

1 Title: To facilitate the reestablishment of domestic, critical mineral assessment, production,
2 manufacturing, recycling, analysis, and workforce capabilities in the United States, and for other
3 purposes.
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6 Be it enacted by the Senate and House of Representatives of the United States of America in
7 Congress assembled,

8 SECTION 1. SHORT TITLE; TABLE OF CONTENTS.

9 (a) Short Title.—This Act may be cited as the “Critical Minerals Policy Act of 2011”.

10 (b) Table of Contents.—The table of contents of this Act is as follows:

11 Sec.1.Short title; table of contents.

12 Sec.2.Definitions.

13 TITLE I—DESIGNATIONS AND POLICIES

14 Sec.101.Designations.

15 Sec.102.Policy.

16 Sec.103.Resource assessment.

17 Sec.104.Permitting.

18 Sec.105.Manufacturing.

19 Sec.106.Recycling and alternatives.

20 Sec.107.Analysis and forecasting.

21 Sec.108.Education and workforce.

22 Sec.109.International cooperation.

23 TITLE II—MINERAL-SPECIFIC ACTIONS

24 Sec.201.Low-Btu gas conservation.

25 Sec.202.Helium.

26 Sec.203.Potash.

27 Sec.204.Rare earth elements in the Arctic.

28 Sec.205.Thorium.

29 Sec.206.Administration.

30 TITLE III—MISCELLANEOUS

31 Sec.301.Administration.

32 Sec.302.Authorization of appropriations.

1 SEC. 2. DEFINITIONS.

2 In this Act:

3 (1) APPLICABLE COMMITTEES.—The term “applicable committees” means—

4 (A) the Committee on Energy and Natural Resources of the Senate;

5 (B) the Committee on Natural Resources of the House of Representatives; and

6 (C) the Committee on Energy and Commerce of the House of Representatives.

7 (2) CLEAN ENERGY TECHNOLOGY.—The term “clean energy technology” means a
8 technology related to the production, use, transmission, storage, control, or conservation of
9 energy that—

10 (A) reduces the need for additional energy supplies by using existing energy
11 supplies with greater efficiency or by transmitting, distributing, or transporting energy
12 with greater effectiveness through the infrastructure of the United States;

13 (B) diversifies the sources of energy supply of the United States to strengthen
14 energy security and to increase supplies with a favorable balance of environmental
15 effects if the entire technology system is considered; or

16 (C) contributes to a stabilization of atmospheric greenhouse gas concentrations
17 through reduction, avoidance, or sequestration of energy-related greenhouse gas
18 emissions.

19 (3) CRITICAL MINERAL.—

20 (A) IN GENERAL.—The term “critical mineral” means any mineral designated as a
21 critical mineral pursuant to section 101.

22 (B) EXCLUSIONS.—The term “critical mineral” does not include coal, oil, or natural
23 gas.

24 (4) CRITICAL MINERAL MANUFACTURING.—The term “critical mineral manufacturing”
25 means—

26 (A) fabrication within the United States of clean energy technologies or components
27 necessary for the fabrication of clean energy technologies (including those related to
28 wind, solar, and geothermal energy, batteries, and other energy storage devices);

29 (B) processing, refining, alloying, separating, concentrating, or beneficiating of
30 critical minerals within the United States; or

31 (C) any other value-added, manufacturing-related use of critical minerals undertaken
32 within the United States.

33 (5) INDIAN TRIBE.—The term “Indian tribe” means any Indian tribe, band, nation, or other
34 organized group or community, including any Alaskan Native village, Village Corporation,
35 or Regional Corporation, as defined in or established pursuant to the Alaska Native Claims
36 Settlement Act (43 U.S.C. 1601 et seq.), that is recognized as eligible for the special
37 programs and services provided by the United States to Indians because of their status as
38 Indians.

1 (6) RARE EARTH ELEMENT.—

2 (A) IN GENERAL.—The term “rare earth element” means the chemical elements in
3 the periodic table from lanthanum (atomic number 57) up to and including lutetium
4 (atomic number 71).

5 (B) INCLUSIONS.—The term “rare earth element” includes the chemical elements
6 yttrium and scandium.

