Phosphate Fertilizers from Morocco and Russia

Investigation Nos. 701-TA-650-651 (Preliminary)

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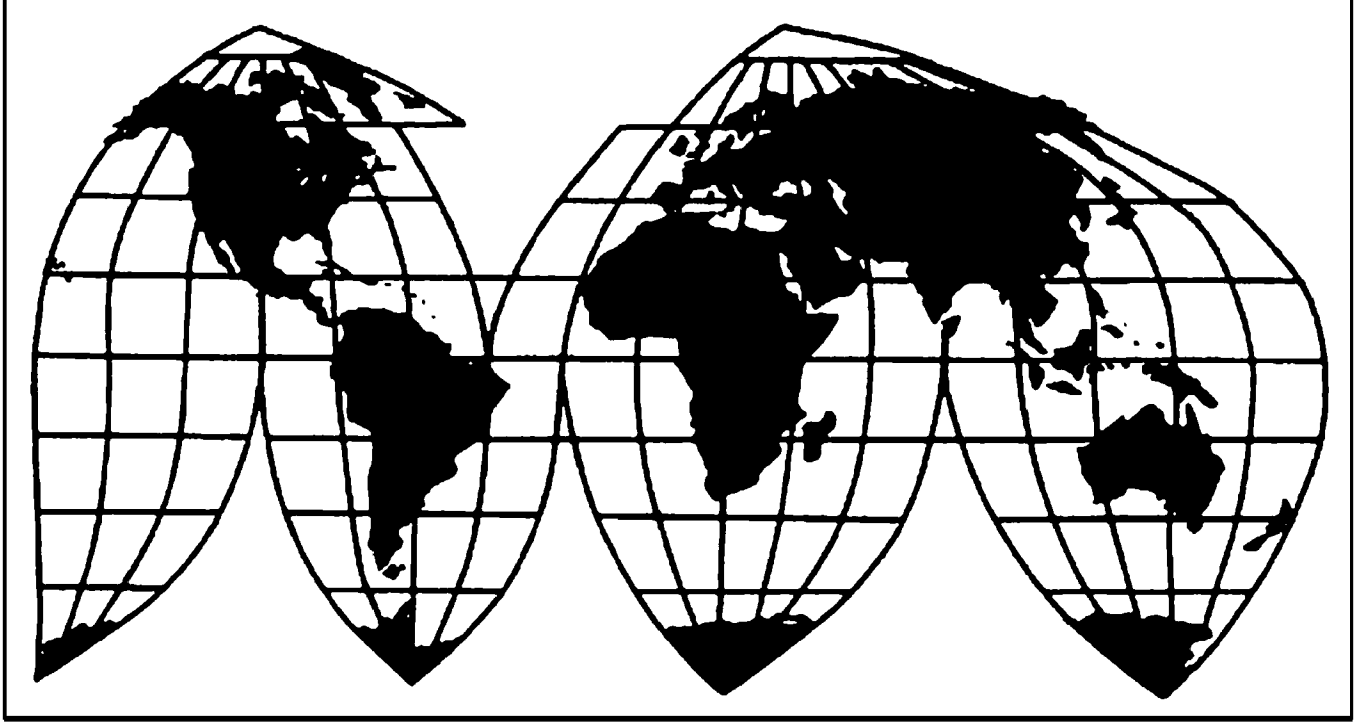
U.S. International Trade Commission



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UNITED STATES INTERNATIONAL TRADE COMMISSION

Investigation Nos. 701-TA-650-651 (Preliminary)

Phosphate Fertilizers from Morocco and Russia

DETERMINATIONS

On the basis of the record[1] developed in the subject investigations, the United States International Trade Commission ("Commission") determines, pursuant to the Tariff Act of 1930 ("the Act"), that there is a reasonable indication that an industry in the United States is materially injured by reason of imports of phosphate fertilizers from Morocco and Russia, provided for in 3103.11.00; 3103.19.00; 3103.90.00; 3105.10.00; 3105.20.00; 3105.30.00; 3105.40.00; 3105.40.00; 3105.51.00; 3105.59.00; 3105.60.00; and 3105.90.00 of the Harmonized Tariff Schedule of the United States, that are alleged to be subsidized by the governments of Morocco and Russia.[2]

COMMENCEMENT OF FINAL PHASE INVESTIGATIONS

Pursuant to section 207.18 of the Commission's rules, the Commission also gives notice of the commencement of the final phase of its investigations. The Commission will issue a final phase notice of scheduling, which will be published in the *Federal Register* as provided in § 207.21 of the Commission's rules, upon notice from the U.S. Department of Commerce ("Commerce") of affirmative preliminary determinations in the investigations under § 703(b) of the Act, or, if the preliminary determinations are negative, upon notice of affirmative final determinations in those investigations under § 705(a) of the Act. Parties that filed entries of appearance in the preliminary phase of the investigations need not enter a separate appearance for the final phase of the investigations. Industrial users, and, if the merchandise under investigation is sold at the retail level, representative consumer organizations have the right to appear as parties in Commission countervailing duty investigations. The Secretary will prepare a public service list containing the names and addresses of all persons, or their representatives, who are parties to the investigations.

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[1] The record is defined in § 207.2(f) of the Commission's Rules of Practice and Procedure (19 CFR 207.2(f)).

[2] 85 FR 44505, July 23, 2020.

BACKGROUND

On June 26, 2020, The Mosaic Company, Plymouth, Minnesota filed petitions with the Commission and Commerce, alleging that an industry in the United States is materially injured or threatened with material injury by reason of subsidized imports of phosphate fertilizers from Morocco and Russia. Accordingly, effective June 26, 2020, the Commission instituted countervailing duty investigation Nos. 701-TA-650-651 (Preliminary).

Notice of the institution of the Commission's investigations and of a public conference through written submission to be held in connection therewith was given by posting copies of the notice in the Office of the Secretary, U.S. International Trade Commission, Washington, DC, and by publishing the notice in the *Federal Register* of July 6, 2020 (85 FR 40319). In light of the restrictions on access to the Commission building due to the COVID–19 pandemic, the Commission conducted its conference through written questions, submissions of opening remarks and written testimony, written responses to questions, and postconference briefs. All persons who requested the opportunity were permitted to participate.

Views of the Commission

Based on the record in the preliminary phase of these investigations, we find that there is a reasonable indication that an industry in the United States is materially injured by reason of imports of phosphate fertilizers from Morocco and Russia that are allegedly subsidized by the governments of Morocco and Russia.

I. The Legal Standard for Preliminary Determinations

The legal standard for a preliminary antidumping duty determination requires the Commission to determine, based upon the information available at the time of the preliminary determination, whether there is a reasonable indication that a domestic industry is materially injured or threatened with material injury, or that the establishment of an industry is materially retarded, by reason of the allegedly unfairly traded imports.[1] In applying this standard, the Commission weighs the evidence before it and determines whether "(1) the record as a whole contains clear and convincing evidence that there is no material injury or threat of such injury; and (2) no likelihood exists that contrary evidence will arise in a final investigation."[2]

II. Background

The petitions in these investigations were filed on June 26, 2020 by The Mosaic Company ("Mosaic"), a domestic producer of phosphate fertilizers.[3] Mosaic and J.R. Simplot Company ("Simplot"), another domestic producer of phosphate fertilizers during the January 2017 to March 2020 period of investigation ("POI"), as well as several respondent parties participated in the preliminary phase of these investigations.[4]

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[1] 19 U.S.C. §§ 1671b(a), 1673b(a) (2000); *see also American Lamb Co. v. United States*, 785 F.2d 994, 1001-04 (Fed. Cir. 1986); *Aristech Chem. Corp. v. United States, 2*0 CIT 353, 354-55 (1996). No party argues that the establishment of an industry in the United States is materially retarded by the allegedly unfairly traded imports.

[2] *American Lamb Co.*, 785 F.2d at 1001; *see also Texas Crushed Stone Co. v. United States*, 35 F.3d 1535, 1543 (Fed. Cir. 1994).

[3] Confidential Report, Memorandum INV-SS-086 at I-4 (Aug. 3, 2020) ("CR"); Public Report, *Phosphate Fertilizers from Morocco and Russia*, Inv. Nos. 701-TA-650-651 (Preliminary), USITC Pub. 5105 at I-4 (Aug. 2020) ("PR").

[4] In light of the restrictions on access to the Commission building due to the COVID-19 pandemic, the Commission conducted its conference in these investigations through parties'

(*continued*...)

U.S. industry data are based on the questionnaire responses of three firms that accounted for the vast majority of U.S. phosphate fertilizer production in 2019.[5] U.S. import data are based on official import statistics and the questionnaire responses of seven importers that accounted for the vast majority of U.S. imports from Morocco and from Russia in 2019.[6] The Commission received usable responses to its foreign producer questionnaires from one producer of subject merchandise in Morocco whose reported exports accounted for all U.S. imports of phosphate fertilizers from Morocco in 2019[7] and two producers of subject merchandise in Russia whose reported exports accounted for nearly all U.S. imports from Russia in 2019.[8]

III. Domestic Like Product

A. Legal Standard

In determining whether there is a reasonable indication that an industry in the United States is materially injured or threatened with material injury by reason of imports of the subject merchandise, the Commission first defines the "domestic like product" and the "industry."[9] Section 771(4)(A) of the Tariff Act of 1930, as amended ("the Tariff Act"), defines the relevant domestic industry as the "producers as a whole of a domestic like product, or those producers whose collective output of a domestic like product constitutes a major

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submissions of written opening statements, written testimony, written responses to questions, and post-conference briefs as set forth in procedures provided to the parties.

Mosaic submitted opening remarks, witness testimony, responses to staff questions, and post-conference briefs. Simplot submitted a post-conference brief. OCP S.A. ("OCP") and PhosAgro PJSC ("PhosAgro"), producers and exporters of phosphate fertilizers in Morocco and Russia, respectively, submitted opening remarks, witness testimony, responses to staff questions, and post-conference briefs. Gavilon Fertilizer, LLC ("Gavilon"), International Raw Materials Ltd. ("IRM"), and Koch Fertilizer ("Koch"), U.S. importers of subject merchandise, each submitted witness testimony, responses to staff questions, and post-conference briefs. Additionally, the Government of Morocco; Eurochem North America Corp., a U.S. importer of subject merchandise; the American Farm Bureau Federation, a general farm organization; and the National Association of Landscape Professionals, a national trade association of landscape professionals, submitted written statements.

[5] CR/PR at I-4.

[6] CR/PR at I-4, IV-1. Data for U.S. importers' U.S. shipments was derived by removing U.S. importers' export shipment data, as reported in questionnaire responses, from the official import statistics.

[7] CR/PR at VII-3.

[8] CR/PR at VII-8.

[9] 19 U.S.C. § 1677(4)(A).

proportion of the total domestic production of the product."[10] In turn, the Tariff Act defines "domestic like product" as "a product which is like, or in the absence of like, most similar in characteristics and uses with, the article subject to an investigation."[11]

By statute, the Commission's "domestic like product" analysis begins with the "article subject to an investigation," *i.e.*, the subject merchandise as determined by Commerce.[12] Therefore, Commerce's determination as to the scope of the imported merchandise that is subsidized and/or sold at less than fair value is "necessarily the starting point of the Commission's like product analysis."[13] The Commission then defines the domestic like product in light of the imported articles Commerce has identified.[14] The decision regarding the appropriate domestic like product(s) in an investigation is a factual determination, and the Commission has applied the statutory standard of "like" or "most similar in characteristics and uses" on a case-by-case basis.[15] No single factor is dispositive, and the Commission may consider other factors it deems relevant based on the facts of a particular investigation.[16] The Commission looks for clear dividing lines among possible like products and disregards minor

[10] 19 U.S.C. § 1677(4)(A).

[11] 19 U.S.C. § 1677(10).

[12] 19 U.S.C. § 1677(10). The Commission must accept Commerce's determination as to the scope of the imported merchandise that is subsidized and/or sold at less than fair value. *See*, *e.g.*, *USEC, Inc. v. United States*, 34 Fed. App'x 725, 730 (Fed. Cir. 2002) ("The ITC may not modify the class or kind of imported merchandise examined by Commerce."); *Algoma Steel Corp. v. United States,* 688 F. Supp. 639, 644 (Ct. Int'l Trade 1988), *aff'd*, 865 F.3d 240 (Fed. Cir.), *cert. denied*, 492 U.S. 919 (1989).

[13] *Cleo Inc. v. United States*, 501 F.3d 1291, 1298 (Fed. Cir. 2007); *see also Hitachi Metals, Ltd. v. United States*, Case No. 19-1289, slip op. at 8-9 (Fed. Cir. Feb. 7, 2020) (the statute requires the Commission to start with Commerce's subject merchandise in reaching its own like product determination).

[14] *Cleo*, 501 F.3d at 1298 n.1 ("Commerce's {scope} finding does not control the Commission's {like product} determination."); *Hosiden Corp. v. Advanced Display Mfrs.,* 85 F.3d 1561, 1568 (Fed. Cir. 1996) (the Commission may find a single like product corresponding to several different classes or kinds defined by Commerce); *Torrington*, 747 F. Supp. at 748–52 (affirming the Commission's determination defining six like products in investigations where Commerce found five classes or kinds).

[15] *See*, *e.g.*, *Cleo*, 501 F.3d at 1299; *NEC Corp. v. Department of Commerce*, 36 F. Supp. 2d 380, 383 (Ct. Int'l Trade 1998); *Nippon Steel Corp. v. United States*, 19 CIT 450, 455 (1995); *Torrington Co. v. United States*, 747 F. Supp. 744, 749 n.3 (Ct. Int'l Trade 1990), *aff'd*, 938 F.2d 1278 (Fed. Cir. 1991) ("every like product determination 'must be made on the particular record at issue' and the 'unique facts of each case'"). The Commission generally considers a number of factors including the following: (1) physical characteristics and uses; (2) interchangeability; (3) channels of distribution; (4) customer and producer perceptions of the products; (5) common manufacturing facilities, production processes, and production employees; and, where appropriate, (6) price. *See Nippon*, 19 CIT at 455 n.4; *Timken Co. v. United States*, 913 F. Supp. 580, 584 (Ct. Int'l Trade 1996).

[16] *See*, *e.g.*, S. Rep. No. 96-249 at 90–91 (1979).

variations.[17] The Commission may, where appropriate, define the domestic like product broader than that described in the scope.[18]

B. Product Description

In its notice of initiation, Commerce defined the imported merchandise within the scope of these investigations as follows:

> . . . {P}hosphate fertilizers in all physical forms (*i.e.*, solid or liquid form), with or without coating or additives such as anti-caking agents. Phosphate fertilizers in solid form are covered whether granular, prilled (*i.e.*, pelletized), or in other solid form (*e.g.*, powdered).
>
> The covered merchandise includes phosphate fertilizers in the following forms: ammonium dihydrogenorthophosphate or monoammonium phosphate (MAP), chemical formula NH4H2PO4; diammonium hydrogenorthophosphate or diammonium phosphate (DAP), chemical formula (NH4)2HPO4; normal superphosphate (NSP), also known as ordinary superphosphate or single superphosphate, chemical formula Ca(H2PO4)2·CaSO4; concentrated superphosphate, also known as double, treble, or triple superphosphate (TSP), chemical formula Ca(H2PO4)2·H2O; and proprietary formulations of MAP, DAP, NSP, and TSP.
>
> The covered merchandise also includes other fertilizer formulations incorporating phosphorous and non-phosphorous plant nutrient components, whether chemically-bonded, granulated (*e.g.*, when multiple components are incorporated into granules through, *e.g.*, a slurry process), or compounded (*e.g.*, when multiple components are compacted together under high pressure),

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[17] *See*, *e.g.*, *Nippon*, 19 CIT at 455; *Torrington*, 747 F. Supp. at 748–49*; see also* S. Rep. No. 96-249 at 90–91 (Congress has indicated that the like product standard should not be interpreted in "such a narrow fashion as to permit minor differences in physical characteristics or uses to lead to the conclusion that the product and article are not 'like' each other, nor should the definition of 'like product' be interpreted in such a fashion as to prevent consideration of an industry adversely affected by the imports under consideration.").

[18] *See*, *e.g.*, *Pure Magnesium from China and Israel*, Inv. Nos. 701-TA-403 and 731-TA-895-96 (Final), USITC Pub. 3467 at 8 n.34 (Nov. 2001); *Torrington,* 747 F. Supp. at 748-49 (holding that the Commission is not legally required to limit the domestic like product to the product advocated by the petitioner, co-extensive with the scope).

including nitrogen, phosphate, sulfur (NPS) fertilizers, nitrogen, phosphorous, potassium (NPK) fertilizers, nitric phosphate (also known as nitrophosphate) fertilizers, ammoniated superphosphate fertilizers, and proprietary formulations thereof that may or may not include other nonphosphorous plant nutrient components. For phosphate fertilizers that contain non-phosphorous plant nutrient components, such as nitrogen, potassium, sulfur, zinc, or other non-phosphorous components, the entire article is covered, including the non-phosphorous content, provided that the phosphorous content (measured by available diphosphorous pentaoxide, chemical formula P2O5) is at least 5% by actual weight.

Phosphate fertilizers that are otherwise subject to this investigation are included when commingled (*i.e.*, mixed or blended) with phosphate fertilizers from sources not subject to this investigation. Phosphate fertilizers that are otherwise subject to this investigation are included when commingled with substances other than phosphate fertilizers subject to this investigation (*e.g.*, granules containing only non-phosphate fertilizers such as potash or urea). Only the subject component of such commingled products is covered by the scope of this investigation.

The following products are specifically excluded from the scope of the investigation:

(1) ABC dry chemical powder preparations for fire extinguishers containing MAP or DAP in powdered form;
(2) industrial or technical grade MAP in white crystalline form with available P2O5 content of at least 60% by actual weight;
(3) industrial or technical grade diammonium phosphate in white crystalline form with available P2O5 content of at least 50% by actual weight;
(4) liquid ammonium polyphosphate fertilizers;
(5) dicalcium phosphate, chemical formula CaHPO4;
(6) monocalcium phosphate, chemical formula CaH4P2O8;
(7) trisodium phosphate, chemical formula Na3PO4;
(8) sodium tripolyphosphate, chemical formula Na5P3O10;

(9) prepared baking powders containing sodium bicarbonate and any form of phosphate;
(10) animal or vegetable fertilizers not containing phosphate fertilizers otherwise covered by the scope of the investigation;
(11) phosphoric acid, chemical formula H3PO4.

The Chemical Abstracts Service (CAS) numbers for covered phosphate fertilizers include, but are not limited to: 7722-76-1 (MAP); 7783-28-0 (DAP); and 65996-95-4 (TSP). The covered products may also be identified by Nitrogen-Phosphate-Potash composition, including but not limited to: NP 11-52-0 (MAP); NP 18-46-0 (DAP); and NP 0-46-0 (TSP).[19]

Phosphate fertilizers contain phosphorus, a chemical element essential to all life on Earth, and are designed to provide nutrients to plants.[20] The phosphorus content in phosphate fertilizers derives from phosphate rock mineral ores, deposits of which are located and mined in the United States and each subject country.[21] Phosphate fertilizers may contain phosphorus alone or be chemically combined or physically blended in various combinations with nitrogen and potassium nutrients. There are four primary representative types of phosphate fertilizers: monoammonium phosphate (MAP), diammonium phosphate (DAP), triple superphosphate (TSP), and single superphosphate (SSP), each differing somewhat in chemical and physical properties, but all containing phosphorus as the primary nutrient.[22] Other types of phosphate fertilizers contain various chemical combinations of nitrogen, phosphorus, and sulfur (NPS), such as Mosaic's MicroEssentials® NPS (MES) specialty line of fertilizers, and nitrogen, phosphorus, and potassium (NPK) chemical combinations.[23]

[19] *Phosphate Fertilizers from the Kingdom of Morocco and the Russian Federation*, 85 Fed. Reg. 44505 (July 23, 2020) (initiation of countervailing duty investigations) ("Commerce Countervailing Duty Investigations").
[20] CR/PR at I-8.
[21] CR/PR at I-9.
[22] CR/PR at I-8.
[23] CR/PR at I-8-9.

C. Arguments of the Parties

Mosaic argues that the Commission should define a single domestic like product, coextensive with the scope.[24] It maintains that all phosphate fertilizers contain phosphate as a primary nutrient and can be used interchangeably in most agricultural applications based upon their phosphorus content, particularly when used in blends.[25] It further states that phosphate fertilizers can be produced in the same production facilities using the same employees and similar production processes, and that all phosphate fertilizers are sold through the same channels of distribution, *** to distributors/wholesalers and retailers.[26] According to Mosaic, producers and purchasers view all phosphate fertilizers as a single product category, namely fertilizers that contain phosphate as a primary nutrient.[27] Additionally, it claims that all phosphate fertilizers fall within the same general price range and that the various types of phosphate fertilizers constrain each other's prices.[28]

IRM asserts that NPS fertilizers, a product category that includes Mosaic's proprietary MES product, should be defined as a domestic like product separate from other fertilizers, including MAP and DAP fertilizers.[29] Specifically, it argues that NPS fertilizers are physically distinct from other phosphate fertilizers because they have a unique chemical composition with lower phosphate levels and contain sulfur and sometimes zinc, which are not found in MAP and DAP fertilizers.[30] IRM maintains that due to its different chemical composition, NPS fertilizers are used primarily for crops with high sulfur demand and would not be used for crops that do not require sulfur, thus limiting their interchangeability with other phosphate fertilizers.[31] Moreover, although IRM concedes that all phosphate fertilizers, including NPS, are generally sold through distributors and wholesalers and to end-users, it claims that end users purchase different types of phosphate fertilizers depending on application.[32] IRM also asserts that NPS

[24] Petition, Vol. I at 19-22; Mosaic Postconf. Br. at 3-14.

[25] Petition, Vol. I. at 20; Mosaic Postconf. Br. at 3-7.

[26] Petition, Vol. I. at 21-22; Mosaic Postconf. Br. at 7-12.

[27] Petition, Vol. I at 21; Mosaic Postconf. Br. at 8-9.

[28] Petition, Vol. I at 22; Mosaic Postconf. Br. at 12-14.

[29] IRM Postconf. Br. at 5. OCP argues that the record supports negative determinations in the preliminary phase of the investigations with respect to a single domestic like product, but that if the investigations proceed to a final phase, the Commission should collect data with respect to three distinct domestic like products – NPS fertilizers, TSP fertilizers, and all other covered phosphate fertilizers. *See id.* at 3-4. As discussed below, there is no clear dividing line between varieties of phosphate fertilizers and we find for purposes of the preliminary phase of these investigations a single domestic like product consisting of all phosphate fertilizers coextensive with the scope.

[30] IRM Postconf. Br. at 5-6; *see also* OCP Postconf. Br. at 10-11.

[31] IRM Postconf. Br. at 8; *see also* OCP Postconf. Br. at 11-12.

[32] IRM Postconf. Br. at 8-9; *see also* OCP Postconf. Br. at 13.

fertilizers are produced using different production processes that require the addition of sulfur and specialized equipment, producers and customers perceive NPS fertilizers to be a product category distinct from other phosphate fertilizers, and NPS fertilizers command a price premium compared to other phosphate fertilizer products.[33]

D. Analysis

For the reasons discussed below, we define a single domestic like product consisting of all phosphate fertilizers, coextensive with the scope of these investigations.

Physical Characteristics and Uses. Phosphate fertilizers are produced in a range of formulations, including formulations that contain only phosphorus (such as TSP); nitrogen and phosphorus formulations (such as MAP and DAP); and nitrogen, sulfur, and phosphorous (NPS) formulations (such as Mosaic's proprietary MES product).[34] There is overlap between all phosphate fertilizers with respect to physical characteristics and uses. Specifically, all phosphate fertilizers within the scope contain phosphorus as a primary constituent and are used in agricultural applications to provide nutrients to plants.[35] NPS fertilizers have a phosphorus content ranging from 20 to 48 percent; TSP fertilizers have a phosphorous content of 45 or 46 percent; DAP fertilizers have a phosphorous content of 46 percent; and MAP fertilizers have a phosphorus content of 52 percent.[36]

IRM argues that NPS fertilizers are physically distinct from other phosphate fertilizers because they have a different chemical composition.[37] The record indicates, however, that all types of phosphate fertilizers, notwithstanding their different chemical formulations, serve the same function of releasing phosphate as a primary nutrient – and in the case of MAP, DAP, and NPS, other nutrients – to foster plant growth.[38]

Manufacturing Facilities, Production Processes and Employees. The record indicates that all phosphate fertilizers share the same fundamental production processes using the same equipment and employees.[39]

IRM contends that NPS fertilizers are produced using different production processes that require the addition of sulfur and specialized equipment.[40] IRM, however, overlooks the

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[33] IRM Postconf. Br. at 9-10; *see also* OCP Postconf. Br. at 9-10, 12-14.
[34] CR/PR at II-1.
[35] CR/PR at I-8-9; Petition, Vol. I at 9-14.
[36] Mosaic Postconf. Br. at 4.
[37] IRM Postconf. Br. at 5-8; *see also* OCP Postconf. Br. at 10-11.
[38] CR/PR at I-8-10.
[39] CR/PR at I-10; Mosaic Postconf. Br. at 9-12.
[40] IRM Postconf. Br. at 9-10; *see also* OCP Postconf. Br. at 12.

significant commonalities in the production processes of the various types of phosphate fertilizers. In particular, production of phosphate fertilizers involves a series of chemical reactions that begins with phosphate rock, which is mined and beneficiated to remove impurities. After beneficiation, the phosphate rock is treated with acids and converted into phosphoric acid, which is then finished into different types of phosphate fertilizers through minor additional processing.[41]

Moreover, domestic producers operate flexible granulation plants that can easily switch between production of different phosphate fertilizer products using the same equipment and employees with minimal cost and downtime. Mosaic states that it produces MAP, DAP, and NPS phosphate fertilizers at its production facilities; it is able to switch production between MAP and NPS in as little as a few hours with minimal cost and is also able to switch production between DAP and MAP in approximately ***.[42] Mosaic also maintains that Simplot ***, has a flexible granulation facility that is capable of producing MAP/DAP or TSP using phosphoric acid made at the same phosphate acid plant.[43]

Channels of Distribution. The majority of all domestically produced phosphate fertilizers are sold to retailers, followed by distributors/wholesalers.[44] Mosaic asserts that NPS fertilizers, like DAP and MAP and other types of fertilizers, ***.[45] IRM does not dispute that all phosphate fertilizers, including NPS, are sold through similar channels of distribution.[46]

Interchangeability. The scope definition encompasses different types of phosphate fertilizer products, all of which overlap with respect to phosphorus content. IRM maintains that due to the presence of sulfur, NPS fertilizers are used primarily for crops with high sulfur demand and would not be used for crops that do not require sulfur.[47] As a general matter, there is some limited interchangeability between each specific type of phosphate fertilizer due to their different chemical formulations. However, the presence of secondary nutrients is not a distinguishing factor unique to NPS. As Mosaic notes, several types of phosphate fertilizer contain secondary or micro-nutrients such as sulfur.[48] Indeed, both MAP and DAP also contain

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[41] CR/PR at I-10-14; Petition, Vol. I at 14-16, 21-22; Mosaic Postconf. Br. at Responses to Staff Questions pp. 17-18.

[42] Petition, Vol. I at 22; Mosaic Postconf. Br. at 10-11, Responses to Staff Questions pp. 10-12.

[43] Mosaic Postconf. Br. at 12.

[44] CR/PR at II-2, Table II-1; Petition, Vol. I at 18.

[45] Mosaic Postconf. Br. at 7-8.

[46] IRM Postconf. Br. at 8. OCP states that NPS products are not as broadly offered as MAP and DAP and are marketed, instead, through limited networks of specialized outlets. OCP Postconf. Br. at 13.

[47] IRM Postconf. Br. at 8; *see also* OCP Postconf. Br. at 11-12.

[48] Mosaic Postconf. Br. at 8-9.

nitrogen as a secondary element; therefore NPS is not unique on this point.[49] Moreover, Mosaic states that all types of phosphate fertilizers are broadly interchangeable under most conditions, particularly when used in blends.[50]

Producer and Customer Perceptions. IRM asserts that customers and producers "perceive there to be limitations on the type of fertilizer purchased," and that dealers require specific bins and equipment to accommodate a specific grade/type of phosphate fertilizer."[51] IRM's assertion, however, was not specific to NPS, but appears to be directed at phosphate fertilizers with different chemical formulas in general.[52] According to Mosaic, notwithstanding that each type of phosphate fertilizer has its own unique chemical formula, producers and customers perceive all phosphate fertilizers to comprise a single category of products, namely fertilizers that contain phosphate as a primary nutrient.[53] By contrast, they do not perceive non-phosphate fertilizers to be part of the same category of products because they do not have phosphate nutrient content and cannot be used in the same fertilizer applications.[54]

Price. Mosaic and IRM agree that prices of phosphate fertilizers depend on the chemical composition of the product.[55] Fertilizers with a higher nutrient content, such as NPS, command a price premium over products with relatively lower total nutrient content, such as TSP.[56]

Conclusion. While NPS fertilizers may have a unique chemical formula, they nonetheless exhibit similarities with other types of phosphate fertilizers with regard to domestic like product factors. All phosphate fertilizers share certain basic physical properties, are manufactured in the same domestic facilities using the same basic processes and are sold through similar channels of distribution. Notwithstanding some limitations in interchangeability for specific end uses, all phosphate fertilizers share a common use of providing phosphate for agriculture, and different formulations may be blended together for

[49] CR/PR at I-9.

[50] Mosaic Postconf. Br. at 6. Mosaic states that because an end user's demand for the primary nutrients vary widely depending on factors such as soil and climate conditions, planned crops, targeted yield, and prevailing prices, farmers will typically consult with fertilizer retailers to develop a custom blend of different types of fertilizer with the right nutrient content. *See id.* at 5. Mosaic estimates that 90 percent of phosphate fertilizers are applied in blended form and the remaining ten percent are applied directly as the single source of fertilizer. *See id.* at Responses to Staff Questions p. 22.

[51] IRM Postconf. Br. at 9; see also OCP Postconf. Br. at 12-13.

[52] IRM Postconf. Br. at 9.

[53] Mosaic Postconf. Br. at 8.

[54] Mosaic Postconf. Br. at 8.

[55] Mosaic Postconf. Br. at 12-14; IRM Postconf. Br. at 10; *see also* OCP Postconf. Br. at 14.

[56] Mosaic Postconf. Br. at 13; IRM Postconf. Br. at 10.

use in specific applications. Consequently, given this overlap, we find all phosphate fertilizers to comprise a single domestic like product coextensive with the scope.[57]

IV. Domestic Industry

The domestic industry is defined as the domestic "producers as a whole of a domestic like product, or those producers whose collective output of a domestic like product constitutes a major proportion of the total domestic production of the product."[58] In defining the domestic industry, the Commission's general practice has been to include in the industry producers of all domestic production of the like product, whether toll-produced, captively consumed, or sold in the domestic merchant market.

Mosaic argues that the Commission should define the domestic industry to include all domestic producers of phosphate fertilizers.[59] None of the respondents address how the Commission should define the domestic industry. No U.S. producer was affiliated with a foreign producer or exporter or importer of subject merchandise, and no U.S. producer was itself an importer of subject imports during the POI.[60] Consequently, we define the domestic industry as all U.S. producers of phosphate fertilizers.

[57] In any final phase of these investigations, we invite parties to identify any proposed domestic like products in their comments on the Commission's draft questionnaires, and specify with particularity those products for which they seek the Commission to collect separate data. 19 C.F.R. § 207.20(b).

[58] 19 U.S.C. § 1677(4)(A).

[59] Petition, Vol. I at 22-23; Mosaic Opening Statement at 2; Mosaic Postconf. Br. at 14.

[60] U.S. producer, *** , purchased phosphate fertilizer imported from Morocco and from Russia at certain times in the POI. *** U.S. Producers Questionnaire Response at II-13. The Commission has previously concluded that a domestic producer that purchases subject imports may be treated as a related party if it controls large volumes of subject imports. *** reported that it purchased subject imports from ***, but stated that it ***. The evidence shows that each importer's imports were substantially larger than the amounts purchased by ***. *See* CR at Table IV-1; *** U.S. Importer Questionnaire Response; *** U.S. Importer Questionnaire Response; *** U.S. Importer Questionnaire Response; *** U.S. Importer Questionnaire Response; *** U.S. Importer Questionnaire Response; *** U.S. Importer Questionnaire Response; *** U.S. Importer Questionnaire Response. Accordingly, we find that *** did not purchase sufficiently large subject import volumes to indirectly control an importer of subject merchandise, or otherwise exercise control, to qualify as a related party.

V. Cumulation[61]

For purposes of evaluating the volume and effects for a determination of reasonable indication of material injury by reason of subject imports, section 771(7)(G)(i) of the Tariff Act requires the Commission to cumulate subject imports from all countries as to which petitions were filed and/or investigations self-initiated by Commerce on the same day, if such imports compete with each other and with the domestic like product in the U.S. market. In assessing whether subject imports compete with each other and with the domestic like product, the Commission generally has considered four factors:

(1) the degree of fungibility between subject imports from different countries and between subject imports and the domestic like product, including consideration of specific customer requirements and other quality related questions;

(2) the presence of sales or offers to sell in the same geographic markets of subject imports from different countries and the domestic like product;

(3) the existence of common or similar channels of distribution for subject imports from different countries and the domestic like product; and

[61] Pursuant to Section 771(24) of the Tariff Act, imports from a subject country of merchandise corresponding to a domestic like product that account for less than 3 percent of all such merchandise imported into the United States during the most recent 12 months for which data are available preceding the filing of the petition shall be deemed negligible. 19 U.S.C. §§ 1671b(a), 1673b(a), 1677(24)(A)(i), 1677(24)(B); *see also* 15 C.F.R. § 2013.1 (developing countries for purposes of 19 U.S.C. § 1677(36)). The statute further provides that subject imports from a single country which comprise less than 3 percent of total such imports of the product may not be considered negligible if there are several countries subject to investigation with negligible imports and the sum of such imports from all those countries collectively accounts for more than 7 percent of the volume of all such merchandise imported into the United States. 19 U.S.C. § 1677(24)(A)(ii). In the case of countervailing duty investigations involving developing countries (as designated by the United States Trade Representative ("USTR")), the statute indicates that the negligibility limits are 4 percent and 9 percent, rather than 3 percent and 7 percent. 19 U.S.C. § 1677(24)(B). USTR has designated Morocco to be a developing country subject to the 4 percent negligibility threshold for countervailing duty investigations. 15 C.F.R. § 2013.1 (1-1-16 edition).

Official import statistics indicate that from June 2019 through May 2020, the most recent 12-month period for which data are available preceding the filing of the petition, subject imports from Morocco accounted for 64.5 percent of total imports and subject imports from Russia accounted for 14.1 percent. CR/PR at Table IV-4. Because imports from each subject country are clearly above the applicable negligibility thresholds, we find that subject imports from Morocco and Russia are not negligible for purposes of the countervailing duty investigations.

(4) whether the subject imports are simultaneously present in the market.[62]

While no single factor is necessarily determinative, and the list of factors is not exclusive, these factors are intended to provide the Commission with a framework for determining whether the subject imports compete with each other and with the domestic like product.[63] Only a "reasonable overlap" of competition is required.[64]

Mosaic argues that the Commission should cumulatively assess imports from Morocco and Russia.[65] It contends that the petitions for both Morocco and Russia were filed on the same day and that a reasonable overlap in competition exists between phosphate fertilizer imports from both countries and with the domestic like product, and that cumulation is therefore mandatory.[66] Specifically, Mosaic claims that phosphate fertilizers from Morocco and Russia are fungible with each other and with the domestic like product, and consist of a range of types, the most common of which are MAP and DAP.[67] It maintains that phosphate fertilizers from both subject and domestic sources are sold in all geographic markets in the United States using the same channels of distribution, ***, and contends that subject imports from Morocco and Russia were simultaneously present in the U.S. market in every year of the POI.[68]

PhosAgro argues that the Commission should not cumulate subject imports from Russia with subject imports from Morocco.[69] PhosAgro asserts that subject imports from Russia are not fungible with subject imports from Morocco and the domestic like product because: (1) it does not produce TSP and NPS, both of which are produced domestically and one of which (TSP) is produced in Morocco; and (2) its DAP and MAP phosphate fertilizers have different purity levels and are safer and more environmentally friendly than product from other sources. It maintains purchasers view phosphate fertilizers from Russia differently and that the

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[62] *See Certain Cast-Iron Pipe Fittings from Brazil, the Republic of Korea, and Taiwan*, Inv. Nos. 731-TA-278-80 (Final), USITC Pub. 1845 (May 1986), *aff'd, Fundicao Tupy, S.A. v. United States*, 678 F. Supp. 898 (Ct. Int'l Trade), *aff'd*, 859 F.2d 915 (Fed. Cir. 1988).

[63] *See*, *e.g.*, *Wieland Werke, AG v. United States*, 718 F. Supp. 50 (Ct. Int'l Trade 1989).

