

Potash and Phosphate as Critical Minerals



The fertilizer industry is essential to food security, and therefore our national security. As with other industries, fertilizer supply chains are vulnerable to disruption. Among the policy solutions to ensure that the United States has a strong domestic fertilizer production capacity are both recognizing the critical importance of the resource dependent fertilizers potash and phosphate, and increasing the efficiency of the permitting process for related projects.

Policy Ask

- Require USGS include both potash and phosphate in their definition of “critical minerals.”
- Pass NEPA permitting reform legislation such as the BUILDER Act (H.R. 2515) or utilize other legislative vehicles to ensure environmental reviews are more efficient, reduce duplicative regulatory burdens, and provide a clear path to permit approvals.
- Absent a complete overhaul of NEPA, update NEPA to include the following provisions for potash and phosphates:
 - Mandate that the time period for the total review process shall not exceed 30 months.
 - Allow applicant or consulting party to develop the Environmental Impact Statement.
 - Mandate that all federal register notices required on DOI projects be considered simultaneously by all agencies and published within the federal register not later than 45 days after initial development.

Overview

Both potash and phosphate meet the critical minerals definition included in The Energy Act of 2020 related to national security, supply chain vulnerabilities, and the essential function agriculture. However, neither mineral was included in the Department of Interior’s (DOI) 2022 list of critical minerals. Potash was included in the 2018 list, but phosphate was again absent.

Once a substance is listed as a critical mineral, a single agency is assigned to the permit application and is responsible for coordinating with all other agencies necessary for final approval. However, the designation does not offer any relief from environmental reviews or streamlined permitting. The primary advantage available to the permittee remains in the ability to encourage the responsible agency to expedite the permit through the process.

Potash's Vulnerability to Disruption

The U.S. is one of the largest importers of potash and typically relies on imports for 90-95% of its potash supply. Production of potash is highly concentrated since it can only be produced where rock is found and is present in only fourteen countries. Global potash production is led by Canada (32%), Russia (19%), and Belarus (17%). In 2022, the DOI determined that potash did not meet the quantitative threshold to make it on the critical minerals list but scored it just below the quantitative threshold.

The determination to leave potash off the list seems to have relied on the assumption that disruption was unlikely since the U.S. relies on Canada, a friendly trading partner, for the majority of its imports. In the first quarter of 2022, we bore witness to two major disruptions to potash imports from Canada. The first disruption occurred in January when both the U.S. and Canada issued cross-border vaccination mandates for truckers. The second disruption occurred in March when CP and the Teamsters Canada union went on strike.

While the exact impacts of these occurrences are unknown at this time, they have certainly impacted the U.S. potash supply and one cannot say with certainty that similar situations won't occur in the future.

Phosphate's Vulnerability to Disruption

Domestic phosphate supply is highly exposed to trade shocks that threaten the economic well-being of U.S. producers, farmers, and consumers. Current models estimate that the U.S. phosphate ore reserves will be exhausted in 50 years and net import reliance is expected to increase because of increased demand for fertilizer to feed a growing global population. China is the largest global phosphate producer, however, historically the largest sources of phosphate products imported into the U.S. were from Morocco and Russia. While the US does have phosphate reserves and production, imports are critical and account for 27% of our processed phosphate supply with most from Saudi Arabia, Jordan, Mexico and Australia this past year.

The current global fertilizer market situation clearly demonstrates how the domestic supply and affordability is susceptible to disruption:

- China banned exports of phosphate fertilizers in October 2021 and account for 25% of all globally exported processed phosphates.
- Russia placed phosphate export quotas in November 2021 and the recent war and sanctions has made exports logistically and financially challenging. Russia accounts for 10% of all globally exported processed phosphates.
- Global phosphate demand in 2020/21 jumped 7.0%, significant relative to the previous years of closer to 1%-2% demand growth.

Major phosphate production projects are being built (particularly in Saudi Arabia and Morocco), creating new capacity that will drive additional foreign phosphate into the U.S. Expansion of overseas operations will create additional competition for domestic phosphate producers who play a critical role in providing a local source when supply disruptions occur.

Analysis of supply chain vulnerability must consider disruptions resulting from regulatory challenges as well. Access to domestic reserves of phosphate ore is subject to a host of federal and state approvals. Acquiring the proper mining permit can take years costing millions of dollars. For example, a TFI member company has already spent over a decade and more than \$20 million dollars for a mining expansion project that remains unpermitted. Because a significant portion of phosphate present in the U.S. is found on federal lands or is subject to WOTUS, the recent final revisions to the National Environmental Policy Act (NEPA) will only increase uncertainty and delay the federal permitting process which in turn will only serve to decrease domestic phosphate fertilizer production.

Increasingly, growing uncertainty in permitting combined with significant permitting costs, rapidly expanding foreign production, and unfair trading practices is putting at risk domestic phosphate production.