-

1 activities for the exploration and development of do-
2 mestic critical minerals;

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

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

23 (4) describes actions carried out pursuant to
24 subsection (a).

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

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

16 (1) summarizes the implementation of rec-
17 ommendations, measures, and options identified in
18 paragraphs (1) and (2) of subsection (b);

19 (2) using the performance metric under sub-
20 section (c), describes progress made by the executive
21 branch, as compared to the baseline established pur-
22 suant to subsection (b)(3), on expediting the permit-
23 ting of activities that will increase exploration for,
24 and development of, domestic critical minerals; and

1 (3) compares the United States to other coun-
2 tries in terms of permitting efficiency and any other
3 criteria relevant to the globally competitive critical
4 minerals industry.

5 (e) INDIVIDUAL PROJECTS.—Using data from the
6 Secretaries generated under subsection (d), the Director
7 of the Office of Management and Budget shall prioritize
8 inclusion of individual critical mineral projects in the per-
9 mit performance dashboard.

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

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

20 (2) performing an analysis of regulations appli-
21 cable to the critical minerals industry that may be
22 outmoded, inefficient, duplicative, or excessively bur-
23 densome.

1 **SEC. 105. APPLICATION OF EXECUTIVE ORDER.**

2 Domestic mines that will produce critical minerals
3 and critical mineral manufacturing projects shall be con-
4 sidered to be infrastructure projects, as described in Exec-
5 utive Order 13604 (5 U.S.C. 601 note; relating to improv-
6 ing performance of Federal permitting and review of infra-
7 structure projects).

8 **SEC. 106. FEDERAL REGISTER PROCESS.**

9 (a) PREPARATION.—The preparation of Federal Reg-
10 ister notices required by law associated with the issuance
11 of a critical mineral exploration or mine permit shall be
12 delegated to the organizational level within the agency re-
13 sponsible for issuing the critical mineral exploration or
14 mine permit.

15 (b) TRANSMISSION.—All Federal Register notices re-
16 garding official document availability, announcements of
17 meetings, or notices of intent to undertake an action shall
18 be originated in, and transmitted to the Federal Register
19 from, the office in which, as applicable—

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

21 (2) the activity is initiated.

22 (c) DEPARTMENTAL REVIEW.—Absent any extraor-
23 dinary circumstance, and except as otherwise required by
24 law, each Federal Register notice described in subsection
25 (a) shall be—

1 (1) subject to any required reviews within the
2 Department of the Interior or the Department of
3 Agriculture; and

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

7 **SEC. 107. RECYCLING, EFFICIENCY, AND ALTERNATIVES.**

8 (a) ESTABLISHMENT.—The Secretary of Energy, in
9 consultation with the Director, shall conduct a program
10 of research and development—

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

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

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

19 (1) Federal agencies and National Laboratories;

20 (2) critical mineral producers;

21 (3) critical mineral processors;

22 (4) critical mineral manufacturers;

23 (5) trade associations;

24 (6) academic institutions;

25 (7) small businesses; and

1 (8) other relevant entities or individuals.

2 (c) ACTIVITIES.—Under the program, the Secretary
3 of Energy, in consultation with the Director, shall carry
4 out activities that include the identification and develop-
5 ment 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 pro-
17 cessing;

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 of Energy shall submit to Congress a report sum-
21 marizing the activities, findings, and progress of the pro-
22 gram.

23 **SEC. 108. ANALYSIS AND FORECASTING.**

24 (a) CAPABILITIES.—In order to evaluate existing crit-
25 ical mineral policies and inform future actions that may

1 be taken to avoid supply shortages, mitigate price vola-
2 tility, and prepare for demand growth and other market
3 shifts, the Director, in consultation with the Energy Infor-
4 mation Administration, academic institutions, and others
5 in order to maximize the application of existing com-
6 petencies related to developing and maintaining computer-
7 models and similar analytical tools, shall conduct and pub-
8 lish the results of an annual report that includes—

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

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

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

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

22 (D) an assessment of—

23 (i) critical mineral requirements to
24 meet the national security, energy, eco-
25 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 Director 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 Director determines to be
11 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 Director shall ensure,
15 consistent with section 5(f) of the National Materials and
16 Minerals Policy, Research and Development Act of 1980
17 (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 Director 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. 109. 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 Director,
17 the Director of the National Science Foundation, institu-
18 tions of higher education with substantial expertise in
19 mining, and employers in the critical minerals sector) shall
20 submit to Congress an assessment of the domestic avail-
21 ability of technically trained personnel necessary for crit-
22 ical mineral exploration, development, assessment, produc-
23 tion, manufacturing, recycling, analysis, forecasting, edu-
24 cation, and research, including an analysis of—

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

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

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

8 (4) the effectiveness of training and education
9 programs in addressing skills shortages;

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

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

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

20 (b) CURRICULUM STUDY.—

21 (1) IN GENERAL.—The Director and the Sec-
22 retary of Labor shall jointly enter into an arrange-
23 ment with the National Academy of Sciences and the
24 National Academy of Engineering under which the

1 Academies shall coordinate with the National
2 Science Foundation on conducting a study—

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

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

17 (C) to develop guidelines for proposals
18 from institutions of higher education with sub-
19 stantial capabilities in the required disciplines
20 for activities to improve the critical mineral
21 supply chain and advance the capacity of the
22 United States to increase domestic, critical min-
23 eral exploration, research, development, produc-
24 tion, manufacturing, and recycling; and

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

6 (2) REPORT.—Not later than 2 years after the
7 date of enactment of this Act, the Director shall
8 submit to Congress a description of the results of
9 the study required under paragraph (1).

10 (c) PROGRAM.—

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

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

21 (B) internships, scholarships, and fellow-
22 ships for students enrolled in programs related
23 to critical minerals;

1 **LOGICAL SURVEY**” of the first section of the Act of
2 March 3, 1879 (43 U.S.C. 31(a)).

3 (b) POTASH.—Nothing in this Act affects any aspect
4 of Secretarial Order 3324, issued by the Secretary of the
5 Interior on December 3, 2012, with respect to potash and
6 oil and gas operators.