[64] The Statement of Administrative Action (SAA) to the Uruguay Round Agreements Act (URAA), expressly states that "the new section will not affect current Commission practice under which the statutory requirement is satisfied if there is a reasonable overlap of competition." H.R. Rep. No. 103-316, Vol. I at 848 (1994) (*citing Fundicao Tupy*, 678 F. Supp. at 902); *see Goss Graphic Sys., Inc. v. United States*, 33 F. Supp. 2d 1082, 1087 (Ct. Int'l Trade 1998) ("cumulation does not require two products to be highly fungible"); *Wieland Werke, AG*, 718 F. Supp. at 52 ("Completely overlapping markets are not required.").

[65] Petition, Vol. I at 25-28; Mosaic Postconf. Br. at Responses to Staff Questions pp. 40-45.

[66] Petition, Vol. I at 26; Mosaic Postconf. Br. at Responses to Staff Questions pp. 40-45.

[67] Petition, Vol. I at 26; Mosaic Postconf. Br. at Responses to Staff Questions pp. 41-43.

[68] Petition, Vol. I at 27; Mosaic Postconf. Br. at Responses to Staff Questions p. 41-44.

[69] PhosAgro Postconf. Br. at 6-7. No other respondent argues against cumulation of subject imports from Russia and Morocco for purposes of the preliminary phase of these investigations.

purchasing patterns are therefore unlike those for the domestic like product and subject imports from Morocco. PhosAgro also claims that subject imports from Russia were present only in some months during the POI and that they are imported in lower quantities and hold a smaller market share compared to subject imports from Morocco.[70]

The statutory threshold for cumulation is satisfied because Mosaic filed the countervailing duty petitions with respect to subject imports from both countries on the same day, June 26, 2020.[71] As discussed below, we find a reasonable overlap of competition among phosphate fertilizers produced in Morocco, Russia, and the United States.

Fungibility. All U.S. producers reported that the domestic like product and phosphate fertilizers from Morocco and Russia were always interchangeable in all comparisons. In addition, the vast majority of U.S. importers reported that the domestic like product and phosphate fertilizers from each subject country were always or frequently interchangeable in all comparisons.[72] Thus, contrary to PhosAgro's assertions regarding a lack of fungibility between the subject imports from Russia and other phosphate fertilizers,[73] the record shows that phosphate fertilizers from all sources generally are viewed as being interchangeable.

Moreover, there was substantial product overlap for shipments of the domestic like product and subject imports, and between phosphate fertilizers from Morocco and Russia. Specifically, in 2019, MAP accounted for the largest share of U.S. shipments of the domestic like product (*** percent) and the largest shares of U.S. shipments of subject imports from Morocco (*** percent) and Russia (*** percent).[74] DAP accounted for the next largest share of U.S. shipments of the domestic like product (*** percent) and U.S. shipments of subject imports from Morocco (*** percent) and Russia (*** percent).[75] In light of the foregoing, the record indicates a reasonable level of fungibility between and among the domestic like product and phosphate fertilizers from each subject source.

Channels of Distribution. Both domestic producers and importers reported shipments of phosphate fertilizers primarily to retailers, followed by distributors/wholesalers.[76]

Geographic Overlap. The domestic like product and subject imports from both Morocco and Russia were sold in every region of the contiguous United States.[77] Nearly all U.S. imports

[70] PhosAgro Postconf. Br. at 6-7.

[71] None of the statutory exceptions to cumulation applies.

[72] CR/PR at Table II-6. Only one of six importers indicated that imports from Morocco were never interchangeable with imports from Russia. *See id.*

[73] PhosAgro Postconf. Br. at 6-7.

[74] CR/PR at Table IV-5.

[75] CR/PR at Table IV-5.

[76] CR/PR at II-2, Table II-1.

[77] CR/PR at II-2, Table II-2.

from Morocco and the vast majority of U.S. imports from Russia entered the United States through ports located in the South (*i.e.*, Port of New Orleans ("NOLA")).[78]

Simultaneous Presence in Market. Import data show that the domestic like product and phosphate fertilizers imported from both subject countries have been present in the U.S. market in each full year of the POI and in interim 2020.[79]

Conclusion. In sum, the record in the preliminary phase of these investigations indicates that subject imports from Morocco and Russia are fungible with the domestic like product and each other, that subject imports from each subject country and the domestic like product are sold in the same channels of distribution, are present in similar geographic markets, and have been simultaneously present in the U.S. market. In light of the foregoing, we find that there is a reasonable overlap of competition between the domestic like product and imports from each subject country and between imports from each subject country. We accordingly analyze subject imports from Morocco and Russia on a cumulated basis for our analysis of whether there is material injury by reason of subject imports.

VI. Reasonable Indication of Material Injury By Reason of Subject Imports

A. Legal Standards

In the preliminary phase of antidumping and countervailing duty investigations, the Commission determines whether there is a reasonable indication that an industry in the United States is materially injured or threatened with material injury by reason of the imports under investigation.[80] In making this determination, the Commission must consider the volume of subject imports, their effect on prices for the domestic like product, and their impact on domestic producers of the domestic like product, but only in the context of U.S. production operations.[81] The statute defines "material injury" as "harm which is not inconsequential, immaterial, or unimportant."[82] In assessing whether there is a reasonable indication that the domestic industry is materially injured by reason of subject imports, we consider all relevant

[78] CR/PR at IV-10 n.7, Table IV-6.

[79] CR/PR at Table IV-7. Subject imports from Morocco were present in every month during the POI except in June 2017 and December 2017. Subject imports from Russia were present in every month during the POI except in July 2017 and June 2018. *See id.*

[80] 19 U.S.C. §§ 1671b(a), 1673b(a).

[81] 19 U.S.C. § 1677(7)(B). The Commission "may consider such other economic factors as are relevant to the determination" but shall "identify each {such} factor ... and explain in full its relevance to the determination." 19 U.S.C. § 1677(7)(B).

[82] 19 U.S.C. § 1677(7)(A).

economic factors that bear on the state of the industry in the United States.[83] No single factor is dispositive, and all relevant factors are considered "within the context of the business cycle and conditions of competition that are distinctive to the affected industry."[84]

Although the statute requires the Commission to determine whether there is a reasonable indication that the domestic industry is "materially injured or threatened with material injury by reason of" unfairly traded imports,[85] it does not define the phrase "by reason of," indicating that this aspect of the injury analysis is left to the Commission's reasonable exercise of its discretion.[86] In identifying a causal link, if any, between subject imports and material injury to the domestic industry, the Commission examines the facts of record that relate to the significance of the volume and price effects of the subject imports and any impact of those imports on the condition of the domestic industry. This evaluation under the "by reason of" standard must ensure that subject imports are more than a minimal or tangential cause of injury and that there is a sufficient causal, not merely a temporal, nexus between subject imports and material injury.[87]

In many investigations, there are other economic factors at work, some or all of which may also be having adverse effects on the domestic industry. Such economic factors might include nonsubject imports; changes in technology, demand, or consumer tastes; competition among domestic producers; or management decisions by domestic producers. The legislative history explains that the Commission must examine factors other than subject imports to ensure that it is not attributing injury from other factors to the subject imports, thereby inflating an otherwise tangential cause of injury into one that satisfies the statutory material

[83] 19 U.S.C. § 1677(7)(C)(iii).

[84] 19 U.S.C. § 1677(7)(C)(iii).

[85] 19 U.S.C. §§ 1671b(a), 1673b(a).

[86] *Angus Chemical Co. v. United States*, 140 F.3d 1478, 1484-85 (Fed. Cir. 1998) ("{T}he statute does not 'compel the commissioners' to employ {a particular methodology}."), *aff'g,* 944 F. Supp. 943, 951 (Ct. Int'l Trade 1996).

[87] The Federal Circuit, in addressing the causation standard of the statute, observed that "{a}s long as its effects are not merely incidental, tangential, or trivial, the foreign product sold at less than fair value meets the causation requirement." *Nippon Steel Corp. v. USITC*, 345 F.3d 1379, 1384 (Fed. Cir. 2003). This was further ratified in *Mittal Steel Point Lisas Ltd. v. United States*, 542 F.3d 867, 873 (Fed. Cir. 2008), where the Federal Circuit, quoting *Gerald Metals, Inc. v. United States*, 132 F.3d 716, 722 (Fed. Cir. 1997), stated that "this court requires evidence in the record 'to show that the harm occurred "by reason of" the LTFV imports, not by reason of a minimal or tangential contribution to material harm caused by LTFV goods.'" *See also Nippon Steel Corp. v. United States*, 458 F.3d 1345, 1357 (Fed. Cir. 2006); *Taiwan Semiconductor Industry Ass'n v. USITC*, 266 F.3d 1339, 1345 (Fed. Cir. 2001).

injury threshold.[88] In performing its examination, however, the Commission need not isolate the injury caused by other factors from injury caused by unfairly traded imports.[89] Nor does the "by reason of" standard require that unfairly traded imports be the "principal" cause of injury or contemplate that injury from unfairly traded imports be weighed against other factors, such as nonsubject imports, which may be contributing to overall injury to an industry.[90] It is clear that the existence of injury caused by other factors does not compel a negative determination.[91]

Assessment of whether material injury to the domestic industry is "by reason of" subject imports "does not require the Commission to address the causation issue in any particular way" as long as "the injury to the domestic industry can reasonably be attributed to the subject

[88] SAA at 851-52 ("{T}he Commission must examine other factors to ensure that it is not attributing injury from other sources to the subject imports."); S. Rep. 96-249 at 75 (1979) (the Commission "will consider information which indicates that harm is caused by factors other than less-than-fair-value imports."); H.R. Rep. 96-317 at 47 (1979) ("in examining the overall injury being experienced by a domestic industry, the ITC will take into account evidence presented to it which demonstrates that the harm attributed by the petitioner to the subsidized or dumped imports is attributable to such other factors;" those factors include "the volume and prices of nonsubsidized imports or imports sold at fair value, contraction in demand or changes in patterns of consumption, trade restrictive practices of and competition between the foreign and domestic producers, developments in technology and the export performance and productivity of the domestic industry"); *accord Mittal Steel*, 542 F.3d at 877.

[89] SAA at 851-52 ("{T}he Commission need not isolate the injury caused by other factors from injury caused by unfair imports."); *Taiwan Semiconductor Industry Ass'n,* 266 F.3d at 1345 ("{T}he Commission need not isolate the injury caused by other factors from injury caused by unfair imports ... . Rather, the Commission must examine other factors to ensure that it is not attributing injury from other sources to the subject imports." (emphasis in original)); *Asociacion de Productores de Salmon y Trucha de Chile AG v. United States*, 180 F. Supp. 2d 1360, 1375 (Ct. Int'l Trade 2002) ("{t}he Commission is not required to isolate the effects of subject imports from other factors contributing to injury" or make "bright-line distinctions" between the effects of subject imports and other causes.); *see also Softwood Lumber from Canada*, Inv. Nos. 701-TA-414 and 731-TA-928 (Remand), USITC Pub. 3658 at 100-01 (Dec. 2003) (Commission recognized that "{i}f an alleged other factor is found not to have or threaten to have injurious effects to the domestic industry, *i.e*., it is not an 'other causal factor,' then there is nothing to further examine regarding attribution to injury"), *citing Gerald Metals,* 132 F.3d at 722 (the statute "does not suggest that an importer of LTFV goods can escape countervailing duties by finding some tangential or minor cause unrelated to the LTFV goods that contributed to the harmful effects on domestic market prices.").

[90] S. Rep. 96-249 at 74-75; H.R. Rep. 96-317 at 47.

[91] *See Nippon Steel Corp*., 345 F.3d at 1381 ("an affirmative material-injury determination under the statute requires no more than a substantial-factor showing. That is, the 'dumping' need not be the sole or principal cause of injury.").

imports."[92] The Commission ensures that it has "evidence in the record" to "show that the harm occurred 'by reason of' the LTFV imports," and that it is "not attributing injury from other sources to the subject imports." [93] The Federal Circuit has examined and affirmed various Commission methodologies and has disavowed "rigid adherence to a specific formula."[94]

The question of whether the material injury threshold for subject imports is satisfied notwithstanding any injury from other factors is factual, subject to review under the substantial evidence standard.[95] Congress has delegated this factual finding to the Commission because of the agency's institutional expertise in resolving injury issues.[96]

B. Conditions of Competition and the Business Cycle

The following conditions of competition inform our analysis of whether there is a reasonable indication of material injury or threat of material injury by reason of subject imports.

1. Demand Conditions

U.S. demand for phosphate fertilizers is primarily driven by agricultural plantings (acres planted), which are impacted by factors such as weather volatility, crop rotation, fertilizer use rates, and crop prices relative to fertilizer prices.[97] U.S. demand for phosphate fertilizers is also

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[92] *Mittal Steel*, 542 F.3d at 876 &78; *see also id.* at 873 ("While the Commission may not enter an affirmative determination unless it finds that a domestic industry is materially injured 'by reason of' subject imports, the Commission is not required to follow a single methodology for making that determination ... {and has} broad discretion with respect to its choice of methodology.") *citing United States Steel Group v. United States*, 96 F.3d 1352, 1362 (Fed. Cir. 1996) and S. Rep. 96-249 at 75. In its decision in *Swiff-Train v. United States*, 793 F.3d 1355 (Fed. Cir. 2015), the Federal Circuit affirmed the Commission's causation analysis as comporting with the Court's guidance in *Mittal*.

[93] *Mittal Steel*, 542 F.3d at 873 (quoting from *Gerald Metals*, 132 F.3d at 722), 877-79. We note that one relevant "other factor" may involve the presence of significant volumes of price-competitive nonsubject imports in the U.S. market, particularly when a commodity product is at issue. In appropriate cases, the Commission collects information regarding nonsubject imports and producers in nonsubject countries in order to conduct its analysis.

[94] *Nucor Corp. v. United States*, 414 F.3d 1331, 1336, 1341 (Fed. Cir. 2005); *see also Mittal Steel*, 542 F.3d at 879 ("*Bratsk* did not read into the antidumping statute a Procrustean formula for determining whether a domestic injury was 'by reason' of subject imports.").

[95] We provide in our discussion below a full analysis of other factors alleged to have caused any material injury experienced by the domestic industry.

[96] *Mittal Steel*, 542 F.3d at 873; *Nippon Steel Corp*., 458 F.3d at 1350, *citing U.S. Steel Group*, 96 F.3d at 1357; S. Rep. 96-249 at 75 ("The determination of the ITC with respect to causation is ... complex and difficult, and is a matter for the judgment of the ITC.").

[97] CR/PR at II-8; Petition, Vol. I. at 23; Mosaic Postconf. Br. at 14-15; OCP Postconf. Br. at 23-24; PhosAgro Postconf. Br. at 3-4; Gavilon Postconf. Br. at 1, 6-8.

subject to seasonal business cycles and is higher in the months preceding the spring and fall planting seasons.[98] Mosaic states that to meet the two seasonal surges in demand, producers manufacture phosphate fertilizers throughout the year, and the supply chain such as wholesalers and retailers move product into position during the off seasons.[99]

Total acres planted for the three major U.S. crops – corn, soybeans, and wheat – was relatively stable between 2017 and 2018, declined by 6.6 percent in 2019, and is expected to increase by 4.3 percent in 2020.[100] Consistent with this, a plurality of responding U.S. producers and importers reported that U.S. demand for phosphate fertilizers has fluctuated since January 1, 2017.[101] The parties state that there were unusually wet weather conditions beginning in the fall of 2018 and through the spring and fall of 2019, which had the result of reducing crop plantings and caused U.S. demand for phosphate fertilizers to decline, but that demand for phosphate fertilizers rebounded with increased crop plantings in interim 2020.[102]

Apparent U.S. consumption fluctuated annually, but declined overall by *** percent from 2017 to 2019, and was *** percent lower in interim 2020 than in interim 2019.[103] It increased from *** short tons in 2017 to *** short tons in 2018, then decreased to *** short tons in 2019; it was lower in interim 2020 at *** short tons than in interim 2019 at *** short tons.[104]

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[98] CR/PR at II-9; Petition, Vol. I. at 23; Mosaic Postconf. Br. at 14-15; OCP Postconf. Br. at 23.

[99] Mosaic U.S. Producer Questionnaire Response at IV-16.

[100] CR/PR at II-8, Figure II-1.

[101] CR/PR at Table II-4. Specifically, two of three responding domestic producers and three of seven U.S. importers indicated that U.S. demand has fluctuated since January 1, 2017. *See id.*

[102] Mosaic U.S. Producer Questionnaire Response at IV-14; OCP Postconf. Br. at 24; PhosAgro Postconf. Br. at 3-4; Gavilon Postconf. Br. at 6-9; IRM Postconf. Br. at 17; Koch Postconf. Br. at 3.

[103] CR/PR at Tables IV-8, C-1. To calculate apparent U.S. consumption, market shares, and subject import volume, values, and average unit values, we rely on official import statistics adjusted to remove U.S. importers' export shipments as reported in the questionnaire responses. Doing so controls for the subject imports that entered into the United States for consumption but were reexported to Canada, particularly after Nutrien announced its decision to close Canada's sole phosphate fertilizer production facility in February 2018. OCP Postconf. Br. at Responses to Staff Questions pp. 11-12; PhosAgro Postconf. Br. at Responses to Staff Questions p. 16; Gavilon Postconf. Br. at 20-21; IRM Postconf. Br. at Responses to Staff Questions p. 6; Koch Postconf. Br. at Responses to Staff Questions p. 7. As OCP and IRM explained, the most logistically efficient and least costly way to serve the Canadian market was entering product into the United States duty free under the applicable HTS provisions and shipping through the Mississippi River. OCP Postconf. Br. at 28-29; IRM Postconf. Br. at 3, 16.

[104] CR/PR at Tables IV-8, C-1.

2. Supply Conditions

In these investigations, the U.S. market was supplied by domestically produced phosphate fertilizers and imports from subject and nonsubject countries. The domestic industry was the largest supplier of phosphate fertilizers to the U.S. market during the POI. Its share of apparent U.S. consumption declined from *** percent in 2017 to *** percent in 2018 and *** percent in 2019, representing an overall decrease of *** percentage points between 2017 and 2019.[105] Three firms – Mosaic, PCS Phosphate Company, Inc. ("Nutrien"), and Simplot – accounted for the vast majority of all known U.S. production of phosphate fertilizers in the United States in 2019, with Mosaic serving as the leading producer in the United States during the POI.[106] ***.[107] Also in 2019, Mosaic temporarily idled 500,000 short tons at its Faustina, Louisiana facility and ***.[108] Consequently, the domestic industry's capacity decreased from *** short tons in 2017 to *** short tons in 2018 and *** short tons in 2019.[109] U.S. importers (who were also purchasers of the domestic like product) argue that as a result of the domestic industry's reduction in capacity, they had difficulties in obtaining adequate supply of domestically produced phosphate fertilizers.[110] Mosaic reported that after idling its Plant City facility, it reduced planned sales volume targets for 2018 with certain customers, but denies it had any continuing supply constraints, pointing to its *** and its excess capacity throughout the POI as contradicting allegations of supply issues.[111]

[105] CR/PR at Tables IV-8, C-1. The domestic industry's share of apparent U.S. consumption was *** percent in interim 2019 and *** percent in interim 2020. *See id.*

[106] CR/PR at I-3, Table III-1. In 2019, Mosaic accounted for *** percent of domestic production. CR/PR at Table III-1.

[107] CR/PR at Table III-3.

[108] CR/PR at Table III-3, CR/PR at III-3.

[109] CR/PR at Tables III-4, C-1. The domestic industry's capacity was *** short tons in interim 2019 and *** short tons in interim 2020. *See id.*

[110] Gavilon Postconf. Br. at 21-24 (citing reductions in allocated contract volume by 100,000 tons and ***); IRM Postconf. Br. at 17-18; Koch Postconf. Br. at 3-4 (citing to statements made by its customers Valley and Inter-Chem as well as other statements on the record made by *** regarding domestic industry supply issues).

[111] Mosaic U.S. Producer Questionnaire Response at IV-17; Mosaic Postconf. Br. at Responses to Staff Questions pp. 29-31, 35-36, 47-51. The domestic industry's capacity utilization was *** percent in 2017, *** percent in 2018, and *** percent in 2019. It was *** percent in interim 2019 and *** percent in interim 2020. CR/PR at Tables III-4, C-1.

Subject imports accounted for the second largest source of supply. Their share of apparent U.S. consumption rose from *** percent in 2017 to *** percent in 2018 and *** percent in 2019, representing an increase of *** percentage points over the POI.[112]

Nonsubject imports were the smallest source of supply to the U.S. phosphate fertilizer market. Their share of apparent U.S. consumption increased from *** percent in 2017 to *** percent in 2018 and *** percent in 2019.[113] According to official import statistics, the largest nonsubject sources of phosphate fertilizers to the U.S. market in 2019 were Saudi Arabia, which accounted for 7.2 percent of total phosphate fertilizer imports, followed by Mexico and Israel, which accounted for 4.5 percent and 3.8 percent of total imports, respectively.[114]

3. Substitutability and Other Conditions

The record indicates that there is a high degree of substitutability between the domestic like product and phosphate fertilizers from subject sources.[115] MAP and DAP accounted for the vast majority of U.S. shipments of the domestic like product and subject imports.[116] Moreover, all U.S. producers reported that the domestic like product and phosphate fertilizers from Morocco and Russia were always interchangeable in all comparisons; and the vast majority of U.S. importers reported that the domestic like product and phosphate fertilizers from each subject country were always or frequently interchangeable in all comparisons.[117]

The record also indicates that price is an important consideration in purchasing decisions, although other considerations are important as well. All three U.S. producers reported that differences other than price between and among subject imports from Morocco

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[112] CR/PR at Tables IV-8, C-1. Subject imports' share of apparent U.S. consumption was *** percent in interim 2019 and *** percent in interim 2020. *See id.*

[113] CR/PR at Tables IV-8, C-1. Nonsubject imports' share of apparent U.S. consumption was *** percent in interim 2019 and *** percent in interim 2020. *See id.*

[114] CR/PR at Table IV-3. Mosaic is affiliated through *** of ***, the only known producer and exporter of phosphate fertilizers in Saudi Arabia. CR/PR at Table III-2; Mosaic Postconf. Br. at Exhibit 32; CNIF Data (EDIS Doc. 714181); https://www.maaden.com.sa/en/about/saf (visited July 29, 2020) (EDIS Doc. 715979). Mosaic states that its investment in the Saudi facility was ***. Mosaic Postconf. Br. at Responses to Staff Questions p. 78. Nonsubject imports from Saudi Arabia increased from 36,792 short tons in 2017 to 288,338 short tons in 2019. CR/PR at Table IV-3.

[115] CR/PR at II-12.

[116] CR/PR at Table IV-5. Specifically, MAP and DAP – both of which are used for direct application and in multi-nutrient NPK bulk blends – accounted for *** percent of the domestic industry's U.S. shipments, *** percent of U.S. shipments of subject imports from Morocco, and *** percent of U.S. shipments of subject imports from Russia. *See id.*

[117] CR/PR at Table II-6.

and Russia and the domestic like product were sometimes or never significant.[118] Four of seven importers reported that such differences were always or frequently significant when comparing the domestic like product to subject imports from Morocco, and a majority of importers reported that such differences were sometimes or never significant in comparing the domestic like product to imports from Russia.[119] Purchasers responding to the Commission's lost sales/lost revenue survey identified price/cost, availability/supply, and quality as the top main factors considered in their purchasing decisions, with price/cost and availability/supply being the most cited top-ranking factors.[120]

Phosphate fertilizer prices are widely disseminated in the U.S. market. Publications such as Argus, Fertecon, ICIS, and Green Market regularly publish information regarding sales transaction prices on a weekly or even daily basis.[121] Mosaic states that as a result, prices of phosphate fertilizers in the U.S. market are highly transparent.[122] Two of three U.S. producers (***) and two of seven U.S. importers (***) refer to prices published in trade publications in determining sales prices.[123]

Raw material costs ranged between *** percent and *** percent of the domestic industry's overall cost of goods sold ("COGS") during the full years of the period of investigation.[124] The primary inputs in producing phosphate fertilizers are phosphate rock, sulfur, and ammonia.[125] All major U.S. producers are vertically integrated from phosphate rock mining through phosphate fertilizer production and are at least partially vertically integrated

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[118] CR/PR at Table II-7.

[119] CR/PR at Table II-7. Some of the non-price differences that were identified by importers as being significant were product availability, quality, and logistics. CR/PR at II-15-16.

[120] CR/PR at Table II-5.

[121] CR/PR at V-3.

[122] Petition, Vol. I at 24; Mosaic Postconf. Br. at 20. Respondents also agree that there is some level of price transparency in the U.S. market. Specifically, OCP states that transparency exists in major hubs where prices are reported in trade publications such as Green Markets, CRU, Argus, and Fertecon, but that the reported indices do not always accurately represent the market supply and demand situation and do not drive an automatic price evolution. OCP Postconf. Br. at Responses to Staff Questions p. 19. PhosAgro states there is not "full" price transparency in the U.S market, claiming that quantity rebates that are offered by producers like Mosaic are not reflected in the published prices. PhosAgro Postconf. Br. at Responses to Staff Questions p. 23. IRM states that with the exception of Mosaic's MES fertilizer product, prices are transparent in the market. IRM Postconf. Br. at Responses to Staff Questions p. 8. Koch states there is a basic level of price transparency, but claims that not all sales are reported to the price reporting publications and that published prices may not truly reflect the sales prices of market participants. Koch Postconf. Br. at Response to Staff Questions p. 12.

[123] CR/PR at V-3-4.

[124] CR/PR at Table VI-1.

[125] CR/PR at V-1.

with respect to production of ammonia.[126] U.S. producers, however, purchase some phosphate rock and ammonia from other suppliers, and will usually purchase sulfur from unrelated U.S. suppliers.[127] Between January 2017 and March 2020, prices for phosphate rock reported in CRU Phosphate Fertilizer Market Outlook ("CRU") was relatively stable, while prices for ammonia fluctuated and prices for sulfur declined.[128]

C. Volume of Subject Imports

Section 771(7)(C)(i) of the Tariff Act provides that the "Commission shall consider whether the volume of imports of the merchandise, or any increase in that volume, either in absolute terms or relative to production or consumption in the United States, is significant."[129] The volume of cumulated subject imports increased from *** short tons in 2017 to *** short tons in 2018 and 2019; they were *** short tons in interim 2019 and *** short tons in interim 2020.[130] Thus, the volume of cumulated subject imports increased *** percent overall from 2017 to 2019. As noted, apparent U.S. consumption decreased *** percent during this period.[131]

The share of apparent U.S. consumption held by cumulated subject imports, by quantity, also increased from 2017 to 2019. Their market share increased from *** percent in 2017 to *** percent in 2018 and *** percent in 2019; their market share was *** percent in interim 2019 and *** percent in interim 2020.[132] Cumulated subject imports gained market share at the expense of the domestic industry, gaining *** percentage points of market share between 2017 and 2019, while the domestic industry lost *** percentage points of market share in the same period.[133]

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[126] Nutrien reported that the closure of its Alberta production facility was because of the need to import phosphate rock for this facility. CR/PR at III-3. Additionally, ***. CR/PR at Table III-3.

[127] CR/PR at V-1; Mosaic Postconf. Br. at Responses to Staff Questions pp. 32-33, 73-74. Mosaic reports that it mines phosphate rock at three sites in Florida and imports a small volume from its joint venture phosphate rock operations in Peru. *See id.* at Responses to Staff Questions pp. 32-33. It produces ammonia at a facility in Florida and also purchases this raw material under long term contracts with CF Industries and ***. *See id.* at Responses to Staff Questions pp. 27, 73-74.

[128] CR/PR at Figure V-1; PhosAgro's Postconf. Br. at Exhibit 8.

[129] 19 U.S.C. § 1677(7)(C)(i).

[130] CR/PR at Tables IV-8, C-1.

[131] CR/PR at Tables IV-8, C-1.

[132] CR/PR at Tables IV-8, C-1.

[133] CR/PR at Tables IV-8, C-1. The domestic industry's market share, by quantity, declined from *** percent in 2017 to *** percent in 2018 and *** percent in 2019; its market share was *** percent in interim 2019 and *** percent in interim 2020. *See id.*

We find, for purposes of the preliminary phase of these investigations, that the volume of cumulated subject imports and the increase in that volume are significant in absolute terms and relative to consumption in the United States.

D. Price Effects of the Subject Imports

Section 771(7)(C)(ii) of the Tariff Act provides that, in evaluating the price effects of subject imports, the Commission shall consider whether –

> (I) there has been significant price underselling by the imported merchandise as compared with the price of domestic like products of the United States, and
>
> (II) the effect of imports of such merchandise otherwise depresses prices to a significant degree or prevents price increases, which otherwise would have occurred, to a significant degree.[134]

As previously discussed, the record in the preliminary phase of these investigations indicates that there is a high degree of substitutability between subject imports and the domestic like product and that price is an important consideration in purchasing decisions.

The Commission collected quarterly pricing data from U.S. producers and importers for the total quantity and value of two phosphate fertilizer products shipped in bulk (*i.e.*, barge-load) to unrelated U.S. agricultural customers in the NOLA area.[135] [136] One U.S. producer and five importers provided usable pricing data, although not all firms reported pricing for both products for all quarters of the POI.[137] Pricing data reported by these firms accounted for approximately *** percent of U.S. producers' U.S. commercial shipments, *** percent of U.S.

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[134] 19 U.S.C. § 1677(7)(C)(ii).

[135] CR/PR at V-7-8. The two pricing products were: (1) Standard-grade monoammonium phosphate (MAP), chemical formula $NH_4H_2PO_4$, granular, excluding high-purity MAP; and (2) Standard-grade diammonium phosphate (DAP), chemical formula $(NH_4)_2(HPO_4)$, granular. *See id.*

[136] According to Mosaic, a large share of subject imports enter the U.S. market into the port of New Orleans (NOLA) and NOLA is the first point of competition with U.S. producers and is considered a benchmark for U.S. phosphate fertilizer pricing. Mosaic asserts that U.S. producers' phosphate fertilizer plants that are not proximate to NOLA (*e.g.*, Mosaic's Florida plants) must absorb freight to be competitive with imports when shipping to NOLA. Petition, Vol. I at 36. For these reasons, the Commission collected pricing data from both U.S. producers and importers on a "barge-loaded" delivered-NOLA basis.

[137] CR/PR at V-8.

shipments of subject imports from Morocco, and *** percent of U.S. shipments of subject imports from Russia in 2019.[138] [139]

Based on the available pricing data obtained by the Commission in these preliminary phase investigations, cumulated subject imports undersold the domestic like product in 16 of 52 quarterly comparisons with margins of underselling ranging from 0.1 percent to 13.0 percent and an average underselling margin of 2.8 percent. Subject imports oversold the domestic like product in the remaining 36 instances with margins of overselling ranging from 0.1 and 11.2 percent and an average overselling margin of 4.0 percent.[140] [141] The results of the lost sales/lost revenue survey demonstrate that seven of ten responding purchasers reported purchasing subject imports instead of the domestic like product during the POI, and that three of these seven purchasers reported that subject import prices were lower than those for domestically produced phosphate fertilizers.[142] Two of those purchasers reported that price was a primary reason for their decision to purchase subject imports rather than the domestic like product.[143]

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[138] CR/PR at V-8. U.S. producer *** and U.S. importers *** stated that they had no sales into the NOLA region and U.S. producer *** reported that its shipments were by ***. CR/PR at V-8 n.19.

[139] The parties argued that there are certain imperfections in the quarterly pricing data on the record that, in their view, undermine the soundness of comparisons of pricing data for determining whether underselling occurred. Mosaic asserts that the Commission, while collecting price data for NOLA sales made by importers to their customers, did not do so for the earlier level of trade in the U.S. market – *i.e.*, U.S. importer purchase cost data – thus omitting price data for the first point of competition between subject imports and the domestic like product in the U.S. market. Mosaic Postconf. Br. at 31-32, Responses to Staff Questions pp. 54-56. Mosaic further maintains that *** and that certain of these major importers failed to provide price data, thus limiting the number of proper price comparisons. Mosaic Postconf. Br. at 31-32, Responses to Staff Questions pp. 54-56. In particular, Mosaic observes that *** and that ***. *See id.* at Responses to Staff Questions p. 55. OCP argues that the Commission's collection of f.o.b.-NOLA prices did not provide apples-to-apples comparisons because Mosaic's reported sales included the cost of freight transported from its plants in Florida to NOLA, while import prices did not include inland transportation costs. OCP Postconf. Br. at 34. In addition, PhosAgro and IRM contend that quarterly pricing did not result in fair or accurate comparisons given the price volatility of fertilizer prices that changed on a weekly, or even daily basis. PhosAgro Postconf. Br. at 14-15, Responses to Staff Question pp. 18-19; IRM Postconf. Br. at Responses to Staff Questions p. 7. In any final phase of the investigations, we request that the parties in their comments on the draft questionnaires provide suggestions on the appropriate methodology for the Commission to collect comparable pricing data for the domestic like product and the subject imports that may also improve pricing coverage.

[140] CR/PR at Table V-6. There were *** short tons of subject merchandise involved in underselling comparisons and *** short tons involved in overselling comparisons. *See id*.

[141] Mosaic maintains that this "mixed" underselling at *** is consistent with the commodity nature of phosphate fertilizers and their transparent prices. Mosaic Postconf. Br. at 32-33.

[142] CR/PR at Tables V-8a-8b.

[143] CR/PR at V-17-19, Tables V-8a-8b. Purchasers identified supply availability as the main non-price reason for purchasing subject imports instead of the domestic like product. CR/PR at Table V-8a.

The volume of these purchases of subject imports totaled *** short tons.[144] Based on the available pricing data in the record of these preliminary phase investigations and questions raised by the parties as to the accuracy of the "apples-to-apples" comparisons when evaluating pricing data from domestic producers and from U.S. importers, we do not draw any conclusions concerning the significance of underselling by subject imports.

We have also examined the available data on pricing trends. The data on the record show that prices fluctuated between each full year, but declined overall during the POI for both the domestic like product and subject imports. Between the first and last quarters of the POI, prices of domestically produced pricing product 1 (MAP) decreased by *** percent and prices of domestically produced pricing product 2 (DAP) declined by *** percent.[145] During this time period, prices for subject imports also decreased for each of the pricing products (by *** percent for MAP and *** percent for DAP from Morocco and by *** percent for MAP and *** percent for DAP from Russia).[146] [147]

The record shows that cumulated subject imports increased in volume between 2017 and 2018, as apparent U.S. consumption increased and remained at elevated levels in 2019 when unusually wet weather caused demand to unexpectedly decline.[148] Apparent U.S. consumption rose *** percent from 2017 to 2018 but declined *** percent from 2018 to 2019, leaving apparent U.S. consumption essentially flat from 2017 to 2019.[149] Mosaic asserts that the presence of subject imports contributed to an oversupply in the U.S. market in 2019 and worsened price declines.[150] Respondents contend that the decline in prices over the POI was attributable to declining global prices and plummeting demand rather than any effects from subject imports.[151] In any final phase of these investigations, we intend to further explore these

[144] CR/PR at Tables V-8a-8b.

[145] CR/PR at Table V-5. Domestic producer prices for both pricing products rose from the first quarter of 2017 through the last quarter of 2018, then fell from the first quarter of 2019 through the last quarter of 2019, for an overall decrease from 2017 to 2019. CR/PR at Tables V-3-4. Domestic producer prices rose for both pricing products from the last quarter of 2019 to the first quarter of 2020 but remained lower than in the first quarter of 2017. *See id.*

[146] CR/PR at Table V-5.

[147] Three purchasers reported that U.S. producers had reduced prices in order to compete with lower-priced imports from the subject countries. CR/PR at V-19.

[148] CR/PR at Tables IV-8, C-1. The parties agree that the decline in demand in 2019 was due to unusually wet weather conditions. Mosaic Postconf. Br. at 15; OCP Postconf. Br. at 24; PhosAgro Postconf. Br. at 3-4; Gavilon Postconf. Br. at 6-8; IRM Postconf. Br. at 17; Koch Postconf. Br. at 3.

[149] CR/PR at Tables IV-8 and C-1.

[150] Petition, Vol. I at 34-35; Mosaic Postconf. Br. at 30-31, Responses to Staff Questions p. 63.

[151] OCP Postconf. Br. at 36-39; PhosAgro Postconf. Br. at Responses to Staff Questions pp. 19, 24; IRM Postconf. Br. at 19, 21; Gavilon Postconf. Br. at 28-29; Koch Postconf. Br. at 2-3.

market conditions and the factors that were affecting price movements. Given the significant increase in the volume of subject imports during the POI and the noted decline in consumption in 2019, we cannot conclude that subject imports did not exacerbate the price declines in 2019 and depress prices to a significant degree.

