To promote the domestic exploration, research, development, and processing of critical minerals to ensure the economic and national security of the United States, and for other purposes.

IN THE HOUSE OF REPRESENTATIVES

Mr. WALTZ introduced the following bill; which was referred to the Committee on

A BILL

To promote the domestic exploration, research, development, and processing of critical minerals to ensure the economic and national security of the United States, and for other purposes.

1 Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

3 SECTION 1. SHORT TITLE.

This Act may be cited as the “American Critical Mineral Independence Act of 2021”.

6 SEC. 2. FINDINGS; SENSE OF CONGRESS.

(a) FINDINGS.—Congress finds the following:
(1) The assured supply of critical minerals and the resiliency of critical mineral supply chains are essential to the economic prosperity and national defense of the United States.

(2) The United States is heavily dependent on foreign sources of critical minerals and on foreign supply chains resulting in the potential for strategic vulnerabilities to both the economy and the military.

(3) As deployment of clean energy technologies and emissions control devices increase, the demand for critical minerals will grow significantly.

(4) The United States is import-reliant for 30 of the 35 minerals designated as critical by the Department of the Interior and relies completely on imports to meet demand for 13 of these minerals.

(5) Over the past two decades China has produced more than 80 percent of the world’s rare-earth elements and processed chemicals and has had similar supply control over other critical minerals.

(6) China’s projected total metals demand growth rate suggests that within a decade China’s total annual metals demand will increase from today’s 55% to more than 75% of the total world production of all metals.
(b) Sense of Congress.—It is the sense of Congress that to break from China’s control on the mineral supply chain, the United States should support significant research and development activities to drive innovation in domestic critical minerals production, promote responsible development of critical minerals, and encourage international collaboration to limit the impact of mineral supply disruptions.

SEC. 3. DEFINITIONS.

In this Act:

(1) Byproduct.—The term “byproduct” has the meaning given such term in section 7002 of Division Z of the Consolidated Appropriations Act, 2021 (Public Law 116–260).

(2) Critical Mineral.—The term “critical mineral” has the meaning given such term in section 7002 of Division Z of the Consolidated Appropriations Act, 2021 (Public Law 116–260) except that such term shall not exclude materials described in subsection (a)(3)(B)(iii) of such section.

(3) Critical Mineral Project.—The term “critical mineral project” means a project—

(A) located on—

(i) a mining claim, millsite claim, or tunnel site claim for any locatable mineral;
(ii) lands open to mineral entry; or

(iii) a Federal mineral lease; and

(B) for the purpose of producing a critical mineral, including—

(i) as a byproduct, or a product of a host mineral, or from tailings; or

(ii) through an exploration project with respect to which the presence of a byproduct is a reasonable expectation, based on known mineral companionality, geologic formation, mineralogy, or other factors.

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

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

(6) STATE.—The term “State” means—

(A) a State;

(B) the District of Columbia;

(C) the Commonwealth of Puerto Rico;

(D) Guam;

(E) American Samoa;

(F) the Commonwealth of the Northern Mariana Islands; and
(G) the United States Virgin Islands.

(7) **LEAD AGENCY.**—The term “lead agency” means the agency with primary responsibility for issuing a mineral exploration or mine permit for a project.

(8) **MINERAL EXPLORATION OR MINE PERMIT.**—The term “mineral exploration or mine permit” means—

(A) an authorization of the Bureau of Land Management or the Forest Service, as applicable, for a premining activity that requires analysis under the National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq.);

(B) a plan of operations issued by the Bureau of Land Management or the Forest Service;

(C) a permit for a project located in an area for which a hardrock mineral permit or lease is available.

**TITLE I—CRITICAL MINERALS RESEARCH AND DEVELOPMENT**

**SEC. 101. CRITICAL MINERALS INTERAGENCY SUBCOMMITTEE.**

(a) **IN GENERAL.**—The Critical Minerals Subcommittee of the National Science and Technology Council
(referred to in this section as “Subcommittee”) shall co-
ordinate Federal science and technology efforts to ensure
secure and reliable supplies of critical minerals to the
United States.

