

United States Senate

WASHINGTON, DC 20510-0609

December 9, 2021

Dave Applegate
Acting Director
US Geological Survey
1849 C St NW
Washington, DC 20240

Dear Acting Director Applegate,

We write to you to strongly urge you not to remove potash from the U.S. Geological Survey, Department of the Interior 2021 List of Critical Minerals and to add phosphate as a critical mineral. As you are aware, we are facing a serious supply shortage of fertilizers for our farmers and ranchers leading to prices more than doubling for potash and phosphate fertilizers. Nothing is more core to national security than food security, and without fertilizer, American agricultural yields will quickly suffer and so too will Americans who have long enjoyed affordable food prices.

The Critical Minerals List published to the federal register on May 18, 2018, included potash as a critical mineral. However, the updated draft list of minerals removed potash in its findings. Furthermore, a 2018 National Science and Technology Council Report identified phosphate as a potentially critical mineral, yet phosphate has not been listed as a critical mineral in any draft lists.

To us, it is clear – under the definition of “critical mineral” potash should remain as a critical mineral and phosphate should be added to the list of critical minerals. There are three criteria under the Energy Act of 2020 that define critical minerals. First, they must be essential to the economic or national security of the United States. Both minerals are critical to our economic and national security. History shows that a food secure nation is stronger and more resilient to geopolitical threats. If you interrupt the food system that threatens national security. Agriculture is also extremely important to the U.S. economy and foreign trade and has typically been a positive contributor to our global trade balance. In many states agriculture is the largest economic driver.

For the second criteria, the supply chain of the mineral must be vulnerable to disruption (including restrictions associated with foreign political risk, abrupt demand growth, military conflict, violent unrest, anti-competitive or protectionist behaviors, and other risks through-out the supply chain). If we have learned anything from COVID-19, it is that our food supply chain is especially vulnerable to disruption. Minerals that create fertilizer are just another example of that disruption. Adding these two as critical minerals will strengthen our supply chain. Potash in the United States only comes from a few sources: one domestic producer, Canada, Russia, and Belarus. Currently, Belarus is under trade sanctions due to human rights violations and that nation is the third largest producer and exporter globally. Our relationship with Russia is certainly not free of political risk nor anti-competitive behavior. While Canada is a quality trading partner, putting all our potash import eggs in one basket is not a smart strategy. If Canada were to limit exports of potash to protect its domestic agricultural production, it would be particularly challenging for the United States to find alternative supplies, given that only six countries

account for over 97% of total global exports. This is not unheard of considering several countries are doing just that to drive down the cost of agricultural production in their own countries.

Phosphate is under even more of a geopolitical threat. China recently banned the export of phosphate fertilizer through June 2022 which puts pressure on the global market. China accounted for 25% of global processed phosphate exports in 2020. Russia recently set a six-month quota on phosphate fertilizers. Russia accounted for 10% of global processed phosphate exports in 2020. The U.S. International Trade Commission has also issued countervailing duties on phosphate from Russia and Morocco which clearly indicates a global market of anti-competitive behavior.

For the final criteria, the mineral must serve an essential function in the manufacturing of a product (including energy technology-, defense-, currency-, agriculture-, consumer electronics-, and healthcare-related applications), the absence of which would have significant consequences for the economic or national security of the United States. It is abundantly clear that these two minerals serve an essential function in agricultural production. Both potash and phosphate are vital crop nutrients used in farming practices and are essential nutrients for plant life. The necessity of fertilizer for sustainable, stable, and sufficient yields cannot be overstated.

While much of DOI's critical mineral list is focused on defense and high technology needs, agricultural minerals are underrepresented and should not be overlooked. Potash is the sole mineral on the current list whose primary use is agricultural. Removing potash would create greater risks of disruption and political exploitation for our nation's farmers at a time when there are a range of challenges already impacting the supply of agricultural inputs. As published in the Mineral Commodities Summaries 2021, the USGS states "No substitutes exist for potassium as an essential plant nutrient and as an essential nutritional requirement for animals and humans." Potash and phosphate address fundamental needs—the ability to meet the country's food requirements reliably and sustainably—and should be added to the critical minerals list. Additionally, during fertilizer production, phosphate deposits contain some rare earth elements (REEs) that have been identified as critical minerals. Accordingly, phosphate should be granted the same identification as those REEs.

As the U.S. agriculture sector continues to be vital to a strong American economy and feed not only the country, but the world, it remains important that these vital crop nutrients are recognized. The rising cost of fertilizer will not only increase food insecurity domestically and abroad, but that increase in hunger and starvation will increase geopolitical tension across the world. Both potash and phosphate serve as essential components to the agricultural supply chain due to their role as crop nutrients and should be included in the 2021 list of critical minerals. Thank you for your attention to this matter.

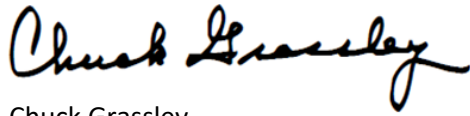
Sincerely,



Roger Marshall, M.D.
United States Senator



John Boozman
United States Senator



Chuck Grassley
United States Senator



John Hoeven
United States Senator



Mike Braun
United States Senator



John Thune
United States Senator



Tommy Tuberville
United States Senator

Cc:

The Honorable Deb Haaland
The Honorable Lloyd Austin
The Honorable Gina Raimondo
The Honorable Tom Vilsack
The Honorable Jennifer Granholm