7 (7) SECRETARY.—The term “Secretary” means the Secretary of the Interior—

8 (A) acting through the Director of the United States Geological Survey; and

9 (B) in consultation with (as appropriate)—

10 (i) the Secretary of Energy;

11 (ii) the Secretary of Defense;

12 (iii) the Secretary of Commerce;

13 (iv) the Secretary of State;

14 (v) the United States Trade Representative; and

15 (vi) the heads of other applicable Federal agencies.

16 (8) STATE.—The term “State” means—

17 (A) a State;

18 (B) the Commonwealth of Puerto Rico; and

19 (C) any other territory or possession of the United States.

20 (9) WORKING GROUP.—The term “Working Group” means the Critical Minerals Working
21 Group established under section 104(a).

22 TITLE I—DESIGNATIONS AND POLICIES

23 SEC. 101. DESIGNATIONS.

24 (a) Draft Methodology.—Not later than 60 days after the date of enactment of this Act, the
25 Secretary shall publish in the Federal Register for public comment a draft methodology for
26 determining which minerals qualify as critical minerals based on an assessment of whether the
27 minerals are—

28 (1) subject to potential supply restrictions (including restrictions associated with foreign
29 political risk, abrupt demand growth, military conflict, and anti-competitive or protectionist
30 behaviors); and

31 (2) important in use (including clean energy technology-, defense-, and health care-
32 related applications).

33 (b) Review of Methodology.—After reviewing public comments on the draft methodology
34 under subsection (a) and updating that methodology as appropriate, the Secretary shall enter into
35 an arrangement with the National Academy of Sciences to obtain, not later than 180 days after
36 the date of enactment of this Act—

1 (1) a review of the methodology; and

2 (2) recommendations for improving the methodology.

3 (c) Final Methodology.—After reviewing the recommendations of the National Academy of
4 Sciences, not later than 240 days after the date of enactment of this Act, the Secretary shall
5 publish in the Federal Register a description of the final methodology for determining which
6 minerals qualify as critical minerals.

7 (d) Designations.—Not later than 1 year after the date of enactment of this Act, the Secretary
8 shall publish in the Federal Register a list of minerals designated as critical, pursuant to the final
9 methodology under subsection (c), for purposes of carrying out this Act.

10 (e) Subsequent Review.—The methodology and designations developed under subsections (c)
11 and (d) shall be updated at least every 5 years, or in more regular intervals if considered
12 appropriate by the Secretary.

13 (f) Notice.—On finalization of the methodology under subsection (c), the list under subsection
14 (d), or any update to the list under subsection (e), the Secretary shall submit to the applicable
15 committees written notice of the action.

16 SEC. 102. POLICY.

17 (a) Policy.—It is the policy of the United States to promote an adequate and stable supply of
18 critical minerals, produced in an environmentally sound manner, in order to strengthen the
19 economic security, manufacturing, industrial, energy, and technological stature of the United
20 States.

21 (b) Coordination.—The President, acting through the Executive Office of the President, shall
22 coordinate the actions of Federal agencies under this and other Acts—

23 (1) to promote the development of economically stable and environmentally sound
24 domestic critical mineral production and manufacturing;

25 (2) to establish an assessment capability for identifying critical mineral demand, supply,
26 and other market dynamics relevant to policy formulation;

27 (3) to increase the efficient use and recycling of critical minerals;

28 (4) to develop alternatives to critical minerals;

29 (5) to strengthen educational capabilities and workforce training;

30 (6) to bolster international cooperation;

31 (7) to minimize duplication, needless paperwork, and delays in the administration of
32 applicable laws (including regulations) and the issuance of permits and authorizations
33 necessary to explore for, develop, and produce critical minerals and construct and operate
34 critical mineral manufacturing facilities in an environmentally sound manner; and

35 (8) to encourage Federal agencies to facilitate the availability, development, and
36 environmentally sound production of domestic resources to meet national critical minerals
37 needs.

38 SEC. 103. RESOURCE ASSESSMENT.

1 (a) In General.—Not later than 2 years after the date of enactment of this Act, the Secretary
2 shall complete a comprehensive national assessment of critical mineral resources that—

3 (1) identifies and quantifies known critical mineral deposits;

4 (2) provides a quantitative assessment of the location and size of undiscovered critical
5 mineral deposits throughout the United States (including in the States of Alaska and
6 Hawaii) using all available public and private information and datasets; and

7 (3) identifies the mineral potential of land under the jurisdiction of the Bureau of Land
8 Management and the Forest Service and the quantity of that land with critical mineral
9 potential that has been withdrawn or restricted from mineral exploration, development, and
10 use.