(b) PURPOSES.—The purposes of the Subcommittee
shall be—

(1) to advise and assist the Committee on
Homeland and National Security and the National
Science and Technology Council on United States
policies, procedures, and plans as it relates to crit-
ical minerals, including—

(A) Federal research, development, and de-
ployment efforts to optimize methods for ex-
tractions, concentration, separation, and purifi-
cation of conventional, secondary, and uncon-
ventional sources of critical minerals;

(B) efficient use and reuse of critical min-
erals;

(C) the critical minerals workforce of the
United States; and

(D) United States private industry invest-
ments in innovation and technology transfer
from federally funded science and technology;

(2) to identify emerging opportunities, stimu-
late international cooperation, and foster the devel-
opment of secure and reliable supply chains of crit-
ical minerals;

(3) to ensure the transparency of information
and data related to critical minerals; and

(4) to provide recommendations on coordination
and collaboration among the research, development,
and deployment programs and activities of Federal
agencies to promote a secure and reliable supply of
critical minerals necessary to maintain national se-
curity, economic well-being, and industrial produc-
tion.

(c) RESPONSIBILITIES.—In carrying out paragraphs
(1) and (2), the Subcommittee shall, taking into account
the findings and recommendations of relevant advisory
committees—

(1) provide recommendations on how Federal
agencies may improve the topographic, geologic, and
geophysical mapping of the United States and im-
prove the discoverability, accessibility, and usability
of the resulting and existing data, to the extent per-
mitted by law and subject to appropriate limitation
for purposes of privacy and security; assess the
progress towards developing critical minerals recy-
cling and reprocessing technologies, and techno-
logical alternatives to critical minerals;
(2) examine options and provide recommendations for accessing and developing critical minerals through investment and trade with allies and partners of the United States;

(3) evaluate and provide recommendations to incentivize the development and use of advances in science and technology in the private industry;

(4) assess the need for, and make recommendations to address, the challenges facing the critical minerals supply chain workforce of the United States, including aging and retiring personnel and faculty; public perceptions about the nature of mining and mineral processing; and foreign competition for United States talent; and

(5) develop, and update as necessary, a strategic plan to guide Federal programs and activities to enhance scientific and technical capabilities across critical mineral supply chains, including a roadmap that identifies key research and development needs and coordinates ongoing activities for source diversification, more efficient use, recycling, and substitution for critical minerals; as well as cross-cutting mining science, data science techniques, manufacturing science and engineering, computational mod-
eling, and environmental health and safety research and development.

**SEC. 102. CRITICAL MINERALS MINING RESEARCH AND DEVELOPMENT AT THE NATIONAL SCIENCE FOUNDATION.**

(a) **In General.**—The Director of the National Science Foundation shall award grants, on a competitive basis, to institutions of higher education or nonprofit organizations (or consortium of such institutions or organizations) to support basic research that will accelerate innovation to advance critical minerals mining strategies and technologies for the purpose of making better use of domestic resources and eliminating national reliance on minerals and mineral materials that are subject to supply disruptions.

(b) **Use of Funds.**—Activities funded by a grant under this section may include—

(1) advancing mining research and development activities to develop new mapping and mining technologies and techniques, including advanced critical mineral extraction and production, to improve existing or to develop new supply chains of critical minerals and to yield more efficient, economical, and environmentally benign mining practices;
(2) advancing critical mineral processing research activities to improve separation, alloying, manufacturing or recycling techniques and technologies that can decrease the energy intensity, waste, potential environmental impact and costs of those activities;

(3) conducting long-term earth observatory of reclaimed mine sites, including the study of the evolution of microbial diversity at such sites;

(4) examining the application of artificial intelligence for geological exploration of critical minerals, including what size and diversity of data sets would be required;

(5) examining the application of machine learning for detection and sorting of critical minerals, and determining the size and diversity of data sets required for this analysis;

(6) conducting detailed isotope studies of critical minerals and the development of more refined geologic models; and

(7) providing training and researcher opportunities to undergraduate and graduate students to prepare the next generation of mining engineers and researchers.
SEC. 103. RARE EARTH ELEMENTS AND CRITICAL MINERALS PROCESSING TECHNOLOGIES.

(a) Research Program for the Recovery of Critical Minerals From Various Forms of Mine Waste and Metallurgical Activities.—

(1) In General.—The Secretary of Energy, in consultation with the Secretary, acting through the Office of Surface Mining Reclamation and Enforcement Applied Science Program, shall carry out a grant program—

(A) to research, develop, and assess advanced processing technologies and techniques for the extraction, recovery, and reduction of critical minerals, including rare earth elements, from various forms of mine waste and metallurgical activities, including mine waste piles, abandoned mine land sites, acid mine drainage sludge, byproducts produced through legacy mining and metallurgy activities, or oil shale; and

(B) to determine if there are, and mitigate if present, any potential environmental impacts that could arise from the recovery of critical minerals from these resources.