During the POI, the domestic industry's ratio of COGS to net sales decreased from *** percent in 2017 to *** percent in 2018 and then increased to *** percent in 2019, for an overall increase in COGS to net sales of *** percentage points; it was *** percent in interim 2019 and higher, at *** percent, in interim 2020.[152] The record indicates that the domestic industry's higher COGS to net sales ratio in 2019 and interim 2020 was attributable to increasing raw material costs and other factory costs relative to declining net sales from 2018.[153] The increase in the industry's COGS-to-net-sales ratio occurred as poor weather conditions led to a decline in consumption in 2019 and the domestic industry's prices and production also declined. During the period of investigation, the industry's raw material costs increased from $*** in 2017 to $*** in 2018 and $*** in 2019; they were higher in interim 2020 at $*** million than in interim 2019 at $***.[154] The industry's other factory costs decreased from $*** in 2017 to $*** in 2018, then increased to $*** in 2019; they were higher in interim 2020 at $*** than in interim 2019 at $***.[155] The industry's direct labor costs steadily declined from $*** in 2017 to $*** in 2018 and $*** in 2019; they were lower in interim 2020 at $*** than in interim 2019 at $***.[156] [157]

[152] CR/PR at Table VI-1.

[153] CR/PR at VI-9.

[154] CR/PR at Tables IV-8, C-1, VI-1.

[155] CR/PR at Table VI-1.

[156] CR/PR at Table VI-1.

[157] For purposes of these preliminary phase investigations, Commissioner Karpel finds that there is evidence of price suppression. Specifically, in addition to *** percentage point increase in the COGS to net sales ratio, Commissioner Karpel notes that the average unit value of U.S. producers net sales increased by $*** per ton between 2017 and 2019 (*** of the 3 U.S. producers recorded a decline in net sales average unit value). The increase in the industry's COGS over this same period was $*** per ton. Of the overall COGS increase, $*** (*** percent) was in raw materials. CR/PR at VI-6. This occurred while subject imports took market share directly from U.S. producers (at a time during which apparent U.S. consumption was essentially flat). Further, while prices increased from 2017 to 2018 when consumption increased and then fell again from 2018 to 2019 when consumption decreased, prices fell in 2019 below 2017 prices when consumption was *** as it was in 2017 (only *** percentage points lower). CR/PR at Tables V-3, V-4 and C-1. Thus, while demand may have affected domestic producers' ability to pass on rising costs, the large volume of subject imports in 2019 that remained at nearly 2018 levels despite the decline in demand that year also appear to have affected domestic producers' ability to pass on rising costs.

Given the foregoing and the totality of the available evidence in these preliminary phase investigations, we cannot conclude that subject imports did not have adverse price effects on the domestic industry. We intend to further examine the nature of price competition between subject imports and the domestic like product in any final phase of these investigations.

E. Impact of the Subject Imports

Section 771(7)(C)(iii) of the Tariff Act provides that the Commission, in examining the impact of the subject imports on the domestic industry, "shall evaluate all relevant economic factors which have a bearing on the state of the industry." These factors include output, sales, inventories, capacity utilization, market share, employment, wages, productivity, profits, cash flow, return on investment, ability to raise capital, research and development, and factors affecting domestic prices. No single factor is dispositive and all relevant factors are considered "within the context of the business cycle and conditions of competition that are distinctive to the affected industry."[158]

Apparent U.S. consumption by quantity increased by *** percent between 2017 and 2018, then declined in 2019 for an overall decline of *** percent over the full years of the POI.[159] The domestic industry's production and shipments declined from 2017 to 2019,[160] and its financial indicators, although improving between 2017 and 2018 as apparent U.S. consumption increased, showed sharp downturns after 2018.[161] Moreover, the domestic industry lost market share to subject imports. The domestic industry's share of apparent U.S. consumption declined from *** percent in 2017 to *** percent in 2018 and *** percent in 2019; it was *** percent in interim 2019 and *** percent in interim 2020.[162] During the full years of the POI, the relative increase in subject imports' U.S. shipments accounted for *** percent of the decline in the domestic industry's market share.[163]

The domestic industry's capacity declined by *** percent between 2017 to 2019, from *** short tons in 2017 to *** short tons in 2018 and *** short tons in 2019; it was higher in

[158] 19 U.S.C. § 1677(7)(C)(iii). This provision was amended by the Trade Preferences Extension Act of 2015, Pub. L. 114-27.

[159] CR/PR at Tables IV-8, C-1.

[160] CR/PR at Tables III-4, III-6, C-1.

[161] CR/PR at Tables VI-1, C-1.

[162] CR/PR at Tables IV-8, C-1.

[163] CR/PR at Tables IV-8, C-1.

interim 2020 at *** short tons than in interim 2019 at *** short tons.[164] Production declined by *** percent from 2017 to 2019, from *** short tons in 2017 to *** short tons in 2018 and *** short tons in 2019; it was lower in interim 2020 at *** short tons than in interim 2019 at *** short tons.[165] Capacity utilization increased from *** percent in 2017 to *** percent in 2018 and *** percent in 2019; it was lower in interim 2020 at *** percent than in interim 2019 at *** percent.[166]

The domestic industry's U.S. shipments declined by *** percent between 2017 and 2019, from *** short tons in 2017 to *** short tons in 2018 and *** short tons in 2019; its U.S. shipments were higher in interim 2020 at *** short tons that in interim 2019 at *** short tons.[167] The domestic industry's end-of-period inventories increased by *** percent from 2017 to 2019 and was *** percent lower in interim 2020 than in interim 2019.[168] The domestic industry's ratio of end-of-period inventories to total shipments increased steadily from 2017 to 2019 but was lower in interim 2020 than in interim 2019.[169]

Employment indicators trended downward. The domestic industry's number of production and related workers fell from *** in 2017 to *** in 2018 and *** in 2019 and was

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[164] CR/PR at Tables III-4, C-1. As previously discussed, this decline in production capacity reflects Mosaic's idling of its Plant City, Florida facility in December 2017 and *** in 2019. CR/PR at III-3. Mosaic states that ***. It claims that this evidence demonstrates the injury caused by subject imports. Petition, Vol. I at 41; Mosaic Postconf. Br. at 38, Responses to Staff Questions p. 63. Respondents, however, dispute the reasons for the idling and facility closures. They allege that Mosaic intentionally idled and ultimately closed its Plant City facility so that it could serve the U.S. market from its lower-cost overseas production in Saudi Arabia. OCP Postconf. Br. at 29-30; Gavilon Postconf. Br. at 24-25; IRM Postconf. Br. at 23. Respondents further argue that ***. PhosAgro Postconf. Br. at Responses to Staff Questions pp. 25-26; Gavilon Postconf. Br. at 38-39; IRM Postconf. Br. at Responses to Staff Questions p. 9. OCP claims that ***. OCP Postconf. Br. at Responses to Staff Questions at 20. We intend to further explore these issues in any final phase of these investigations.

[165] CR/PR at Tables III-4, C-1.

[166] CR/PR at Tables III-4, C-1.

[167] CR/PR at Tables III-6, C-1.

[168] CR/PR at Tables III-7, C-1. The domestic industry's end-of-period inventories totaled *** short tons in 2017 and 2018 and *** short tons in 2019. They totaled *** short tons in interim 2019 and *** short tons in interim 2020. *See id.* As Mosaic notes, production of phosphate fertilizers occurs year-round to satisfy seasonal demand for spring and fall plantings, thus indicating that large inventories would be expected prior to these planting seasons. Given this cycle, we invite parties in their comments on draft questionnaires to comment on whether another time period to measure inventory levels is appropriate.

[169] CR/PR at Tables III-7, C-1. The ratio of end-of-period inventories to total shipments was *** percent in 2017, *** percent in 2018, *** percent in 2019, *** percent in interim 2019, and *** percent in interim 2020. *Id.*

lower in interim 2020 at *** than in interim 2019 at ***.[170] Total hours worked,[171] wages paid,[172] and productivity[173] also fell from 2017 to 2019 and were lower in interim 2020 than interim 2019.

The domestic industry's financial performance deteriorated over the POI. Specifically, from 2017 to 2019, net sales by value decreased by *** percent.[174] The domestic industry's gross profit, operating income, and net income followed overall demand trends – increasing between 2017 and 2018 as apparent U.S. consumption increased, but deteriorating after 2018 as apparent U.S. consumption declined. Specifically, the domestic industry's gross profit increased from $*** in 2017 to $*** in 2018, then declined to ***; it was lower in interim 2020 at *** than in interim 2019 at $***.[175] The industry's operating income increased from $*** in 2017 to $*** in 2018, then declined to *** in 2019; it was lower in interim 2020 at *** than in interim 2019 at $***.[176] The ratio of operating income to net sales increased from *** percent in 2017 to *** percent in 2018, then declined to *** percent in 2019; it was lower in interim 2020 at *** percent than in interim 2019 at *** percent.[177] The domestic industry's net income increased from $*** in 2017 to $*** in 2018, then declined to ***; it was lower in interim 2020 at *** than in interim 2019 at $***.[178]

While apparent U.S. consumption levels fluctuated but were relatively flat overall between 2017 and 2019, the domestic industry lost market share over the three full years and experienced steadily declining production, U.S. shipments, and employment measures. Available pricing data also indicate that prices for the domestically manufactured product were lower in 2019 than in 2017, as demand declined between 2018 and 2019. As a result, the domestic industry's financial performance was *** in 2019 compared to 2017.

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[170] CR/PR at Tables III-9; C-1.

[171] CR/PR at Tables III-9; C-1. Total hours worked decreased from *** hours in 2017 to *** hours in 2018 and *** hours in 2019 and were lower in interim 2020 at *** hours than in interim 2019 at *** hours. *Id*.

[172] CR/PR at Tables III-9; C-1. Wages paid decreased from $*** in 2017 to $*** in 2018 to $*** in 2019 and were lower in interim 2020 at $*** than in interim 2019 at $***. *Id*.

[173] CR/PR at Tables III-9; C-1. Productivity per 1,000 hours decreased from *** short tons in 2017 to *** short tons in 2018 and *** short tons in 2019 and was lower in interim 2020 at *** short tons than in interim 2019 at *** short tons. *Id*.

[174] CR/PR at Tables VI-1; C-1. Net sales by value increased from $*** in 2017 to $*** in 2018, then declined to $*** in 2019 and was lower in interim 2020 at $*** than in interim 2019 at $***. *See id.*

[175] CR/PR at Tables VI-1, C-1.

[176] CR/PR at Tables IV-1, C-1.

[177] CR/PR at Tables VI-1, C-1.

[178] CR/PR at Tables VI-1, C-1.

Domestic producers' capital expenditures decreased from $*** in 2017 to $*** in 2018, then increased to $*** in 2019; they were higher in interim 2020 at $*** than in interim 2019 at $***.[179] *** also reported negative effects on investment and growth and development that *** attributed to subject imports.[180]

Cumulated subject imports were significant in volume and increasing over the POI, taking market share from the domestic industry, whose performance deteriorated between 2018 and 2019. Further, as discussed, we cannot conclude that the increasing volume of cumulated subject imports did not have significant adverse price effects, thus contributing to the domestic industry's declining financial performance over the POI. We therefore conclude for purposes of these preliminary investigations that cumulated subject imports had a significant adverse impact on the domestic industry.

We have considered whether there are other factors that may have had an impact on the domestic industry during the POI to ensure that we are not attributing injury from such other factors to subject imports. Respondents allege several such other factors, including the domestic industry's alleged inability or refusal to supply U.S. purchasers;[181] unusual weather disruptions that caused demand to plummet in 2019;[182] Mosaic's poor management decisions

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[179] CR/PR at Tables VI-6, C-1. Research and development expenses decreased from $*** in 2017 to $*** in 2018 and $*** in 2019; they were lower in interim 2020 at $*** than in interim 2019 at $***. *See id.*

[180] CR/PR at Tables VI-9-10.

[181] Specifically, respondents claim that the domestic industry suffered from transportation and distribution limitations within the United States and was not able to compete in certain geographic locations. OCP Postconf. Br. at 18-19; Koch Postconf. Br. at 6-7. They further claim that U.S. producers have been increasingly unable to meet the needs of the current U.S. phosphate fertilizer market. They observe that in 2000, there were a dozen U.S. phosphate fertilizer producers, but that depleting U.S. phosphate rock reserves, both in quantity and quality, have resulted in consolidation of the domestic industry with only four U.S. producers with active phosphate fertilizer operation – Mosaic, Nutrien, Simplot, and Itafos – remaining. OCP Postconf. Br. at 18; Gavilon Postconf. Br. at 10-11; IRM Postconf. Br. at 1-2, 11-12, 17-19; Koch Postconf. Br. at 1. Moreover, according to respondents, Mosaic's intentional idling of its Plant City, Florida facility, ***, exportation of *** of domestic production, and focus of production on its patented MES fertilizer product, reduced the availability of domestically produced MAP and DAP, the main categories of phosphate fertilizers sold in the U.S. market. *See* OCP Postconf. Br. at 16-18, 28-30; Gavilon Postconf. Br. at 21-26; IRM Postconf. Br. at 2, 17-19, 24; Koch Postconf. Br. at 1, 4-5. They claim that as a consequence, Mosaic was forced to decrease its allocated volume of a supply contract with Gavilon by 100,000 tons a year, ***, turned down other sizeable order requests by Gavilon, and ***. Gavilon Postconf. Br. at 21-24; IRM Postconf. Br. at 17-18; *see also* Koch Postconf. Br. at 3-4.

[182] OCP Postconf. Br. at 43-44; Gavilon Postconf. Br. at 39-40; IRM Postconf. Br. at 22-23. Observing that the domestic industry's profitability was *** and its financial condition improved

(*continued*...)

and cost challenges that impacted the domestic industry's performance as a whole;[183] and the domestic industry's decline in exports and their lower prices.[184] There is limited information in the record of the preliminary phase of these investigations to allow us to assess the factual disputes implicated by respondents' allegations and Mosaic's rebuttals.[185] We intend to explore these issues in any final phase of these investigations.

We have also examined the role of nonsubject imports. Nonsubject imports increased from *** short tons in 2017 to *** short tons in 2018, then declined to *** short tons in 2019.[186] Their market share fluctuated, but increased overall by *** percentage points from

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notwithstanding a *** percent increase in the volume of subject imports, respondents assert that the industry's ensuing *** in 2019 were due to a record bad year for the entire agriculture sector. Gavilon Postconf. Br. at 31-36; IRM Postconf. Br. at 23.

[183] OCP Postconf. Br. at 44-45; PhosAgro Postconf. Br. at 9-11; Gavilon Postconf. Br. at 37-38; IRM Postconf. Br. at 22-23. Respondents claim that after having invested $1,400,000,000 in the Plant City, Florida facility in 2014, Mosaic idled the plant just three years later, ultimately closing it in 2019 citing the plant's inefficiencies and its addition of capacity in Saudi Arabia. OCP Postconf. Br. at 44-45; Gavilon Postconf. Br. at 37-38; IRM Postconf. Br. at 23. Respondents further contend that Mosaic faced dwindling reserves of usable phosphate rock, requiring it to purchase this raw material from third parties, and that it had locked itself into a long-term contract to purchase ammonia at a price significantly higher than it could obtain on the global market. OCP Postconf. Br. at 44-45; PhosAgro Postconf. Br. at 9-10.

[184] PhosAgro Postconf. Br. at 10-11.

[185] Mosaic disputes respondents' arguments regarding its inability or refusal to supply product during the POI. It maintains that it possesses the same logistical efficiencies of moving product up the Mississippi River via its own barge fleeting facility in the NOLA area and competes with subject imports sold by rail out of Florida and the Ports of Houston and Galveston, as well as subject imports sold by the truck load out of warehouses, via Mosaic's extensive infrastructure network throughout the inland United States. Mosaic Postconf. Br. at 18, Responses to Staff Questions pp. 34-35. In addition, it argues that the evidence that it ***, and the domestic industry's excess capacity throughout the POI contradict respondents' arguments of supply constraints. *See* Mosaic Postconf. Br. at Responses to Staff Questions at pp. 29-31, 35-36, 47-50, 77-78. Regarding respondents' other arguments, Mosaic acknowledges that the domestic industry was affected by adverse weather conditions in 2019, but it maintains that the unrelenting surge of low-priced subject imports was a significant cause of material injury. It states that subject producers continued to ship large volumes of phosphate fertilizers to the U.S. market throughout 2019 and 2020 despite reduced demand and ***, which exerted significant pressure on domestic prices and sales. Petition, Vol. I at 56, Mosaic Postconf. Br. at Responses to Staff Questions p. 23. Mosaic also denies respondents' claims that it faced cost challenges in its sourcing of raw materials or that there was any decline in the quantity and quality of the phosphate rock mined in the United States. Mosaic Postconf. Br. at Responses to Staff Questions pp. 33, 79-81. Moreover, it maintains that its export shipments were relatively consistent over the POI and fails to explain the industry's declining performance. Mosaic Postconf. Br. at Responses to Staff Questions 20-21, 24-25, 51-52, 71-73.

[186] CR/PR at Tables IV-8, C-1. Nonsubject imports were lower in interim 2020 at *** short tons than in interim 2019 at *** short tons. *See id.*

*** percent in 2017 to *** percent in 2019.[187] The domestic industry, however, lost *** percentage points in market share during this time.[188] Thus, based on the available data, nonsubject imports cannot explain the magnitude of the domestic industry's loss of market share or deterioration in performance during the POI. We will examine further the role of nonsubject imports, particularly those from Saudi Arabia where Mosaic has invested in phosphate fertilizer operations, in any final phase of these investigations.[189]

VI. Conclusion

For the foregoing reasons, we determine that there is a reasonable indication that an industry in the United States is materially injured by reason of subject imports of phosphate fertilizers from Morocco and Russia that are allegedly subsidized by the governments of Morocco and Russia.

[187] CR/PR at Tables IV-8, C-1. Nonsubject imports' market share was lower in interim 2020 at *** percent than in interim 2019 at *** percent. *See id.*

[188] CR/PR at Table C-1.

[189] As noted above, nonsubject imports from Saudi Arabia, where Mosaic is affiliated with the only producer of phosphate fertilizers, increased each year of the POI until Saudi Arabia was the largest source of nonsubject imports by 2019. CR/PR at Table IV-3.

Part I: Introduction

Background

These investigations result from petitions filed with the U.S. Department of Commerce ("Commerce") and the U.S. International Trade Commission ("USITC" or "Commission") by The Mosaic Company, Plymouth, Minnesota, on June 26, 2020, alleging that an industry in the United States is materially injured and threatened with material injury by reason of subsidized imports of phosphate fertilizers[1] from Morocco and Russia. The following tabulation provides information relating to the background of these investigations.[2] [3]

Effective date	Action
June 26, 2020	Petitions filed with Commerce and the Commission; institution of Commission investigations (85 FR 40319, July 6, 2020)
July 16, 2020	Commerce's notice of initiation of countervailing duty investigations (85 FR 44505, July 23, 2020)
July 17, 2020	Commission's conference (conducted through written statements, testimony, questions, and responses, July 15 – July 22, 2020)
August 7, 2020	Commission's vote
August 10, 2020	Commission's determinations
August 17, 2020	Commission's views

[1] See the section entitled "The subject merchandise" in Part I of this report for a complete description of the merchandise subject in this proceeding.

[2] Pertinent *Federal Register* notices are referenced in appendix A, and may be found at the Commission's website (www.usitc.gov).

[3] A list of witnesses that participated in the conference via written submission is presented in appendix B of this report.

Statutory criteria

Section 771(7)(B) of the Tariff Act of 1930 (the "Act") (19 U.S.C. § 1677(7)(B)) provides that in making its determinations of injury to an industry in the United States, the Commission--

> *shall consider (I) the volume of imports of the subject merchandise, (II) the effect of imports of that merchandise on prices in the United States for domestic like products, and (III) the impact of imports of such merchandise on domestic producers of domestic like products, but only in the context of production operations within the United States; and. . . may consider such other economic factors as are relevant to the determination regarding whether there is material injury by reason of imports.*

Section 771(7)(C) of the Act (19 U.S.C. § 1677(7)(C)) further provides that--[4]

> *In evaluating the volume of imports of merchandise, the Commission shall consider whether the volume of imports of the merchandise, or any increase in that volume, either in absolute terms or relative to production or consumption in the United States is significant.. . .In evaluating the effect of imports of such merchandise on prices, the Commission shall consider whether. . .(I) there has been significant price underselling by the imported merchandise as compared with the price of domestic like products of the United States, and (II) the effect of imports of such merchandise otherwise depresses prices to a significant degree or prevents price increases, which otherwise would have occurred, to a significant degree.. . . In examining the impact required to be considered under subparagraph (B)(i)(III), the Commission shall evaluate (within the context of the business cycle and conditions of competition that are distinctive to the affected industry) all relevant economic factors which have a bearing on the state of the industry in the United States, including, but not limited to. . . (I) actual and potential decline in output, sales, market share, gross profits, operating profits, net profits, ability to service debt, productivity, return on investments, return on assets, and utilization of capacity, (II) factors affecting domestic prices, (III) actual and potential negative effects on cash flow, inventories, employment, wages, growth, ability to raise capital, and investment, (IV) actual and potential negative effects on the existing development and production efforts of the domestic industry, including efforts to develop a derivative or more advanced version of the domestic like product, and (V) in {an antidumping investigation}, the magnitude of the margin of dumping.*

[4] Amended by PL 114-27 (as signed, June 29, 2015), Trade Preferences Extension Act of 2015.

In addition, Section 771(7)(J) of the Act (19 U.S.C. § 1677(7)(J)) provides that—[5]

(J) EFFECT OF PROFITABILITY.—The Commission may not determine that there is no material injury or threat of material injury to an industry in the United States merely because that industry is profitable or because the performance of that industry has recently improved.

Organization of report

Part I of this report presents information on the subject merchandise, alleged subsidy programs, and domestic like product. Part II of this report presents information on conditions of competition and other relevant economic factors. Part III presents information on the condition of the U.S. industry, including data on capacity, production, shipments, inventories, and employment. Parts IV and V present the volume of subject imports and pricing of domestic and imported products, respectively. Part VI presents information on the financial experience of U.S. producers. Part VII presents the statutory requirements and information obtained for use in the Commission's consideration of the question of threat of material injury as well as information regarding nonsubject countries.

Market summary

Phosphate fertilizers are generally used for farm crop growth. The leading U.S. producer of phosphate fertilizers is The Mosaic Company ("Mosaic"), while leading producers of phosphate fertilizer outside the United States include OCP S.A. ("OCP") of Morocco and PhosAgro PJSC ("PhosAgro"), and EuroChem of Russia. The leading U.S. importers of phosphate fertilizers from Morocco are ***, while the leading importers of phosphate fertilizers from Russia are ***. Leading importers of product from nonsubject countries include ***. U.S. purchasers of phosphate fertilizers are wholesalers, distributors, and retailers that supply agricultural end users; leading purchasers include ***.

[5] Amended by PL 114-27 (as signed, June 29, 2015), Trade Preferences Extension Act of 2015.

Apparent U.S. consumption of phosphate fertilizers totaled approximately *** short tons dry weight ($***) in 2019. Currently, five firms are known to produce phosphate fertilizers in the United States. U.S. producers' U.S. shipments of phosphate fertilizers totaled *** short tons dry weight ($***) in 2019 and accounted for *** percent of apparent U.S. consumption by quantity and *** percent by value. U.S. shipments of U.S. imports from subject sources totaled *** short tons dry weight ($***) in 2019 and accounted for *** percent of apparent U.S. consumption by quantity and *** percent by value. U.S. imports from nonsubject sources totaled *** short tons dry weight ($***) in 2019 and accounted for *** percent of apparent U.S. consumption by quantity and *** percent by value.

Summary data and data sources

A summary of data collected in these investigations is presented in appendix C, table C-1. Except as noted, U.S. industry data are based on questionnaire responses of three firms that accounted for the vast majority U.S. production of phosphate fertilizers during 2019. U.S. imports are based on questionnaire responses from seven firms and official U.S. import statistics.[6]

Previous and related investigations

Phosphate fertilizers have not been the subject to prior countervailing or antidumping duty investigations in the United States.

Nature and extent of alleged subsidies

On July 23, 2020, Commerce published a notice in the *Federal Register* of the initiation of its countervailing duty investigation on phosphate fertilizers from Morocco.[7] Commerce identified the following government programs in Morocco:

[6] As discussed in more detail in Part IV and appendix C, data for U.S. importers' U.S. shipments is derived by removing U.S. importers' export shipment data, as reported in questionnaire responses, from the official import statistics. U.S. import and apparent U.S. consumption data derived from questionnaire responses is presented in Appendix D.

[7] 85 FR 44505, July 23, 2020.

Loan Programs

1. OCP Bond Program
2. Direct Government Loans
3. Government Loan Guarantees
4. Creditworthiness of the OCP Group

A. Provision of Goods and Services for Less Than Adequate Renumeration of (LTAR)

1. Provision of Phosphate Mining Rights for LTAR
2. OCP Bond Issuance for LTAR

B. Tax Programs

1. Value Added Tax (VAT) Reform
2. Tax Incentives for Export Operations
3. Provision of Phosphogypsum Waste Disposal

On July 23, 2020, Commerce published a notice in the *Federal Register* of the initiation of its countervailing duty investigation on phosphate fertilizers from Russia.[8] Commerce identified the following government programs in Russia:

A. Provisions of Good and Services for Less Than Adequate Renumeration (LTAR)

1. Provisions of Phosphate Mining Rights for LTAR
2. Provision of Natural Gas for LTAR

B. Tax Programs

1. Tax Incentives for Mining Operations – Reduction in Extraction Tax
2. Tax Incentives for Mining Operations – Income Tax Deduction for Exploration Expenses
3. Income Tax Deduction for Research and Development (R&D) Expenses

C. Preferential Export Financing

1. State Specialized Russian Export-Import Bank (Eximbank) Financing

D. Regional Government Subsidies

1. Murmansk Region's Support of Industrial Development
2. Saratov Region's Support of Industrial Development

[8] 85 FR 44505, July 23, 2020.

The subject merchandise

Commerce's scope

In the current proceeding, Commerce has defined the scope as follows:[9]

> *The merchandise covered by the investigation is phosphate fertilizers in all physical forms (i.e., solid or liquid form), with or without coating or additives such as anti-caking agents. Phosphate fertilizers in solid form are covered whether granular, prilled (i.e., pelletized), or in other solid form (e.g., powdered).*
>
> *The covered merchandise includes phosphate fertilizers in the following forms: ammonium dihydrogenorthophosphate or monoammonium phosphate (MAP), chemical formula NH4H2PO4; diammonium hydrogenorthophosphate or diammonium phosphate (DAP), chemical formula (NH4)2HPO4; normal superphosphate (NSP), also known as ordinary superphosphate or single superphosphate, chemical formula Ca(H2PO4)2·CaSO4; concentrated superphosphate, also known as double, treble, or triple superphosphate (TSP), chemical formula Ca(H2PO4)2·H2O; and proprietary formulations of MAP, DAP, NSP, and TSP.*
>
> *The covered merchandise also includes other fertilizer formulations incorporating phosphorous and non-phosphorous plant nutrient components, whether chemically-bonded, granulated (e.g., when multiple components are incorporated into granules through, e.g., a slurry process), or compounded (e.g., when multiple components are compacted together under high pressure), including nitrogen, phosphate, sulfur (NPS) fertilizers, nitrogen, phosphorous, potassium (NPK) fertilizers, nitric phosphate (also known as nitrophosphate) fertilizers, ammoniated superphosphate fertilizers, and proprietary formulations thereof that may or may not include other nonphosphorous plant nutrient components. For phosphate fertilizers that contain non-phosphorous plant nutrient components, such as nitrogen, potassium, sulfur, zinc, or other non-phosphorous components, the entire article is covered, including the non-phosphorous content, provided that the phosphorous content (measured by available diphosphorous pentaoxide, chemical formula P2O5) is at least 5% by actual weight.*
>
> *Phosphate fertilizers that are otherwise subject to this investigation are included when commingled (i.e., mixed or blended) with phosphate*

[9] 85 FR 44505, July 23, 2020.

fertilizers from sources not subject to this investigation. Phosphate fertilizers that are otherwise subject to this investigation are included when commingled with substances other than phosphate fertilizers subject to this investigation (e.g., granules containing only non-phosphate fertilizers such as potash or urea). Only the subject component of such commingled products is covered by the scope of this investigation.

The following products are specifically excluded from the scope of the investigation:

(1) ABC dry chemical powder preparations for fire extinguishers containing MAP or DAP in powdered form;
(2) industrial or technical grade MAP in white crystalline form with available P2O5 content of at least 60% by actual weight;
(3) industrial or technical grade diammonium phosphate in white crystalline form with available P2O5 content of at least 50% by actual weight;
(4) liquid ammonium polyphosphate fertilizers;
(5) dicalcium phosphate, chemical formula CaHPO4;
(6) monocalcium phosphate, chemical formula CaH4P2O8;
(7) trisodium phosphate, chemical formula Na3PO4;
(8) sodium tripolyphosphate, chemical formula Na5P3O10;
(9) prepared baking powders containing sodium bicarbonate and any form of phosphate;
(10) animal or vegetable fertilizers not containing phosphate fertilizers otherwise covered by the scope of the investigation;
(11) phosphoric acid, chemical formula H3PO4.

The Chemical Abstracts Service (CAS) numbers for covered phosphate fertilizers include, but are not limited to: 7722-76-1 (MAP); 7783-28-0 (DAP); and 65996- 95-4 (TSP). The covered products may also be identified by Nitrogen-Phosphate- Potash composition, including but not limited to: NP 11-52-0 (MAP); NP 18-46-0 (DAP); and NP 0-46-0 (TSP).

Tariff treatment

Based upon the scope set forth by Commerce, information available to the Commission indicates that the merchandise subject to these investigations are imported under statistical reporting numbers 3103.11.0000; 3103.19.0000; 3103.90.0010; 3105.10.0000; 3105.20.0000; 3105.30.0000; 3105.40.0010; 3105.40.0050; 3105.51.0000; 3105.59.0000; 3105.60.0000; 3105.90.0010; and 3105.90.0050 of the Harmonized Tariff Schedule of the United States ("HTS"). The 2020 general rate of duty is free for the above listed statistical reporting numbers. Decisions on the tariff classification and treatment of imported goods are within the authority of U.S. Customs and Border Protection.

The product

Description and applications

Phosphorus (P) is a chemical element essential to all life on Earth which has no substitute. Phosphate fertilizer in soluble P form is one of the three primary plant nutrients along with nitrogen (N) and potassium (K) responsible for crop production and bountiful harvests over more than 300 million acres of fertile U.S. cropland.[10] Phosphate fertilizers may contain phosphorus nutrient alone or be combined chemically or physically blended in solid or liquid forms in various combinations with nitrogen and potassium nutrients. Phosphorus is a vital component in the process of converting the sun's energy into food, fiber, and oilseeds, where it plays a key role in plant photosynthesis, the metabolism of sugars, energy storage and transfer, cell division, cell enlargement, and transfer of genetic information. These processes lead to healthy root growth, groundcover, water use efficiency, and the quality of fruit, vegetable and grain crops vital to U.S. and global nutrition. Soluble phosphate is also used in industrial products such as soft drinks, food products, fire retardants and metal treatment.[11]

There are four fundamentally representative phosphate fertilizer product types, monoammonium phosphate (MAP) and diammonium phosphate (DAP), together with triple superphosphate (TSP), and single superphosphate (SSP), each differing somewhat in chemical and physical properties, but all containing primary phosphorus (P) nutrient designed to fertilize plants.[12] Other types of phosphate fertilizers contain various chemical combinations of

[10] National Agricultural Statistics Service (NASS), USDA, *Acreage,* June 30, 2020.
[11] *Phosphorus,* "Essential Elements," The Fertilizer Institute, www.tfi.org, retrieved July 17, 2020.
[12] Petition, volume I, pp. I-9-10.

nitrogen, phosphorus and sulfur (NPS), such as Mosaic's proprietary MicroEssentials® NPS specialty line of fertilizers, and nitrogen, phosphorus, and potassium (NPK) chemical combinations.[13]

MAP and DAP are large volume ammonium phosphate (NP) fertilizers sharing similar chemical compositions and characteristics, each popularly used for direct application and in multi-nutrient NPK bulk blends. MAP, (11-52-0), is higher in phosphorus content (52 percent vs. 48 percent) and mildly acidic in soils, while DAP, (18-46-0), is higher in nitrogen (18 percent vs. 11 percent) and mildly alkaline, each type variably used dependent on crop and soil types. Mosaic MicroEssentials® NPS product is also a high volume product composed of various combinations of MAP, ammonium sulfate, elemental sulfur and zinc combined in single granules, for example (12-40-0 10S 1Z). Specialty products of this nature enhance crop yields and fertilizer efficiency through prescription formulation and application methods. TSP is a high-analysis, single nutrient phosphorus fertilizer of phosphate rock mineral and phosphoric acid chemical (0-46-0) finding use in direct application and NPK bulk blends. Single superphosphate (SSP) is a low-analysis product derived from phosphate mineral and sulfuric acid (0-20-0), having limited use in direct application and multi-nutrient NPK blend applications.[14]

Phosphate fertilizer primary phosphorus nutrient is derived from phosphate rock mineral ores of sedimentary marine origin deposited over various geological periods millions of years ago, now mined in Florida and North Carolina and in the western states of Idaho and Utah.[15] Moroccan phosphate rock ore is also of sedimentary origin; Russian phosphate rock ores of igneous (molten rock) origin of the Kola Peninsula are the highest grade globally.[16] [17] Marketable phosphate rock is an insoluble form of phosphate ore that is refined and transformed into several types of soluble phosphate fertilizers at production plants, of which representative principal forms are the solid granular ammoniated phosphate DAP, and MAP. The various phosphate grades of commercial phosphate rocks are expressed in terms of tricalcium phosphate, $Ca_3(PO_4)_2$, known in the trade as "Bone Phosphate of Lime," or BPL. Typical BPL contents of marketable U.S. phosphate rock are estimated to average around 61 percent BPL, or 28 percent as phosphorus pentoxide, P_2O_5.[18] [19]

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[13] Mosaic, www.cropnutrition.com/microessentials, retrieved July 20, 2020.
[14] Petition, volume I, pp. I-9-14.
[15] *Phosphate Rock, Mineral Commodity Summaries*, U.S. Geological Survey, January 2020.
[16] Petition, volume II, Morocco, pp. II-1-6.
[17] Petition, volume III, Russia, pp. III-2-7.
[18] The P_2O_5 content of tricalcium phosphate or BPL is 45.76 percent; thus, BPL x 0.4576 = P_2O_5.
[19] U.S. Geological Survey, "Phosphate Rock 2017."

Standards established for expressing the plant available nutrient analysis of fertilizers and associated labeling in the United States and Canada are coordinated by the Association of American Plant Food Control Officials Organization (AAPFCO).[20] Nitrogen, Phosphorus, and Potassium available plant nutrient contents are expressed in terms of nitrogen (N), and the oxides of phosphorus (P_2O_5), and potassium (K_2O). Nitrogen forms are recognized as completely water soluble, phosphate forms mostly soluble in a combination of water or citrate solution, and potassium, in water. Any insoluble portions outside of water or citrate solution, however, are not considered a part of the official nutrient analysis. Fertilizer nutrient analyses are designated simply by the abbreviated term N-P-K. For example, a fertilizer having a plant available nutrient analysis of 15 percent each of nitrogen, P_2O_5, and K_2O, would be labeled simply as 15-15-15, or if an N-P, 15-15-0, or a P-K, 0-15-15.

U.S. phosphate fertilizer use is dependent on demand for domestic crop fertilization.[21] Fertilizer consumption is cyclically dependent upon multiple factors including crop distribution and soil types, planted crop acreage and weather during narrow spring and fall seasonal application windows, crop and fertilizer prices, offshore competition and global supply and demand.[22] Also, export volumes of DAP and MAP are important sources of demand for U.S. produced phosphate fertilizers.[23] Phosphate fertilizers are generally shipped in bulk to wholesales/distributors, retailers or end users (farmers) via barge, rail and truck. There is limited end use of fertilizer materials in industrial fire retardants and food applications. Nonfertilizer uses for animal feeds and certain other products produced from purified phosphoric acid are also present in the U.S. marketplace.[24]

[20] *AAPFCO Product Label Guide*, 2019, www.aapfco.org, retrieved July 19, 2020.

[21] USDA, ERS, *Fertilizer use and price*, https://www.ers.usda.gov/data-products/fertilizer-use-and-price.aspx, accessed July 2020.

[22] Gavilon conference testimony (Harlander), pp. 1-3, and IRM testimony (O'Neill), pp. 1-5.

[23] *Phosphate Rock, Mineral Commodity Summaries*, U.S. Geological Survey, January 2020.

[24] Petitioner responses to Commerce supplemental scope questions, pp. 10-11, July 6, 2020.

