

CHARTER of the

SUBCOMMITTEE ON CRITICAL AND STRATEGIC MINERAL SUPPLY CHAINS COMMITTEE ON ENVIRONMENT, NATURAL RESOURCES, AND SUSTAINABILITY NATIONAL SCIENCE AND TECHNOLOGY COUNCIL

A. Official Designation

The Subcommittee on Critical and Strategic Mineral Supply Chains (CSMSC) is hereby reestablished by action of the National Science and Technology Council (NSTC) Committee on Environment, Natural Resources, and Sustainability (CENRS).

B. Purpose and Scope

Mineral resources are crucial to production in energy, information, and defense. These resources are equally important for consumer electronics, oil refining, medical technology, and pollution control. Access to and availability of these resources are sensitive to disruptions in global supply that may be exacerbated by geographic concentration of production outside of the United States. Furthermore, consideration must be given to constraints on such resources both as raw commodities and as part of a broader manufacturing supply chain. These are key resources for U.S. economic, energy, and national security goals. The purpose of the Subcommittee on Critical and Strategic Mineral Supply Chains is to advise and assist the CENRS and the NSTC on policies, procedures, and plans relating to identification and forecasting of mineral criticality and risk mitigation in the procurement and downstream processing of these minerals.

For the purposes of this Subcommittee, a mineral is critical if it serves an essential function in the manufacture of a product, the absence of which would cause significant economic or social consequence, and if its supply chain is vulnerable to disruption. Indicia of criticality include low substitutability with other minerals, dependence on foreign imports for raw materials or refined product, and single versus multiple supplies of raw materials. Strategic minerals are a subset of critical minerals and are essential for national security applications. The supply chain considered is from mine to manufacture, and includes the mining of ores, extraction, and refining of minerals and the manufacture of components, such as magnets.¹

¹ The definitions used here are consistent with those established by the National Research Council in the 2008 report "Minerals, Critical Minerals, and the U.S. Economy" (http://www.nap.edu/catalog/12034/minerals-critical-minerals-and-the-us-economy). Note however that the Department of Defense's Strategic Materials Protection Board (SMPB) has defined these terms differently, regarding a strategic material as "A material 1) which is essential for important defense systems, 2) which is unique in the function it performs, and 3) for which there are no viable alternatives" and a critical material as "A strategic material for which 1) the DoD dominates the market for the material, 2) the DoD's full and active involvement and support are necessary to sustain and shape the strategic direction of the market, and

C. Functions

The Subcommittee will facilitate a strong, coordinated effort across Federal agencies to identify and address important policy implications arising from critical and strategic mineral supply issues. Such functions of the subcommittee will include:

- Implement and, as necessary, update the methodology developed cooperatively by CSMSC member agencies for dynamically assessing mineral criticality and for signaling emerging critical or strategic minerals;
- Review and analyze domestic and global policies that affect the supply of critical and strategic minerals, assess their implications on U.S. manufacturing, and evaluate potential strategies for risk mitigation as needed;
- Advise on international interactions involving critical and strategic mineral supply chains including standards, trade interactions, and research and development activities;
- Consider and offer recommendations for enhanced U.S. minerals data collection and economic analysis;
- Identify cross-agency opportunities in research and development and in education and training for addressing critical and strategic minerals across the life-cycle spectrum including extraction, processing, and recycling;
- Coordinate Federally-funded research and development of sustainable alternatives to critical and strategic minerals; and
- Conduct other functions as the membership shall deem necessary to meet the purpose of the subcommittee, subject to the approval of the CENRS.

Through its co-chairs, the Subcommittee will recommend action on major policy and research and development issues to the Committee on Environment, Natural Resources, and Sustainability for approval.

D. Membership

The following NSTC departments and agencies are represented on the CSMSC:

- · Department of Agriculture
- Department of Commerce
- Department of Defense
- Department of Education
- Department of Energy (Co-Chair)
- Department of Homeland Security
- Department of the Interior (Co-Chair)
- Department of Justice
- · Department of Labor
- Department of State
- Department of the Treasury
- Environmental Protection Agency
- National Aeronautics and Space Administration
- National Science Foundation

³⁾ there is significant and unacceptable risk of supply disruption due to vulnerable U.S. or qualified non-U.S. suppliers." (See SMPB report at:

The following organizations in the Executive Office of the President shall also be represented on the CENRS Subcommittee on Critical and Strategic Mineral Supply Chains:

- Council on Environmental Quality
- National Economic Council
- · National Security Council
- Office of Management and Budget
- Office of Science and Technology Policy (Co-Chair)
- Office of the U.S. Trade Representative

Cooperating departments and agencies may include other Executive organizations, departments, and agencies when designated by the co-chairs. The CSMSC will also strive to enhance the Federal research and development enterprise by embracing diversity, recognizing that inclusion of a broad range of backgrounds and perspectives is critical to achieving robust intellectual dialogue.

E. Private Sector Interface

The CSMSC may work with the President's Council of Advisors on Science and Technology (PCAST) to secure appropriate private sector advice, and will recommend to the CENRS and/or the Assistant to the President for Science and Technology the nature of any additional private-sector advice needed to accomplish its mission. The CSMSC may also interact with and receive ad hoc advice from various private-sector groups as consistent with the Federal Advisory Committee Act.

F. Termination Date

Unless renewed by the Co-Chairs of the CENRS prior to its expiration, the CSMSC shall terminate no later than April 30, 2017.

G. Determination

I hereby determine that the reestablishment of the Subcommittee on Critical and Strategic Mineral Supply Chains is in the public interest in connection with the performance of duties imposed on the Executive Branch by law, and that such duties can best be performed through the advice and counsel of such a group.

Approved:

Tamara Dickinson

Co-Chair, Committee on Environment, Natural Resources, . and Sustainability of the NSTC; and

Principal Assistant Director for Environment and Energy

Office of Science and Technology Policy

Executive Office of the President

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Date

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Date

Thomas Burke

Co-Chair, Committee on Environment, Natural Resources, and Sustainability of the NSTC; and

Deputy Assistant Administrator, Office of Research and Development and Science Advisor

Environmental Protection Agency

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Date

Kathryn SuNivan

Co-Chair, Committee on Environment, Natural Resources, and Sustainability of the NSTC;

Administrator, National Oceanic and

Atmospheric Administration; and

Under Secretary of Commerce for Oceans and Atmosphere

Department of Commerce