(2) Authorization of Appropriations.—To carry out the program under paragraph (1) there is
authorized to be appropriated to the Secretary of the Energy $15,000,000 for each of fiscal years 2022 through 2026, and to the Secretary of the Interior $10,000,000 for each of fiscal years 2022 through 2026.

(b) REPORT.—Not later than 1 year after the date of enactment of this Act, the Secretary of Energy, in consultation with the Secretary, shall submit to the Committee on Energy and Natural Resources of the Senate and the Committee on Natural Resources, the Committee on Science, Space, and Technology, and the Committee on Energy and Commerce of the House of Representatives a report evaluating the research and development of advanced processing technologies for the extraction, recovery, and reduction of critical minerals, including rare earth elements, from mine waste piles, acid mine drainage sludge, byproducts produced through legacy mining and metallurgy activities, or oil shale.

TITLE II—CRITICAL MINERAL DEVELOPMENT AND TECHNOLOGY SUPPORT

SEC. 201. PERMITTING.

(a) SENSE OF CONGRESS.—It is the sense of Congress that—
(1) critical minerals are fundamental to the economy, competitiveness, and security of the United States;

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

(3) the current Federal permitting process is an impediment to mineral production and the mineral security of the United States.

(b) COORDINATION ON PERMITTING PROCESS.—

(1) IN GENERAL.—The Secretary, in consultation with appropriate Federal agencies, shall, to the maximum extent practicable, with respect to the Federal permitting and review process for critical mineral projects on Federal land—

(A) establish and adhere to timelines and schedules for the consideration of, and final decisions regarding, applications, operating plans, leases, licenses, permits, and other use authorizations for mineral-related activities on Federal land;
(B) establish clear, quantifiable, and temporal permitting performance goals and tracking progress against those goals;

(C) engage in early collaboration among agencies, project sponsors, and affected stakeholders—

(i) to incorporate and address the interests of each such agency, sponsor, and stakeholder; and

(ii) to minimize delays;

(D) ensure transparency and accountability by using cost-effective information technology to collect and disseminate information regarding individual critical mineral projects and agency performance;

(E) engage in early and active consultation with State and local governments and Indian Tribes to avoid conflicts or duplication of effort, resolve concerns, and allow for concurrent, rather than sequential, State, local, Tribal, and Federal environmental and regulatory reviews;

(F) meet or exceed the performance metrics required by subsection (g);
(G) expand and institutionalize permitting
and review process improvements that have
proven effective;

(H) develop mechanisms to better commun-
icate priorities and resolve disputes among
agencies at the national, regional, State, and
local levels; and

(I) develop other practices to improve the
regulatory processes, such as preapplication
procedures.

(2) CONSIDERATIONS.—In carrying out para-
graph (1), the lead agency shall consider deferring
to, and relying on, baseline data, analyses, and re-
views performed by State agencies with jurisdiction
over the proposed critical mineral project.

(3) MEMORANDUM OF AGREEMENT.—The lead
agency with respect to a critical mineral project on
Federal land, in consultation with any other Federal
agency with jurisdiction over such project, shall,
upon request of the project sponsor, a State or local
government, an Indian Tribe, or other entity such
lead agency determines appropriate, establish a
memorandum of agreement with the project sponsor,
a State or local government, an Indian Tribe, or an-
other entity such lead agency determines appropriate
to carry out the activities described in this sub-
section.

(4) **TIME LIMIT FOR PERMITTING PROCESS.**—
Notwithstanding any other provision of law, and ex-
cept with agreement of the project sponsor, the total
period for all necessary Federal reviews and permit
consideration for a critical mineral project on Fed-
eral land reasonably expected to produce critical
minerals may not exceed—

(A) with respect to a project that requires
an environmental assessment under section
102(2)(C) of the National Environmental Policy
Act of 1969 (42 U.S.C. 4332(2)(C)), 18
months; or

(B) with respect to a project that requires
an environmental impact statement under such
section, 24 months.

(c) **DETERMINATION UNDER NATIONAL ENVIRON-
MENTAL POLICY ACT.**—

(1) **IN GENERAL.**—To the extent that the Na-
tional Environmental Policy Act of 1969 (42 U.S.C.
4321 et seq.) applies to the issuance of any mineral
exploration or mine permit relating to a critical min-
eral project, the lead agency may deem the require-
ments of such Act satisfied if the lead agency deter-
mines that a State or Federal agency acting under State or Federal law has addressed the following factors:

(A) The environmental impact of the action to be conducted under the permit.