Manufacturing processes

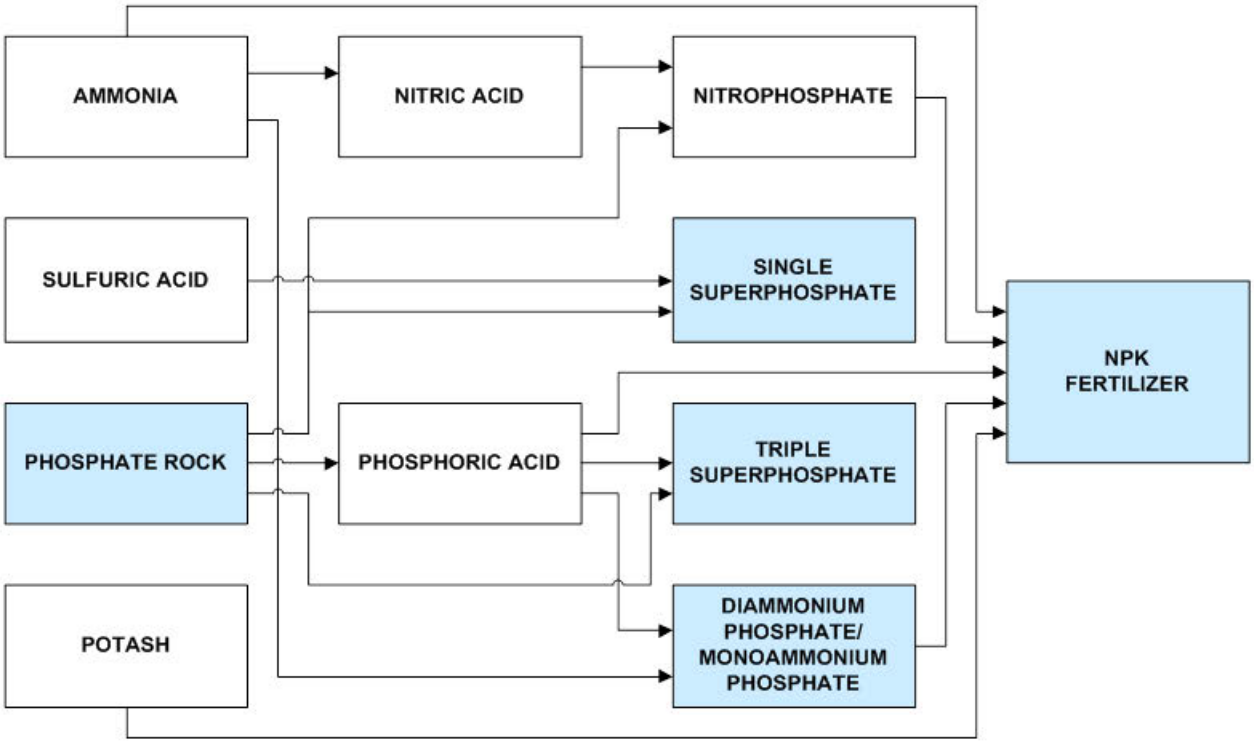
The fundamentals of phosphate fertilizer manufacture are similar across the industry. Phosphate fertilizers are based on refined phosphate rock ore which first must be converted to soluble P form as liquid wet-process phosphoric acid (H_3PO_4). The major feedstocks required to produce phosphoric acid and thence to finished phosphate fertilizers are phosphate rock, a mineral of calcium, phosphorus and fluorine (calcium fluorapatite), anhydrous ammonia (NH_3), and sulfur (S). Refined phosphate rock ore depending on logistics and location may be delivered from mining sites to producer phosphate plants by slurry pipeline, conveyor belt, rail or truck; anhydrous ammonia by pipeline or rail, and molten sulfur by rail. Phosphate rock and phosphate fertilizer production operations are vertically integrated and may use combinations of slurry pipeline and conveyor belt transfer from mine to plant depending upon distances between mining and manufacture. Refined phosphate rock in western states is delivered from mine to plant by cost effective slurry pipeline over distances up to 100 miles.[25]

Sulfur is first burned to produce sulfur oxides dissolved in water to produce liquid sulfuric acid (H_2SO_4), while byproduct steam generated in the process may be used to produce cogenerated power for plant operations and for possible surplus sales to local utility firms. This is followed by sulfuric acid acidulation of finely ground phosphate rock in a series of reaction vessels designed to produce liquid phosphoric acid. The major byproduct of this reaction is phosphogypsum ($CaSO_4$) a product of calcium from the phosphate rock and sulfur from the sulfuric acid. Fluorine gas from the phosphate mineral is scrubbed out in water and used as a major municipal water fluoridation agent in the form of hydrofluorosilicic acid.[26] Phosphogypsum slurry is filtered out from liquid phosphoric acid and pumped to disposal stacks or backfilled into mined out pits depending upon impurities.[27] [28]

The following process flow diagram demonstrates the various phosphate fertilizer process steps leading to the large number of phosphate fertilizer products produced.[29]

[25] Simplot Phosphates, LLC, www.simplot.com, retrieved June 26, 2002.
[26] Mosaic, www.mosaicco.com, retrieved July 21, 2020.
[27] Petition exhibits, I-11-14.
[28] Petition, volume II, p. II-15. Moroccan phosphogypsum is reportedly discharged to ocean waters.
[29] Petition exhibits, I-12-22.

Figure I-1
Phosphate Fertilizers: Process Flow Diagram



Source: Nexant.

Ammonium phosphate fertilizers are solid granular water-soluble reaction products of ammonia (NH_3) and phosphoric acid (H_3PO_4) as shown. The ammonium phosphate fertilizers diammonium phosphate (DAP), 18-46-0, and monoammonium phosphate (MAP), 11-52-0, are principal high analysis granular multi-nutrient phosphate fertilizers popularly consumed and traded in domestic and offshore markets with advantages of consumption as direct application N-P or bulk blend N-P-K applications with potash potassium (K) mineral fertilizer nutrient, other nitrogen fertilizers and associated additives. Granulated forms typically range in solid particle size averaging about 3 millimeters (mm), with coatings designed to prevent moisture absorption and caking. MAP is mildly acidic on the pH scale due to its lower ratio of ammonia to phosphoric acid compared to DAP which is mildly alkaline, but each form performs well in soil types and crop fertilization applications. Liquid ammonium phosphates are produced from ammonia and concentrated phosphoric acid known as superphosphoric acid; 10-34-0 is a popular liquid ammonium polyphosphate fertilizer as this type prevents precipitation of solids in liquid formulations. Liquid polyphosphate fertilizers, although important, have lower volume applications compared to solid fertilizers.[30]

[30] Petitioner responses to Commerce supplemental scope questions, p. 10, July 6, 2020.

Various combinations of ammonia N, phosphoric acid P, and potash nutrient K can be reacted to produce granular chemically mixed or compound fertilizers (complex fertilizers) of various nutrient analyses ranging from N-P to N-P-K fertilizers, each chemically combined in a single homogeneous fertilizer granule. Certain types of this nature are also produced by compacting various fertilizer nutrient combinations together into a given fertilizer granule.[31] Each of these types is reported to increase the efficiency of fertilizer application and crop yields by providing prescription formulation and application specificity for crops in a single granule. Sulfur and other chemical ingredients, zinc and other micronutrients, can also be added as constituents of these products. Complementary products are also produced in Morocco[32] and Russia.[33] [34]

Petitioner produces a series of proprietary MicroEssentials® (MES/MESZ) homogeneous nutrient granule products of N-P sulfur (NPS) and NPS-Zinc reported to account for 20 percent of applied phosphate fertilizer in the United States, and also shipped to other countries.[35] [36] The products are reportedly based on MAP, ammonium sulfate, elemental sulfur, and zinc having product analyses of MESZ®12-40-0 10S 1Z; MES15® 13-33-0 15S; and MES10®, 12-40-0 10S.[37] [38] Simplot also produces a similar MAP-based NPS-Zn "40 Rock"™ product, 12-40-0, containing 1 percent of infused Zn and 6 percent S.[39]

Triple Superphosphate (TSP) is a high analysis single nutrient granular 0-46-0 phosphate fertilizer product containing 46% available P_2O_5 typically produced by the reaction of phosphoric acid with high analysis, 72-73% BPL (33% P_2O_5) ground phosphate rock. The product has declined in use over the years due to its limitations as a single nutrient fertilizer along with a general decline in U.S. phosphate rock grades and its acidic nature in the pH 3 range.[40] According to official U.S. fertilizer consumption statistics, TSP consumption peaked circa mid-

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[31] Petitioner responses to Commerce supplemental scope questions, pp. 11-13, July 6, 2020.

[32] OCP, https://www.ocpgroup.ma/en/our-products/fortified-fertilizers, retrieved, July 26, 2020.

[33] PhosAgro, https://www.phosagro.com/production/fertilizer/, retrieved July 26, 2020.

[34] EuroChem, https://www.eurochemgroup.com/products/agricultural-products/, retrieved July 26, 2020.

[35] Mosaic, www.cropnutrition.com/microessentials, retrieved July 20, 2020.

[36] Mosaic, http://www.mosaicco.com/Who_We_Are/4238.htm, retrieved July 25, 2020.

[37] Mosaic, http://www.mosaicco.com/products/premium_products.htm, retrieved July 20, 2020.

[38] OCP conference testimony (Aranoff), pp. 1-3, and IRM conference testimony (O'Neill), pp. 1-5. Respondents questioned the inclusion of petitioner proprietary MicroEssentials-type products as a commodity scope product.

[39] J.R. Simplot conference testimony (Stone), pp. 1-2.

[40] International Raw Materials conference testimony (O'Neill), pp. 1-5.

1975 and has progressively declined thereafter.[41] U.S. producer Simplot , Pocatello, ID, advertises TSP as part of its product portfolio as a preferred source of P_2O_5 in high analysis bulk blends.[42] Moroccan shipments of TSP to the United States averaged about 150,000 short tons, valued at $44 million during the period 2017-19.[43] [44] Israel also shipped similar amounts of TSP to the United States.

Single Superphosphate (SSP) is a low analysis single nutrient granular phosphate fertilizer assaying 20% available P_20_5 produced by the reaction of sulfuric acid with ground phosphate rock. Single Superphosphate was one of the early chemically produced phosphate fertilizers in the United States and is no longer produced or consumed to any degree.

Nitrophosphates are granular phosphate fertilizer products produced from the nitric acid acidulation of phosphate rock designed to produce phosphoric acid and calcium nitrate used for N-P-K production confined principally to European producers who import phosphate rock feedstock. There is no presently known production of nitrophosphates in the United States or in subject countries.[45]

Domestic like product issues

The petitioner proposes a single like product, co-extensive with the scope of these investigations.[46] The petitioner states that all forms of phosphate fertilizer possess similar physical characteristics and uses, are interchangeable, are sold through the same channels of distribution, are viewed as a single category of products, are manufactured through similar production processes, and fall within the same general price range.[47]

[41] Fertilizer use and price, USDA, ERS, https://www.ers.usda.gov/data-products/fertilizer-use-and-price.aspx, accessed July 2020.

[42] Simplot, http://www.simplot.com/ag_suppliers/ag_crop_nutrition/dry_products, retrieved July 27, 2020. Simplot's annual TSP capacity is rated at ***.

[43] USITC Dataweb import trade data, HTS 3103.11.00, accessed July 25, 2020.

[44] OCP, https://www.ocpgroup.ma/en/our-products/fertilizers, retrieved July 26, 2020.

[45] Petition, Volume I, pp. I-9-13. and associated Part I exhibits, June 26, 2020.

[46] Petitioner's postconference brief, p. 3

[47] Ibid, pp. 3-14.

Respondent IRM argues that NPS constitutes a separate like product from MAP and DAP.[48] IRM contends that NPS has a significant chemical difference, is not interchangeable for crops that require sulfur, requires different equipment for retail sale, requires additional time and money for production, and commands a price premium due to the added sulfur content.[49] Respondent OCP argues that the record supports negative determinations with respect to a single domestic like product, but that if the investigations proceed to a final phase, the Commission should collect data with respect to three distinct domestic like products – TSP, NPS, and all other covered phosphate fertilizers.[50]

With regard to TSP, respondent OCP contends that it has a chemical difference that is significant commercially, is uniquely appropriate for crops that require phosphate and calcium, requires different raw materials and production facilities, has commercial distinctions from nitrogen-based phosphate fertilizers, is sold through a more limited distribution network of specialized outlets, and is priced differently from MAP and DAP.[51] With regard to NPS, respondent OCP contends that it has a chemical difference due to the sulfur content, serve different needs than MAP, DAP, or TSP, requires different raw materials than DAP, MAP, and TSP, are considered premium products designed for use in sulfur-deficient soil, are marketed through limited networks of specialized outlets, and enjoy a significant price premium.[52]

[48] Respondent IRM's postconference brief, p. 5.
[49] Ibid, pp. 5-11.
[50] Respondent OCP's postconference brief, p. 4.
[51] Ibid, pp. 4-10.
[52] Ibid, pp. 10-14.

Part II: Conditions of competition in the U.S. market

U.S. market characteristics

Agricultural applications are the primary use for phosphate fertilizers. The amount and type of fertilizer used by farmers depends on soil conditions, climate conditions, type of crop, targeted yield, and prices of other fertilizers, and farmers will commonly use a custom mixture of fertilizers.[1] Phosphate fertilizers are produced in a limited range of formulations, including formulations that contain only phosphorous ("P") (such as TSP); nitrogen ("N") and phosphorous formulations (such as MAP and DAP); and nitrogen, sulfur ("S") and phosphorous ("NPS") formulations (such as Mosaic's MicroEssentials). MAP and DAP, the most common phosphate fertilizers, accounted for most of domestic and import shipments in 2019 (*** percent of U.S. producers' shipments, *** percent of subject import shipments, and *** percent of nonsubject import shipments). MAP and DAP can be combined with a separate sulfur-only fertilizer, or a farmer can use NPS fertilizers that contains all 3 nutrients.[2] According to the petitioner, if MAP and DAP prices were to rise relative to other phosphate fertilizer prices, a farmer could opt to substitute an N-only fertilizer and a P-only fertilizer (such as TSP).[3] Two of 3 U.S. producers and 3 of 7 importers reported no changes to the product mix or marketing of phosphate fertilizers since January 1, 2017. Among firms reporting changes, U.S. producer *** reported the increased availability of sulfur-enhanced phosphate fertilizers; importer *** reported increased NPS product offerings; and *** stated that the use of DAP and MAP has decreased as the market has shifted to more use of phosphate fertilizers with added sulfur, zinc, and other micro-nutrients. Other changes reported include new production capacity in Saudi Arabia and Morocco and decreased U.S. capacity (***), and more shipments arriving on consignment rather than being sold at a fixed price, which can lead to price swings when demand is weak (***). ***;[4] and ***.

Apparent U.S. consumption of phosphate fertilizers increased by *** percent from 2017 to 2018 and declined by *** percent in 2019, and it was *** percent lower in the first quarter

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[1] Retailers work with farmers to develop custom blends of fertilizers to meet their specific requirements. These blended products are typically not sold in bulk because they are specific to a particular end user and lack the stability to be transported over long distances. Petition, pp. I-13-14. Testimony of Andy Jung, Mosaic, p. 2.

[2] Testimony of Andy Jung, Mosaic, p. 3.

[3] Testimony of Andy Jung, Mosaic, p. 2.

[4] ***.

of 2020 compared to the first quarter of 2019. Overall, apparent U.S. consumption in 2019 was *** percent lower than in 2017.

Channels of distribution

U.S. producers and importers sold phosphate fertilizers mainly to retailers, followed by distributors/wholesalers (table II-1). Importers also reported a very small share of sales directly to end users.

Mosaic stated that competition occurs at both the wholesale and retail levels, and that while historically most imports were sold to distributors, imports are increasingly sold to retailers, and even end users.[5] Trading companies such as Ameropa, CHS, and Eurochem, import phosphate fertilizers from both Russia and Morocco and act as distributors, and ***.[6] Mosaic sells to Gavilon, CHS, and Helm which also import subject product, and Mosaic may also compete downstream with these importers/purchasers for sales to retailers.[7]

Geographic distribution

U.S. producers and importers reported selling phosphate fertilizers to all regions in the contiguous United States (table II-2). All three U.S. producers reported sales to each specified region in the contiguous United States except one producer (***) reported no shipments to the Northeast. All responding importers of product from Morocco and Russia reported shipments to the Midwest and Central Southwest, and all responding importers of product from Morocco also reported shipments to the Mountains region.

[5] Petition, p. I-23.
[6] Petition, p. I-27.
[7] Testimony of Dan Klett, Mosaic, p. 2.

Table II-1
Phosphate fertilizers: U.S. producers' and importers' U.S. commercial shipments, by sources and channels of distribution, 2017-19, January-March 2019, and January-March 2020

Item	Calendar year			January to March	
	2017	2018	2019	2019	2020
	Share of U.S. shipments (percent)				
U.S. producers: to Distributors/wholesalers	***	***	***	***	***
to Retailers	***	***	***	***	***
to End users	***	***	***	***	***
U.S. importers: Morocco to Distributors/wholesalers	***	***	***	***	***
to Retailers	***	***	***	***	***
to End users	***	***	***	***	***
U.S. importers: Russia to Distributors/wholesalers	***	***	***	***	***
to Retailers	***	***	***	***	***
to End users	***	***	***	***	***
U.S. importers: Subject sources to Distributors/wholesalers	***	***	***	***	***
to Retailers	***	***	***	***	***
to End users	***	***	***	***	***
U.S. importers: Nonsubject sources to Distributors/wholesalers	***	***	***	***	***
to Retailers	***	***	***	***	***
to End users	***	***	***	***	***
U.S. importers: All sources: to Distributors/wholesalers	***	***	***	***	***
to Retailers	***	***	***	***	***
to End users	***	***	***	***	***

Source: Compiled from data submitted in response to Commission questionnaires.

In 2019, more than 80 percent of phosphate fertilizer imports entered through the Port of New Orleans ("NOLA"): 89.2 percent of imports from Morocco, 84.4 percent of imports from Russia, and 67.2 percent of imports from nonsubject countries. Mosaic stated that from the NOLA port, barge loads of phosphate fertilizers can easily be shipped via the Mississippi River to the Corn Belt and other Midwest locations.[8]

For U.S. producers, 7.8 percent of sales were within 100 miles of their production facility, 46.6 percent were between 101 and 1,000 miles, and 45.6 percent were over 1,000 miles. Importers sold 43.3 percent within 100 miles of their U.S. point of shipment, 40.0 percent between 101 and 1,000 miles, and 16.7 percent over 1,000 miles.

[8] Petition, p. I-27. Testimony of Dan Klett, Mosaic, p. 2.

Table II-2
Phosphate fertilizers: Geographic market areas in the United States served by U.S. producers and importers

Region	U.S. producers	Morocco	Russia	Subject sources
Northeast	2	1	3	3
Midwest	3	6	6	7
Southeast	3	4	5	5
Central Southwest	3	6	6	7
Mountains	3	6	2	6
Pacific Coast	3	3	1	3
Other[1]	1	---	---	---
All regions (except Other)	2	1	1	1
Reporting firms	3	6	6	7

Note: All other U.S. markets, including AK, HI, PR, and VI.

Source: Compiled from data submitted in response to Commission questionnaires.

Supply and demand considerations

U.S. supply

Table II-3 provides a summary of the supply factors regarding phosphate fertilizers from U.S. producers and from subject countries. From 2017 to 2019, capacity in the United States declined and capacity in Morocco and Russia increased. Combined capacity utilization in subject countries was higher than in the United States. Exports were a large share of shipments from each country, accounting for more than *** of U.S. producers' total shipments, more than *** of Russian producers' shipments, and more than *** percent of shipments from Morocco. *** responding U.S. and foreign producers reported that they were unable to shift production from phosphate fertilizers to other products.

Domestic production

Based on available information, U.S. producers of phosphate fertilizers have the ability to respond to changes in demand with large changes in the quantity of shipments of U.S.-produced phosphate fertilizers to the U.S. market. The main contributing factors to this degree of responsiveness of supply are the availability of unused capacity and inventories and the ability to shift shipments from alternate markets. A factor mitigating responsiveness of supply include the limited ability to shift production to or from alternate products.

Table II-3
Phosphate fertilizers: Supply factors that affect the ability to increase shipments to the U.S. market

Item	2017	2019	2017	2019	2017	2019	Shipments by market in 2019 (percent)		Able to shift to alternate products
	Capacity (1,000 short tons dry weight)		Capacity utilization (percent)		Inventories as a ratio to total shipments (percent)		Home market shipments	Exports to non-U.S. markets	No. of firms reporting "yes"
United States	***	***	***	***	***	***	***	***	***
Morocco	***	***	***	***	***	***	***	***	***
Russia	***	***	***	***	***	***	***	***	***
All subject foreign producers	***	***	***	***	***	***	***	***	***

Note: Responding U.S. producers accounted for the vast majority of U.S. production of phosphate fertilizers in 2019. Responding foreign producer/exporter firms accounted for all of U.S. imports of phosphate fertilizers from Morocco and nearly all of U.S. imports from Russia during 2019. For additional data on the number of responding firms and their share of U.S. production and of U.S. imports from each subject country, please refer to Part I, "Summary Data and Data Sources."

Source: Compiled from data submitted in response to Commission questionnaires.

U.S. producers' capacity and production both declined from 2017 to 2019, with capacity declines outpacing production declines, resulting in increased capacity utilization. Mosaic idled its Plant City, Florida facility in 2017 (production capacity of 2 million tons) for a period of 18 months, and then permanently closed the facility in 2019. In fourth quarter 2019, Mosaic temporarily idled its 500,000 tons Faustina, Louisiana plant, and ***.[9]

*** producers exported phosphate fertilizers, with *** reporting that Canada and Mexico were principal export markets. ***.

*** producers reported that they were unable to switch production on the equipment used to produce phosphate fertilizers to other products, although U.S. producers reported producing some out-of-scope products on shared equipment (*** percent of total production in 2019). ***.

[9] Petition, p. I-34; Petitioner's postconference brief, p. 30 and Responses to Staff Questions, p. 63.

Subject imports from Morocco

Based on available information, the Moroccan producer OCP has the ability to respond to changes in demand with large changes in the quantity of shipments of phosphate fertilizers to the U.S. market. The main contributing factors to this degree of responsiveness of supply are growing overall capacity, the availability of unused capacity and inventories and the ability to shift shipments from alternate markets. A factor mitigating responsiveness of supply include the limited ability to shift production to or from alternate products.

OCP's capacity and production both increased from 2017 to 2019, with capacity increases outpacing production increased resulting in decreased capacity utilization. OCP exported most of its production, with exports comprising more than *** percent of its shipments during the period of investigation. OCP reported that its major other export markets are ***. OCP reported that it is *** to switch production on the same equipment used to produce phosphate fertilizers to other products, and it reported *** production of other products on shared equipment.

Subject imports from Russia

Based on available information, producers of phosphate fertilizers from Russia have the ability to respond to changes in demand with moderate changes in the quantity of shipments of phosphate fertilizers to the U.S. market. The main contributing factors to this degree of responsiveness of supply are the ability to shift shipments from alternate markets and inventories. Factors mitigating responsiveness of supply include limited availability of unused capacity and limited ability to shift production to or from alternate products.

Russian producers' capacity and production both increased from 2017 to 2019, with production increases outpacing capacity increases resulting in increased capacity utilization. Russian producers reported high rates of capacity utilization during the period (*** percent in 2019). Major export markets reported by Russian producers include ***. Russian producers reported that they are unable to switch production on the same equipment used to produce phosphate fertilizers to other products, although *** reported a small share of out-of-scope fertilizer production on shared equipment (accounting for less than *** percent of Russian producers' total production).

Imports from nonsubject sources

Nonsubject imports accounted for 22.0 percent of the quantity of total U.S. imports in 2019. The largest sources of nonsubject imports during January 2017-March 2019 were Israel, Mexico, and Saudi Arabia. Combined, these countries accounted for 70.4 percent of nonsubject imports in 2019. Saudi Arabia was the largest nonsubject country source in 2019, accounting for 32.9 percent of nonsubject imports.[10] China was the second largest nonsubject country source in 2017 but accounted for only a small share of imports in 2019.

Supply constraints

Two of three U.S. producers and two of seven importers reported that they refused, declined, or were unable to supply phosphate fertilizers since January 1, 2017. ***.[11]

[10] ***.

[11] ***.

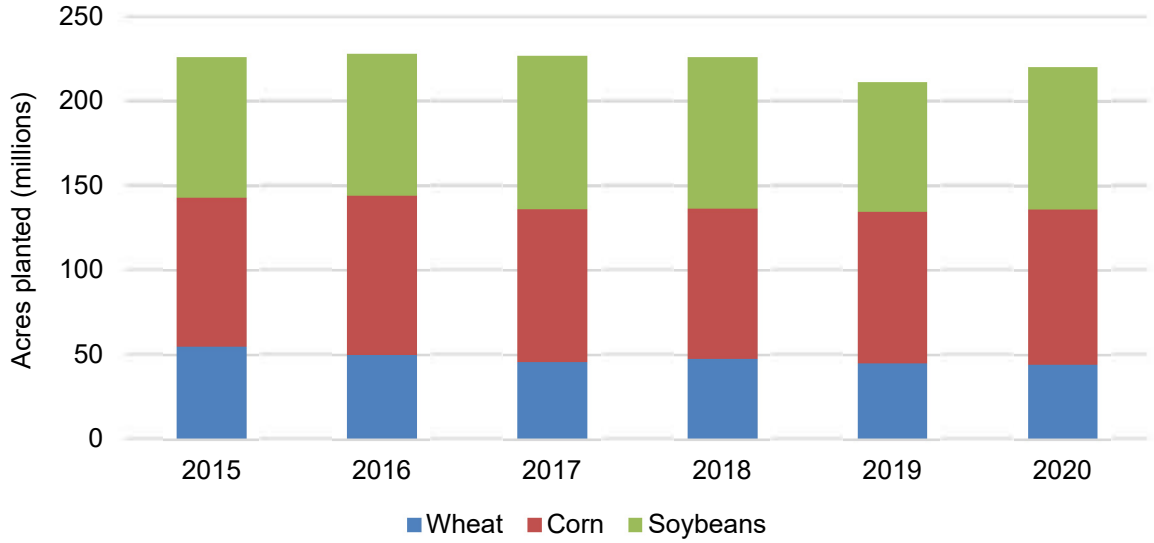
Respondent Koch stated that it imports phosphate fertilizers because it "cannot obtain meaningful supplies domestically," that Mosaic has from time to time declined to sell product, respond to RFQs and to enter into any kind of commercial arrangement to support Koch's network; and that Koch's customers (which sell to farmers and retailers) purchase from Koch because in some instances, U.S. producers will not sell to them. It added that it is more "freight logical" to import than buy from domestic producers; that OCP's quality is often preferred to domestic sources, and that U.S. producers choose to export rather than sell domestically.[12] Koch stated that it has storage facilities along the Mississippi to serve its customers and that Mosaic has limited off-site non-customer storage facilities (outside of Illinois, Iowa, Minnesota, and Wisconsin).[13] Respondent Gavilon stated that Mosaic cut supply by 100,000 tons in its long-term contract when it closed its Plant City, Florida plant in 2017.[14] Respondents also stated that flooding on the Mississippi River in 2019 stopped or delayed shipping routes, cutting off New Orleans from the Midwest markets and caused stranded inventories to build up.[15]

U.S. demand

Based on available information, the overall demand for phosphate fertilizers is likely to experience moderate changes in response to changes in price. The main contributing factors are the limited range of substitute products and the ability of farmers to adjust the amount of fertilizer used. The major driver of demand for phosphate fertilizers is agricultural plantings (acres planted), particularly for the major crops: corn, soybeans, and wheat. Total acres planted for these three crops was relatively stable between 2017 and 2018, declined by 6.6 percent in 2019, and then increased by 4.3 percent in 2020 (figure II-1). Factors impacting demand include weather volatility, crop rotation, fertilizer use rates, and crop prices relative to fertilizer prices.[16] Abnormally wet weather in the spring of 2019 resulted in reduced fertilizer applications.[17]

[12] Testimony of Scott McGinn, Koch, p. 1-2.
[13] Testimony of Scott McGinn, Koch, p. 2.
[14] Testimony of Brian Harlander, Gavilon, p. 2.
[15] Respondent Gavilon's postconference brief, pp. 16-17.
[16] Petition, p. I-23 and testimony of Brian Harlander, Gavilon, p. 2.
[17] Petition, p. I-32 and testimony of Dan Klett, Mosaic, p. 3.

Figure II-1
Agricultural plantings: Acres planted for corn, wheat, and soybeans, 2015-20



Source: USDA, National Agricultural Statistics Service.

Business cycles

All three U.S. producers and 5 of 7 importers indicated that the market was subject to business cycles. Demand for phosphate fertilizers is seasonal, with farmers applying fertilizers in the spring prior to planting and in the fall after harvest. *** stated that demand is higher in the months preceding the major spring and fall planting seasons, but that "production and logistical constraints necessitate that manufacturers produce phosphate fertilizer year round and that the supply chain, including wholesalers and retailers, continue to move product into position during the off seasons in order to meet these two seasonal surges in on-farm demand." *** stated that when there is too much precipitation, farm fields can be too wet for applications of fertilizer and fields may not be planted during the short window of the spring planting season. In addition to the seasonal growing cycles, *** stated that weather, commodity prices, and the type of crops planted (e.g. corn vs. soybeans) affect demand. Importer *** stated that the phosphate fertilizer market is subject to global supply and demand dynamics.
All three U.S. producers and 3 of 7 importers indicated that the market was subject to distinct conditions of competition. ***. *** reported that increased imports, including from Russia and Morocco are changing the U.S. market and driving prices lower.

Among importers, *** reported that in addition to supply and demand, phosphate fertilizer markets in the U.S. and globally are heavily influenced by prices of inputs ammonia and sulfur. *** stated that crop prices and weather patterns were distinct conditions. *** reported a large number of conditions, including ***.

All three U.S. producers and 3 of 7 importers indicated that there were changes in the business cycles or conditions of competition since January 1, 2017. All three U.S. producers reported that increased imports were a change in conditions of competition, with *** stating that continued Moroccan and Russian imports exacerbated the impact on its prices and sales of bad weather in late 2018 and 2019 on the spring planting season. Importer *** stated that a global decline in natural gas and coal prices has driven down ammonia prices, and that sulfur prices have also declined. It stated that the declining prices were particularly seen in China, "the major marginal cost producer of phosphates globally." *** reported that production of MAP and DAP in North America has declined since 2017, by 2.218 million metric tons ("MMT"), and that production of MAP and DAP is 1.02 MMT less than the 2020 usage. *** stated that the weather events in the second half of 2018 and first half of 2019 disrupted demand, leading to high inventories and falling prices[18] and that the market is impacted by global supply and demand and disruptions including "macro-events" such as COVID-19.

[18] ***.

Demand trends

A plurality of U.S. producers and importers reported that U.S. demand for phosphate fertilizers has fluctuated since January 1, 2017 and a majority of firms reported that demand outside of the United States increased (table II-4).

Table II-4
Phosphate fertilizers: Firms' responses regarding U.S. demand and demand outside the United States

Item	Number of firms reporting			
	Increase	No change	Decrease	Fluctuate
Demand inside the United States:				
U.S. producers	---	1	---	2
Importers	1	1	2	3
Demand outside the United States:				
U.S. producers	2	---	---	1
Importers	5	---	---	---

Source: Compiled from data submitted in response to Commission questionnaires.

U.S. producer *** stated that demand was strong in 2017 and the first half of 2018 but was weak in the second half of 2018 and in 2019 "due to the record-setting weather events (e.g. moisture/rainfall) throughout much of the U.S. Midwest," and that demand has returned to a "historically-normal level" in the first half of 2020. *** stated that U.S. demand has been relatively flat, with a slight decrease in past years due to weather.

*** stated that demand can be negatively impacted by low crop prices. *** described the U.S. market as "mature." *** stated that U.S. demand fluctuates by 4 to 5 percent each year, based on weather, crop prices, and types of crops and acres planted. *** stated that weather is the main cause of demand fluctuations and that severe weather in the fall of 2018, and a 100-year flooding event on the Mississippi river system led to largest drop in fertilizer demand seen in decades and high fertilizer inventories through the fall of 2019. *** reported demand increases to meet the needs for higher yields to feed a growing population. *** stated that demand varies based on grower economics and weather conditions. *** stated that overall U.S. demand has declined slightly because of improved seed hybrids, variable rate fertilizer application, and use of GPS for planting and fertilizing the crops precisely. In addition, it stated that bad weather in the latter part of the period of investigation decreased demand for phosphate fertilizer and that the U.S.-China trade war also reduced demand for phosphate fertilizer.

Firms generally reported increased demand outside of the United States, with some firms citing a 1 to 2 percent global demand increase. *** stated that global demand has been flat since 2017, with rising demand in developing countries (due to increased food

production and usage of fertilizer) offset by reduced demand in China (as it sought to reduce fertilizer consumption to agronomically-appropriate levels). It added that there are indications that Chinese demand has stabilized or increased in 2020 despite COVID-19 and that world demand is likely to return to its long-term 1.5 to 2.0 percent annual growth rate. *** cited improvement in global diets as a reason for increased demand, and *** stated that global demand has increased by about 1 to 2 percent due to increased cultivation. Importers cited increased planted acres, growth in developing markets, and population growth as reasons for increased global demand for phosphate fertilizers.

Substitute products

Substitutes for phosphate fertilizers are limited since there are few substitutes for the phosphate content. Organic sources such as manure have low phosphate content and would require using a large amount of manure which is impractical for large-scale commercial agriculture.[19] Two U.S. producers reported that there were substitutes for phosphate fertilizers and one U.S. producer and six importers reported that there were no substitutes. Manure, phosphate rock, and ammonium polyphosphates were listed as possible substitutes in limited applications. *** stated that organic fertilizers made from manure have limited supply and low nutrient content and cannot be transported over long distances due to the high logistical cost per unit of nutrient. Phosphate rock can be applied directly as a fertilizer but is not typically used in commercial agriculture because the phosphate is not water soluble and therefore may not become available to the plant for a period of years. *** stated that ammonium polyphosphates are a niche product, which as a liquid fertilizer, requires more specialized storage, handling and application than phosphate fertilizers.

Substitutability issues

The degree of substitution between domestic and imported phosphate fertilizers depends upon such factors as relative prices, quality (e.g., grade standards, defect rates, etc.), and conditions of sale (e.g., price discounts/rebates, lead times between order and delivery dates, reliability of supply, product services, etc.). Based on available data, staff believes that there is a high degree of substitutability between domestically produced phosphate fertilizers and phosphate fertilizers imported from subject sources.

[19] Testimony of Andy Jung, Mosaic, p. 2.

Lead times

Phosphate fertilizers are sold from inventory. U.S. producers and importers reported that all or nearly all of their commercial shipments were from inventories.[20] U.S. producers and importers reported lead times from U.S. inventories averaging 37 days and 21 days, respectively.[21] Importers reported that lead times averaged 45 days from foreign inventories.

Factors affecting purchasing decisions

Purchasers responding to lost sales lost revenue allegations[22] were asked to identify the main purchasing factors their firm considered in their purchasing decisions for phosphate fertilizers. The major purchasing factors identified by firms include price, supply, availability, and quality (table II-5). Other factors mentioned were storage capability, warehouse agreements, railcar availability, total product offerings, location of supply source, ability to efficiently and cost effectively supply the purchaser supply chain, and diversity of suppliers to ensure product availability.

Table II-5
Phosphate fertilizers: Ranking of factors used in purchasing decisions as reported by U.S. purchasers, by number of firms

Item	First	Second	Third	Total
Availability/supply	4	2	2	7
Price/cost	4	2	1	6
Quality	1	2	3	6
All other factors	1	4	4	9

Source: Compiled from data submitted in response to Commission questionnaires.

Comparison of U.S.-produced and imported phosphate fertilizers

In order to determine whether U.S.-produced phosphate fertilizers can generally be used in the same applications as imports from Morocco and Russia, U.S. producers and importers were asked whether the products can always, frequently, sometimes, or never be used interchangeably. As shown in table II-6, all responding U.S. producers reported that phosphate fertilizers from all specified sources were always interchangeable. All responding

[20] Importers reported that 89 percent of their sales were from U.S. inventories and nearly all of the remainder were from foreign inventories.

[21] ***.

[22] This information is compiled from responses by purchasers identified by the Petitioner to the lost sales lost revenue allegations. See Part V for additional information.

importers reported that U.S. produced phosphate fertilizers were always or frequently interchangeable with imported product from Morocco and from Russia. One importer indicated that imports from Morocco were never interchangeable with imports from Russia.

Table II-6
Phosphate fertilizers: Interchangeability between phosphate fertilizers produced in the United States and in other countries, by country pair

Country pair	U.S. producers				U.S. importers			
	A	F	S	N	A	F	S	N
United States vs. Morocco	3	---	---	---	2	5	---	---
United States vs. Russia	3	---	---	---	2	4	---	---
Morocco vs. Russia	3	---	---	---	2	3	---	1
United States vs. Other	3	---	---	---	2	3	1	---
Morocco vs. Other	3	---	---	---	2	3	1	---
Russia vs. Other	3	---	---	---	2	3	1	---

Note: A=Always, F=Frequently, S=Sometimes, N=Never.

Source: Compiled from data submitted in response to Commission questionnaires.