11 (b) Field Work.—As part of the assessment under this section, the Secretary may carry out a
12 drilling program and other field work to supplement the geological data available for
13 determining the existence of critical minerals on—

14 (1) Federal land;

15 (2) Indian tribe land, at the request and with the written permission of the Indian tribe;
16 and

17 (3) State land, at the request and with the written permission of the Governor of a State.

18 (c) Technical Assistance.—At the request of the Governor of a State or an Indian tribe, the
19 Secretary may provide technical assistance to State governments and Indian tribes conducting
20 critical mineral resource assessments on non-Federal land.

21 (d) Grants.—The Secretary may make grants to Indian tribe economic development entities to
22 cover the costs associated with assessments of critical mineral resources on Indian tribe land.

23 (e) Report.—Not later than 3 years after the date of enactment of this Act, the Secretary shall
24 submit to the applicable committees of Congress a report describing the results of the assessment
25 conducted under this section.

26 (f) Updates.—The Secretary shall periodically update the assessment conducted under this
27 section based on the receipt of new information from critical mineral producers, State geological
28 surveys, institutions of higher education, trade associations, or other entities or individuals.

29 SEC. 104. PERMITTING.

30 (a) Critical Minerals Working Group.—

31 (1) IN GENERAL.—There is established within the Department of the Interior a working
32 group to be known as the “Critical Minerals Working Group”, which shall report to the
33 President and Congress through the Secretary.

34 (2) COMPOSITION.—The Working Group shall be composed of the following:

35 (A) The Secretary of the Interior (or a designee), who shall serve as co-chair of the
36 Working Group.

37 (B) A Presidential designee from the Executive Office of the President, who shall
38 serve as co-chair of the Working Group.

1 (C) The Secretary of Energy (or a designee).

2 (D) The Secretary of Agriculture (or a designee).

3 (E) The Secretary of Defense (or a designee).

4 (F) The Secretary of Commerce (or a designee).

5 (G) The Secretary of State (or a designee).

6 (H) The Director of the Office of Management and Budget (or a designee).

7 (I) The Chairman of the Council on Environmental Quality (or a designee).

8 (J) The Commanding General of the U.S. Army Corps of Engineers (or a designee).

9 (b) Duties.—The Working Group shall—

10 (1) monitor and assist Federal agencies in optimizing efficiencies, while maintaining
11 environmental protections, associated with the permitting of activities that will increase
12 exploration for, and development of, domestic critical minerals;

13 (2) assist Federal agencies in reviewing laws (including regulations) and policies that
14 discourage investment in, exploration for, and development of domestic critical minerals;

15 (3) assess whether Federal policies adversely affect the competitiveness of the domestic
16 mining industry and the exploration for, development, production, and processing of critical
17 minerals (including tax policies, regulatory burdens, restrictions on access to Federal land,
18 and actions on authorizations necessary to carry out critical mineral-related activities); and

19 (4) take such other actions to increase investment in, exploration for, and development of
20 domestic critical minerals as the Working Group considers appropriate to promote the
21 policy described in section 102(a).

22 (c) Report.—Not later than 120 days after the date of enactment of this Act, the Working
23 Group shall submit to the applicable committees a report that—

24 (1) describes the results of actions taken under subsection (b);

25 (2) evaluates the typical amount of time required (including range derived from minimum
26 and maximum durations, mean, median, variance, and other statistical measures or
27 representations) to complete each step (including those aspects outside the control of the
28 executive branch of the Federal Government, such as judicial review, applicant decisions, or
29 State and local government involvement) associated with the processing of applications,
30 operating plans, leases, licenses, permits, and other use authorizations for critical mineral-
31 related activities on land under the jurisdiction of the Bureau of Land Management and the
32 Forest Service, which shall serve as a baseline for development of a performance metric
33 developed and finalized under subsections (d) and (e), respectively; and

34 (3) identifies measures (including regulatory changes and legislative proposals) that
35 would optimize efficiencies, while maintaining environmental protections, associated with
36 the permitting of activities that will increase exploration for, and development of, domestic
37 critical minerals.

