

ONE HUNDRED EIGHTEENTH CONGRESS
Congress of the United States
House of Representatives
COMMITTEE ON ENERGY AND COMMERCE
2125 RAYBURN HOUSE OFFICE BUILDING
WASHINGTON, DC 20515-6115
Majority (202) 225-3641
Minority (202) 225-2927

October 21, 2024

The Honorable Gene L. Dodaro
Comptroller General of the United States
U.S. Government Accountability Office
441 G Street, NW
Washington, DC 20548

Dear Mr. Dodaro:

The Department of Energy's (DOE's) Isotope Program produces and sells hundreds of high priority isotopes that are rare but essential for the production of strategically important commodities in national security, advanced manufacturing, and medicine. The DOE is often the only, or one of very few, global producers of such isotopes,¹ which are in short supply or represent a supply chain risk for U.S. industries. However, the United States still relies on obtaining several materials and commercially produced isotopes from other, sometimes adversarial countries, like Russia, on which it may not be expedient to depend. The Government Accountability Office (GAO) last reviewed the DOE Isotope Program over a decade ago ([GAO-12-591](#)) during a period of increased concern over our reliance on countries like Russia and our insufficient domestic capacity to shore up domestic production.

These concerns have persisted and are of increased focus since 2021 as the United States considers the effects of Russia's invasion of Ukraine. For example, according to a 2022 testimony by the executive director of the Council on Radionuclides and Radiopharmaceuticals, the United States still relies nearly exclusively on Russia to obtain 44 isotopes that are critical in industrial applications and cancer treatment.² Russia's state-owned nuclear corporation, Rosatom, could at any moment withhold such isotopes, and has used our dependence on this supply to avoid American sanctions and shore up Russian production of otherwise sanctioned military components for use in Russia's war of aggression in Ukraine.³ Americans could face unforeseen impacts caused by disruptions in imports of isotopes, given the lack of insight and influence the United States has on the production processes in countries like Russia. China, too, has emerged as a new global supplier of stable isotopes, positioning the United States for even further foreign reliance to keep Americans healthy and safe.

¹ DOE's National Nuclear Security Administration supplies the program with a critical subset of isotopes, which are generated as by-products of NNSA's nuclear weapons program.

² Michael J. Guastella, Written Testimony before House Science Committee, June 22, 2022.

³ Lloyd Doggett, "Russia's Rosatom Fuels Putin's War Machine." Foreign Policy, April 9, 2024.

The DOE Isotope Program has been working for at least a decade to shore up domestic isotope development and free the United States from a position of dependence, but its progress in doing so is unclear. Current U.S. production still has not replaced our reliance on Russia and possibly other high-risk countries, and several proposed DOE facilities conceived as major contributors to the U.S. domestic supply chain remain in the design phase or, at best, under construction (chief among these is Oak Ridge’s Stable Isotope Production and Research Center, or SIPRC, which is reportedly not expected to start production until 2032). These dynamics raise serious questions and concerns about the security of the U.S. supply chain for these critical isotopes.

Additionally, numerous technological and commercial trends affecting industries that require rare isotopes have also emerged since GAO’s last report. These trends include advances in quantum computing, concerns over bottlenecks in the microprocessor supply chain, the expansion of markets for alternative energy supplies and electric-vehicle batteries, and increases in U.S. biodefense spending following the COVID-19 pandemic.⁴ According to its fiscal year 2025 budget request, DOE is in the process of re-prioritizing the DOE Isotope Program’s R&D investments to focus on these areas and requested a 68 percent budget increase for the program over its enacted 2023 budget to address these and other emerging priorities. In the meantime, Congress, as part of its fiscal year 2024 emergency supplemental appropriations bill this past April, provided DOE \$98 million for the development and production of medical, stable, and radioactive isotopes.

Given the myriad global and technological challenges affecting the U.S. isotope market, we request that GAO conduct a comprehensive review of the DOE Isotope Program, including whether and how it is planning to address such challenges. Specifically, we would like GAO to address the following questions:

1. Which isotopes are currently produced, sold, or distributed (or planned to be) domestically, including by the DOE Isotope Program and the National Nuclear Security Administration, and to what extent are these production activities aligned with current and projected needs of U.S. commercial, medical, national security, and research entities?
2. What geopolitical, technological, and other risks affect the supply chain for isotopes on which the U.S. relies?
3. To what extent have the DOE Isotope Program and the National Nuclear Security Administration assessed these risks and developed mitigation plans for them, and to what extent have these plans been implemented?

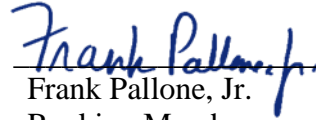
Thank you for your attention to this matter. If you have any questions, please contact Committee Majority staff at (202) 225-3641 or the Committee Minority staff at (202) 225-2927.

⁴ Council on Strategic Risks, “Biodefense Budget Breakdown: Data Visualization of U.S. Biodefense Investments,” December 7, 2023. Accessed on 3/19/2024 at <https://councilonstrategicrisks.org/nolan/biodefense-budget-breakdown/>

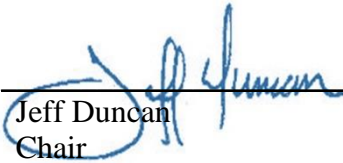
Sincerely,



Cathy McMorris Rodgers
Chair
Committee on Energy and Commerce



Frank Pallone, Jr.
Ranking Member
Committee on Energy and Commerce



Jeff Duncan
Chair
Subcommittee on Energy, Climate, and
Grid Security



Diana DeGette
Ranking Member
Subcommittee on Energy, Climate, and
Grid Security