*** stated that domestic and imported phosphate fertilizers can be used in the same applications but that ***.

Importer *** stated that phosphate fertilizers of the same type, e.g. MAP or DAP, will have the same nutrient content regardless of source and thus can be used interchangeably, but that there is limited cross-product interchangeability (e.g. DAP for MAP or MAP for NPSZ) since customers typically demand a specific type of product to suit their customers' needs. It added that MESZ and NPSZ-type products include micro-essentials and do not compete with DAP or MAP. *** stated that branded products, NPK blends, and low cadmium products (produced by PhosAgro) may not be interchangeable, and also stated that "geopolitical intervention can cause changes." It also stated that its customers that purchase Moroccan and Russian NPSZ do not view the products as interchangeable, and that U.S. customers cannot purchase a high grade P content Micro Nutrient homogenous pellet like Morocco can make, and customers who purchase the Russian NPSZ equivalent do so for low cadmium content material, which Mosaic's is not. Koch stated that MAP and DAP produced in Morocco is made from higher quality ore than domestic sources and has higher levels of water solubility.[23]

In addition, U.S. producers and importers were asked to assess how often differences other than price were significant in sales of phosphate fertilizers from the United States,

[23] Respondent Koch's postconference brief, p. 5.

subject, or nonsubject countries. As seen in table II-7, the three U.S. producers reported that such differences were sometimes or never significant for all country combinations. Four of 7 importers reported that such differences were always or frequently significant in comparing domestic product to imports from Morocco, and a majority of importers reported that such differences were sometimes significant in comparing domestic product to imports from Russia and nonsubject countries.

Table II-7
Phosphate fertilizers: Significance of differences other than price between phosphate fertilizers produced in the United States and in other countries, by country pair

Country pair	U.S. producers				U.S. importers			
	A	F	S	N	A	F	S	N
United States vs. Morocco	---	---	2	1	2	2	2	1
United States vs. Russia	---	---	1	2	1	1	3	1
Morocco vs. Russia	---	---	1	2	---	1	3	1
United States vs. Other	---	---	2	1	---	1	4	1
Morocco vs. Other	---	---	1	2	---	1	3	1
Russia vs. Other	---	---	1	2	---	1	3	1

Note: A = Always, F = Frequently, S = Sometimes, N = Never.

Source: Compiled from data submitted in response to Commission questionnaires.

*** stated that the longer lead time for imports, especially during application seasons is a disadvantage, but that this is becoming less of a factor as importers set up more distribution warehouses in the United States. *** stated that its “extensive network infrastructure,” product range (including non-phosphate fertilizers, e.g. potash), and technical support may be advantages for some customers, but that differences in price between imports and domestic product generally outweigh other factors.

*** stated that Morocco is a consistent supplier to its customers compared to other suppliers (global and domestic), which may not be willing or able to supply the quantity of product needed. *** stated that non-price factors include availability, having multiple supply sources in addition to Mosaic, and that importers’ distribution networks for imports from Morocco and Russia offer more locations and are more widely distributed throughout the United States than Mosaic's distribution network. *** stated that quality (uniformity, hardness, color, and dust-free), availability and logistics are other factors. It stated that Moroccan product is consistently high-quality and that the positioning of inventories prior to application season is very important because of the long supply chain and short application season. *** reported that product availability has been an issue with phosphate fertilizers from Mosaic but not with imports from Morocco or Russia. *** stated that availability and product range are factors for its imports from OCP, explaining that Mosaic is unable to supply

all of its phosphate needs, that Mosaic does not make GTSP and makes a different grade of NPSZ which it will only sell to *** in very limited volumes. It also stated that availability is a factor in its imports from ***.

Part III: U.S. producers' production, shipments, and employment

The Commission analyzes a number of factors in making injury determinations (see 19 U.S.C. §§ 1677(7)(B) and 1677(7)(C)). Information on the subsidy programs was presented in *Part I* of this report and information on the volume and pricing of imports of the subject merchandise is presented in *Part IV* and *Part V*. Information on the other factors specified is presented in this section and/or *Part VI* and (except as noted) is based on the questionnaire responses of three firms that accounted for the vast majority of U.S. production of phosphate fertilizers during 2019.

U.S. producers

The Commission issued a U.S. producer questionnaire to five firms based on information contained in the petitions. Three firms provided usable data on their operations. Staff believes that these responses represent the vast majority of U.S. production of phosphate fertilizers.

Table III-1 lists U.S. producers of phosphate fertilizers, their production locations, positions on the petitions, and shares of total production.

Table III-1
Phosphate fertilizers: U.S. producers of phosphate fertilizers, their positions on the petitions, production locations, and shares of reported production, 2019

Firm	Position on petitions	Production locations	Share of production (percent)
Mosaic	Petitioner	Tampa, FL Plymouth, MN Bartow, FL Bowling Green, FL Lithia, FL Mulberry, FL	***
Nutrien	***	Aurora, NC White Springs, FL Geismar, LA	***
Simplot	***	Pocatello, ID Rock Springs, WY	***
Total			***

Note: ***.

Source: Compiled from data submitted in response to Commission questionnaires.

Table III-2 presents information on U.S. producers' ownership, related and/or affiliated firms. No responding U.S. producer is related to a producer/exporter of phosphate fertilizers in Morocco or Russia. Nutrien is related to Agrium, Inc., ("Agrium") a producer in Canada.[1] Nutrien was formed as a result of a merger between Agrium and Potash Corp. on January 1, 2018.[2] At the time of the merger, Agrium was North America's largest farm retailer and Potash Corp. was the world's largest crop nutrient producer by capacity.[3] Mosaic is related to several foreign producers of the subject merchandise in Saudi Arabia and Brazil.[4] No responding U.S. producer reported imports of the subject merchandise during the period for which data were collected. However, *** reported purchases of phosphate fertilizers from U.S. importers.

Table III-2
Phosphate fertilizers: U.S. producers' ownership, related and/or affiliated firms, 2019

Item / Firm	Firm Name	Affiliated/Ownership
Ownership:		
***	***	***
Related producers:		
***	***	***
***	***	***
***	***	***

Source: Compiled from data submitted in response to Commission questionnaires.

[1] *About Us*, https://www.nutrienagsolutions.com/about-us, retrieved July 28, 2020.

[2] *Agrium and PotashCorp Merger Completed Forming Nutrien, a Leader in Global Agriculture*, https://www.nutrien.com/investors/news-releases/2018-agrium-and-potashcorp-merger-completed-forming-nutrien-leader-global, retrieved July 23, 2020 and *Agrium and PotashCorp Merger Completed Forming Nutrien, a Leader in Global Agriculture*, https://www.nutrien.com/investors/news-releases/2018-agrium-and-potashcorp-merger-completed-forming-nutrien-leader-global, retrieved July 23, 2020.

[3] *Potash Corp, Agrium to merge to create $36 billion company*, https://www.cnbc.com/2016/09/12/agrium-and-potash-corp-to-merge.html, retrieved July 23, 2020.

[4] *Who We Are*, http://www.mosaicco.com/Who_We_Are/overview.htm, retrieved July 28, 2020. "Partnerships", https://www.maaden.com.sa/en/about/saf, retrieved July 28, 2020.

Table III-3 presents U.S. producers' reported changes in operations since January 1, 2017. In May 2019, Nutrien shut down its phosphate operation in Redwater, Alberta, Canada and converted it to an ammonium sulfate plant.[5] Nutrien reported that this shutdown was a strategic move to make the firm's operations more cost-effective and enabled it to eliminate the need to purchase imported phosphate rock.[6]

In June 2019, Mosaic permanently shut down its fertilizer plant in Plant City, Florida, which had been idled since late 2017. According to Mosaic, the plant was idled because it was the highest cost manufacturing plant in Florida and due to global phosphate market conditions.[7] Additionally, Mosaic's CEO, Joe O'Rourke stated, "we will continue to meet global demand for high-quality phosphate fertilizers with production from our low-cost facilities in Florida, Louisiana, Brazil and Peru, and through our joint venture in Saudi Arabia."[8] The Plant City facility produced 1.3 million tons of finished phosphates in 2017, its last year of operation.[9]

In October 2019, Mosaic temporarily idled its phosphate operations in Saint James (Faustina) and Uncle Sam, Louisiana, which cut production by 500,000 tons.[10] Mosaic reported that the idling of these facilities was in response to an oversupply of phosphate fertilizer in the North American market caused by heavy rain that delayed the planting season and due to excess imports.[11] Since the Louisiana operations serve the North American market, Mosaic saw the idling of these facilities as the best way to affect market conditions in North America ahead of an anticipated balancing of supply and demand in 2020.[12]

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[5] *Going Off the MAP at Redwater*, https://www.nutrien.com/what-we-do/stories/going-map-redwater, retrieved July 23, 2020.

[6] Ibid.

[7] *The Mosaic Company Announces Closure of Plant City Phosphates Manufacturing Facility*, http://investors.mosaicco.com/file/Index?KeyFile=398371400, retrieved July 23, 2020.

[8] Ibid.

[9] Ibid.

[10] *Mosaic Temporarily Halts Production at St. James Plants; Some Staff Will Remain for Maintenance*, https://www.theadvocate.com/baton_rouge/news/article_cc39068e-d356-11e9-8763-27c6d097ddfd.html, retrieved, July 28, 2020. *The Mosaic Company Discloses Strategic Decisions Prior to Planned Investor Meetings*, http://investors.mosaicco.com/file/Index?KeyFile=399516810, retrieved July 28, 2020. The Uncle Sam, Louisiana facility produced phosphoric and sulfuric acid.

[11] Ibid.

[12] Ibid.

Table III-3
Phosphate fertilizers: U.S. producers' reported changes in operations, since January 1, 2017

Item / Firm	Reported changed in operations
Plant closings:	
***	***
***	***
Expansions:	
***	***
Prolonged shutdowns or curtailments:	
***	***
Other:	
***	***

Source: Compiled from data submitted in response to Commission questionnaires.

U.S. production, capacity, and capacity utilization

Table III-4 and figure III-1 present U.S. producers' production, capacity, and capacity utilization.

Table III-4
Phosphate fertilizers: U.S. producers' production, capacity, and capacity utilization, 2017-19, January to March 2019, and January to March 2020

Item	Calendar year			January to March	
	2017	2018	2019	2019	2020
	Capacity (short tons dry weight)				
Mosaic	***	***	***	***	***
Nutrien	***	***	***	***	***
Simplot	***	***	***	***	***
All firms	***	***	***	***	***
	Production (short tons dry weight)				
Mosaic	***	***	***	***	***
Nutrien	***	***	***	***	***
Simplot	***	***	***	***	***
All firms	***	***	***	***	***
	Capacity utilization (percent)				
Mosaic	***	***	***	***	***
Nutrien	***	***	***	***	***
Simplot	***	***	***	***	***
All firms	***	***	***	***	***
	Share of production (percent)				
Mosaic	***	***	***	***	***
Nutrien	***	***	***	***	***
Simplot	***	***	***	***	***
All firms	***	***	***	***	***

Source: Compiled from data submitted in response to Commission questionnaires.

The collective annual production capacity of the three responding U.S. producers decreased by *** percent during 2017-19. *** reported more production capacity in 2019 than in 2017 while *** reported less.[13] *** production capacity remained unchanged during 2017-19. Responding U.S. producers' production capacity was *** percent higher in interim 2020 than in interim 2019. *** was the only firm to report more production capacity in interim 2020 than in interim 2019. *** had the same level of production capacity in both interim periods.

Responding U.S. producers' aggregate production decreased by *** percent during 2017-19. *** reported less production in 2019 than in 2017 while *** reported more production.[14] Their collective production was *** percent lower in interim 2020 than in interim 2019 with all three firms reporting less production in interim 2020 than in interim 2019. Responding U.S. producers' capacity utilization increased from *** percent in 2017 to *** percent in 2019. *** reported higher capacity utilization in 2019 than in 2017 while *** reported lower capacity utilization. Capacity utilization was lower in interim 2020 than in interim 2019 with all three responding U.S. producers reporting lower capacity utilization.

[13] Mosaic's production capacity decreased by *** percent from 2017 to 2019 and was due in part to the idling and shutdown of its production facility in Plant City, Florida as well as the idling of its production facilities in Saint James and Uncle Sam, Louisiana. *** production capacity increased by *** percent from 2017 to 2018 and was due to ***. *** production capacity *** from 2018 to 2019.

[14] *** production decreased in each year during 2017-19, ending *** percent lower in 2019 than in 2017. *** production fluctuated year to year, increasing by *** percent from 2017 to 2018, but then decreasing by *** percent from 2018 to 2019, ending *** percent lower in 2019 than in 2017. *** production increased in each year during 2017-19, ending *** percent higher in 2019 than in 2017.

Figure III-1
Phosphate fertilizers: U.S. producers' production, capacity, and capacity utilization, 2017-19, January to March 2019, and January to March 2020

* * * * * * *

Source: Compiled from data submitted in response to Commission questionnaires.

Alternative products

As shown in table III-5, phosphate fertilizers accounted for the vast majority of total production on shared equipment in each year during 2017-19 and in interim 2020. *** reported production of out-of-scope merchandise on the same machinery used to produce phosphate fertilizers during 2017-19. These U.S. producers produced ***.

Table III-5
Phosphate fertilizer: U.S. producers' overall plant capacity and production on the same equipment as subject production, 2017-19, January to March 2019, and January to March 2020

Item	Calendar year			January to March	
	2017	2018	2019	2019	2020
	Quantity (short tons dry weight)				
Overall capacity	***	***	***	***	***
Production: Phosphate fertilizers	***	***	***	***	***
Out-of-scope production	***	***	***	***	***
Total production on same machinery	***	***	***	***	***
	Ratios and shares (percent)				
Overall capacity utilization	***	***	***	***	***
Share of production: Phosphate fertilizers	***	***	***	***	***
Out-of-scope production	***	***	***	***	***
Total production on same machinery	***	***	***	***	***

Source: Compiled from data submitted in response to Commission questionnaires.

U.S. producers' U.S. shipments and exports

Table III-6 presents U.S. producers' U.S. shipments, export shipments, and total shipments. U.S. shipments accounted for a slight majority of total shipments in 2018 and interim 2020, but a slight minority in 2017 and 2019.[15] The collective quantity of responding U.S. producers' U.S. shipments decreased by *** percent during 2017-19.[16] The quantity of responding U.S. producers' U.S. shipments was *** percent higher in interim 2020 than in interim 2019.[17] *** U.S. shipments in interim 2020 than in interim 2019. The collective value of U.S. producers' U.S. shipments fluctuated year to

[15] All responding U.S. producers reported commercial U.S. shipments during 2017-19 and both interim periods while *** reported internal consumption in 2018, 2019, and both interim periods. None of the responding U.S. producers reported transfers to related firms during the period for which data were collected.

[16] *** U.S. shipments decreased in each year during 2017-19, ending *** percent lower in 2019 than in 2017. *** U.S. shipments increased by *** percent and *** percent, respectively, from 2017 to 2018, but then decreased by *** percent and *** percent, respectively, from 2018 to 2019. Overall, *** U.S. shipments were *** percent higher in 2019 than in 2017 while *** U.S. shipments were *** percent lower.

[17] The difference in the quantity of U.S. shipments between the interim periods is largely a reflection of *** U.S. shipments. Collectively, these firms' U.S. shipments were *** short tons dry weight greater in interim 2020 than in interim 2019.

year, increasing by *** percent from 2017 to 2018, but then decreasing by *** percent from 2018 to 2019, ending *** percent lower in 2019 than in 2017. It was *** percent higher in interim 2020 than in interim 2019.

Table III-6
Phosphate fertilizers: U.S. producers' U.S. shipments, exports shipments, and total shipments, 2017-19, January to March 2019, and January to March 2020

Item	Calendar year			January to March	
	2017	2018	2019	2019	2020
	Quantity (short tons dry weight)				
U.S. shipments	***	***	***	***	***
Export shipments	***	***	***	***	***
Total shipments	***	***	***	***	***
	Value (1,000 dollars)				
U.S. shipments	***	***	***	***	***
Export shipments	***	***	***	***	***
Total shipments	***	***	***	***	***
	Unit value (dollars per STDW)				
U.S. shipments	***	***	***	***	***
Export shipments	***	***	***	***	***
Total shipments	***	***	***	***	***
	Share of quantity (percent)				
U.S. shipments	***	***	***	***	***
Export shipments	***	***	***	***	***
Total shipments	***	***	***	***	***
	Share of value (percent)				
U.S. shipments	***	***	***	***	***
Export shipments	***	***	***	***	***
Total shipments	***	***	***	***	***

Note: STDW is short ton dry weight.

Source: Compiled from data submitted in response to Commission questionnaires.

The average unit value of responding U.S. producers' U.S. shipments increased from $*** per short ton dry weight in 2017 to $*** per short ton dry weight in 2018, but then decreased to $*** per short ton dry weight in 2019. It was $*** per short ton dry weight in interim 2020, compared with $*** per short ton dry weight in interim 2019. The average unit value of U.S. shipments is largely a reflection of *** U.S. shipments since it accounted for the majority of responding U.S. producers' U.S. shipments during 2017-19 and interim 2020.[18]

By quantity, export shipments accounted for nearly half of responding U.S. producers' total shipments in 2018 and slightly over half in 2017 and 2019. All three responding U.S. producers reported export shipments during 2017-19.[19] The collective quantity of responding U.S. producers' export shipments fluctuated year to year, decreasing by *** percent from 2017 to 2018, but then increasing by *** percent from 2018 to 2019, ending *** percent lower in 2019 than in 2017. It was *** percent lower in interim 2020 than in interim 2019. The collective value of responding U.S. producers' export shipments decreased irregularly by *** percent during 2017-19 and was *** percent lower in interim 2020 than in interim 2019. The average unit value of export shipments was lower than the average unit value of U.S. shipments in each year during 2017-19 and in interim 2020.

U.S. producers' inventories

Table III-7 presents U.S. producers' end-of-period inventories and the ratio of these inventories to U.S. producers' production, U.S. shipments, and total shipments**.** Responding U.S. producers' end-of-period inventories increased by *** percent from 2017 to 2019 and was *** percent lower in interim 2020 than in interim 2019. The ratio of the responding U.S. producers' end-of-period inventories to their production ranged from *** percent in 2017 to *** percent in 2019 and was *** percent in interim 2020, compared with *** percent in interim 2019. The ratio of responding U.S. producers' end-of-period inventories to their U.S. shipments ranged from *** percent in 2017 to *** percent in 2019 and was *** percent in interim 2020, compared with *** percent in interim 2019.

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[18] The unit value of *** U.S. shipments was generally higher during 2017-19 while the unit value of *** U.S. shipments was generally lower.

[19] Export shipments accounted for a majority of *** total shipments in each year during 2017-19 and in interim 2020 (*** percent in 2017, *** percent in 2018, *** percent in 2019, and *** percent in interim 2020). Conversely, export shipments represented a minority of *** total shipments during 2017-19 and interim 2020, accounting for no more than *** percent in any period. *** principal export markets were ***. *** principal export markets were ***.

Table III-7
Phosphate fertilizers: U.S. producers' end-of-period inventories, 2017-19, January to March 2019, and January to March 2020

Item	Calendar year			January to March	
	2017	2018	2019	2019	2020
	Quantity (short tons dry weight)				
U.S. producers' end-of-period inventories	***	***	***	***	***
	Ratio (percent)				
Ratio of inventories to.--					
U.S. production	***	***	***	***	***
U.S. shipments	***	***	***	***	***
Total shipments	***	***	***	***	***

Source: Compiled from data submitted in response to Commission questionnaires.

U.S. producers' imports and purchases

No responding U.S. producer imported phosphate fertilizers from any source since 2017 while *** purchased phosphate fertilizer at some point during 2017-19 and interim 2020. *** purchased phosphate fertilizer from subject and nonsubject sources in 2017 and 2019, and from nonsubject sources in interim 2020.[20] *** purchased phosphate fertilizer from nonsubject sources in 2018, 2019, and interim 2020 while *** purchased phosphate fertilizer from domestic sources in 2018, 2019, and interim 2020.[21] U.S. producers' purchases of phosphate fertilizer are presented in table III-8.

[20] *** purchased phosphate fertilizer from ***.

[21] *** purchased phosphate fertilizer from U.S. producer, ***, and *** purchased phosphate fertilizer from ***.

Table III-8
Phosphate fertilizers: U.S. producers' U.S. purchases, 2017-19, January to March 2019, and January to March 2020

Item	Calendar year			January to March	
	2017	2018	2019	2019	2020
	Quantity (short tons dry weight)				
*** U.S. production	***	***	***	***	***
*** purchases from.-- Morocco	***	***	***	***	***
Russia	***	***	***	***	***
Subject sources	***	***	***	***	***
Nonsubject sources	***	***	***	***	***
All import sources[1]	***	***	***	***	***
Domestic producers	***	***	***	***	***
Other	***	***	***	***	***
All purchases	***	***	***	***	***
	Narrative				
*** reason for purchasing	***				
	Quantity (short tons dry weight)				
*** U.S. production	***	***	***	***	***
*** purchases from.-- Domestic producers	***	***	***	***	***
	Narrative				
*** reason for purchasing	***				
	Quantity (short tons dry weight)				
*** U.S. production	***	***	***	***	***
*** purchases from.-- Nonsubject sources	***	***	***	***	***
	Narrative				
*** reason for purchasing	***				

Source: Compiled from data submitted in response to Commission questionnaires.

U.S. employment, wages, and productivity

Table III-9 presents U.S. producers' employment-related data. The number of production related workers ("PRWs") decreased by *** percent from 2017 to 2019 and was *** percent lower in interim 2020 than in interim 2019. Although *** reported more PRWs in 2019 than in 2017, those increases were more than offset by the decrease in *** PRWs, which accounted for *** of PRWs during 2017-19. Productivity decreased by *** percent during 2017-19 while unit labor costs increased irregularly by *** percent.

Table III-9
Phosphate fertilizers: U.S. producers' employment-related data, 2017-19, January to March 2019, and January to March 2020

Item	Calendar year			January to March	
	2017	2018	2019	2019	2020
Production and related workers (PRWs) (number)	***	***	***	***	***
Total hours worked (1,000 hours)	***	***	***	***	***
Hours worked per PRW (hours)	***	***	***	***	***
Wages paid ($1,000)	***	***	***	***	***
Hourly wages (dollars per hour)	***	***	***	***	***
Productivity (short tons dry weight per hour)	***	***	***	***	***
Unit labor costs (dollars per STDW)	***	***	***	***	***

Source: Compiled from data submitted in response to Commission questionnaires.

Part IV: U.S. imports, apparent U.S. consumption, and market shares

U.S. importers

The Commission issued importer questionnaires to 28 firms believed to be importers of phosphate fertilizers, as well as to all U.S. producers of phosphate fertilizers.[1] Usable questionnaire responses were received from seven companies, representing the vast majority of U.S. imports from Morocco and from Russia in 2019 under HTS subheadings 3103.11.00, 3103.19.00, 3105.20.00, 3105.30.00, 3105.40.00, 3105.51.00, and 3105.59.00. Table IV-1 lists all responding U.S. importers of phosphate fertilizers from Morocco, Russia, and other sources, their locations, and their shares of U.S. imports, in 2019.

Table IV-1
Phosphate fertilizers: U.S. importers, their headquarters, and share of total imports by source, 2019

Firm	Headquarters	Share of imports by source (percent)				
		Morocco	Russia	Subject sources	Nonsubject sources	All import sources
ADM	Chicago, IL	***	***	***	***	***
CHS	Inver Grove Heights, MN	***	***	***	***	***
EuroChem	Tulsa, OK	***	***	***	***	***
Gavilon	Savannah, GA	***	***	***	***	***
Growmark	Bloomington, IL	***	***	***	***	***
IRM	Philadelphia, PA	***	***	***	***	***
Koch	Wichita, KS	***	***	***	***	***
Total		***	***	***	***	***

Source: Compiled from data submitted in response to Commission questionnaires.

U.S. imports

Table IV-2 and figure IV-1 present data for U.S. imports of phosphate fertilizers from Morocco, Russia, and all other sources.[2]

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[1] The Commission issued questionnaires to those firms identified in the petitions, along with firms that, based on a review of data provided by U.S. Customs and Border Protection ("Customs"), may have accounted for more than one percent of total imports under HTS subheadings 3103.11.00, 3103.19.00, 3105.20.00, 3105.30.00, 3105.40.00, 3105.51.00, and 3105.59.00 in 2019.

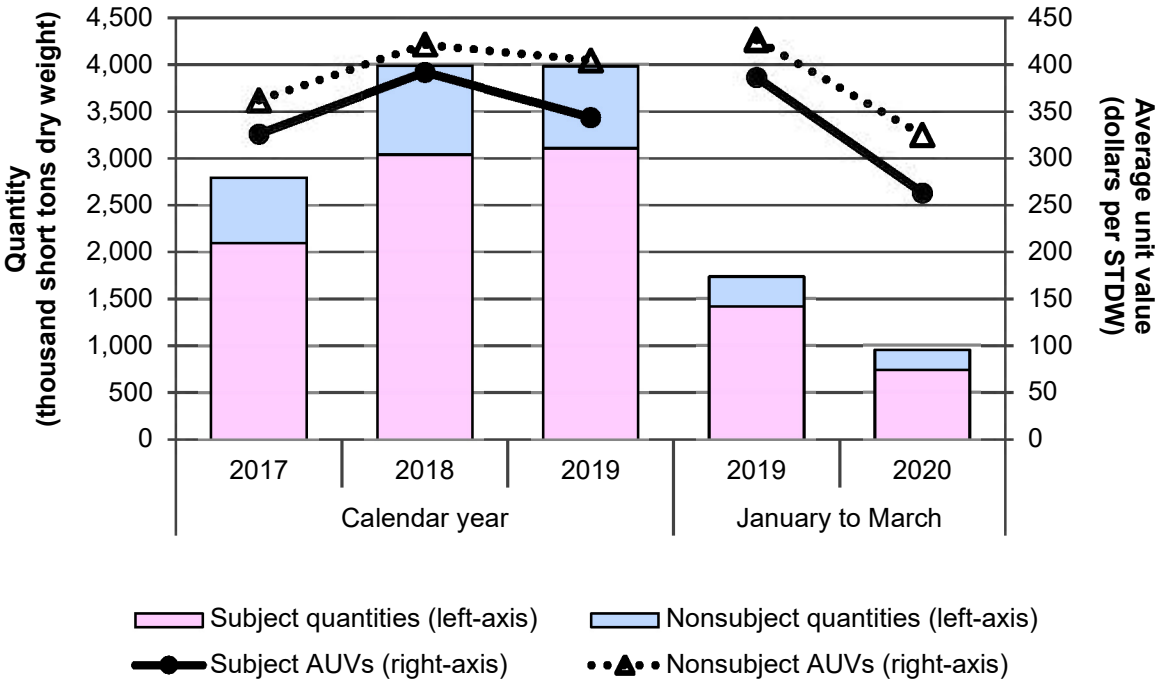
[2] Appendix D presents U.S. imports and apparent U.S. consumption based on responses to Commission questionnaires.

Table IV-2
Phosphate fertilizers: U.S. imports by source, 2017-19, January to March 2019, and January to March 2020

Item	Calendar year			January to March	
	2017	2018	2019	2019	2020
	Quantity (short tons dry weight)				
U.S. imports from.--					
Morocco	1,519,089	2,004,304	2,258,660	833,352	449,284
Russia	577,236	1,032,067	845,789	581,909	289,071
Subject sources	2,096,325	3,036,371	3,104,449	1,415,261	738,355
Nonsubject sources	699,492	946,349	877,585	316,916	212,273
All import sources	2,795,816	3,982,720	3,982,034	1,732,178	950,628
	Value (1,000 dollars)				
U.S. imports from.--					
Morocco	493,788	788,881	750,971	318,937	117,006
Russia	189,770	400,252	314,841	228,160	77,335
Subject sources	683,557	1,189,133	1,065,812	547,097	194,341
Nonsubject sources	253,222	398,818	354,999	135,169	68,988
All import sources	936,780	1,587,951	1,420,811	682,266	263,329
	Unit value (dollars per STDW)				
U.S. imports from.--					
Morocco	325	394	332	383	260
Russia	329	388	372	392	268
Subject sources	326	392	343	387	263
Nonsubject sources	362	421	405	427	325
All import sources	335	399	357	394	277
	Share of quantity (percent)				
U.S. imports from.--					
Morocco	54.3	50.3	56.7	48.1	47.3
Russia	20.6	25.9	21.2	33.6	30.4
Subject sources	75.0	76.2	78.0	81.7	77.7
Nonsubject sources	25.0	23.8	22.0	18.3	22.3
All import sources	100.0	100.0	100.0	100.0	100.0
	Share of value (percent)				
U.S. imports from.--					
Morocco	52.7	49.7	52.9	46.7	44.4
Russia	20.3	25.2	22.2	33.4	29.4
Subject sources	73.0	74.9	75.0	80.2	73.8
Nonsubject sources	27.0	25.1	25.0	19.8	26.2
All import sources	100.0	100.0	100.0	100.0	100.0
	Ratio to U.S. production				
U.S. imports from.--					
Morocco	***	***	***	***	***
Russia	***	***	***	***	***
Subject sources	***	***	***	***	***
Nonsubject sources	***	***	***	***	***
All import sources	***	***	***	***	***

Source: Official U.S. import statistics for HTS statistical reporting numbers 3103.11.0000, 3103.19.0000, 3105.20.0000, 3105.30.0000, 3105.40.0010, 3105.40.0050, 3105.51.0000, and 3105.59.0000, accessed July 22, 2020.

Figure IV-1
Phosphate fertilizers: U.S. imports by source, 2017-19, January to March 2019, and January to March 2020



Source: Official U.S. import statistics for HTS statistical reporting numbers 3103.11.0000, 3103.19.0000, 3105.20.0000, 3105.30.0000, 3105.40.0010, 3105.40.0050, 3105.51.0000, and 3105.59.0000, accessed July 22, 2020.

By quantity, U.S. imports from Morocco accounted for over half of all imports in each calendar year during 2017-19 (54.3 percent in 2017, 50.3 percent in 2018, and 56.7 percent in 2019). It accounted for 48.1 percent of total imports in interim 2019 and 47.3 percent in interim 2020. U.S. imports from Russia accounted for 20.6 percent of total imports in 2017, 25.9 percent in 2018, and 21.2 percent in 2019. It accounted for 33.6 percent of total imports in interim 2019 and 30.4 percent in interim 2020. Overall, subject imports accounted for at least 75.0 percent of total imports in each year during 2017-19 and 77.7 percent in interim 2020.

During 2017-19, the quantity of U.S. imports from Morocco increased by 48.7 percent and was 46.1 percent lower in interim 2020 than in interim 2019. U.S. imports from Russia, by quantity, fluctuated year to year, increasing by 78.8 percent from 2017 to 2018, but then decreasing by 18.0 percent from 2018 to 2019, ending 46.5 percent higher in 2019 than in 2017. U.S. imports from Russia were 50.3 percent lower in interim 2020 than in interim 2019. Overall, the quantity of U.S. imports from subject sources increased by 48.1 percent from 2017 to 2019 and was 47.8 percent lower in interim 2020 than in interim 2019.

By value, U.S imports from Morocco increased irregularly by 52.1 percent from 2017 to 2018 and was 63.3 percent lower in interim 2020 than in interim 2019. The value of U.S imports from Russia increased irregularly by 65.9 percent from 2017 to 2019 and was 66.1 percent lower in interim 2020 than in interim 2019. Overall, the value of imports from subject sources increased irregularly by 55.9 percent from 2017 to 2019 and was 64.5 percent lower in interim 2020 than in interim 2019.

The unit value of U.S. imports from Morocco increased from $325 per short ton dry weight in 2017 to $394 per short ton dry weight in 2018, but then decreased to $332 per short ton dry weight in 2019. It was $260 per short ton dry weight in interim 2020, compared with $383 per short ton dry weight in interim 2019. The unit value of U.S. imports from Russia exhibited the same trend as the unit value of U.S. imports from Morocco, increasing from $329 per short ton dry weight in 2017 to $388 per short ton dry weight in 2018, but then decreasing to $372 per short ton dry weight in 2019. It was $268 per short ton dry weight in interim 2020, compared with $392 per short ton dry weight in interim 2019. The unit value of imports from all subject sources increased irregularly from $326 per short ton dry weight in 2017 to $343 per short ton dry weight in 2019. It was $263 per short ton dry weight in interim 2020, compared with $387 per short ton dry weight in interim 2019.

Table IV-3 presents data on U.S. imports of phosphate fertilizers from nonsubject sources. Nonsubject sources accounted for no more than 25.0 percent of all imports during 2017-19 and 22.3 percent in interim 2020. Fluctuating year to year, the quantity of U.S. imports from nonsubject sources increased by 35.3 percent from 2017 to 2018 but then decreased by 7.3 percent from 2018 to 2019, ending 25.5 percent higher in 2019 than in 2017. By quantity, Saudi Arabia was the largest source of nonsubject imports in 2019 (7.2 percent of total imports), followed by Mexico (4.5 percent) and Israel (3.8 percent). Israel was the largest source of nonsubject imports, by quantity, in 2017 and 2018. U.S. imports from Saudi Arabia increased by nearly 8-fold from 2017 to 2019. However, they were 53.3 percent lower in interim 2020 than in interim 2019. Despite the lower quantity of imports compared with interim 2019, Saudi Arabia remained the largest source of nonsubject imports in interim 2020.

Table IV-3
Phosphate fertilizers: U.S. imports from nonsubject sources, 2017-19, January to March 2019, and January to March 2020

Item	Calendar year			January to March	
	2017	2018	2019	2019	2020
	Quantity (short tons dry weight)				
U.S. imports from.--					
Saudi Arabia	36,792	101,267	288,338	144,492	67,422
Mexico	41,780	151,840	177,464	66,496	6,962
Israel	199,472	259,554	152,017	26,496	54,449
Norway	57,846	63,566	77,099	29,026	17,633
Canada	137,115	100,717	72,858	10,286	20,188
Lithuania	2,577	45,235	36,709	12,162	29,319
Finland	17,741	24,771	25,076	10,678	3,644
Japan	12,991	13,767	11,387	3,298	3,246
Belgium	6,400	7,326	6,959	3,221	674
China	158,701	29,642	6,799	2,396	1,314
All other sources	28,078	148,663	22,878	8,365	7,423
Nonsubject sources	699,492	946,349	877,585	316,916	212,273
	Share of all import sources quantity (percent)				
U.S. imports from.--					
Saudi Arabia	1.3	2.5	7.2	8.3	7.1
Mexico	1.5	3.8	4.5	3.8	0.7
Israel	7.1	6.5	3.8	1.5	5.7
Norway	2.1	1.6	1.9	1.7	1.9
Canada	4.9	2.5	1.8	0.6	2.1
Lithuania	0.1	1.1	0.9	0.7	3.1
Finland	0.6	0.6	0.6	0.6	0.4
Japan	0.5	0.3	0.3	0.2	0.3
Belgium	0.2	0.2	0.2	0.2	0.1
China	5.7	0.7	0.2	0.1	0.1
All other sources	1.0	3.7	0.6	0.5	0.8
Nonsubject sources	25.0	23.8	22.0	18.3	22.3

Source: Official U.S. import statistics for HTS statistical reporting numbers 3103.11.0000, 3103.19.0000, 3105.20.0000, 3105.30.0000, 3105.40.0010, 3105.40.0050, 3105.51.0000, and 3105.59.0000, accessed July 22, 2020.

Negligibility

The statute requires that an investigation be terminated without an injury determination if imports of the subject merchandise are found to be negligible.[3] Negligible imports are generally defined in the Act, as amended, as imports from a country of merchandise corresponding to a domestic like product where such imports account for less than 3 percent of the volume of all such merchandise imported into the United States in the most recent 12-month period for which data are available that precedes the filing of the petition or the initiation of the investigation. However, if there are imports of such merchandise from a number of countries subject to investigations initiated on the same day that individually account for less than 3 percent of the total volume of the subject merchandise, and if the imports from those countries collectively account for more than 7 percent of the volume of all such merchandise imported into the United States during the applicable 12-month period, then imports from such countries are deemed not to be negligible.[4] In the case of countervailing duty investigations involving developing countries (as designated by the United States Trade Representative), the statute indicates that the negligibility limits are 4 percent and 9 percent, rather than 3 percent and 7 percent.[5] By quantity, imports from Morocco and Russia accounted for 64.5 percent and 14.1 percent of total imports of phosphate fertilizer, respectively, during the most recent 12-month period (June 2019-May 2020). Table IV-4 presents the share of total U.S. imports, by quantity, attributable to Morocco, Russia, and nonsubject sources during the most recent 12-month period.

[3] Sections 703(a)(1), 705(b)(1), 733(a)(1), and 735(b)(1) of the Act (19 U.S.C. §§ 1671b(a)(1), 1671d(b)(1), 1673b(a)(1), and 1673d(b)(1)).

[4] Section 771 (24) of the Act (19 U.S.C § 1677(24)).

[5] Section 771(24)(B) of the Act (19 U.S.C. § 1677(24)(B)).

Table IV-4
Phosphate fertilizers: U.S. imports in the twelve-month period preceding the filing of the petitions, June 2019 through May 2020

Item	June 2019 through May 2020	
	Quantity (short tons dry weight)	Share quantity (percent)
U.S. imports from.--		
Morocco	2,284,612	64.5
Russia	498,878	14.1
Subject sources	2,783,490	78.5
Nonsubject sources	760,745	21.5
All import sources	3,544,235	100.0

Source: Official U.S. import statistics for HTS statistical reporting numbers 3103.11.0000, 3103.19.0000, 3105.20.0000, 3105.30.0000, 3105.40.0010, 3105.40.0050, 3105.51.0000, and 3105.59.0000, accessed July 22, 2020.

