## **Suffering Succotash: What Happened to Our Potash?**

Cheng Yen, Office of Industry and Competitiveness Analysis

On March 20, 2025, President Trump declared potash a "critical mineral" and called for an increase in domestic production to reduce import dependence and strengthen national security (EO 14241). In March and April 2025, President Trump issued multiple executive orders for reciprocal tariffs but noted that potash is exempt from the higher tariff rates (subject to only the 10 percent tariff imposed on nearly all imports under EO 14257). This executive briefing on trade will provide background on potash fertilizers, examine the current potash market in the United States, and describe measures by China and the United States to secure their potash supply chains.

**Background**: Fertilizers supply three major nutrients to plants—nitrogen, phosphorous, and potassium. Potash (pronounced "pot-tash"), which is used mainly as an agricultural fertilizer, refers to a group of minerals and chemicals that have potassium in water-soluble form. Potassium is the seventh most abundant element in the earth's crust and is an essential nutrient for all-around plant health in commercial crops, as potassium aids in the promotion of nitrogen and carbohydrate metabolism along with a host of other essential plant functions.<sup>2</sup>

Various forms of potash, which are processed into usable forms from mined ores and deposits, play a key role in plant nutrition. Potassium chloride (KCl), also known as muriate of potash (MOP, >95% KCl), is the cheapest and most common source of potash. Other potash fertilizers include sulfate of potash (SOP), potassium magnesium sulfate (also known as SOPM, KMS, or langbeinite), and potassium nitrate (also known as nitrate of potash, NOP).<sup>3</sup> Alternatives to potash such as manure and glauconite have lower amounts of potassium and cost more to transport, making them less desirable. Recently, the Trump administration classified potash as a critical mineral.<sup>4</sup> According to various industry groups, continued supplies of potash are essential in safeguarding the nation's food security, as there is no government stockpile of potash in the United States.

Present: Although demand for potash is global and it is abundant in the earth's crust, potash production is concentrated in a few key regions around the world. The largest potash reserves are found in the following countries (in order): Canada, Russia, Belarus, and Laos.<sup>5</sup> Currently, most American potash production comes from the southeastern region of New Mexico, and only two U.S. states produce potash—Utah and New Mexico. Based on U.S. Geological Survey (USGS) estimates (figure 1), the United States produced about 420,000 metric tons of potash, which is equivalent to less than 1 percent of global potash production for 2024. As a result, the United States is the third largest importer of potash in the world (behind Brazil and China) with the United States' apparent consumption<sup>6</sup> of potash for 2024 estimated at 6.4 million metric tons. During 2023–24 (figure 2), the United States imported most of its potash from Canada<sup>7</sup> (88 percent), Russia (9 percent), and Israel (2 percent).

The views expressed solely represent the opinions and professional research of the author. The content of the EBOT is not meant to represent the views of the U.S. International Trade Commission, any of its individual Commissioners, or the United States government.

<sup>&</sup>lt;sup>1</sup> The overwhelming majority of potash (about 85 percent) is used in fertilization applications while the rest is used in industrial and chemical applications such as in the form of caustic potash. Caustic potash is used in soaps, greases, textiles, and catalysts as well as in special fertilizers.

<sup>&</sup>lt;sup>2</sup> Plant functions include the growth of young meristems (undifferentiated cells in plants that can divide and grow, forming new tissues) and stomatal control (pores found in the epidermis layer of leaves that aids in gas exchange).

<sup>&</sup>lt;sup>3</sup> Certain crops (e.g., tobacco) exhibit a sensitivity towards chloride so alternatives such as SOP are used instead.

<sup>&</sup>lt;sup>4</sup> The U.S. Department of Interior has added potash to the draft edition of the 2025 List of Critical Minerals.

<sup>&</sup>lt;sup>5</sup> Another large potash reserve is located in the Dead Sea, which is estimated to contain 2 billion metric tons of KCl.

<sup>&</sup>lt;sup>6</sup> Apparent consumption = value of U.S. domestic sales + U.S. imports - U.S. exports.

<sup>&</sup>lt;sup>7</sup> The vast majority of Canadian potash production comes from Saskatchewan.

Figure 1: World Potash Production (2023 and 2024)

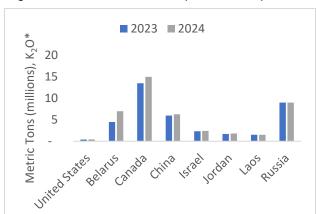
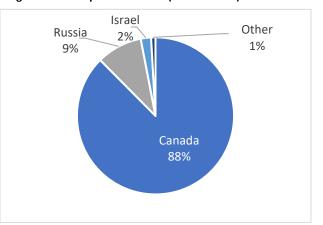


Figure 2: U.S. Imports of Potash (2023 to 2024)



Source: USGS, "Potash," January 2025. Note: Data are for mined potash. \* = estimated.  $K_2O$  is potassium oxide, the standard unit of measure used in the

potash industry.

Source: USITC, DataWeb, HTS 3104.20, accessed May 8, 2025.

Comparisons with China: Similar to the United States, China is highly dependent on potash imports (primarily from Russia, Laos, and Canada), as it is currently the world's largest consumer of potash. Consequently, China is leveraging its international partnerships to help reinforce its potash supply. With the fourth largest reserve of potash in the world and its close proximity to China, Laos remains an integral part of its supply chain. In 2022, the Chinese company Asia-Potash International invested \$4.3 billion in a potash mining facility in the Khammouane province of Laos. The facility was projected to produce up to 5 million metric tons of potash in 2025 and eventually reach 7 to 10 million metric tons annually.

In contrast, the United States is trying to build potash mining facilities domestically. In January 2025, Michigan Potash Operating LLC received over \$1.2 billion in grants and loans (federal and state) to construct its potash mining and processing facility in Osceola County, Michigan, with an estimated timeline of 42 months, assuming no delays from state and national permitting. The plant is expected to produce about 726,000 metric tons of MOP annually and create 1,400 full-time jobs. Upon completion, this facility would be the first new potash facility built within the past 60 years in the United States.

Investing in U.S. manufacturing, particularly for critical minerals, has become a priority for many U.S. stakeholders; however, unanticipated challenges can arise during the construction of potash mining facilities. For China, unforeseen events have stalled the potash mining facility in Laos, as the presence of sinkholes have caused nearby mining activities to cease temporarily. The U.S. agricultural sector will need to rely heavily on imports (e.g., from Canada) for the foreseeable future despite the investments in the domestic potash industry, as it will take considerable time and money to build the required infrastructure.

A special thanks to Raymond Cantrell for his assistance in gathering information for this EBOT.

Sources: Federal Register, "EO 14241," March 2025; Federal Register, "EO 14257," April 2025; USITC, "HTS (2025) Revision 11," April 2025; Dasco, "North American Fertilizer Production Map," accessed various dates; Michigan Farm News, USGS, "Potash," January 2025; DOE, "LPO Announces Conditional Commitment," January 2025; "Michigan Potash Plant," February 2025; Yamaguchi et al., "Potash (Chemical Economics Handbook)," July 2024; Radio Free Asia, "China's Dependency on Potash," June 2024; Radio Free Asia, "Laos Shutters Parts," January 2025; CSIS, "China's Food Security," March 2024; USGS, "Plenty of Potash," March 2015; Orris et al., "Potash: A Global Overview," 2014.

The views expressed solely represent the opinions and professional research of the author. The content of the EBOT is not meant to represent the views of the U.S. International Trade Commission, any of its individual Commissioners, or the United States government.