(B) Possible alternatives to issuance of the permit.

(C) The relationship between long- and short-term uses of the local environment and the maintenance and enhancement of long-term productivity.

(D) Any irreversible and irretrievable commitment of resources that would be involved in the proposed action.

(2) PUBLICATION.—The lead agency shall publish a determination under paragraph (1) not later than 90 days after receipt of an application for the permit.

(3) VERIFICATION.—The lead agency shall publish a determination that the factors under paragraph (1) have been sufficiently addressed and public participation has occurred with regard to any authorizing actions before issuing any mineral exploration or mine permit for a critical mineral project.
(d) Schedule for Permitting Process.—For any critical mineral project for which the lead agency cannot make the determination described in subsection (c), at the request of a project sponsor, the lead agency, cooperating agencies, and any other agencies involved with the mineral exploration or mine permitting process shall enter into an agreement with the project sponsor that sets time limits for each part of the permitting process, including—

(1) the decision on whether to prepare an environmental impact statement or similar analysis required under the National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq.);
(2) a determination of the scope of any environmental impact statement or similar analysis required under such Act;
(3) the scope of, and schedule for, the baseline studies required to prepare an environmental impact statement or similar analysis required under such Act;
(4) preparation of any draft environmental impact statement or similar analysis required under such Act;
(5) preparation of a final environmental impact statement or similar analysis required under such Act;

(6) any consultations required under applicable law;

(7) submission and review of any comments required under applicable law;

(8) publication of any public notices required under applicable law; and

(9) any final or interim decisions.

e) ADDRESSING PUBLIC COMMENTS.—As part of the review process of a critical mineral project under the National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq.), the lead agency may not address any agency or public comments that were not submitted—

(1) during a public comment period or consultation period provided during the permitting process; or

(2) as otherwise required by law.

f) REVIEW AND REPORT.—Not later than 1 year after the date of enactment of this Act, the Secretary and the Secretary of Agriculture shall submit to Congress a report that—

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

(2) identifies options (including cost recovery
paid by permit applicants, as appropriate) for ensur-
ing adequate staffing and training of Federal enti-
ties and personnel responsible for the consideration
of applications, operating plans, leases, licenses, per-
mits, and other use authorizations for critical min-
eral projects on Federal land;

(3) quantifies the amount of time typically re-
quired (including a range derived from minimum
and maximum durations, mean, median, variance,
and any other statistical measure or representation
the Secretary and the Secretary of Agriculture de-
termine appropriate) to complete each step (includ-
ing those aspects outside the control of the executive
branch, such as judicial review, applicant decisions,
or State and local government involvement) associ-
ated with the development and processing of applica-
tions, operating plans, leases, licenses, permits, and
other use authorizations for a mineral exploration or
mine permit for a critical mineral project; and

(4) describes actions carried out pursuant to
subsection (b).
(g) PERFORMANCE METRIC.—Not later than 90 days after the date of submission of the report under subsection (f), the Secretary and the Secretary of Agriculture, after providing public notice and an opportunity to comment, shall develop and publish a performance metric for evaluating the progress made by the executive branch to expedite the permitting of critical mineral projects.

(h) ANNUAL REPORTS.—Beginning with the first budget submission by the President under section 1105 of title 31, United States Code, after publication of the performance metric required under subsection (g), and annually thereafter, the Secretary and the Secretary of Agriculture shall jointly submit to Congress a report that—

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

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

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

(i) **INDIVIDUAL PROJECTS.**—Using data from the Secretary of Agriculture and the Secretary generated under subsection (h), the Director of the Office of Management and Budget shall prioritize inclusion of individual critical mineral projects on the website operated by the Office of Management and Budget in accordance with section 1122 of title 31, United States Code.

(j) **REPORT OF SMALL BUSINESS ADMINISTRATION.**—Not later than 1 year and 300 days after the date of enactment of this Act, the Administrator of the Small Business Administration shall submit to the Committees on Small Business and Natural Resources of the House of Representatives and Small Business and Entrepreneurship and Energy and Natural Resources of the Senate a report that assesses the performance of Federal agencies with respect to—

(1) complying with chapter 6 of title 5, United States Code, in promulgating regulations applicable to the critical minerals industry; and

(2) performing an analysis of regulations applicable to the critical minerals industry that may be outmoded, inefficient, duplicative, or excessively burdensome.
SEC. 202. TECHNOLOGY GRANTS.