Cumulation considerations

In assessing whether imports should be cumulated, the Commission determines whether U.S. imports from the subject countries compete with each other and with the domestic like product and has generally considered four factors: (1) fungibility, (2) presence of sales or offers to sell in the same geographical markets, (3) common or similar channels of distribution, and (4) simultaneous presence in the market. Information regarding channels of distribution, market areas, and interchangeability appear in Part II. Additional information concerning fungibility, geographical markets, and simultaneous presence in the market is presented below.

Fungibility

The Commission collected data on U.S. producers' and U.S. importers' U.S. shipments in 2019 by product type.[6] MAP accounted for the largest share of U.S. producers' U.S. shipments (*** percent), followed by DAP (*** percent). MAP also accounted for the largest share of U.S. shipments of U.S. imports from Morocco and U.S. shipments of U.S. imports from Russia (*** percent and *** percent, respectively), followed by DAP (*** percent and *** percent, respectively). NPS accounted for a sizable share of U.S. producers' U.S. shipments (*** percent), but a negligible share of U.S. shipments of subject imports (*** percent). ***

[6] See Part I for additional information on the different types of phosphate fertilizers.

***. Table IV-5 and figure IV-2 present data on U.S. producers' and U.S. importers' U.S. shipments of phosphate fertilizers by product type.

Table IV-5
Phosphate fertilizers: U.S. producers' and U.S. importers' U.S. shipments by product type, 2019

Item	U.S. producers	U.S. importers					U.S. producers and U.S. importers
		Morocco	Russia	Subject sources	Nonsubject sources	All import sources	
	Quantity (short tons dry weight)						
U.S. shipments.--MAP	***	953,763	365,141	1,318,904	***	***	***
DAP	***	701,420	225,531	926,951	***	***	***
NSP	***	***	***	***	***	***	***
TSP	***	***	***	***	***	***	***
NPS	***	***	***	***	***	***	***
NPK	***	***	***	***	***	***	***
Other	***	***	***	***	***	***	***
All types	***	1,753,990	599,842	2,353,832	***	***	***
	Share across (percent)						
U.S. shipments.--MAP	***	***	***	***	***	***	***
DAP	***	***	***	***	***	***	***
NSP	***	***	***	***	***	***	***
TSP	***	***	***	***	***	***	***
NPS	***	***	***	***	***	***	***
NPK	***	***	***	***	***	***	***
Other	***	***	***	***	***	***	***
All types	***	***	***	***	***	***	***
	Share down (percent)						
U.S. shipments.--MAP	***	***	***	***	***	***	***
DAP	***	***	***	***	***	***	***
NSP	***	***	***	***	***	***	***
TSP	***	***	***	***	***	***	***
NPS	***	***	***	***	***	***	***
NPK	***	***	***	***	***	***	***
Other	***	***	***	***	***	***	***
All types	***	***	***	***	***	***	***

Source: Compiled from data submitted in response to Commission questionnaires.

Figure IV-2
Phosphate fertilizers: U.S. producers' and U.S. importers' U.S. shipments by product type, 2019

* * * * * * *

Source: Compiled from data submitted in response to Commission questionnaires.

Geographical markets

According to official U.S. import statistics, nearly all U.S. imports from Morocco and the vast majority of U.S. imports from Russia (86.4 percent) entered the United States in 2019 through ports located in the South.[7] Table IV-6 presents data on U.S. imports of phosphate fertilizer by border of entry in 2019.

[7] New Orleans was the port of entry for nearly all U.S. imports of phosphate fertilizers from Morocco and the vast majority of U.S. imports from Russia classified under HTS statistical reporting numbers 3103.11.0000, 3105.20.0000, 3105.30.0000, 3105.40.0010, 3105.40.0050, and 3105.59.0000.

Table IV-6
Phosphate fertilizers: U.S. imports by border of entry, 2019

Item	Border of entry				
	East	North	South	West	All borders
	Quantity (short tons dry weight)				
U.S. imports from.--					
Morocco	---	980	2,257,680	---	2,258,660
Russia	100,112	13,618	730,459	1,601	845,789
Subject sources	100,112	14,598	2,988,139	1,601	3,104,449
Nonsubject sources	91,574	49,303	641,078	95,630	877,585
All import sources	191,686	63,901	3,629,217	97,230	3,982,034
	Share across (percent)				
U.S. imports from.--					
Morocco	---	0.0	100.0	---	100.0
Russia	11.8	1.6	86.4	0.2	100.0
Subject sources	3.2	0.5	96.3	0.1	100.0
Nonsubject sources	10.4	5.6	73.1	10.9	100.0
All import sources	4.8	1.6	91.1	2.4	100.0
	Share down (percent)				
U.S. imports from.--					
Morocco	---	1.5	62.2	---	56.7
Russia	52.2	21.3	20.1	1.6	21.2
Subject sources	52.2	22.8	82.3	1.6	78.0
Nonsubject sources	47.8	77.2	17.7	98.4	22.0
All import sources	100.0	100.0	100.0	100.0	100.0

Note: Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent.

Source: Official U.S. import statistics for HTS statistical reporting numbers 3103.11.0000, 3103.19.0000, 3105.20.0000, 3105.30.0000, 3105.40.0010, 3105.40.0050, 3105.51.0000, and 3105.59.0000, accessed July 22, 2020.

Presence in the market

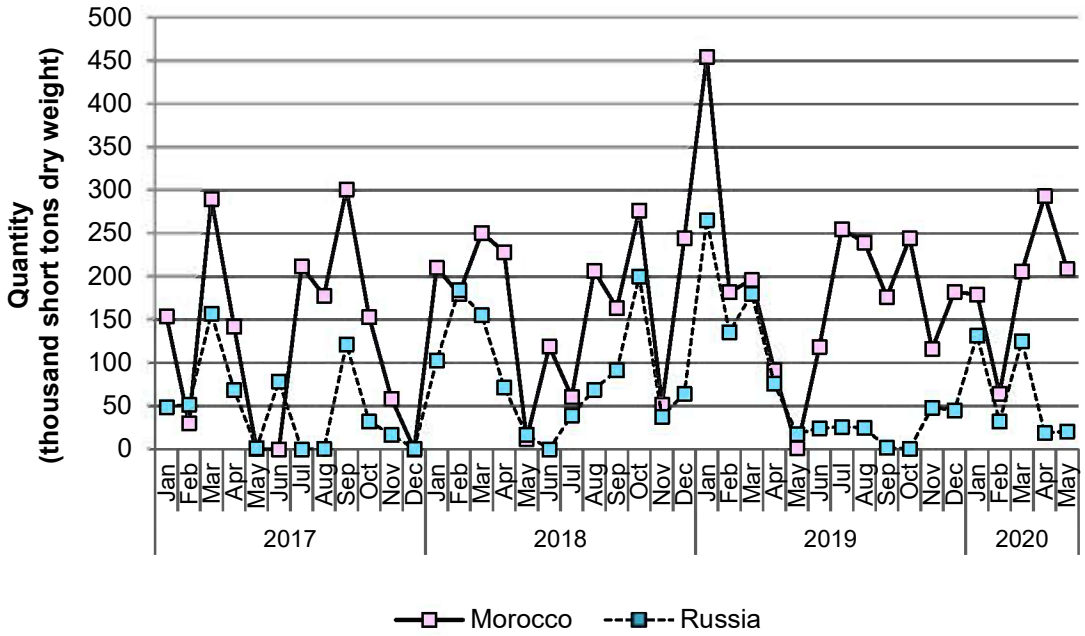
U.S. imports of phosphate fertilizers from Morocco were present in each month during January 2017-May 2020, except in June 2017 and December 2017. U.S. imports from Russia were present in every month during January 2017-May 2020 except July 2017 and June 2018. Imports from Morocco and Russia each peak in late winter and early fall. Table IV-7 and figures IV-3 and IV-4 present monthly data for subject and nonsubject imports of phosphate fertilizers during January-2017-May 2020.

Table IV-7
Phosphate fertilizers: U.S. imports by month, January 2017 through May 2020

U.S. imports	Morocco	Russia	Subject sources	Nonsubject sources	All import sources
	Quantity (short tons dry weight)				
2017.--					
January	153,868	48,900	202,768	183,713	386,481
February	30,314	51,817	82,131	39,069	121,200
March	289,941	157,292	447,233	53,120	500,353
April	142,016	68,545	210,561	94,309	304,870
May	248	1,200	1,448	54,700	56,148
June	---	78,597	78,597	37,993	116,590
July	211,943	---	211,943	63,747	275,690
August	178,113	383	178,496	36,313	214,809
September	301,290	121,521	422,811	27,611	450,422
October	152,989	32,006	184,994	61,435	246,429
November	58,367	16,449	74,816	30,968	105,784
December	---	527	527	16,513	17,040
2018.--					
January	210,268	102,692	312,960	73,465	386,425
February	179,699	184,164	363,863	75,755	439,618
March	250,768	155,430	406,198	71,994	478,192
April	228,551	71,582	300,133	101,928	402,061
May	11,660	16,943	28,603	46,511	75,114
June	118,906	---	118,906	92,565	211,472
July	60,796	39,061	99,857	17,645	117,502
August	206,840	68,816	275,656	87,608	363,264
September	163,724	91,405	255,129	134,025	389,154
October	276,875	200,100	476,975	122,004	598,979
November	51,770	37,756	89,526	20,776	110,303
December	244,448	64,118	308,566	102,072	410,638
2019.--					
January	454,982	265,746	720,728	49,407	770,134
February	181,988	135,835	317,824	87,773	405,596
March	196,382	180,328	376,710	179,737	556,447
April	91,527	76,011	167,538	61,024	228,562
May	912	17,722	18,633	95,043	113,677
June	118,790	24,197	142,987	23,104	166,092
July	255,134	25,998	281,132	45,808	326,940
August	239,614	24,577	264,191	32,858	297,048
September	176,701	1,603	178,304	90,618	268,922
October	244,383	289	244,672	93,642	338,314
November	115,906	48,281	164,187	43,245	207,432
December	182,341	45,202	227,543	75,327	302,871
2020.--					
January	178,949	131,653	310,602	42,695	353,297
February	64,265	32,024	96,289	74,214	170,503
March	206,070	125,393	331,464	95,364	426,828
April	293,500	18,819	312,319	98,722	411,040
May	208,959	20,841	229,801	45,148	274,949

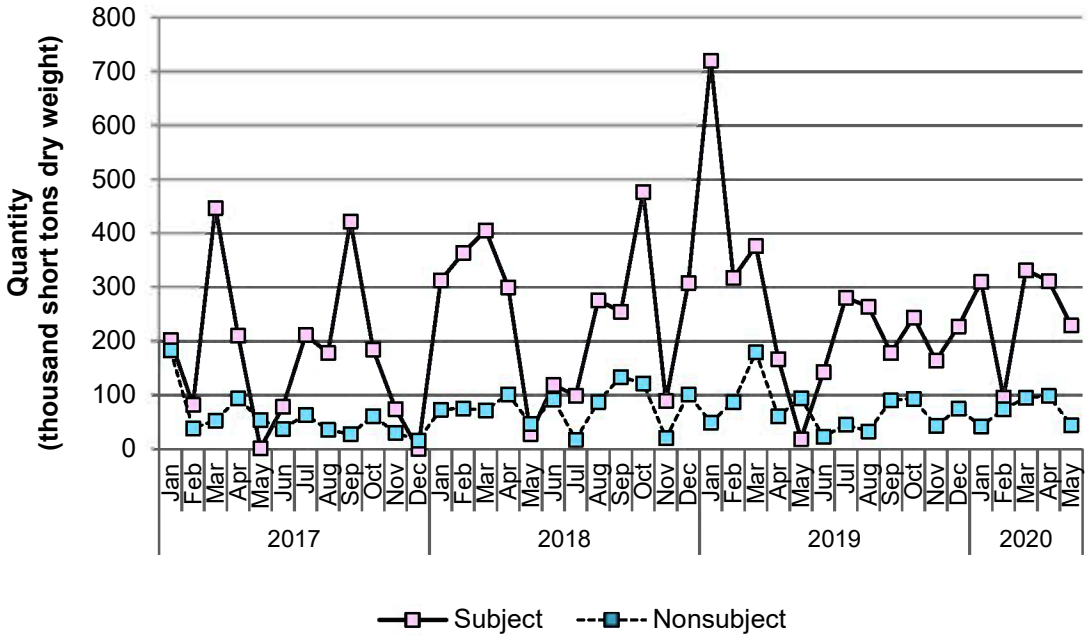
Source: Official U.S. import statistics for HTS statistical reporting numbers 3103.11.0000, 3103.19.0000, 3105.20.0000, 3105.30.0000, 3105.40.0010, 3105.40.0050, 3105.51.0000, and 3105.59.0000, accessed July 22, 2020.

Figure IV-3
Phosphate fertilizers: U.S. imports from individual subject sources, by month, January 2017 through May 2020



Source: Official U.S. import statistics for HTS statistical reporting numbers 3103.11.0000, 3103.19.0000, 3105.20.0000, 3105.30.0000, 3105.40.0010, 3105.40.0050, 3105.51.0000, and 3105.59.0000, accessed July 22, 2020.

Figure IV-4
Phosphate fertilizers: U.S. imports from aggregated subject and nonsubject sources, by month, January 2017 through May 2020



Source: Official U.S. import statistics for HTS statistical reporting numbers 3103.11.0000, 3103.19.0000, 3105.20.0000, 3105.30.0000, 3105.40.0010, 3105.40.0050, 3105.51.0000, and 3105.59.0000, accessed July 22, 2020.

Apparent U.S. consumption and market shares

Table IV-8 and figure IV-5 present data on apparent U.S. consumption and U.S. market shares for phosphate fertilizers.[8] Apparent U.S. consumption, by quantity, fluctuated year to year, increasing by *** percent from 2017 to 2018 and then decreasing by *** percent from 2018 to 2019, ending *** percent lower in 2019 than in 2017. Apparent U.S. consumption, by quantity, was *** percent lower in interim 2020 than in interim 2019.

[8] Demand for phosphate fertilizers is driven primarily by agricultural plantings. See e.g. petitioner's postconference brief, p. 14 and respondent Gavilon's postconference brief, pp. 5-6. See part II for additional information on demand factors.

Table IV-8
Phosphate fertilizers: Apparent U.S. consumption and market shares, 2017-19, January to March 2019, and January to March 2020

Item	Calendar year			January to March	
	2017	2018	2019	2019	2020
	Quantity (short tons dry weight)				
U.S. producers' U.S. shipments	***	***	***	***	***
Adjusted U.S. imports from.-- Morocco	***	***	***	***	***
Russia	***	***	***	***	***
Subject sources	***	***	***	***	***
Nonsubject sources	***	***	***	***	***
All import sources	***	***	***	***	***
Apparent U.S. consumption	***	***	***	***	***
	Value (1,000 dollars)				
U.S. producers' U.S. shipments	***	***	***	***	***
Adjusted U.S. imports from.-- Morocco	***	***	***	***	***
Russia	***	***	***	***	***
Subject sources	***	***	***	***	***
Nonsubject sources	***	***	***	***	***
All import sources	***	***	***	***	***
Apparent U.S. consumption	***	***	***	***	***
	Share of quantity (percent)				
U.S. producers' U.S. shipments	***	***	***	***	***
Adjusted U.S. imports from.-- Morocco	***	***	***	***	***
Russia	***	***	***	***	***
Subject sources	***	***	***	***	***
Nonsubject sources	***	***	***	***	***
All import sources	***	***	***	***	***
	Share of value (percent)				
U.S. producers' U.S. shipments	***	***	***	***	***
Adjusted U.S. imports from.-- Morocco	***	***	***	***	***
Russia	***	***	***	***	***
Subject sources	***	***	***	***	***
Nonsubject sources	***	***	***	***	***
All import sources	***	***	***	***	***

Note: Official U.S. import statistics were adjusted to remove U.S. importers' export shipments as reported in questionnaire responses.

Source: Compiled from data submitted in response to Commission questionnaires and official U.S. import statistics for HTS statistical reporting numbers 3103.11.0000, 3103.19.0000, 3105.20.0000, 3105.30.0000, 3105.40.0010, 3105.40.0050, 3105.51.0000, and 3105.59.0000, accessed July 22, 2020.

Figure IV-5
Phosphate fertilizers: Apparent U.S. consumption, 2017-19, January to March 2019, and January to March 2020

* * * * * * *

Note: Official U.S. import statistics were adjusted to remove U.S. importers' export shipments as reported in questionnaire responses.

Source: Compiled from data submitted in response to Commission questionnaires and official U.S. import statistics for HTS statistical reporting numbers 3103.11.0000, 3103.19.0000, 3105.20.0000, 3105.30.0000, 3105.40.0010, 3105.40.0050, 3105.51.0000, and 3105.59.0000, accessed July 22, 2020.

The decrease in U.S. producers' U.S. shipments, largely driven, particularly in 2018, by Mosaic, was offset by the increase in U.S. imports from subject and nonsubject sources. The difference in apparent U.S. consumption between the two interim periods largely reflects the difference in imports from subject sources and nonsubject sources as they each were lower in interim 2020 than in interim 2019. Conversely, U.S. producers' shipments were higher in interim 2020 than in interim 2019.[9] Apparent U.S. consumption, by value, increased irregularly by *** percent from 2017 to 2019 and was *** percent lower in interim 2020 than in interim 2019.

U.S. producers' market share decreased from *** percent in 2017 to *** percent in 2019. It was *** percent in interim 2020, compared with *** percent in interim 2019. Conversely, the market share of U.S. imports from Morocco increased from *** percent to *** percent during 2017-19 and the share of U.S. imports from Russia increased irregularly from *** percent to *** percent. The market share of U.S. imports from Morocco and U.S. imports from Russia was *** percent and *** percent, respectively in interim 2020, compared with *** percent and *** percent, respectively in interim 2019. Overall, the market share of subject imports increased from *** percent in 2017 to *** percent in 2019 and was *** percent in interim 2020, compared with *** percent in interim 2019.

[9] In its earnings release for the first quarter of 2020, Mosaic reported that fertilizer applications are in the peak spring season, demand is running high, and its shipment quantity for April was robust. Additionally, Mosaic's retail distribution customers reported that demand is outpacing even their high expectations. *The Mosaic Company Reports First Quarter 2020 Results*, http://investors.mosaicco.com/file/4097833/Index?KeyFile=1001263310, p. 5, retrieved July 28, 2020.

Part V: Pricing data

Factors affecting prices

Raw material costs

Phosphate rock, sulfur, and ammonia are the main inputs for phosphate fertilizers. The major U.S. and subject foreign producers are vertically integrated from phosphate mining through phosphate fertilizer production, although phosphate rock can also be purchased on the market. U.S. producers are at least partially vertically integrated with respect to ammonia and usually purchase sulfur from unrelated U.S. suppliers.[1] As a share of the total cost of goods sold ("COGS"), U.S. producers' raw material costs increased from *** percent in 2017 to *** percent in 2019. Figure V-1 shows prices in the United States for ammonia and sulfur and prices in Morocco for phosphate rock.

Figure V-1
Phosphate fertilizers input prices: Indices of prices of ammonia, phosphate rock, and sulfur, monthly January 2017-July 2020

* * * * * * *

[1] Petitioner's postconference brief, Responses to Staff Questions, p. 27.

All three U.S. producers reported that raw material prices have fluctuated since January 1, 2017, and all six responding importers reported that raw material prices have declined. *** stated that ammonia and sulfur costs can be very cyclical, with ammonia prices influenced by supply and demand and hydrocarbon feedstock costs, and sulfur produced as a by-product of natural gas and oil refining. *** stated that prices of sulfur, ammonia, and phosphate have separate supply and demand cycles and tend not to be correlated with each other. *** stated that its prices for phosphate fertilizers are based on market pricing and thus it is exposed to fluctuations in the cost of ammonia and sulfur inputs.

Importers generally reported that prices for ammonia and sulfur have declined globally since 2017, with *** citing global oversupply of these commodities. *** stated that lower ammonia and sulfur costs in China has resulted in lower global sales prices for phosphate fertilizers. *** reported that raw material costs for phosphate rock, sulfur, and ammonia have declined but that some producers entered into fixed price supply contracts for inputs when the costs were higher, such as Mosaic's ammonia contract.

Transportation costs to the U.S. market

Transportation costs for phosphate fertilizers shipped from subject countries to the United States averaged 3.0 percent for Morocco and 5.1 percent for Russia during 2019. These estimates were derived from official import data and represent the transportation and other charges on imports.[2]

U.S. inland transportation costs

Bulk phosphate fertilizer may be sold by the barge (typically 1,500 short tons), railcar (a minimum of 100 short tons), truck, or ton.[3] All 3 responding U.S. producers and 6 of 7 importers (***) reported that they typically arrange transportation to their customers. U.S. producers reported U.S. inland transportation costs between 7 percent (***) and 20 percent (***).[4] Importers reported varying U.S. inland transportation costs, with three firms reporting costs of 5 percent or less (***); two reporting 10 percent (***); and two reporting 17 to 20 percent (***).

---

[2] The estimated transportation costs were obtained by subtracting the customs value from the c.i.f. value of the imports for 2019 and then dividing by the customs value based on the HTS statistical reporting numbers 3103.11.0000, 3103.19.0000, 3105.20.0000, 3105.30.0000, 3105.40.0010, 3105.40.0050, 3105.51.0000, and 3105.59.0000, accessed July 6, 2020.

[3] Petition, p. I-21.

[4] *** reported 12 percent.

According to Respondent Koch, imports have a freight cost advantage compared to domestic producers, particularly west of the Mississippi River because they are loaded directly onto barges whereas Mosaic generally ships by rail from Florida and Louisiana, and vessel freight from Morocco to New Orleans ("NOLA") is often less expensive than vessel freight crossing the Gulf from Tampa to NOLA. Koch asserted that Mosaic chooses to export phosphate fertilizer to non-U.S. markets by vessel rather than shipping domestically by rail.[5] Mosaic stated that it faces higher freight costs than imports to some destinations and lower costs to other destinations. It stated that in shipping from ***. However, it stated that it faces similar costs as imports for barge freight from NOLA to upriver destinations, and that it can serve some locations by rail from Florida more efficiently than imports.[6]

Pricing practices

Pricing methods

U.S. prices for phosphate fertilizers are influenced by global market prices (which is influenced by China), raw material prices (phosphate rock, sulfur, ammonia), transport costs, demand (driven by grain prices and strength of agricultural industry), seasonality (highest demand in fall and spring), and demand in non-U.S. markets, according to Koch.[7] Mosaic stated that MAP and DAP serve as a reference for pricing of other phosphate fertilizers and that prices of different types of phosphate fertilizers tend to move in parallel.[8]

Prices of bulk phosphate fertilizer in the United States and other countries are published frequently, as often as weekly or even daily, by publications such as Argus, Fertecon, ICIS, and Green Markets.[9] Two of the three U.S. producers (***) and two of the seven importers (***) refer to prices published in trade publications in determining their

[5] Testimony of Scott McGinn, Koch, p. 2.

[6] Mosaic provided some examples of 2019 transportation costs for some destinations, ***. Petitioner's postconference brief, Responses to Staff Questions, pp. 74-77.

[7] Testimony of Scott McGinn, Koch, p. 3.

[8] Testimony of Andy Jung, Mosaic, p. 5. Testimony of Richard McLellan, Mosaic, p. 2.

[9] Argus started daily reporting for DAP and MAP in selected markets in March 2020. Petition, p. I-24.

selling prices for phosphate fertilizers.[10] ***. ***.[11] [12] ***. ***.

[10] ***.

[11] ***.

[12] ***.

Importer *** stated that *** percent of its sales have price indexing, that it uses ***. *** mostly sells phosphate fertilizer on a fixed price basis, ***.[13]

All three U.S. producers use set price lists and two producers each also use transaction-by-transaction pricing and contracts (table V-1). Six of seven importers set prices using transaction-by-transaction negotiations, and two each also use contracts or set price lists.[14] Importer *** sets prices weekly based on an analysis of publicly available data and customers' alternatives, and adjusts prices as needed. ***.

[13] ***.

[14] ***.

Table V-1
Phosphate fertilizers: U.S. producers' and importers' reported price setting methods, by number of responding firms

Method	U.S. producers	Importers
Transaction-by-transaction	2	6
Contract	2	2
Set price list	3	2
Other	1	1
Responding firms	3	7

Note: The sum of responses down may not add up to the total number of responding firms as each firm was instructed to check all applicable price setting methods employed.

Source: Compiled from data submitted in response to Commission questionnaires.

U.S. producers and importers sell most of their phosphate fertilizers in the spot market and under short-term contracts (table V-2). ***. Two importers reported annual contract sales: ***. The remaining importers reported selling only on a spot and/or short-term contract basis.

Table V-2
Phosphate fertilizers: U.S. producers' and importers' shares of U.S. commercial shipments by type of sale, 2019

Type of sale	U.S. producers	Importers
Long-term contracts	***	***
Annual contracts	***	***
Short-term contracts	***	***
Spot sales	***	***
Total	***	***

Note: Because of rounding, figures may not add to the totals shown.

Source: Compiled from data submitted in response to Commission questionnaires.

Sales terms and discounts

U.S. producers and importers reported quoting prices on both a delivered and an f.o.b. basis. ***.

Among importers, *** and *** reporting quoting delivered prices. ***, ***, and *** reported quoting f.o.b. NOLA prices, with *** also quoting f.o.b. prices from *** and *** also quoting prices f.o.b. ***. ***.

All three U.S. producers reported rebates to their customers, two reported annual total volume discounts (***), and one reported other discounts (***). ***.[15] None of the responding importers reported having a discount or rebate policy.[16]

Price data

The Commission requested U.S. producers and importers to provide quarterly data for the total quantity and f.o.b. value of the following phosphate fertilizers products shipped in bulk (i.e. barge-load) to unrelated U.S. agricultural customers in the NOLA area during January 2017-March 2020.[17]

Product 1.-- Standard-grade monoammonium phosphate (MAP), chemical formula $NH_4H_2PO_4$, granular, excluding high-purity MAP.

[15] ***.

[16] ***.

[17] Petitioner stated that some importers purchase phosphate fertilizers from domestic producers as well as from foreign producers and that there is price competition for these purchases as well as price competition for importers' sales to customers. The preliminary phase importer questionnaires did not collect quarterly purchase data; however, quarterly f.o.b. import quantity and values for DAP and MAP entering the NOLA port are available from U.S. import statistics. These data are presented in Petitioner's postconference brief, exhibit 27.

Product 2.-- Standard-grade diammonium phosphate (DAP), chemical formula $(NH4)_2(HPO_4)$, granular.

One U.S. producer and five importers provided usable pricing data for sales of the requested products, although not all firms reported pricing for all products for all quarters.[18] [19] Pricing data reported by these firms accounted for approximately *** percent of U.S. producers' shipments of phosphate fertilizers, *** percent of U.S. shipments of subject imports from Morocco, and *** percent of U.S. shipments of subject imports from Russia in 2019.

Price data for products 1 and 2 are presented in tables V-3 to V-4 and figures V-2 to V-3. Firms were asked whether they give rebates to their customers based on annual volume and if so, to explain how those rebates were applied to their reported pricing data. ***.

[18] Per-unit pricing data are calculated from total quantity and total value data provided by U.S. producers and importers. The precision and variation of these figures may be affected by rounding, limited quantities, and producer or importer estimates.

[19] Price data were reported by U.S. producer *** and importers ***. *** reported data for both Morocco and Russia and ***. ***. *** reported data for Russia only.

U.S. producer *** and importers *** stated that they had no sales into the NOLA region and U.S. producer *** reported that its shipments were by ***.

Table V-3
Phosphate fertilizers: Weighted-average f.o.b. prices and quantities of domestic and imported product 1 and margins of underselling/(overselling), by quarter, January 2017-March 2020

Period	United States		Morocco			Russia		
	Price (dollars per STDW)	Quantity (short tons dry weight)	Price (dollars per STDW)	Quantity (short tons dry weight)	Margin (percent)	Price (dollars per STDW)	Quantity (short tons dry weight)	Margin (percent)
2017: Jan.-Mar.	***	***	***	***	***	***	***	***
Apr.-Jun.	***	***	***	***	***	***	***	***
Jul.-Sep.	***	***	***	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***	***	***	***
2018: Jan.-Mar.	***	***	***	***	***	***	***	***
Apr.-Jun.	***	***	***	***	***	***	***	***
Jul.-Sep.	***	***	***	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***	***	***	***
2019: Jan.-Mar.	***	***	***	***	***	***	***	***
Apr.-Jun.	***	***	***	***	***	***	***	***
Jul.-Sep.	***	***	***	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***	***	***	***
2020: Jan.-Mar.	***	***	***	***	***	***	***	***

Note: Product 1: Standard-grade monoammonium phosphate (MAP), chemical formula $NH_4H_2PO_4$, granular, excluding high-purity MAP.

Source: Compiled from data submitted in response to Commission questionnaires.

Table V-4
Phosphate fertilizers: Weighted-average f.o.b. prices and quantities of domestic and imported product 2 and margins of underselling/(overselling), by quarter, January 2017-March 2020

Period	United States		Morocco			Russia		
	Price (dollars per STDW)	Quantity (short tons dry weight)	Price (dollars per STDW)	Quantity (short tons dry weight)	Margin (percent)	Price (dollars per STDW)	Quantity (short tons dry weight)	Margin (percent)
2017: Jan.-Mar.	***	***	***	***	***	***	***	***
Apr.-Jun.	***	***	***	***	***	***	***	***
Jul.-Sep.	***	***	***	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***	***	***	***
2018: Jan.-Mar.	***	***	***	***	***	***	***	***
Apr.-Jun.	***	***	***	***	***	***	***	***
Jul.-Sep.	***	***	***	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***	***	***	***
2019: Jan.-Mar.	***	***	***	***	***	***	***	***
Apr.-Jun.	***	***	***	***	***	***	***	***
Jul.-Sep.	***	***	***	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***	***	***	***
2020: Jan.-Mar.	***	***	***	***	***	***	***	***

Note: Product 2: Standard-grade diammonium phosphate (DAP), chemical formula $(NH4)_2(HPO_4)$, granular.

Source: Compiled from data submitted in response to Commission questionnaires.

Figure V-2
Phosphate fertilizers: Weighted-average prices and quantities of domestic and imported product 1, by quarter, January 2017-March 2020

* * * * * * *

Figure V-3
Phosphate fertilizers: Weighted-average prices and quantities of domestic and imported product 2, by quarter, January 2017-March 2020

* * * * * * *

Price trends

In general, prices decreased overall from January 2017 to March 2020. Prices increased in 2017 and 2018, decreased in 2019, and then increased in the first quarter of 2020. Table V-5 summarizes the price trends, by country and by product. As shown in the table, domestic prices for product 1 (MAP) and product 2 (DAP) decreased by *** and *** percent, respectively, during January 2017-March 2020 while import prices decreased by *** and *** percent, respectively, for Morocco, and by *** and *** percent, respectively for Russia. Figure V-4 shows indexed prices for products 1 and 2. Figure V-5 shows monthly published prices for DAP and MAP.

Table V-5
Phosphate fertilizers: Summary of weighted-average f.o.b. prices for products 1-2 from the United States, Morocco, and Russia

Item	Number of quarters	Low price (dollars per STDW)	High price (dollars per STDW)	Change in price over period[1] (percent)
Product 1:				
United States	13	***	***	***
Morocco	13	***	***	***
Russia	13	***	***	***
Product 2:				
United States	13	***	***	***
Morocco	13	***	***	***
Russia	13	***	***	***

Note: Percentage change from the first quarter in which data were available to the last quarter in which price data were available.

Source: Compiled from data submitted in response to Commission questionnaires.

Figure V-4
Phosphate fertilizers: Indexed prices of domestic and imported products 1 and 2, by quarter, January 2017-March 2020

* * * * * * *

Figure V-5
Phosphate fertilizers: Published prices for DAP and MAP, by month, January 2017-May 2020

* * * * * * *

One industry source stated that wholesale NOLA f.o.b. barge prices for DAP began to decline in late 2018, with the decline continuing into 2019, with prices falling about $150 per ton in 2019. It stated that "consecutive weather-interrupted application seasons — fall '18, spring '19, and fall '19" contributed to the declining prices, as well as excess import supplies "pushed into a U.S. river system that was contending with record-setting high water throughout the first half of the year (and beyond)," and that "stocks throughout the fertilizer distribution channel swelled."[20]

Price comparisons

As shown in table V-6, prices for product imported from subject countries were below those for U.S.-produced product in 16 of 52 instances (431,179 short tons); margins of underselling ranged from 0.1 to 13.0 percent. In the remaining 36 instances (1,032,024 short tons), prices for product from subject countries were between 0.1 and 11.2 percent above prices for the domestic product.

Lost sales and lost revenue

*** three responding U.S. producers reported that they had to either reduce prices or roll back announced price increases, and *** firms reported that they had lost sales.[21] U.S. producer Mosaic submitted lost sales and lost revenue allegations, and identified *** firms with which it lost sales and revenue (all *** consisting of both types of allegations). All *** allegations listed Morocco as a subject country and *** listed Russia. Staff contacted all *** purchasers and received responses from 10 purchasers.[22] Responding purchasers reported purchasing and/or importing 14.2 million short tons of phosphate fertilizers during January 2017-March 2020 (table V-7).

[20] "As an example of the challenges on the U.S. inland waterways, Mosaic was unable to offload a phosphate barge at its Pine Bend, MN, facility until August, when this would typically have taken place by early April." Croplife, Phosphate-and-potash-outlook-2020, https://www.croplife.com/crop-inputs/fertilizer/phosphate-and-potash-outlook-2020/.

[21] ***.

[22] ***.

Table V-6
Phosphate fertilizers: Instances of underselling/overselling and the range and average of margins, by country, January 2017-March 2020

Source	Underselling				
	Number of quarters	Quantity (short tons dry weight)	Average margin (percent)	Margin range (percent)	
				Min	Max
Product 1	***	***	***	***	***
Product 2	***	***	***	***	***
Total, underselling	16	431,179	2.8	0.1	13.0
Morocco	***	***	***	***	***
Russia	***	***	***	***	***
Total, underselling	16	431,179	2.8	0.1	13.0
Source	(Overselling)				
	Number of quarters	Quantity (short tons dry weight)	Average margin (percent)	Margin range (percent)	
				Min	Max
Product 1	***	***	***	***	***
Product 2	***	***	***	***	***
Total, overselling	36	1,032,024	(4.0)	***	(11.2)
Morocco	***	***	***	***	***
Russia	***	***	***	***	***
Total, overselling	36	1,032,024	(4.0)	***	(11.2)

Source: Compiled from data submitted in response to Commission questionnaires.

Table V-7
Phosphate fertilizers: Purchasers' reported purchases and imports, January 2017-March 2020

Purchaser	Purchases and imports January 2017 to March 2020 (short tons dry weight)			Subject country sources	Change in domestic share (pp, 2017-19)	Change in subject country share (pp, 2017-19)
	Domestic	Subject	All other			
***	***	***	***	***	***	***
***	***	***	***	***	***	***
***	***	***	***	***	***	***
***	***	***	***	***	***	***
***	***	***	***	***	***	***
***	***	***	***	***	***	***
***	***	***	***	***	***	***
***	***	***	***	***	***	***
***	***	***	***	***	***	***
***	***	***	***	***	***	***
Total	6,627,252	4,464,774	3,083,656	Morocco, Russia	(6.2)	4.4

Note: All other includes all other sources and unknown sources. Six firms reported purchases from all other sources. Four firms reported purchases from unknown sources.

Note: Percentage points (pp) change: Change in the share of the firm's total purchases of domestic and/or subject country imports between first and last years.

Source: Compiled from data submitted in response to Commission questionnaires.

During 2019, responding purchasers purchased and/or imported 44.8 percent from U.S. producers, 28.4 percent from Morocco, 5.0 percent from Russia, 7.3 percent from nonsubject countries, and 14.5 percent from "unknown source" countries.[23] Purchasers were asked about changes in their purchasing patterns from different sources since January 1, 2017. Of the 10 responding purchasers, three reported decreasing purchases from domestic producers, three reported increasing purchases, three reported fluctuating purchases, and one did not purchase any domestic product. Explanations for increasing purchases of domestic product included: ***, prices were competitive with imports (***), and general increased focus on trading phosphates (***). Explanations for decreasing purchases of domestic product included: started purchasing *** instead of Mosaic's MicroEssentials because of its better agronomics (***) and ***. Reasons reported for fluctuating domestic purchases included: price/supply needed varies depending on seasonality; changes in supply and demand and changes in supplier contracts; and price and quality. ***. ***.

