



One Physics Ellipse College Park, MD 20740-3844 aps.org

President Philip H. Bucksbaum Stanford University and SLAC National Accelerator Laboratory

President-Elect Sylvester James Gates, Jr. Brown University

## Vice President

Frances Hellman University of California, Berkeley Lawrence Berkeley National Laboratory

## Past President

**David J. Gross** Kavli Institute for Theoretical Physics University of California, Santa Barbara

Chief Executive Officer

Kate P. Kirby American Physical Society

## May 4, 2020

The Honorable Lisa Murkowski Chairwoman Committee on Energy and Natural Resources U.S. Senate 304 Dirksen Senate Building Washington, DC 20510

The Honorable Raúl M. Grijalva Chairman Committee on Natural Resources U.S. House of Representatives 1324 Longworth HOB Washington, DC 20515 The Honorable Joe Manchin Ranking Member Committee on Energy and Natural Resources U.S. Senate 304 Dirksen Senate Building Washington, DC 20510

The Honorable Rob Bishop Ranking Member Committee on Natural Resources U.S. House of Representatives 1324 Longworth HOB Washington, DC 20515

RE: Continued access to Federal Helium Reserve for federally funded users

Dear Chairwoman Murkowski, Ranking Member Manchin, Chairman Grijalva and Ranking Member Bishop:

As elected leaders of the American Physical Society – the nation's largest physics organization with more than 55,000 members across academia, industry and the national labs – we are writing to request urgent and necessary congressional action to ensure the U.S. research community has access to a reliable supply of affordable helium. Specifically, we urge you to continue to allow federal users, including any researchers supported by federal grants, access to the helium marked for federal use remaining in the Federal Helium Reserve after September 30, 2022 – the date by which the General Services Administration (GSA) will complete their disposal process.

There is no replacement for helium. It is unique among all elements for its ability to reach ultra-cold temperatures, making it one of our nation's mostvaluable, non-renewable and irreplaceable natural resources. The U.S. scientific enterprise depends on a steady, reliable and affordable supply of helium. For tens of thousands of scientists and engineers across our innovation ecosystem, with research projects ranging from quantum information science to nextgeneration energy materials to space exploration, helium is essential to performing their work. Helium is also a critical component of medical devices and treatments, including MRI machines, that Americans depend on every day. Thus, maintaining access to the Reserve's approximately 3 billion cubic feet of helium marked for federal use is critical to our economic security, global competitiveness and national security.

The potential sale of the Reserve and its remaining helium, along with notable supply chain disruptions, are impacting the operations of U.S. scientific, medical and industrial activities. The severity of the situation is illustrated by recent price increases for university researchers across the country. According to a survey conducted by our Society, the average price of liquid helium for academic researchers has increased by nearly 25% from 2018 to 2019; some researchers' prices have more than tripled.

For some researchers, the situation is far worse as they are having difficulty securing helium at any price. In some instances, they have already started purchasing helium from providers that import it from abroad. Without continued access to the Reserve, researchers could ultimately come to depend on helium imported from other countries, including Qatar, Russia and Algeria. Given we currently have a domestic strategic stockpile of helium, forcing our research community to rely on other nations for this critical resource would not be prudent.

With the Bureau of Land Management set to end its management of the Federal Helium Reserve by September 2021, now is the time for Congress to act to ensure U.S. researchers continue to have access to a stable and affordable supply of helium. We urge you, as the leaders of the Congressional committees with jurisdiction over the nation's Federal Helium Reserve, to take the necessary steps to ensure that federal users, including any academic researchers supported by federal grants, maintain access after September 30, 2022 to the helium marked for federal use that is currently stored in the Reserve.

Thank you for your consideration. We stand ready to work with you and your colleagues to develop and enact policies that will ensure that federally sponsored researchers have the stable supply of affordable helium necessary to fuel the U.S. scientific enterprise.

Sincerely,

Philip H. Bochstan

Phil Bucksbaum President, APS

Eva itudiei

Eva Andrei Chair, APS Division of Condensed Matter Physics

antoinette J. Taylon

Antoinette Taylor Chair, APS Division of Materials Physics

Yol J. Boleni

John Bollinger Chair, APS Division of Atomic, Molecular and Optical Physics

forte

Jay Gambetta Chair, APS Division of Quantum Information