(a) In General.—The Secretary, in coordination with the Secretary of Energy, shall establish a competitive grant program to conduct studies, research, and demonstration projects relating to the production of critical minerals, including—

1. studies of mining, mineral extraction efficiency, and related processing technology;
2. reclamation technology and practices for active mining operations;
3. the development of remining systems and technologies that facilitate reclamation that fosters the recovery of resources at abandoned mine sites;
4. investigations of critical mineral extraction methods that reduce environmental and human impacts;
5. reducing dependence on foreign energy and mineral supplies through increased domestic critical mineral production;
6. enhancing the competitiveness of United States energy and mineral technology exports;
7. the extraction or processing of coinciding mineralization, including rare earth elements, within coal, coal processing byproduct, overburden or coal residue;
(8) enhancing technologies and practices related to mitigation of acid mine drainage, reforestation, and revegetation in the reclamation of land and water resources adversely affected by mining;

(9) meeting challenges of extreme mining conditions, such as deeper deposits or offshore or cold region mining; and

(10) mineral economics, including analysis of supply chains, future mineral needs, and unconventional mining resources.

(b) Minimum Amount for Mining Schools.—Of amounts expended pursuant to this section, not less than 70 percent shall be expended to enhance and support mining and mineral engineering programs at mining schools in the United States.

(e) Public Participation.—The Secretary shall consult with relevant stakeholders and provide a significant opportunity for participation by undergraduate and graduate students at mining schools.

(d) Authorization of Appropriations.—There is authorized to be appropriated to carry out this title $10,000,000 for each of fiscal years 2022 through 2032.

(e) Mining School.—In this section, the term “mining school” means a mining, metallurgical, or mineral engineering program or department accredited by the A-
creditation Board for Engineering and Technology, Inc., that is located at an institution of higher education (as that term is defined in section 631(a) of the Higher Education Act of 1965 (20 U.S.C. 1132(a))) in the United States.

SEC. 203. ECONOMIC AND NATIONAL SECURITY ANALYSIS.

(a) Resource Assessments Required.—Federal lands and waters may not be withdrawn from entry under the mining laws or operation of the mineral leasing and mineral materials laws unless a quantitative and qualitative geophysical and geological mineral resource assessment of the impacted area has been completed during the 10-year period ending on the date of such withdrawal or has been certified as current by the Director of the United States Geological Survey.

(b) New Information.—If a resource assessment completed by the Director of the United States Geological Survey shows that a previously undiscovered deposit is likely present in an area that has been withdrawn from entry under the mining laws or operation of the mineral leasing and mineral materials laws pursuant to—

(1) section 204 of the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1714), the Secretary shall update the existing Resource Management Plan for such area; or
(2) chapter 3203 of title 54, United States Code, the Secretary shall provide recommendations to the President on appropriate measures to reduce unnecessary impacts that the withdrawal may have on critical mineral exploration, development, and other mining activities.

(e) Resource Management Plans.—Before a resource management plan under the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1701 et seq.) is updated or completed, the Secretary or Secretary of Agriculture, as applicable, shall, in consultation with the Director of the United States Geological Survey—

(1) review a quantitative and qualitative mineral resource assessment that was completed or updated during the 10-year period ending on the date the resource management plan is updated or completed or is certified as current by the Director of the United States Geological Survey for the geographic area affected by the resource management plan; and

(2) in consultation with the Departments of Commerce and Defense, consider the economic, strategic and national security value of mineral deposits in the impacted geographic area affected by the resource management plan.
(d) **Previously Undiscovered Deposit.**—In this section, the term “previously undiscovered deposit” means a deposit that has been previously evaluated by the United States Geological Survey and found to be of low mineral potential but upon subsequent evaluation is determined to have recoverable quantities of a critical mineral.

**SEC. 204. CONGRESSIONAL APPROVAL.**

(a) **Moratoria.**—Notwithstanding any other provision of law, the Secretary may not declare a moratorium on issuing leases, claims, or permits on Federal lands, including on the Outer Continental Shelf, for the mining of critical minerals, or related activities unless such moratorium is authorized by an Act of Congress.

(b) **Limitation.**—Notwithstanding any other provision of law, the Secretary may not withdraw Federal lands and waters from entry under the mining laws or operation of the mineral leasing and mineral materials laws for the mining of critical minerals without congressional approval if such withdrawal—

(1) exceeds 5,000 acres in a single withdrawal;

or

(2) is of a parcel the exterior boundary of which is less than 50 miles away from the exterior boundary of another parcel that was withdrawn during the
1-year period ending on the date of withdrawal of the parcel at issue.