38 (d) Draft Performance Metric.—Not later than 240 days after the date of enactment of this
39 Act, and upon completion of the report required under subsection (c), the Working Group shall

1 publish in the Federal Register for public comment a draft description of a performance metric
2 for judging the progress made by the executive branch of the Federal Government on matters
3 within the control of that branch towards optimizing efficiencies, while maintaining
4 environmental protections, associated with the permitting of activities that will increase
5 exploration for, and development of, domestic critical minerals (referred to in this section as the
6 “performance metric”).

7 (e) Final Performance Metric.—Not later than 1 year after the date of enactment of this Act,
8 and after consideration of public comments received pursuant to subsection (d), the Working
9 Group shall publish in the Federal Register a final description of the performance metric.

10 (f) Annual Report.—Not later than 2 years after the date of enactment of this Act, using the
11 final performance metric under subsection (e), and annually thereafter, the Working Group shall
12 submit to the applicable committees of Congress, as part of the budget request of the Department
13 of the Interior for a fiscal year, a report that—

14 (1) describes the progress made by the executive branch of the Federal Government on
15 matters within the control of that branch towards optimizing efficiencies, while maintaining
16 environmental protections, associated with the permitting of activities that will increase
17 exploration for, and development of, domestic critical minerals; and

18 (2) compares the United States to other countries in terms of permitting efficiency,
19 environmental protection, and other criteria relevant to a globally competitive sector of the
20 economy.

21 (g) Report of Small Business Administration.—Not later than 120 days after the date of
22 enactment of this Act, the Administrator of the Small Business Administration shall submit to
23 Congress a report that assesses the performance of Federal agencies in—

24 (1) complying with chapter 6 of title 5, United States Code (commonly known as the
25 “Regulatory Flexibility Act”), in promulgating regulations applicable to the critical minerals
26 industry; and

27 (2) performing an analysis of regulations applicable to the critical minerals industry that
28 may be outmoded, inefficient, duplicative, or excessively burdensome.

29 (h) Judicial Review.—

30 (1) IN GENERAL.—Nothing in this section affects any judicial review of an agency action
31 under any other provision of law.

32 (2) CONSTRUCTION.—This section—

33 (A) is intended to improve the internal management of the Federal Government; and

34 (B) does not create any right or benefit, substantive or procedural, enforceable at law
35 or equity by a party against the United States (including an agency, instrumentality,
36 officer, or employee of the United States) or any other person.

37 SEC. 105. MANUFACTURING.

38 (a) Agreement.—At the request of the Governor of a State, the President may enter into a
39 cooperative agreement with the State for the processing of permits for critical mineral
40 manufacturing facilities (including those related to wind, solar, and geothermal energy, batteries,

1 and other energy storage devices) under which each party to the agreement identifies steps,
2 including timelines, that the party will take to optimize efficiencies, while maintaining
3 environmental protections, associated with the consideration of Federal and State permits for a
4 new critical mineral manufacturing facility.

5 (b) Authority Under Agreement.—In carrying out this section, the President may—

6 (1) accept from an applicant a consolidated application for all permits required by the
7 Federal Government, to the extent consistent with other applicable law;

8 (2) facilitate memoranda of agreement between Federal agencies to coordinate
9 consideration of applications and permits among Federal agencies; and

10 (3) enter into memoranda of agreement with a State, under which Federal and State
11 review of permit applications will be coordinated and concurrently considered, to the
12 maximum extent practicable.

13 (c) State Assistance.—The President may provide financial assistance to State governments to
14 facilitate the hiring of additional personnel with expertise in fields relevant to consideration of
15 critical mineral manufacturing-related permits.

16 (d) Other Assistance.—The President may provide technical, legal, or other assistance to State
17 governments to facilitate State review of applications to build new critical mineral manufacturing
18 capacity.

19 SEC. 106. RECYCLING AND ALTERNATIVES.

20 (a) Establishment.—The Secretary and the Secretary of Energy, shall jointly conduct a
21 program of research and development to promote the efficient use and recycling of, and
22 alternatives to, critical minerals.

23 (b) Cooperation.—In carrying out the program, the Secretaries shall cooperate with
24 appropriate—

25 (1) Federal agencies;

26 (2) critical mineral producers;

27 (3) critical mineral manufacturers;

28 (4) trade associations;

29 (5) institutions of higher education; and

30 (6) other relevant entities.