Seven of the 10 responding purchasers reported that since January 1, 2017, they had purchased subject imports instead of U.S.-produced product (six firms purchased product from Morocco and seven firms purchased product from Russia). Three purchasers reported that subject import prices from Russia were lower than U.S.-produced product, and one of these purchasers also reported that prices from Morocco were lower than U.S. produced product. Two purchasers reported that price was a primary reason for the decision to purchase subject imported product rather than U.S.-produced product, with one purchaser (***) reporting purchasing from both Morocco and Russia because of lower prices and the other purchaser (***) reporting purchasing from Russia because of lower prices. One purchaser estimated the quantity of phosphate fertilizers from Morocco purchased instead of domestic product (*** short tons) and two estimated the quantity from Russia (*** short tons)

[23] Four of the 10 responding purchasers indicated that they did not know the source of some of the phosphate fertilizers they purchased.

(tables V-8a and V-8b). Purchasers identified supply availability as the main non-price reason for purchasing imported rather than U.S.-produced product.

Table V-8a
Phosphate fertilizers: Purchasers' responses to purchasing subject imports instead of domestic product, by firm

Purchaser	Subject imports purchased instead of domestic (Y/N)	Imports priced lower (Y/N)	If purchased subject imports instead of domestic, was price a primary reason		
			Y/N	If Yes, quantity (short tons dry weight)	If No, non-price reason
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
Total	Yes--7; No--3	Yes--3; No--4	Yes--2; No--5	***	

Note: ***.

Source: Compiled from data submitted in response to Commission questionnaires.

Table V-8b
Phosphate fertilizers: Purchasers' responses to purchasing subject imports instead of domestic product, by country

Source	Count of purchasers reporting subject instead of domestic	Count of purchasers reporting that imports were priced lower	Count of purchasers reporting that price was a primary reason for shift	Quantity subject purchased (short tons dry weight)
Morocco	6	1	1	***
Russia	7	3	2	***
Any subject source	7	3	2	***

Source: Compiled from data submitted in response to Commission questionnaires.

Three purchasers reported that U.S. producers had reduced prices in order to compete with lower-priced imports from subject countries (two firms with respect to Morocco and two firms with respect to Russia); two firms reported that U.S. producers had not reduced prices; and four firms reported that they did not know (table V-9a and V-9b). The reported estimated price reduction ranged from 1 to 50 percent with one purchaser reporting 1 percent for Russia, one reporting 15 percent for Morocco, and one reporting 50 percent for both subject countries. In describing the price reductions, *** described a 15 percent drop in U.S. price because of lower-priced imports from Morocco related to increased imports combined with lack of demand in July-October 2020. ***, which cited a 50 percent reduction stated that "buying is all about trends, sometimes imports are cheaper, sometimes domestic tons are competitive, so a black and white answer above is difficult."

Some purchasers provided additional information on purchases and market dynamics. *** stated that product supply and Mosaic's business practices were the main reasons it purchased imports. *** stated that domestic producers have inconsistent supply availability and limited warehouse infrastructure, and that Mosaic has expanded its distribution in Brazil and India at the expense of its U.S. distribution, which has created shortages of domestically available phosphates. *** reported that Mosaic has been competitive with import offers and that there have been times when Mosaic was the cheapest option and times when Mosaic chose not to sell into the market because the price was too low in Mosaic's opinion. *** stated that it sometimes purchased subject imports at a lower price than domestic product and sometimes the subject imports were purchased at a higher price, depending on the timing of the purchase. It added that ***.

*** stated that, ***, it generally purchases the cheapest or best positioned product on a given day.

Table V-9a
Phosphate fertilizers: Purchasers' responses to U.S. producer price reductions, by firm

Purchaser	Producers reduced price (Y/N)	If producer reduced prices:	
		Estimated U.S. price reduction (percent)	Additional information, if available
***	***	***	***
***	***	***	***.
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
Total / average	Yes--3; No--2	22.0	

Note: ***.

Source: Compiled from data submitted in response to Commission questionnaires.

Table V-9b
Phosphate fertilizers: Purchasers' responses to U.S. producer price reductions, by country

Source	Count of purchasers reporting U.S. producers reduced prices	Simple average of estimated U.S. price reduction (percent)	Range of estimated U.S. price reductions (percent)
Morocco	2	***	***
Russia	2	***	***
All subject sources	3	22.0	***

Source: Compiled from data submitted in response to Commission questionnaires.

Part VI: Financial experience of U.S. producers

Background

Three firms provided usable financial results on their phosphate fertilizers operations. Two U.S. producers reported financial data on a GAAP basis and all three firms reported for calendar-year annual periods.[1] In 2019, *** accounted for *** percent of the U.S. producers' net sales by quantity, *** accounted for *** percent, and *** accounted for *** percent.[2] [3] Commercial sales accounted for the vast majority of reported phosphate fertilizers revenue, with transfers to related firms representing a relatively small share.[4] Accordingly, the tables below present a combined revenue total.

Operations on phosphate fertilizers

Income-and-loss data for U.S. producers' phosphate fertilizers operations are presented in table VI-1. Table VI-2 presents corresponding changes in average per short ton values. Table VI-3 presents selected company-specific financial data.

[1] *** used International Financial Reporting Standards as its accounting basis. *** has a fiscal year end of ***, however its financial results were provided on a calendar year basis.

[2] By value, *** accounted for *** percent of net sales, *** accounted for *** percent, and *** accounted for *** percent in 2019.

[3] ***. Email from ***, July 14, 2020.

[4] ***. U.S. producer's questionnaire response of ***, question II-12.

Table VI-1
Phosphate fertilizers: Results of operations of U.S. producers, 2017-19, January to March 2019, and January to March 2020

Item	Calendar year			January to March	
	2017	2018	2019	2019	2020
	Quantity (short tons dry weight)				
Total net sales	***	***	***	***	***
	Value (1,000 dollars)				
Total net sales	***	***	***	***	***
Cost of goods sold.-- Raw materials	***	***	***	***	***
Direct labor	***	***	***	***	***
Other factory costs	***	***	***	***	***
Total COGS	***	***	***	***	***
Gross profit	***	***	***	***	***
SG&A expense	***	***	***	***	***
Operating income or (loss)	***	***	***	***	***
Other expense / (income), net	***	***	***	***	***
Net income or (loss)	***	***	***	***	***
Depreciation/amortization	***	***	***	***	***
Cash flow	***	***	***	***	***
	Ratio to net sales (percent)				
Cost of goods sold.-- Raw materials	***	***	***	***	***
Direct labor	***	***	***	***	***
Other factory costs	***	***	***	***	***
Average COGS	***	***	***	***	***
Gross profit	***	***	***	***	***
SG&A expense	***	***	***	***	***
Operating income or (loss)	***	***	***	***	***
Net income or (loss)	***	***	***	***	***
	Ratio to total COGS (percent)				
Cost of goods sold.-- Raw materials	***	***	***	***	***
Direct labor	***	***	***	***	***
Other factory costs	***	***	***	***	***
Average COGS	***	***	***	***	***

Table continued on next page.

Table VI-1—Continued
Phosphate fertilizers: Results of operations of U.S. producers, 2017-19, January to March 2019, and January to March 2020

Item	Calendar year			January to March	
	2017	2018	2019	2019	2020
	Unit value (dollars per STDW)				
Total net sales	***	***	***	***	***
Cost of goods sold.-- Raw materials	***	***	***	***	***
Direct labor	***	***	***	***	***
Other factory costs	***	***	***	***	***
Average COGS	***	***	***	***	***
Gross profit	***	***	***	***	***
SG&A expense	***	***	***	***	***
Operating income or (loss)	***	***	***	***	***
Net income or (loss)	***	***	***	***	***
	Number of firms reporting				
Operating losses	***	***	***	***	***
Net losses	***	***	***	***	***
Data	***	***	***	***	***

Source: Compiled from data submitted in response to Commission questionnaires.

Table VI-2
Phosphate fertilizers: Changes in AUVs, between calendar years and between partial year periods

Item	Between calendar years			Between partial year period
	2017-19	2017-18	2018-19	2019-20
	Change in AUVs (percent)			
Total net sales	***	***	***	***
Cost of goods sold.-- Raw materials	***	***	***	***
Direct labor	***	***	***	***
Other factory costs	***	***	***	***
Average COGS	***	***	***	***
	Change in AUVs (dollars per STDW)			
Total net sales	***	***	***	***
Cost of goods sold.-- Raw materials	***	***	***	***
Direct labor	***	***	***	***
Other factory costs	***	***	***	***
Average COGS	***	***	***	***
Gross profit	***	***	***	***
SG&A expense	***	***	***	***
Operating income or (loss)	***	***	***	***
Net income or (loss)	***	***	***	***

Source: Compiled from data submitted in response to Commission questionnaires.

Table VI-3
Phosphate fertilizers: Select results of operations of U.S. producers, by company, 2017-19, January to March 2019, and January to March 2020

Item	Calendar year			January to March	
	2017	2018	2019	2019	2020
	Total net sales (short tons dry weight)				
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
All firms	***	***	***	***	***
	Total net sales (1,000 dollars)				
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
All firms	***	***	***	***	***
	Cost of goods sold (1,000 dollars)				
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
All firms	***	***	***	***	***
	Gross profit or (loss) (1,000 dollars)				
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
All firms	***	***	***	***	***
	SG&A expenses (1,000 dollars)				
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
All firms	***	***	***	***	***
	Operating income or (loss) (1,000 dollars)				
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
All firms	***	***	***	***	***

Table continued on next page.

Table VI-3—Continued
Phosphate fertilizers: Select results of operations of U.S. producers, by company, 2017-19, January to March 2019, and January to March 2020

Item	Calendar year			January to March	
	2017	2018	2019	2019	2020
	Net income or (loss) (1,000 dollars)				
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
All firms	***	***	***	***	***
	COGS to net sales ratio (percent)				
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
All firms	***	***	***	***	***
	Gross profit or (loss) to net sales ratio (percent)				
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
All firms	***	***	***	***	***
	SG&A expense to net sales ratio (percent)				
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
All firms	***	***	***	***	***
	Operating income or (loss) to net sales ratio (percent)				
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
All firms	***	***	***	***	***
	Net income or (loss) to net sales ratio (percent)				
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
All firms	***	***	***	***	***

Table continued on next page.

Table VI-3—Continued
Phosphate fertilizers: Select results of operations of U.S. producers, by company, 2017-19, January to March 2019, and January to March 2020

Item	Calendar year			January to March	
	2017	2018	2019	2019	2020
	Unit net sales value (dollars per STDW)				
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
All firms	***	***	***	***	***
	Unit raw materials (dollars per STDW)				
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
All firms	***	***	***	***	***
	Unit direct labor (dollars per STDW)				
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
All firms	***	***	***	***	***
	Unit other factory costs (dollars per STDW)				
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
All firms	***	***	***	***	***
	Unit COGS (dollars per STDW)				
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
All firms	***	***	***	***	***
	Unit gross profit or (loss) (dollars per STDW)				
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
All firms	***	***	***	***	***

Table continued on next page.

Table VI-3—Continued
Phosphate fertilizers: Select results of operations of U.S. producers, by company, 2017-19, January to March 2019, and January to March 2020

Item	Calendar year			January to March	
	2017	2018	2019	2019	2020
	Unit SG&A expenses (dollars per STDW)				
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
All firms	***	***	***	***	***
	Unit operating income or (loss) (dollars per STDW)				
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
All firms	***	***	***	***	***
	Unit net income or (loss) (dollars per STDW)				
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
All firms	***	***	***	***	***

Source: Compiled from data submitted in response to Commission questionnaires.

Net sales

As shown in table VI-1, total net sales by quantity and value declined overall from 2017 to 2019. Total net sales quantity was higher in January-March 2020 compared to the same period in 2019, while total net sales value was lower between the comparable interim periods. As shown in table VI-3, ***.

U.S. producers' net sales average unit value ("AUV") irregularly increased from $*** in 2017 to $*** in 2019. U.S. producers' net sales AUV was lower in January-March 2020 ($***) than in January-March 2019 ($***). ***.

Cost of goods sold and gross profit or (loss)

As seen in table VI-1, other factory costs ("OFC") were the largest component of phosphate fertilizers' COGS throughout 2017-19 and during both interim periods. It accounted for between *** percent (2018) and *** percent (January-March 2020) of total COGS. The average per unit OFC increased from $*** in 2017 to $*** in 2019 and were lower between the comparable interim periods. ***.[5]

Raw material costs were the second largest component of COGS representing between *** percent (January-March 2020) and *** percent (2019). The average per unit raw material costs increased from $*** in 2017 to $*** in 2019 but were lower between the comparable interim periods. ***.[6] Raw materials consist of phosphate rock, sulfur, ammonia, and other material inputs such as ***.[7] Table VI-4 presents a break-out of the raw material costs, by type, for calendar year 2019.[8]

[5] ***. Email from ***, July 23, 2020.
[6] ***. Emails from ***, July 23 and 27, 2020.
[7] ***. U.S. producer's questionnaire responses of ***, question III-7.
[8] ***. Email from ***, July 31, 2020.

Table VI-4
Phosphate fertilizers: Raw material costs, between calendar years and between partial year periods

Raw materials	Calendar 2019		
	Value (1,000 dollars)	Unit value (dollars per STDW)	Share of value (percent)
Phosphate rock	***	***	***
Sulfur	***	***	***
Ammonia	***	***	***
Other material inputs	***	***	***
Total, raw materials	***	***	***

Source: Compiled from data submitted in response to Commission questionnaires.

Finally, direct labor represented between *** percent (2019) and *** percent (January-March 2019). The average per unit direct labor costs declined from $*** in 2017 to $*** in 2019 and were lower between the comparable interim periods.

The average cost of goods sold ("COGS") to net sales ratio irregularly increased from *** percent in 2017 to *** percent in 2019 and was higher in January-March 2020 compared to January-March 2019 driven by increased and higher raw material costs and other factory costs to net sales ratios.

As shown in table VI-1, the industry's gross profit declined irregularly from $*** in 2017 to a loss of $*** in 2019 because the decline in net sales value along with the decline in sales volume exceeded the corresponding decline in COGS. The industry's gross profit was lower in January-March 2020 compared to January-March 2019 due to the higher COGS with the lower net sales value despite the higher total sales volume. Gross profit margin (gross profit as a ratio to net sales) declined irregularly from *** percent in 2017 to *** percent in 2019 and was notably lower in January-March 2020 compared to January-March 2019. ***.

SG&A expenses and operating income

Total SG&A expenses declined from $*** in 2017 to $*** in 2019 but were higher in January-March 2020 compared to January-March 2019. The SG&A expenses ratio (SG&A expenses as a share of sales) declined irregularly from *** percent in 2017 and *** percent 2019 and was higher in January-March 2020 compared to January-March 2019.

Operating income declined from $*** in 2017 to *** in 2019. It was lower in January-March 2020 (***) compared to the same period in 2019 ($***). The operating income ratio (operating income as a share of sales) declined from *** percent in 2017 to *** percent in 2019 and was lower in

January-March 2020 (*** percent) compared to the same period in 2019 (*** percent).

Other expenses and net income

Classified below the operating income level are interest expense, other expense, and other income. In table VI-1, these items are aggregated and only the net amount is shown. The industry reported an increase in net "all other expenses" from 2017 to 2019 and lower net "all other income in January-March 2020 compared to January-March 2019. *** accounted for the vast majority of reported net "all other expenses/(income)" during the reporting period. ***.[9]

Net income declined from $*** in 2017 to *** in 2019 and was lower in January-March 2020 (***) compared to the same period in 2019 ($***). The net income ratio (net income as a share of sales) declined from *** percent in 2017 to *** percent in 2019 and was lower in January-March 2020 (*** percent) compared to the same period in 2019 (*** percent).

[9] U.S. producer's questionnaire response of ***, question III-10.

Variance analysis

The variance analysis presented in table VI-5 is based on the data in table VI-1.[10]

Table VI-5

Phosphate fertilizers: Variance analysis for U.S. producers, between calendar years and between partial year periods

Item	Between calendar years			Between partial year period
	2017-19	2017-18	2018-19	2019-20
	Value (1,000 dollars)			
Net sales:				
Price variance	***	***	***	***
Volume variance	***	***	***	***
Net sales variance	***	***	***	***
COGS:				
Cost variance	***	***	***	***
Volume variance	***	***	***	***
COGS variance	***	***	***	***
Gross profit variance	***	***	***	***
SG&A expenses:				
Cost/expense variance	***	***	***	***
Volume variance	***	***	***	***
Total SG&A expense variance	***	***	***	***
Operating income variance	***	***	***	***
Summarized (at the operating income level) as:				
Price variance	***	***	***	***
Net cost/expense variance	***	***	***	***
Net volume variance	***	***	***	***

Source: Compiled from data submitted in response to Commission questionnaires.

[10] The Commission's variance analysis is calculated in three parts: sales variance, cost of sales variance (COGS variance), and SG&A expense variance. Each part consists of a price variance (in the case of the sales variance) or a cost variance (in the case of the COGS and SG&A expense variance), and a volume variance. The sales or cost variance is calculated as the change in unit price or unit cost/expense times the new volume, while the volume variance is calculated as the change in volume times the old unit price or unit cost. Summarized at the bottom of the table, the price variance is from sales; the cost/expense variance is the sum of those items from COGS and SG&A expense variances, respectively, and the volume variance is the sum of the volume components of the net sales, COGS, and SG&A expense variances.

Capital expenditures and research and development expenses

Table VI-6 presents U.S. producers' capital expenditures and research and development ("R&D") expenses related to their phosphate fertilizers operations and table VI-7 presents corresponding narrative descriptions.

Table VI-6
Phosphate fertilizers: Capital expenditures and research and development expenses for U.S. producers, by firm, 2017-19, January to March 2019, and January to March 2020

Item	Calendar year			January to March	
	2017	2018	2019	2019	2020
	Capital expenditures (1,000 dollars)				
All firms	***	***	***	***	***
	R&D expenses (1,000 dollars)				
All firms	***	***	***	***	***

Source: Compiled from data submitted in response to Commission questionnaires.

Table VI-7
Phosphate fertilizers: Nature and focus of capital expenditures and R&D expenses for U.S. producers, 2017-19, January to March 2019, and January to March 2020

Firm	Nature and focus of capital expenditures
***	***
***	***
***	***
	Nature and focus of R&D expenses
***	***
***	***
***	***

Source: Compiled from data submitted in response to Commission questionnaires.

Assets and return on assets

Table VI-8 presents data on the U.S. producers' total assets and their return on assets (operating income divided by total assets) related to operations on phosphate fertilizers.[11]

Table VI-8
Phosphate fertilizers: Value of assets used in production, warehousing, and sales, and return on investment for U.S. producers, by firm, 2017-2019

Firm	Calendar years		
	2017	2018	2019
	Total net assets (1,000 dollars)		
All firms	***	***	***
	Operating return on assets (percent)		
All firms	***	***	***

Source: Compiled from data submitted in response to Commission questionnaires.

[11] With respect to a company's overall operations, staff notes that total asset value (i.e., the bottom line number on the asset side of a company's balance sheet) reflects an aggregation of a number of assets which are generally not product specific. Accordingly, high level corporate allocations may be required in order to report a total asset value for phosphate fertilizers.

Capital and investment

The Commission requested U.S. producers of phosphate fertilizers to describe any actual or potential negative effects of imports of phosphate fertilizers from Morocco and Russia on their firms' growth, investment, ability to raise capital, development and production efforts, or the scale of capital investments. Table VI-9 presents the number of firms reporting an impact in each category and table VI-10 provides the U.S. producers' narrative responses.

Table VI-9
Phosphate fertilizers: Actual and anticipated negative effects of imports on investment and growth and development

Item	No	Yes
Negative effects on investment	0	3
Cancellation, postponement, or rejection of expansion projects		3
Denial or rejection of investment proposal		1
Reduction in the size of capital investments		2
Return on specific investments negatively impacted		2
Other		0
Negative effects on growth and development	0	3
Rejection of bank loans		0
Lowering of credit rating		1
Problem related to the issue of stocks or bonds		0
Ability to service debt		0
Other		3
Anticipated negative effects of imports	0	3

Source: Compiled from data submitted in response to Commission questionnaires.

Table VI-10
Phosphate fertilizers: Narratives relating to actual and anticipated negative effects of imports on investment and growth and development, since January 1, 2017

Item / Firm	Narrative
Cancellation, postponement, or rejection of expansion projects:	
***	***
***	***
***	***
Denial or rejection of investment proposal:	
***	***
Reduction in the size of capital investments:	
***	***
***	***
Return on specific investments negatively impacted:	
***	***
***	***
Lowering of credit rating:	
***	***
Other effects on growth and development:	
***	***
***	***
***	***

Table continued on next page.

Table VI-10—Continued
Phosphate fertilizers: Narratives relating to actual and anticipated negative effects of imports on investment and growth and development, since January 1, 2017

Anticipated effects of imports:	
***	***
***	***
***	***

Source: Compiled from data submitted in response to Commission questionnaires.

Part VII: Threat considerations and information on nonsubject countries

Section 771(7)(F)(i) of the Act (19 U.S.C. § 1677(7)(F)(i)) provides that—

> *In determining whether an industry in the United States is threatened with material injury by reason of imports (or sales for importation) of the subject merchandise, the Commission shall consider, among other relevant economic factors*[1]*--*
>
> *(I) if a countervailable subsidy is involved, such information as may be presented to it by the administering authority as to the nature of the subsidy (particularly as to whether the countervailable subsidy is a subsidy described in Article 3 or 6.1 of the Subsidies Agreement), and whether imports of the subject merchandise are likely to increase,*
>
> *(II) any existing unused production capacity or imminent, substantial increase in production capacity in the exporting country indicating the likelihood of substantially increased imports of the subject merchandise into the United States, taking into account the availability of other export markets to absorb any additional exports,*
>
> *(III) a significant rate of increase of the volume or market penetration of imports of the subject merchandise indicating the likelihood of substantially increased imports,*
>
> *(IV) whether imports of the subject merchandise are entering at prices that are likely to have a significant depressing or suppressing effect on domestic prices, and are likely to increase demand for further imports,*
>
> *(V) inventories of the subject merchandise,*

---

[1] Section 771(7)(F)(ii) of the Act (19 U.S.C. § 1677(7)(F)(ii)) provides that "The Commission shall consider {these factors} . . . as a whole in making a determination of whether further dumped or subsidized imports are imminent and whether material injury by reason of imports would occur unless an order is issued or a suspension agreement is accepted under this title. The presence or absence of any factor which the Commission is required to consider . . . shall not necessarily give decisive guidance with respect to the determination. Such a determination may not be made on the basis of mere conjecture or supposition."

(VI) the potential for product-shifting if production facilities in the foreign country, which can be used to produce the subject merchandise, are currently being used to produce other products,

(VII) in any investigation under this title which involves imports of both a raw agricultural product (within the meaning of paragraph (4)(E)(iv)) and any product processed from such raw agricultural product, the likelihood that there will be increased imports, by reason of product shifting, if there is an affirmative determination by the Commission under section 705(b)(1) or 735(b)(1) with respect to either the raw agricultural product or the processed agricultural product (but not both),

(VIII) the actual and potential negative effects on the existing development and production efforts of the domestic industry, including efforts to develop a derivative or more advanced version of the domestic like product, and

(IX) any other demonstrable adverse trends that indicate the probability that there is likely to be material injury by reason of imports (or sale for importation) of the subject merchandise (whether or not it is actually being imported at the time).[2]

Information on the nature of the alleged subsidies was presented earlier in this report; information on the volume and pricing of imports of the subject merchandise is presented in *Parts IV* and *V*; and information on the effects of imports of the subject merchandise on U.S. producers' existing development and production efforts is presented in *Part VI*. Information on inventories of the subject merchandise; foreign producers' operations, including the potential for "product-shifting;" any other threat indicators, if applicable; and any dumping in third-country markets, follows. Also presented in this section of the report is information obtained for consideration by the Commission on nonsubject countries.

[2] Section 771(7)(F)(iii) of the Act (19 U.S.C. § 1677(7)(F)(iii)) further provides that, in antidumping investigations, ". . . the Commission shall consider whether dumping in the markets of foreign countries (as evidenced by dumping findings or antidumping remedies in other WTO member markets against the same class or kind of merchandise manufactured or exported by the same party as under investigation) suggests a threat of material injury to the domestic industry."

The industry in Morocco

The Commission issued foreign producers' or exporters' questionnaires to one firm, OCP S.A. ("OCP"), believed to produce and/or export phosphate fertilizers from Morocco.[3] OCP's exports to the United States accounted for all known U.S. imports of phosphate fertilizers from Morocco in 2019. According to estimates requested of OCP, the production of phosphate fertilizers in Morocco reported in its questionnaire accounts for all known production of phosphate fertilizers in Morocco.[4] Table VII-1 presents information on the phosphate fertilizers operations of the responding producer/exporter in Morocco.

Table VII-1
Phosphate fertilizers: Summary data for producer in Morocco, 2019

Firm	Production (short tons dry weight)	Share of reported production (percent)	Exports to the United States (short tons dry weight)	Share of reported exports to the United States (percent)	Total shipments (short tons dry weight)	Share of firm's total shipments exported to the United States (percent)
OCP	***	***	***	***	***	***
Total	***	***	***	***	***	***

Source: Compiled from data submitted in response to Commission questionnaires.

[3] This firm was identified through a review of information submitted in the petitions and contained in *** records.

[4] OCP confirms it is the only known foreign producer of phosphate fertilizers in Morocco as identified in the petition. Respondent OCP's postconference brief: Responses to staff questions, p. 1.

Changes in operations

As presented in table VII-2, OCP reported several operational and organizational changes since January 1, 2017.[5] [6]

Table VII-2
Phosphate fertilizers: Moroccan producer's reported changes in operations, since January 1, 2017

Item / Firm	Reported changed in operations
Plant Openings:	
***	***
Acquisitions:	
***	***
Revised Labor Agreements:	
***	***

Source: Compiled from data submitted in response to Commission questionnaires.

[5] According to its website, OCP is implementing a modular investment program for upstream and downstream activities for the 2008 to 2027 period, which is estimated to cost MAD 200 billion ($21.4 billion). OCP's ambition is to double mining capacity and triple processing capacity through activities such as a new downstream plant for drying of phosphate rock at Jorf Lasfar dedicated to exports, 4 new integrated fertilizer production units (1 million tons of DAP each) including Africa Fertilizer Complex, 3 new phosphoric acid lines, and the renovation of existing port infrastructure. Our Industrial and Commercial Strategy, https://www.ocpgroup.ma/index.php/en/our-strategy/our-industrial-and-commercial-strategy, retrieved July 23, 2020.

[6] Fully owned by OCP, Phosboucraa operates the Boucraa mine. Its reserves are estimated at less than 2% of Morocco's national phosphate reserves, with a total annual production capacity of 3 million metric tons (3.3 million short tons). Phosboucraa has an average annual revenue of $200 million and is engaged in a development program which is estimated to cost approximately $2.2 billion. This is in order to move its operations up the value chain from raw materials to intermediate products and phosphate fertilizers by 2022. About Phosboucraa, http://www.phosboucraa.ma/company/about-phosboucraa, retrieved July 23, 2020.

Operations on phosphate fertilizers

Table VII-3 presents information on OCP's phosphate fertilizer operations for 2017-19, January to March 2019, January to March 2020, as well as projections for 2020-21.

OCP's production capacity in Morocco increased by *** percent from 2017 to 2019, while its production increased by *** percent from 2017 to 2019. Consequently, OCP's capacity utilization decreased by *** percentage points during 2017-19. While capacity is projected to increase *** percent in 2020 and *** percent in 2021, its production is projected to increase *** percent and *** percent respectively. This is projected to result in a *** percentage point increase in capacity utilization to *** percent in 2020 and *** percent in 2021.

OCP's total shipments increased by *** percent from 2017 to 2019 and were *** percent higher in interim 2020 than in interim 2019. Home market shipments accounted for between *** percent (2017) and *** percent (2018) of total shipments during the same period. Home market shipments, by quantity, decreased irregularly by *** percent during 2017-19 and were *** percent lower in interim 2020 than in interim 2019.

Export shipments accounted for between *** percent (2017) and *** percent (2018) of total shipments during 2017-19 and *** percent in interim 2020. Exports of phosphate fertilizers to the United States, by quantity, increased by *** percent from 2017 to 2019. As a share of total shipments, exports to the United States increased from *** percent in 2017 to *** percent in 2019 and were *** percent in interim 2019 compared to *** percent in interim 2020. This share is projected to decline to *** percent in 2020 and *** percent in 2021.

The share of total shipments held by exports to non-U.S. markets decreased from *** percent in 2017 to *** percent in 2019 but is projected to increase to *** percent in 2020 and then decrease to *** percent in 2021. Other export markets identified by the firm included ***. End-of-period inventories increased by *** percent in 2018 and by *** percent in 2019 but are projected to decrease by *** percent in 2020 and by *** percent in 2021. End-of-period inventories as a ratio to production and total shipments followed a similar trend, increased each year during 2017-19, and are projected to decline in 2020-21.

Table VII-3
Phosphate fertilizers: Data on industry in Morocco, 2017-19, January to March 2019, and January to March 2020 and projection calendar years 2020 and 2021

Item	Actual experience					Projections	
	Calendar year			January to March		Calendar year	
	2017	2018	2019	2019	2020	2020	2021
	Quantity (short tons dry weight)						
Capacity	***	***	***	***	***	***	***
Production	***	***	***	***	***	***	***
End-of-period inventories	***	***	***	***	***	***	***
Shipments:							
Home market shipments:							
Internal consumption/ transfers	***	***	***	***	***	***	***
Commercial home market shipments	***	***	***	***	***	***	***
Total home market shipments	***	***	***	***	***	***	***
Export shipments to:							
United States	***	***	***	***	***	***	***
All other markets	***	***	***	***	***	***	***
Total exports	***	***	***	***	***	***	***
Total shipments	***	***	***	***	***	***	***
	Ratios and shares (percent)						
Capacity utilization	***	***	***	***	***	***	***
Inventories/production	***	***	***	***	***	***	***
Inventories/total shipments	***	***	***	***	***	***	***
Share of shipments:							
Home market shipments:							
Internal consumption/ transfers	***	***	***	***	***	***	***
Commercial home market shipments	***	***	***	***	***	***	***
Total home market shipments	***	***	***	***	***	***	***
Export shipments to:							
United States	***	***	***	***	***	***	***
All other markets	***	***	***	***	***	***	***
Total exports	***	***	***	***	***	***	***
Total shipments	***	***	***	***	***	***	***

Source: Compiled from data submitted in response to Commission questionnaires.

Alternative products

The responding Moroccan firm did not produce other products on the same equipment and machinery used to produce phosphate fertilizers.

Exports

Data on Morocco's exports of fertilizers are presented in table VII-4. According to GTA, the largest export destinations for fertilizers from Morocco based on value are Brazil, the United States, and Djibouti, accounting for 29.5 percent, 19.0 percent, and 7.0 percent of Morocco's exports, respectively, in 2019. Morocco's exports of fertilizers to the United States increased 68.3 percent from 2017 to 2018, and then declined 34.5 percent from 2018 to 2019. Overall, Morocco's exports to the United States increased by 10.3 percent from 2017 to 2019. During 2017-19, Morocco's total exports increased 13.9 percent.

Table VII-4
Fertilizers: Exports from Morocco, 2017-19

Destination market	Calendar year		
	2017	2018	2019
	Value (1,000 dollars)		
United States	496,828	836,261	547,887
Brazil	579,668	560,844	850,747
Djibouti	29,872	108,018	202,142
Argentina	76,137	107,511	149,928
Turkey	94,486	45,429	116,131
Spain	101,908	110,319	115,764
Bangladesh	82,490	90,964	110,704
Pakistan	7,957	91,869	82,651
France	83,730	101,513	69,238
All other destination markets	980,745	1,095,146	641,890
Total exports	2,533,820	3,147,872	2,887,081
	Share of value (percent)		
United States	19.6	26.6	19.0
Brazil	22.9	17.8	29.5
Djibouti	1.2	3.4	7.0
Argentina	3.0	3.4	5.2
Turkey	3.7	1.4	4.0
Spain	4.0	3.5	4.0
Bangladesh	3.3	2.9	3.8
Pakistan	0.3	2.9	2.9
France	3.3	3.2	2.4
All other destination markets	38.7	34.8	22.2
Total exports	100.0	100.0	100.0

Note: United States is shown at the top and all remaining top export destinations are shown in descending order of value for 2019. HS subheadings 3103.11, 3103.19, 3105.20, 3105.30, 3105.40, 3105.51, and 3105.59 are basket categories that contains products outside of the scope of these investigations.

Source: Official exports statistics under HS subheadings 3103.11, 3103.19, 3105.20, 3105.30, 3105.40, 3105.51, and 3105.59, as reported by Customs Committee of Russia in the Global Trade Atlas database, accessed July 9, 2020.

The industry in Russia

The Commission issued foreign producers' or exporters' questionnaires to two firms, PhosAgro PJSC, ("PhosAgro") and EuroChem, believed to produce and/or export phosphate fertilizers from Russia.[7] [8] These firms' exports to the United States accounted for nearly all U.S. imports of phosphate fertilizers from Russia in 2019. According to estimates requested of the responding Russian producers, the production of phosphate fertilizers in Russia reported in questionnaires accounts for approximately *** percent of overall production of phosphate fertilizers in Russia.[9] According to its website, EuroChem produced 26.5 million metric tons (2.9 million short tons) of fertilizer in 2019.[10] According to its website, PhosAgro produced 69.0 million metric tons (7.6 million short tons) of phosphate fertilizer in 2019.[11] Table VII-5 presents information on the phosphate fertilizers operations of the responding producers and exporters in Russia.

[7] These firms were identified through a review of information submitted in the petitions and contained in *** records.

[8] ***.

[9] PhosAgro is the largest supplier of mineral fertilizers in the Russian market. The firm is also able to switch up to 50 percent of its phosphate production from DAP/MAP to NPK, depending on the market situation. Company Profile, https://ar2019.phosagro.com/about, retrieved July 23, 2020.

[10] EuroChem's public production figure represents a 4.7 percent increase from 2018 and consists of all fertilizer products, which includes out-of-scope products such as ammonia and urea and ammonium nitrate. 2019 Annual Report: A Global Leader, https://www.eurochemgroup.com/investors/reports-results/, retrieved July 23, 2020.

[11] PhosAgro's production of phosphate fertilizers increased by 6.3 percent from 65.0 million metric tons (7.2 million short tons) since 2018. Phosphate Segment- Downstream, https://ar2019.phosagro.com/strategic-report/operational-review/phosphate-segment-downstream, retrieved July 23, 2020.

Table VII-5
Phosphate fertilizers: Summary data for producers in Russia, 2019

Firm	Production (short tons dry weight)	Share of reported production (percent)	Exports to the United States (short tons dry weight)	Share of reported exports to the United States (percent)	Total shipments (short tons dry weight)	Share of firm's total shipments exported to the United States (percent)
EuroChem	***	***	***	***	***	***
PhosAgro	***	***	***	***	***	***
Total	***	***	***	***	***	***

Source: Compiled from data submitted in response to Commission questionnaires.

Changes in operations

As presented in table VII-6, producers in Russia reported several operational and organizational changes since January 1, 2017.[12] [13]

Table VII-6
Phosphate fertilizers: Russian producers' reported changes in operations, since January 1, 2017

Item / Firm	Reported changed in operations
Expansions:	
***	***
Revised labor agreements:	
***	***
Other:	
***	***
***	***

Source: Compiled from data submitted in response to Commission questionnaires.

[12] PhosAgro reported the completion in 2019 of investment projects to modernize key production capacities in the firm's Cherepovets and Balakovo facilities, which in part produce phosphoric acid for phosphate-based fertilizers. The firm also reduced the number of major overhauls and eliminated downtime, which resulted in a significant increase in working time. Finally, production flexibility post modernization helped expand the fertilizer range through adding less concentrated grades with virtually no downtime. Phosphate Segment- Downstream, https://ar2019.phosagro.com/strategic-report/operational-review/phosphate-segment-downstream, retrieved July 23, 2020.

[13] EuroChem sold its 50 percent share in a Spanish producer of liquid fertilizer products, reportedly in order to focus on its core premium NPK and water-soluble products. 2019 Annual Report: A Global Leader, https://www.eurochemgroup.com/investors/reports-results/, retrieved July 23, 2020.

Operations on phosphate fertilizers

Table VII-7 presents information on the phosphate fertilizers operations of the responding producers in Russia for 2017-19, January to March 2019, January to March 2020, as well as projections for 2020-21.

PhosAgro's and Eurochem's collective production capacity in Russia increased by *** percent from 2017 to 2019, while their production increased by *** percent resulting in a *** percentage point increase in capacity utilization. While production capacity is projected to increase by *** percent in 2020 and by *** percent in 2021, their production is projected to increase *** percent and *** percent respectively. This is projected to result in a *** percentage point decline in capacity utilization to *** percent in 2020 and *** percent in 2021.

Total shipments of the responding Russian producers increased by *** percent from 2017 to 2019 and were *** percent higher in interim 2020 than in interim 2019. Home market shipments accounted for between *** percent (2017) and *** percent (2019) of total shipments during the same period. Home market shipments, by quantity, increased by *** percent during 2017-19 and were *** percent higher in interim 2020 than in interim 2019.