31 (c) Activities.—Under the program, the Secretaries shall carry out activities that include the
32 identification and development of—

33 (1) techniques and practices that lead to the more efficient use of critical minerals;

34 (2) techniques and practices that facilitate the recycling of critical minerals; and

35 (3) alternative minerals, metals, and materials, particularly those available in abundance
36 within the United States and not subject to potential supply restrictions, that lessen the need
37 for critical minerals.

1 (d) Report.—Not later than 2 years after the date of enactment of this Act and biennially
2 thereafter, the Secretaries shall submit to the applicable committees a report summarizing the
3 activities, findings, and progress of the program.

4 SEC. 107. ANALYSIS AND FORECASTING.

5 (a) Capabilities.—In order to improve the ability to evaluate the effectiveness of critical
6 mineral policies and programs, the Secretary, in coordination with the Administrator of the
7 Energy Information Administration to maximize the application of existing, computer-modeling
8 capabilities associated with use of the National Energy Modeling System and similar analytical
9 tools, shall conduct and publish the results of an annual report that includes—

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

13 (A) the quantity of critical minerals domestically produced during the preceding
14 year;

15 (B) the quantity of critical minerals domestically consumed during the preceding
16 year;

17 (C) market price data for each critical mineral;

18 (D) an assessment of—

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

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

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

26 (E) the quantity of critical minerals domestically recycled during the preceding year;

27 (F) the market penetration during the preceding year of alternatives to critical
28 minerals; and

29 (G) such other data, analyses, and evaluations as the Secretary finds are necessary to
30 achieve the purposes of this section; and

31 (2) a comprehensive forecast of projected domestic critical mineral production and
32 consumption patterns, including—

33 (A) the quantity of critical minerals projected to be domestically produced over the
34 subsequent 1-year, 5-year, and 10-year periods;

35 (B) the quantity of critical minerals projected to be domestically consumed over the
36 subsequent 1-year, 5-year, and 10-year periods;

37 (C) market price projections for each critical mineral, to the maximum extent
38 practicable and based on the best available information;

1 (D) an assessment of—

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

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

6 (iii) the projected implications of potential supply shortages, restrictions, or
7 disruptions;

8 (E) the quantity of critical minerals projected to be domestically recycled over the
9 subsequent 1-year, 5-year, and 10-year periods;

10 (F) the market penetration of alternatives to critical minerals projected to take place
11 over the subsequent 1-year, 5-year, and 10-year periods; and

12 (G) such other projections relating to critical minerals as the Secretary determines to
13 be necessary to achieve the purposes of this section.

14 (b) Proprietary Information.—In preparing a report described in subsection (a), the Secretary
15 shall ensure that—

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

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

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

26 SEC. 108. EDUCATION AND WORKFORCE.

27 (a) Workforce Assessment.—Not later than 1 year after the date of enactment of this Act, the
28 Secretary of Labor, in consultation with the Secretary of the Interior, shall submit to Congress an
29 assessment of the availability of technically trained personnel necessary for exploration, mining,
30 manufacturing, and use of critical minerals, including an analysis of—

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

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

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

35 (4) the effectiveness of training and education programs in addressing skills shortages;
36 and

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

1 (b) Programmatic Assessment.—Not later than 1 year after the date of enactment of this Act,
2 the Director of the Office of Science and Technology Policy shall submit to Congress an
3 assessment of the capabilities of Federal, State, and academic mining, mineral and metallurgical
4 research, and engineering programs relating to critical minerals.

5 (c) National Academy of Sciences Study.—

6 (1) IN GENERAL.—The Secretary, in coordination with the Secretary of Labor and the
7 Director of the Office of Science and Technology Policy, shall enter into an arrangement
8 with the National Academy of Sciences under which the Academy shall conduct a study—

9 (A) to design an interdisciplinary program on critical minerals that will support the
10 critical mineral supply chain and improve the ability of the United States to increase
11 domestic exploration for, and development of, critical minerals;

12 (B) to address undergraduate and graduate education, especially to assist in the
13 development of graduate level programs of research and instruction that lead to
14 advanced degrees with an emphasis on the critical mineral supply chain or other
15 positions that will increase domestic exploration for, and development of, critical
16 minerals;

17 (C) to develop guidelines for proposals from institutions of higher education with
18 substantial capabilities in the required disciplines to improve the critical mineral
19 supply chain and advance the capacity of the United States to increase exploration for,
20 and development of, critical minerals; and

21 (D) to outline a budget and recommendations for the amount of funding that will be
22 necessary to establish and carry out the grant program described in subsection (d).

23 (2) REPORT.—Not later than 2 years after the date of enactment of this Act, the Secretary
24 shall submit to Congress a description of the results of the study required under paragraph
25 (1).

26 (d) Grant Program.—

27 (1) ESTABLISHMENT.—The Secretary shall conduct a competitive grant program under
28 which institutions of higher education may apply for and receive 4-year grants for—

29 (A) startup costs for newly designated faculty positions in integrated critical mineral
30 innovation, training, and workforce development programs; and

31 (B) internships, scholarships, and fellowships for graduate students in critical
32 mineral programs created under subparagraph (A).

33 (2) RENEWAL.—A grant under this subsection shall be renewable for up to 2 additional 3-
34 year terms, based on performance criteria, established under the National Academy of
35 Sciences study conducted under subsection (c), that include the number of graduates in the
36 applicable program.

37 SEC. 109. INTERNATIONAL COOPERATION.

38 (a) Establishment.—The Secretary, in coordination with the Secretary of Energy (acting
39 through the Assistant Secretary of Policy and International Affairs) and the Secretary of State,
40 shall carry out a program to promote cooperation on critical mineral supply chain issues with

1 other countries.

2 (b) Activities.—Under the program, the Secretary may fund activities to work with other
3 countries—

4 (1) to increase the global, environmentally sound production of critical minerals;

5 (2) to improve the efficiency and environmental performance of extraction techniques;

6 (3) to increase the recycling of, and deployment of alternatives to, critical minerals; and

7 (4) to assist in the development and transfer of critical mineral extraction, processing, and
8 manufacturing technologies that would have a beneficial impact on world commodity
9 markets and the environment.

10 (c) Participation by Institutions of Higher Education.—To the maximum extent practicable,
11 the Secretary shall carry out the program in conjunction with institutions of higher education—

12 (1) to evaluate new technologies;

13 (2) to resolve technical issues; and

14 (3) to work with other countries in the development of new policies.

15 TITLE II—MINERAL-SPECIFIC ACTIONS

16 SEC. 201. LOW-BTU GAS CONSERVATION.

17 (a) Definitions.—In this section:

18 (1) LOW-BTU GAS.—The term “low-Btu gas” means a fuel gas with a heating value of less
19 than 250 Btu per cubic foot measured as the higher heating value resulting from the
20 inclusion of noncombustible gases, including nitrogen, helium, argon, and carbon dioxide.

21 (2) SECRETARY.—The term “Secretary” means the Secretary of Energy.

22 (b) Authorization.—The Secretary shall support programs of research, development,
23 commercial application, and conservation to expand the domestic production of low-Btu gas and
24 helium resources, including the programs described in subsection (c).

25 (c) Programs.—

26 (1) MEMBRANE TECHNOLOGY RESEARCH.—The Secretary, in consultation with
27 appropriate agencies, shall support a civilian research program to develop advanced
28 membrane technology that is used in the separation of gases from applications, including
29 technologies that—

30 (A) remove constituent gases that lower the Btu content of natural gas; or

31 (B) remove gases from landfills and separate out methane.

32 (2) HELIUM SEPARATION TECHNOLOGY.—The Secretary shall support a research program
33 to develop technologies for separating, gathering, and processing helium in low
34 concentrations that occur naturally in geologic reservoirs or formations, including low-Btu
35 gas production streams.

36 (3) INDUSTRIAL HELIUM PROGRAM.—The Secretary, working through the Industrial

1 Technologies Program of the Department of Energy, shall support a research program—

2 (A) to develop technologies for recycling, reprocessing, and reusing helium; and

3 (B) to develop industrial gathering technologies to capture helium from other
4 chemical processing, including ammonia processing.

5 (d) Incentives for Innovative Technologies.—Section 1703(b) of the Energy Policy Act of
6 2005 (42 U.S.C. 16513(b)) is amended by adding at the end the following:

7 “(11) Low-Btu gas (as defined in section 202(a) of the Critical Minerals Policy Act of
8 2011) and helium gas projects.”.