Export shipments accounted for between *** percent (2017) and *** percent (2019) of total shipments during 2017-19 and *** percent in interim 2020. Exports of phosphate fertilizers to the United States, by quantity, increased irregularly by *** percent from 2017 to 2019. As a share of total shipments, exports to the United States increased irregularly from *** percent in 2017 to *** percent in 2019 and were *** percent in interim 2019 compared to *** percent in interim 2020. This share is projected to decline to *** percent in 2020 and *** percent in 2021.

The share of total shipments held by exports to non-U.S. markets decreased from *** percent in 2017 to *** percent in 2019 but is projected to increase to *** percent in 2020 and to *** percent in 2021. Other export markets identified by the firms included ***. End-of-period inventories increased by *** percent in 2018 but decreased by *** percent in 2019 and are projected to remain *** in 2020 and 2021. End-of-period inventories as a ratio to production and total shipments increased from 2017 to 2018 but decreased from 2018 in 2019 and are projected to decline in 2020-21.

Table VII-7
Phosphate fertilizers: Data for producers in Russia, 2017-19, January to March 2019, and January to March 2020 and projection calendar years 2020 and 2021

Item	Actual experience					Projections	
	Calendar year			January to March		Calendar year	
	2017	2018	2019	2019	2020	2020	2021
	Quantity (short tons dry weight)						
Capacity	***	***	***	***	***	***	***
Production	***	***	***	***	***	***	***
End-of-period inventories	***	***	***	***	***	***	***
Shipments:							
Home market shipments:							
Internal consumption/ transfers	***	***	***	***	***	***	***
Commercial home market shipments	***	***	***	***	***	***	***
Total home market shipments	***	***	***	***	***	***	***
Export shipments to:							
United States	***	***	***	***	***	***	***
All other markets	***	***	***	***	***	***	***
Total exports	***	***	***	***	***	***	***
Total shipments	***	***	***	***	***	***	***
	Ratios and shares (percent)						
Capacity utilization	***	***	***	***	***	***	***
Inventories/production	***	***	***	***	***	***	***
Inventories/total shipments	***	***	***	***	***	***	***
Share of shipments:							
Home market shipments:							
Internal consumption/ transfers	***	***	***	***	***	***	***
Commercial home market shipments	***	***	***	***	***	***	***
Total home market shipments	***	***	***	***	***	***	***
Export shipments to:							
United States	***	***	***	***	***	***	***
All other markets	***	***	***	***	***	***	***
Total exports	***	***	***	***	***	***	***
Total shipments	***	***	***	***	***	***	***

Source: Compiled from data submitted in response to Commission questionnaires.

Alternative products

As shown in table VII-8, responding Russian firms produced other products on the same equipment and machinery used to produce phosphate fertilizers.[14]

Table VII-8
Phosphate fertilizers: Russian producers' overall capacity and production on the same equipment as subject production, 2017-19, January to March 2019, and January to March 2020

Item	Calendar year			January to March	
	2017	2018	2019	2019	2020
	Quantity (short tons dry weight)				
Overall capacity	***	***	***	***	***
Production:					
Phosphate fertilizers	***	***	***	***	***
Out-of-scope production	***	***	***	***	***
Total production on same machinery	***	***	***	***	***
	Ratios and shares (percent)				
Overall capacity utilization	***	***	***	***	***
Share of production:					
Phosphate fertilizers	***	***	***	***	***
Out-of-scope production	***	***	***	***	***
Total production on same machinery	***	***	***	***	***

Source: Compiled from data submitted in response to Commission questionnaires.

Exports

Data on Russia's exports of fertilizers are presented in table VII-9. According to GTA, the largest export destinations for fertilizers from Russia based on value are Brazil, Estonia, and China, accounting for 13.4 percent, 10.4 percent, and 9.5 percent of Russia's exports in 2019 respectively. Exports to the United States accounted for 5.2 percent of Russia's exports in 2019. Russia's exports of fertilizers to the United States increased 192.0 percent from 2017 to 2018, and then declined 56.3 percent from 2018 to 2019. Overall, Russia's exports to the United States increased by 27.5 percent from 2017 to 2019. During 2017-19, Russia's total exports increased 15.0 percent.

[14] ***.

Table VII-9
Fertilizers: Exports from Russia, 2017-19

Destination market	Calendar year		
	2017	2018	2019
	Value (1,000 dollars)		
United States	126,073	368,083	160,716
Brazil	402,311	605,847	418,274
Estonia	177,487	336,555	322,859
China	247,791	259,183	294,662
Ukraine	509,049	293,928	185,030
India	78,775	141,823	174,706
Romania	67,053	102,108	126,515
Latvia	67,433	107,816	122,833
Poland	78,290	121,097	106,017
All other destination markets	956,095	1,034,181	1,205,676
Total exports	2,710,358	3,370,621	3,117,287
	Share of value (percent)		
United States	4.7	10.9	5.2
Brazil	14.8	18.0	13.4
Estonia	6.5	10.0	10.4
China	9.1	7.7	9.5
Ukraine	18.8	8.7	5.9
India	2.9	4.2	5.6
Romania	2.5	3.0	4.1
Latvia	2.5	3.2	3.9
Poland	2.9	3.6	3.4
All other destination markets	35.3	30.7	38.7
Total exports	100.0	100.0	100.0

Note: United States is shown at the top and all remaining top export destinations are shown in descending order of value for 2019. HS subheadings 3103.11, 3103.19, 3105.20, 3105.30, 3105.40, 3105.51, and 3105.59 are basket categories that contains products outside of the scope of these investigations.

Source: Official exports statistics under HS subheadings 3103.11, 3103.19, 3105.20, 3105.30, 3105.40, 3105.51, and 3105.59, as reported by Customs Committee of Russia in the Global Trade Atlas database, accessed July 9, 2020.

Subject countries combined

Table VII-10 presents summary data on phosphate fertilizers operations of the reporting subject producers in the subject countries.

Table VII-10
Phosphate fertilizers: Data on the industry in subject countries, 2017-19, January to March 2019, and January to March 2020 and projection calendar years 2020 and 2021

Item	Actual experience					Projections	
	Calendar year			January to March		Calendar year	
	2017	2018	2019	2019	2020	2020	2021
	Quantity (short tons dry weight)						
Capacity	***	***	***	***	***	***	***
Production	***	***	***	***	***	***	***
End-of-period inventories	***	***	***	***	***	***	***
Shipments:							
Home market shipments:							
Internal consumption/ transfers	***	***	***	***	***	***	***
Commercial home market shipments	***	***	***	***	***	***	***
Total home market shipments	***	***	***	***	***	***	***
Export shipments to:							
United States	***	***	***	***	***	***	***
All other markets	***	***	***	***	***	***	***
Total exports	***	***	***	***	***	***	***
Total shipments	***	***	***	***	***	***	***
	Ratios and shares (percent)						
Capacity utilization	***	***	***	***	***	***	***
Inventories/production	***	***	***	***	***	***	***
Inventories/total shipments	***	***	***	***	***	***	***
Share of shipments:							
Home market shipments:							
Internal consumption/ transfers	***	***	***	***	***	***	***
Commercial home market shipments	***	***	***	***	***	***	***
Total home market shipments	***	***	***	***	***	***	***
Export shipments to:							
United States	***	***	***	***	***	***	***
All other markets	***	***	***	***	***	***	***
Total exports	***	***	***	***	***	***	***
Total shipments	***	***	***	***	***	***	***

Source: Compiled from data submitted in response to Commission questionnaires.

Responding producer's production capacity in the subject countries increased by *** percent from 2017 to 2019, while their production increased by *** percent from 2017 to 2019. Consequently, capacity utilization decreased by *** percentage points during 2017-19. While capacity is projected to increase *** percent in 2020 and *** percent in 2021, their production is projected to increase *** percent and *** percent respectively. This is projected to result in a *** percentage point increase in capacity utilization to *** percent in 2020 and *** percent in 2021.

Total shipments of the responding producers in the subject countries increased by *** percent from 2017 to 2019 and were *** percent higher in interim 2020 than in interim 2019. Home market shipments accounted for between *** percent (2018) and *** percent (2019) of total shipments during the same period. Home market shipments, by quantity, increased by *** percent during 2017-19 and were *** percent higher in interim 2020 than in interim 2019.

Export shipments accounted for between *** percent (2018) and *** percent (2019) of total shipments during 2017-19 and *** percent in interim 2020. Exports of phosphate fertilizers to the United States, by quantity, increased irregularly by *** percent from 2017 to 2019. As a share of total shipments, exports to the United States increased irregularly from *** percent in 2017 to *** percent in 2019 and were *** percent in interim 2019 compared to *** percent in interim 2020. This share is projected to decline to *** percent in 2020 and *** percent in 2021.

The share of total shipments held by exports to non-U.S. markets decreased from *** percent in 2017 to *** percent in 2019 but is projected to increase to *** percent in 2020 and then decrease to *** percent in 2021. End-of-period inventories increased by *** percent in 2018 and by *** percent in 2019 but are projected to decrease by *** percent in 2020 and by *** percent in 2021. End-of-period inventories as a ratio to production and total shipments followed a similar trend, increased each year during 2017-19, and are projected to decline in 2020-21.

U.S. inventories of imported merchandise

Table VII-11 presents data on U.S. importers' reported inventories of phosphate fertilizers. U.S. importers' end-of-period inventories of imports from subject countries increased by *** percent from 2017 to 2019. U.S. imports from Morocco accounted for the majority of the end-of-period inventories in each year during 2017-19, accounting for *** percent of the inventories of U.S. imports from all subject sources in 2019. U.S. imports from

all subject countries accounted for *** percent of end-of-period inventories of U.S. imports from all sources in 2019.

PhosAgro stated that its increase in inventories during 2018 was primarily related to increased raw material costs and building inventory volumes in all segments at year-end.[15] OCP stated that its distributors increased inventories over the period due to the uncertainty in supply created by the delayed shutdown of Nutrien's phosphate facility in Redwater, Alberta and the need to maintain supply through Mississippi River barge shipping.[16]

Table VII-11
Phosphate fertilizers: U.S. importers' inventories, 2017-19, January to March 2019, and January to March 2020

Item	Calendar year			January to March	
	2017	2018	2019	2019	2020
	Inventories (short tons dry weight); Ratios (percent)				
Imports from Morocco					
Inventories	***	***	***	***	***
Ratio to U.S. imports	***	***	***	***	***
Ratio to U.S. shipments of imports	***	***	***	***	***
Ratio to total shipments of imports	***	***	***	***	***
Imports from Russia:					
Inventories	***	***	***	***	***
Ratio to U.S. imports	***	***	***	***	***
Ratio to U.S. shipments of imports	***	***	***	***	***
Ratio to total shipments of imports	***	***	***	***	***
Imports from subject sources:					
Inventories	***	***	***	***	***
Ratio to U.S. imports	***	***	***	***	***
Ratio to U.S. shipments of imports	***	***	***	***	***
Ratio to total shipments of imports	***	***	***	***	***
Imports from nonsubject sources:					
Inventories	***	***	***	***	***
Ratio to U.S. imports	***	***	***	***	***
Ratio to U.S. shipments of imports	***	***	***	***	***
Ratio to total shipments of imports	***	***	***	***	***
Imports from all import sources:					
Inventories	***	***	***	***	***
Ratio to U.S. imports	***	***	***	***	***
Ratio to U.S. shipments of imports	***	***	***	***	***
Ratio to total shipments of imports	***	***	***	***	***

Source: Compiled from data submitted in response to Commission questionnaires.

[15] Respondent PhosAgro's postconference brief, exh. 7, p. 18.
[16] Respondent OCP's postconference brief, pp. 30-31.

U.S. importers' outstanding orders

Seven importers reported data to indicate whether they imported or arranged for the importation of phosphate fertilizers from Morocco and Russia after March 31, 2020 (table VII-12).

Table VII-12
Phosphate fertilizers: Arranged imports, April 2020 through March 2021

Item	Period				
	Apr-Jun 2020	Jul-Sept 2020	Oct-Dec 2020	Jan-Mar 2021	Total
	Quantity (short tons dry weight)				
Arranged U.S. imports from.--					
Morocco	***	***	***	***	***
Russia	***	***	***	***	***
Subject sources	***	***	***	***	***
Nonsubject sources	***	***	***	***	***
All import sources	***	***	***	***	***

Source: Compiled from data submitted in response to Commission questionnaires.

Antidumping or countervailing duty orders in third-country markets

Vietnam has imposed safeguard measures on DAP and MAP with a minimum content of 7 percent Nitrogen and 30 percent Phosphorus, under HS Codes: 3105.10.20; 3105.10.90; 3105.20.00; 3105.30.00; 3105.40.00; 3105.51.00; 3105.59.00; 3105.90.00. The measures were imposed in March 2018 for a period of two years and were recently extended for two more years. The safeguard duty on the imported fertilizers stands at VNĐ1.05 million ($46) per ton for one year from March 7, 2020 dropping to VNĐ1.03 million ($45) per ton from March 7, 2021. It will then be VNĐ1.01 million ($44) starting from March 7, 2021 to September 6, 2022.[17] [18] On August 28, 2019, Ukraine initiated two safeguard investigatory processes for mineral

[17] *** foreign producer questionnaire, section II-7

[18] Safeguard Measures on Imported Fertilizers Extended until 2022, https://vietnamnews.vn/economy/653368/safeguard-measures-on-imported-fertilisers-extended-until-2022.html, retrieved July, 23, 2020.

fertilizers containing nitrogen, phosphorous, and potassium regardless of country of origin or export.[19] These investigations resulted in negative determinations.[20]

Information on nonsubject countries

Mosaic has affiliated producers in Brazil and Saudi Arabia.[21] Mosaic stated its U.S. operations are "not impacted by its assets in Brazil as they serve the Brazilian market ***".[22] [23] Mosaic's investment in the Ma'aden Wa'ad Al Shamal Phosphate Company (MWSPC) facility in Saudi Arabia was based on ***.[24] [25] Data on Saudi Arabia's exports of fertilizers are presented in table VII-13.

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[19] Ukraine: Initiation of Safeguard Investigation on Imports of Certain Mineral Fertilizers, https://www.globaltradealert.org/intervention/73212/safeguard/ukraine-initiation-of-safeguard-investigation-on-imports-of-certain-mineral-fertilizers, retrieved July 28, 2020.

[20] Asters' International Trade Team has Secured a No-Measures Outcome in Two Safeguard Investigations on Fertilizers Imports, https://www.usubc.org/site/recent-news/asters--039--international-trade-team-has-secured-a-no-measures-outcome-in-two-safeguard-investigations-on-fertilizers-imports, retrieved July 23, 2020.

[21] Who We Are, http://www.mosaicco.com/Who_We_Are/overview.htm, retrieved July 28, 2020. "Partnerships", https://www.maaden.com.sa/en/about/saf, retrieved July 28, 2020.

[22] Petitioner Mosaic's postconference brief, pp. 77-78.

[23] Mosaic bought Fertilizantes from Brazilian miner Vale for $2.5 billion in 2018. Mosaic has an approximate 25 percent market share in Brazil, where it sold 10.2 million short tons of fertilizer products in 2019. Mosaic plans to raise its Brazilian fertilizer production approximately 22% in 2020 from 4.1 million short tons to 5 million short tons. This is mainly due to resuming production at some halted local mines, after new tailings dam regulations were enacted in 2019. Mosaic is already receiving orders for fertilizer deliveries in the first quarter of 2021. Mosaic Upbeat on Brazilian as FX Helps Farmers, Drives Fertilizer Sales, https://www.reuters.com/article/mosaic-fertilizantes-outlook/mosaic-upbeat-on-brazil-as-fx-helps-farmers-drives-fertilizer-sales-idUSL1N2AZ131, retrieved July 23, 2020.

[24] Petitioner Mosaic's postconference brief, pp. 77-78.

[25] In August 2017, MWSPC's granulation plant's first train line became operational in Ras Al Khair—but with all four trains operational later in the year, the joint venture has been expected to produce approximately 3 million metric tons (3.3 million short tons) per year of DAP, MAP and NPK fertilizers. Mosaic has a 25 percent ownership in this venture. Who We Are, http://www.mosaicco.com/Who_We_Are/overview.htm, retrieved July 28, 2020. Along with diversifying Mosaic's phosphate sources, the Saudi Arabia mine should produce relatively low cost supplies due to the project's integrated nature. It will use low-cost natural gas to produce ammonia, which is a key ingredient in making DAP and MAP. Update 3- Mosaic to Mine Phosphate in Saudi Arabia, Eyeing India, https://www.reuters.com/article/mosaic-saudiarabia/update-3-mosaic-to-mine-phosphate-in-saudi-arabia-eyeing-india-idUSL1N0CB3XC20130319, retrieved July 23, 2020.

Table VII-13
Fertilizers: Exports from Saudi Arabia, 2017-19

Destination market	Calendar year		
	2017	2018	2019
	Value (1,000 dollars)		
United States	10,656	35,639	90,251
India	445,140	852,085	901,578
Brazil	199,478	283,270	347,285
Australia	58,056	90,492	88,950
South Africa	---	29,981	26,905
Thailand	30,528	46,573	16,944
Argentina	12,746	18,504	9,606
Rwanda	2,125	7,320	6,951
Uruguay	3,341	---	3,158
All other destination markets	261,247	165,421	2,309
Total exports	1,023,317	1,529,284	1,493,938
	Share of value (percent)		
United States	1.0	2.3	6.0
India	43.5	55.7	60.3
Brazil	19.5	18.5	23.2
Australia	5.7	5.9	6.0
South Africa	---	2.0	1.8
Thailand	3.0	3.0	1.1
Argentina	1.2	1.2	0.6
Rwanda	0.2	0.5	0.5
Uruguay	0.3	---	0.2
All other destination markets	25.5	10.8	0.2
Total exports	100.0	100.0	100.0

Note: United States is shown at the top and all remaining top export destinations are shown in descending order of value for 2019. HS subheadings 3103.11, 3103.19, 3105.20, 3105.30, 3105.40, 3105.51, and 3105.59 are basket categories that contains products outside of the scope of these investigations.

Source: Official imports statistics of imports from Saudi Arabia (constructed export statistics for Saudi Arabia) under HS subheadings 3103.11, 3103.19, 3105.20, 3105.30, 3105.40, 3105.51, and 3105.59, as reported by various statistical reporting authorities in the Global Trade Atlas database, accessed July 24, 2020.

According to GTA, the largest export destinations for fertilizers from Saudi Arabia based on value are India, Brazil, and the United States, accounting for 60.3 percent, 23.0 percent, and 6.0 percent of Saudi Arabia's exports in 2019 respectively. Saudi Arabia's exports of fertilizers to the United States increased by 234.5 percent from 2017 to 2018 and increased by 153.2 percent from 2018 to 2019. Overall, Saudi Arabia's exports to the United States increased by 747.3 percent from 2017 to 2019. During 2017-19, Saudi Arabia's total exports increased 46.0 percent.

Table VII-14 presents global export data for fertilizers. The value of global exports of fertilizers increased by 5.5 percent from 2017-19. China was the largest global exporter of fertilizers, based on value, accounting for 23.0 percent of global exports in 2019. The next largest global exporters based on value of fertilizers were, in descending order of magnitude, Russia, Morocco, the United States, and Saudi Arabia.

Table VII-14
Fertilizers: Global exports by exporter, 2017-19

Exporter	Calendar year		
	2017	2018	2019
	Value (1,000 dollars)		
United States	2,030,141	2,121,757	2,247,527
Morocco	2,533,820	3,147,872	2,887,081
Russia	2,710,358	3,370,621	3,117,287
Subject exporters	5,244,178	6,518,494	6,004,369
China	3,769,736	4,939,297	4,294,054
Saudi Arabia	1,023,317	1,529,284	1,493,938
Belgium	827,100	890,879	872,527
Netherlands	477,642	477,739	503,930
Lithuania	363,777	413,991	421,620
Poland	232,560	234,536	263,393
Spain	186,578	205,119	219,284
South Korea	200,167	206,821	205,812
Germany	197,289	207,843	192,334
All other exporters	3,160,940	3,098,767	1,972,163
All exporters	17,713,423	20,844,527	18,690,950
	Share of value (percent)		
United States	11.5	10.2	12.0
Morocco	14.3	15.1	15.4
Russia	15.3	16.2	16.7
Subject exporters	29.6	31.3	32.1
China	21.3	23.7	23.0
Saudi Arabia	5.8	7.3	8.0
Belgium	4.7	4.3	4.7
Netherlands	2.7	2.3	2.7
Lithuania	2.1	2.0	2.3
Poland	1.3	1.1	1.4
Spain	1.1	1.0	1.2
South Korea	1.1	1.0	1.1
Germany	1.1	1.0	1.0
All other exporters	17.8	14.9	10.6
All exporters	100.0	100.0	100.0

Note: United States is shown at the top, followed by subject countries, and then all remaining top export destinations are shown in descending order of value for 2019. HS subheadings 3103.11, 3103.19, 3105.20, 3105.30, 3105.40, 3105.51, and 3105.59 are basket categories that contains products outside of the scope of these investigations.

Source: Official exports statistics and official global imports statistics from Saudi Arabia under HS subheadings 3103.11, 3103.19, 3105.20, 3105.30, 3105.40, 3105.51, and 3105.59 as reported by various national statistical authorities in the Global Trade Atlas database, accessed July 24, 2020.

APPENDIX A

FEDERAL REGISTER NOTICES

The Commission makes available notices relevant to its investigations and reviews on its website, www.usitc.gov. In addition, the following tabulation presents, in chronological order, *Federal Register* notices issued by the Commission and Commerce during the current proceeding.

Citation	Title	Link
85 FR 40319, July 6, 2020	*Phosphate Fertilizers from Morocco and Russia; Institution of Countervailing Duty Investigations and Scheduling of Preliminary Phase Investigations*	https://www.govinfo.gov/content/pkg/FR-2020-07-06/pdf/2020-14294.pdf
85 FR 44505, July 23, 2020	*Phosphate Fertilizers From the Kingdom of Morocco and the Russian Federation: Initiation of Countervailing Duty Investigations*	https://www.govinfo.gov/content/pkg/FR-2020-07-23/pdf/2020-15956.pdf

APPENDIX B

LIST OF STAFF CONFERENCE WITNESSES

CALENDAR OF PRELIMINARY CONFERENCE

Those listed below participated in the United States International Trade Commission's preliminary conference. The Commission conducted its preliminary conference through submissions of written testimony and postconference briefs:

Subject: Phosphate Fertilizers from Morocco and Russia

Inv. Nos.: 701-TA-650 and 651 (Preliminary)

Date: July 17, 2020

OPENING REMARKS:

In Support of Imposition (**Patrick J. McLain**, Wilmer Cutler Pickering Hale and Dorr LLP)
In Opposition to Imposition (**Shara L. Aranoff**, Covington & Burling LLP)

In Support of the Imposition of Countervailing Duty Orders:

Wilmer Cutler Pickering Hale and Dorr LLP
Washington, DC
on behalf of

The Mosaic Company ("Mosaic")

Andy Jung, Vice President, Market & Strategic Analysis, Mosaic

Richard McLellan, Senior Vice President, Commercial, Mosaic

Clint Freeland, Senior Vice President and Chief Financial Officer, Mosaic

Daniel Klett, Economist, Capital Trade, Inc.

Patrick J. McLain)
David J. Ross)
Sarah S. Sprinkle) – OF COUNSEL
Stephanie E. Hartmann)
Semira Nikou)

In Support of the Imposition of
Countervailing Duty Orders (continued):

King & Spalding LLP
Washington, DC
on behalf of

J. R. Simplot Company ("Simplot")

Douglas M. Stone, President, AgriBusiness Division, Simplot

Jamieson L. Greer) – OF COUNSEL

In Opposition to the Imposition of
Countervailing Duty Orders:

Alston & Bird LLP
Washington, DC
on behalf of

Koch Fertilizer, LLC. ("Koch")

Scott McGinn, Executive Vice-President, Koch

Kenneth Weigel)
Chunlian (Lian) Yang)
) – OF COUNSEL
Yuzhe PengLing)
Lucas Queiroz Pires)

Hogan Lovells US LLP
Washington, DC
on behalf of

Gavilon Fertilizer, LLC

Brian Harlander, President, Gavilon Fertilizer, LLC

H. Deen Kaplan)
Jared R. Wessel)
) – OF COUNSEL
Michael G. Jacobson)
Cayla D. Ebert)

In Opposition to the Imposition of
Countervailing Duty Orders (continued):

Cassidy Levy Kent (US) LLP
Washington, DC
on behalf of

Government of Morocco

Ali Seddiki, General Director of Industry, Ministry of Industry, Trade, Green and Digital Economy of Morocco

Jonathan M. Zielinski) – OF COUNSEL

Crowell & Moring, LLP
Washington, DC
on behalf of

PhosAgro PJSC ("PhosAgro")

Alexander Sharabaiko, Deputy Chief Executive Officer, Finance and International Projects, PhosAgro

Daniel Cannistra)
Elena Klonitskaya) – OF COUNSEL
Walter Sampson Boone)

Kelley Drye & Warren LLP
Washington, DC
on behalf of

International Raw Materials Ltd. ("IRM")

William P. O'Neill Jr., President, IRM

Paul C. Rosenthal)
) – OF COUNSEL
Melissa M. Brewer)

In Opposition to the Imposition of
Countervailing Duty Orders (continued):

Covington & Burling LLP
Washington, DC
on behalf of

OCP S.A.

Mohamed Belhoussain, Executive Vice President Sales,
Marketing, and Raw Material Procurement, OCP S.A.

Shara L. Aranoff) – OF COUNSEL

-END-

APPENDIX C

SUMMARY DATA

Table C-1
Phosphate fertilizers: Summary data concerning the U.S. market, 2017-19, January to March 2019, and January to March 2020
(Quantity=short tons dry weight; Value=1,000 dollars; Unit values, unit labor costs, and unit expenses=dollars per STDW; Period changes=percent--exceptions noted)

	Reported data					Period changes			
	Calendar year			January to March		Calendar year			Jan-Mar
	2017	2018	2019	2019	2020	2017-19	2017-18	2018-19	2019-20
U.S. consumption quantity:									
Amount	***	***	***	***	***	▼***	▲***	▼***	▼***
Producers' share (fn1)	***	***	***	***	***	▼***	▼***	▼***	▲***
Importers' share (fn1):									
Morocco	***	***	***	***	***	▲***	▲***	▲***	▼***
Russia	***	***	***	***	***	▲***	▲***	▼***	▼***
Subject sources	***	***	***	***	***	▲***	▲***	▲***	▼***
Nonsubject sources	***	***	***	***	***	▲***	▲***	▲***	▼***
All import sources	***	***	***	***	***	▲***	▲***	▲***	▼***
U.S. consumption value:									
Amount	***	***	***	***	***	▲***	▲***	▼***	▼***
Producers' share (fn1)	***	***	***	***	***	▼***	▼***	▼***	▲***
Importers' share (fn1):									
Morocco	***	***	***	***	***	▲***	▲***	▲***	▼***
Russia	***	***	***	***	***	▲***	▲***	▼***	▼***
Subject sources	***	***	***	***	***	▲***	▲***	▲***	▼***
Nonsubject sources	***	***	***	***	***	▲***	▲***	▲***	▼***
All import sources	***	***	***	***	***	▲***	▲***	▲***	▼***
Adjusted U.S. imports from (fn2).--									
Morocco:									
Quantity	***	***	***	***	***	▲***	▲***	▲***	▼***
Value	***	***	***	***	***	▲***	▲***	▼***	▼***
Unit value	***	***	***	***	***	▲***	▲***	▼***	▼***
Ending inventory quantity	***	***	***	***	***	▲***	▲***	▲***	▼***
Russia									
Quantity	***	***	***	***	***	▲***	▲***	▼***	▼***
Value	***	***	***	***	***	▲***	▲***	▼***	▼***
Unit value	***	***	***	***	***	▲***	▲***	▼***	▼***
Ending inventory quantity	***	***	***	***	***	▲***	▲***	▼***	▼***
Subject sources:									
Quantity	***	***	***	***	***	▲***	▲***	▼***	▼***
Value	***	***	***	***	***	▲***	▲***	▼***	▼***
Unit value	***	***	***	***	***	▲***	▲***	▼***	▼***
Ending inventory quantity	***	***	***	***	***	▲***	▲***	▼***	▼***
Nonsubject sources:									
Quantity	***	***	***	***	***	▲***	▲***	▼***	▼***
Value	***	***	***	***	***	▲***	▲***	▼***	▼***
Unit value	***	***	***	***	***	▲***	▲***	▼***	▼***
Ending inventory quantity	***	***	***	***	***	▲***	▲***	▼***	▼***
All import sources:									
Quantity	***	***	***	***	***	▲***	▲***	▼***	▼***
Value	***	***	***	***	***	▲***	▲***	▼***	▼***
Unit value	***	***	***	***	***	▲***	▲***	▼***	▼***
Ending inventory quantity	***	***	***	***	***	▲***	▲***	▼***	▼***
U.S. producers':									
Average capacity quantity	***	***	***	***	***	▼***	▼***	▼***	▲***
Production quantity	***	***	***	***	***	▼***	▼***	▼***	▼***
Capacity utilization (fn1)	***	***	***	***	***	▲***	▲***	▲***	▼***
U.S. shipments:									
Quantity	***	***	***	***	***	▼***	▼***	▼***	▲***
Value	***	***	***	***	***	▼***	▲***	▼***	▲***
Unit value	***	***	***	***	***	▼***	▲***	▼***	▼***
Export shipments:									
Quantity	***	***	***	***	***	▼***	▼***	▲***	▼***
Value	***	***	***	***	***	▼***	▲***	▼***	▼***
Unit value	***	***	***	***	***	▲***	▲***	▼***	▼***
Ending inventory quantity	***	***	***	***	***	▲***	▲***	▲***	▼***
Inventories/total shipments (fn1)	***	***	***	***	***	▲***	▲***	▲***	▼***

Table continued.

Table C-1--Continued
Phosphate fertilizers: Summary data concerning the U.S. market, 2017-19, January to March 2019, and January to March 2020
(Quantity=short tons dry weight; Value=1,000 dollars; Unit values, unit labor costs, and unit expenses=dollars per STDW; Period changes=percent--exceptions noted)

	Reported data					Period changes			
	Calendar year			January to March		Calendar year			Jan-Mar
	2017	2018	2019	2019	2020	2017-19	2017-18	2018-19	2019-20
U.S. producers':--Continued									
Production workers	***	***	***	***	***	▼***	▼***	▼***	▼***
Hours worked (1,000s)	***	***	***	***	***	▼***	▼***	▼***	▼***
Wages paid ($1,000)	***	***	***	***	***	▼***	▼***	▼***	▼***
Hourly wages (dollars per hour)	***	***	***	***	***	▲***	▲***	▼***	▼***
Productivity (STDW per 1,000 hours)	***	***	***	***	***	▼***	▼***	▼***	▼***
Unit labor costs	***	***	***	***	***	▲***	▲***	▲***	▼***
Net sales:									
Quantity	***	***	***	***	***	▼***	▼***	▼***	▲***
Value	***	***	***	***	***	▼***	▲***	▼***	▼***
Unit value	***	***	***	***	***	▲***	▲***	▼***	▼***
Cost of goods sold (COGS)	***	***	***	***	***	▼***	▼***	▼***	▲***
Gross profit or (loss) (fn3)	***	***	***	***	***	▼***	▲***	▼***	▼***
SG&A expenses	***	***	***	***	***	▼***	▼***	▼***	▲***
Operating income or (loss) (fn3)	***	***	***	***	***	▼***	▲***	▼***	▼***
Net income or (loss) (fn3)	***	***	***	***	***	▼***	▲***	▼***	▼***
Capital expenditures	***	***	***	***	***	▲***	▼***	▲***	▲***
Research and development expenses	***	***	***	***	***	▼***	▼***	▼***	▼***
Net assets	***	***	***	***	***	▼***	▼***	▼***	***
Unit COGS	***	***	***	***	***	▲***	▲***	▲***	▼***
Unit SG&A expenses	***	***	***	***	***	▼***	▼***	▼***	▼***
Unit operating income or (loss) (fn3)	***	***	***	***	***	▼***	▲***	▼***	▼***
Unit net income or (loss) (fn3)	***	***	***	***	***	▼***	▲***	▼***	▼***
COGS/sales (fn1)	***	***	***	***	***	▲***	▼***	▲***	▲***
Operating income or (loss)/sales (fn1)	***	***	***	***	***	▼***	▲***	▼***	▼***
Net income or (loss)/sales (fn1)	***	***	***	***	***	▼***	▲***	▼***	▼***

Note.--Shares and ratios shown as "0.0" percent represent non-zero values less than "0.05" percent (if positive) and greater than "(0.05)" percent (if negative). Zeroes, null values, and undefined calculations are suppressed and shown as "---". Period changes preceded by a "▲" represent an increase, while period changes preceded by a "▼" represent a decrease.

fn1.--Reported data are in percent and period changes are in percentage points.
fn2.--Official U.S. import statistics were adjusted to remove U.S. importers' export shipments as reported in questionnaire responses.
fn3.--Percent changes only calculated when both comparison values represent profits; The directional change in profitability provided when one or both comparison values represent a loss.

Source: Compiled from data submitted in response to Commission questionnaires and official U.S. import statistics for HTS statistical reporting numbers 3103.11.0000, 3103.19.0000, 3105.20.0000, 3105.30.0000, 3105.40.0010, 3105.40.0050, 3105.51.0000, and 3105.59.0000, accessed July 22, 2020.

APPENDIX D

U.S. IMPORT AND APPARENT U.S. CONSUMPTION DATA COMPILED FROM QUESTIONNAIRE SUBMISSIONS

Table D-1
Phosphate fertilizers: U.S. imports by source, 2017-19, January to March 2019, and January to March 2020

Item	Calendar year			January to March	
	2017	2018	2019	2019	2020
	Quantity (short tons dry weight)				
U.S. imports from.--Morocco	***	***	***	***	***
Russia	***	***	***	***	***
Subject sources	***	***	***	***	***
Nonsubject sources	***	***	***	***	***
All import sources	***	***	***	***	***
	Value (1,000 dollars)				
U.S. imports from.--Morocco	***	***	***	***	***
Russia	***	***	***	***	***
Subject sources	***	***	***	***	***
Nonsubject sources	***	***	***	***	***
All import sources	***	***	***	***	***
	Unit value (dollars per STDW)				
U.S. imports from.--Morocco	***	***	***	***	***
Russia	***	***	***	***	***
Subject sources	***	***	***	***	***
Nonsubject sources	***	***	***	***	***
All import sources	***	***	***	***	***
	Share of quantity (percent)				
U.S. imports from.--Morocco	***	***	***	***	***
Russia	***	***	***	***	***
Subject sources	***	***	***	***	***
Nonsubject sources	***	***	***	***	***
All import sources	***	***	***	***	***
	Share of value (percent)				
U.S. imports from.--Morocco	***	***	***	***	***
Russia	***	***	***	***	***
Subject sources	***	***	***	***	***
Nonsubject sources	***	***	***	***	***
All import sources	***	***	***	***	***
	Ratio to U.S. production				
U.S. imports from.--Morocco	***	***	***	***	***
Russia	***	***	***	***	***
Subject sources	***	***	***	***	***
Nonsubject sources	***	***	***	***	***
All import sources	***	***	***	***	***

Note: STDW is short tons dry weight.

Source: Compiled from data submitted in response to Commission questionnaires.

Table D-2
Phosphate fertilizers: Apparent U.S. consumption and market shares, 2017-19, January to March 2019, and January to March 2020

Item	Calendar year			January to March	
	2017	2018	2019	2019	2020
	Quantity (short tons dry weight)				
U.S. producers' U.S. shipments	***	***	***	***	***
U.S. importers' U.S. shipments of imports from.--					
Morocco	***	***	***	***	***
Russia	***	***	***	***	***
Subject sources	***	***	***	***	***
Nonsubject sources	***	***	***	***	***
All import sources	***	***	***	***	***
Apparent U.S. consumption	***	***	***	***	***
	Value (1,000 dollars)				
U.S. producers' U.S. shipments	***	***	***	***	***
U.S. importers' U.S. shipments of imports from.--					
Morocco	***	***	***	***	***
Russia	***	***	***	***	***
Subject sources	***	***	***	***	***
Nonsubject sources	***	***	***	***	***
All import sources	***	***	***	***	***
Apparent U.S. consumption	***	***	***	***	***
	Share of quantity (percent)				
U.S. producers' U.S. shipments	***	***	***	***	***
U.S. importers' U.S. shipments of imports from.--					
Morocco	***	***	***	***	***
Russia	***	***	***	***	***
Subject sources	***	***	***	***	***
Nonsubject sources	***	***	***	***	***
All import sources	***	***	***	***	***
	Share of value (percent)				
U.S. producers' U.S. shipments	***	***	***	***	***
U.S. importers' U.S. shipments of imports from.--					
Morocco	***	***	***	***	***
Russia	***	***	***	***	***
Subject sources	***	***	***	***	***
Nonsubject sources	***	***	***	***	***
All import sources	***	***	***	***	***

Source: Compiled from data submitted in response to Commission questionnaires.

Figure D-1
Phosphate fertilizers: Apparent U.S. consumption, 2017-19, January to March 2019, and January to March 2020

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Source: Compiled from data submitted in response to Commission questionnaires.