9 SEC. 202. HELIUM.

10 Not later than 2 years after the date of enactment of this Act, the Secretary of the Interior,
11 acting through the Director of the United States Geological Survey, shall—

12 (1) in coordination with appropriate heads of State geological surveys, complete a
13 comprehensive national helium gas assessment that identifies and quantifies the quantity of
14 helium in each reservoir, including assessments of the constituent gases found in each
15 helium resource, such as carbon dioxide, nitrogen, and natural gas; and

16 (2) submit to the Committee on Energy and Natural Resources of the Senate and the
17 Committee on Natural Resources of the House of Representatives a report describing the
18 results of the assessment.

19 SEC. 203. POTASH.

20 (a) In General.—The Secretary of the Interior, acting through the Director of the United States
21 Geological Survey (referred to in this section as the “Secretary”), in coordination with
22 appropriate heads of State geological surveys, shall complete a comprehensive national potash
23 assessment that—

24 (1) identifies and quantifies known potash deposits; and

25 (2) provides a quantitative assessment of the location and size of undiscovered potash
26 deposits throughout the United States using all available public and private information and
27 data sets.

28 (b) Drilling Program.—As part of the assessment under this section, the Secretary may carry
29 out a drilling program to supplement the geological data applicable to determining the existence
30 of potash.

31 (c) Review of Methodology.—As part of the assessment, the Secretary, in consultation with
32 the National Academies, shall—

33 (1) review the methodology used to determine measured and indicated reserves of potash
34 on public land; and

35 (2) provide recommendations for updating the methodology using the best available
36 technology.

37 (d) Report.—Not later than 2 years after the date of enactment of this Act, the Secretary shall
38 submit to the Committee on Energy and Natural Resources, and the Committee on Agriculture,

1 Nutrition, and Forestry, of the Senate and the Committee on Natural Resources, and the
2 Committee on Agriculture, of the House of Representatives a report describing the results of the
3 assessment under this section.

4 **SEC. 204. RARE EARTH ELEMENTS IN THE ARCTIC.**

5 (a) In General.—The Secretary of the Interior, acting through the Director of the United States
6 Geological Survey (referred to in this section as the “Secretary”), shall coordinate with the
7 Alaska Department of Natural Resources, in completing critical mineral assessments under
8 section 103 or any other provision of law, to ensure that the assessments—

9 (1) account for the most up-to-date information regarding rare earth element mineral
10 occurrences on State land; and

11 (2) pay particular attention to areas in which Federal and State land are interspersed.

12 (b) Administration.—In conducting the activities authorized under section 107, the Secretary
13 shall consider using the Arctic Region Supercomputing Center of the University of Alaska to
14 generate analyses and forecasts.

15 **SEC. 205. THORIUM.**

16 (a) Study.—The Secretary of Energy (referred to in this section as the “Secretary”), in
17 consultation with the Nuclear Regulatory Commission, shall conduct a study on the technical,
18 economic, and policy issues (including nonproliferation) associated with establishing a licensing
19 pathway for the complete thorium nuclear fuel cycle (including mining, milling, processing,
20 fabrication, reactors, disposal, and decommissioning) that—

21 (1) identifies the gaps in the technical knowledge that could lead to a licensing pathway;
22 and

23 (2) considers technologies and applications for any thorium byproducts of critical mineral
24 production or processing.

25 (b) Cooperation.—In conducting the study under subsection (a), the Secretary shall cooperate
26 with appropriate—

27 (1) trade associations;

28 (2) equipment manufacturers;

29 (3) National Laboratories;

30 (4) institutions of higher education; and

31 (5) other applicable entities.

32 (c) Report.—Not later than 2 years after the date of enactment of this Act, the Secretary shall
33 submit to the applicable committees a report summarizing the findings of the study.

34 **SEC. 206. ADMINISTRATION.**

35 Nothing in this title or an amendment made by this title affects the methodology or
36 designations established under section 101.

1 TITLE III—MISCELLANEOUS

2 SEC. 301. ADMINISTRATION.

3 Nothing in this Act or an amendment made by this Act modifies any requirement of—

4 (1) the Mining and Minerals Policy Act of 1970 (30 U.S.C. 21a);

5 (2) the National Materials and Minerals Policy, Research and Development Act of 1980
6 (30 U.S.C. 1601 et seq.); or

7 (3) the National Critical Materials Act of 1984 (30 U.S.C. 1801 et seq.).

8 SEC. 302. AUTHORIZATION OF APPROPRIATIONS.

9 There are authorized to be appropriated to carry out this Act and the amendments made by this
10 Act [\$____] for each of fiscal years [____] through [____], to remain available until expended.