Pure Magnesium (Ingot) from China

Investigation No. 731-TA-696 (Fourth Review)

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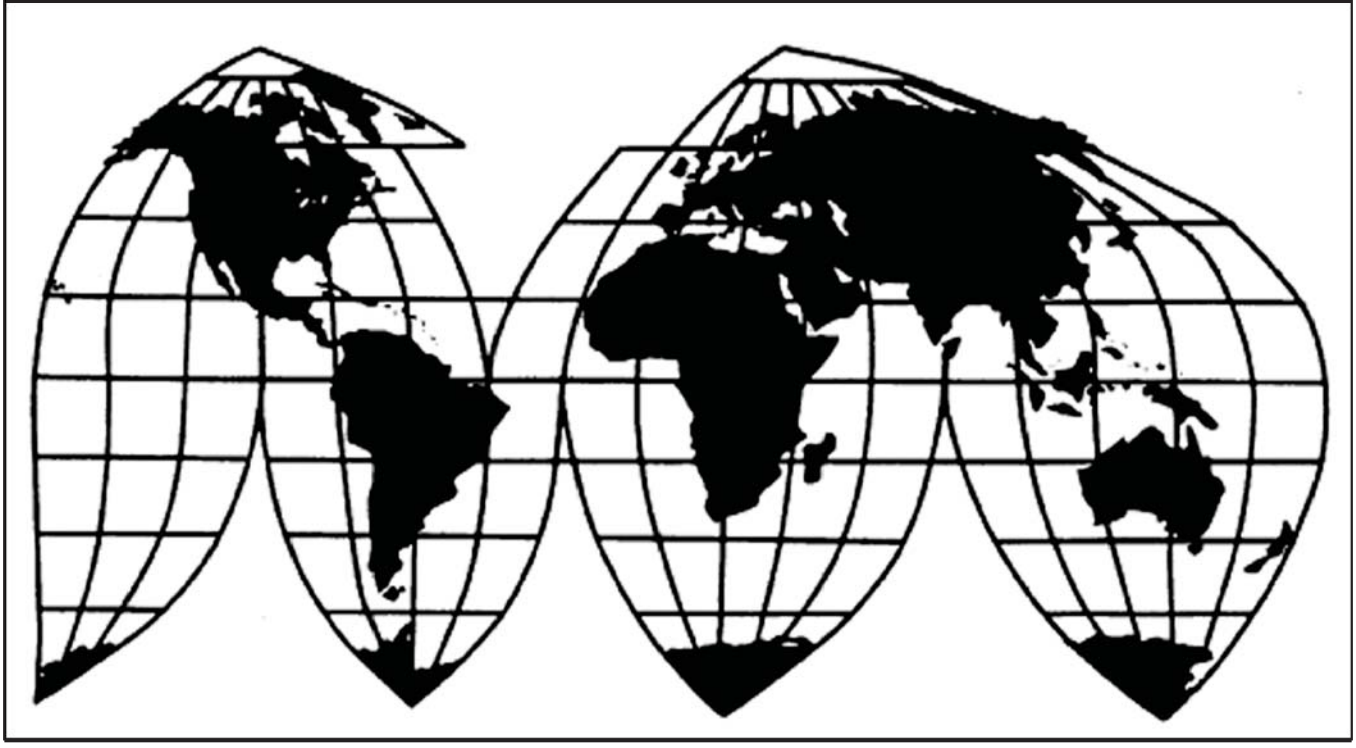
U.S. International Trade Commission



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U.S. International Trade Commission

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Note.—Information that would reveal confidential operations of individual concerns may not be published and therefore has been deleted. Such deletions are indicated by asterisks.

UNITED STATES INTERNATIONAL TRADE COMMISSION

Investigation No. 731-TA-696 (Fourth Review)

Pure Magnesium (Ingot) from China

DETERMINATION

On the basis of the record[1] developed in the subject five-year review, the United States International Trade Commission ("Commission") determines, pursuant to the Tariff Act of 1930 ("the Act"), that revocation of the antidumping duty order on pure magnesium (ingot) from China would likely to lead to continuation or recurrence of material injury to an industry in the United States within a reasonably foreseeable time.

BACKGROUND

The Commission, pursuant to section 751(c) of the Act (19 U.S.C. 1675(c)), instituted this review on October 3, 2016 (81 F.R. 67697) and determined on January 6, 2017, that it would conduct an expedited review (82 F.R. 9596, February 7, 2017).

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

Views of the Commission

Based on the record in this five-year review, we determine under section 751(c) of the Tariff Act of 1930, as amended ("the Tariff Act"), that revocation of the antidumping duty order on pure magnesium from China would be likely to lead to continuation or recurrence of material injury to an industry in the United States within a reasonably foreseeable time.

I. Background

***The Original Investigation and Prior Reviews*.** In March 1994, Magnesium Corporation of America, the corporate predecessor of current domestic producer US Magnesium LLC ("US Magnesium"), and two labor unions filed an antidumping petition on imports of primary magnesium from China, Russia, and Ukraine. In June 1994, domestic producer Dow Chemical Company joined the petition. The Commission issued its final determinations in May 1995.[1] The Commission found two separate like products – pure magnesium and alloy magnesium – coextensive with the two classes or kinds of merchandise defined by the U.S. Department of Commerce ("Commerce"). The Commission cumulated subject imports of pure magnesium from China with subject imports of pure magnesium from Russia and Ukraine, and found that the domestic industry producing pure magnesium was materially injured by reason of the cumulated subject imports.[2] On May 12, 1995, Commerce published antidumping duty orders covering the subject merchandise.[3]

The respondent U.S. importer in the Ukraine investigation, Gerald Metals, Inc. ("Gerald Metals"), appealed the Commission's affirmative determination. The U.S. Court of International Trade ("CIT") affirmed the Commission's determination.[4] Gerald Metals appealed to the U.S. Court of Appeals for the Federal Circuit ("CAFC") and the CAFC vacated the judgment of the CIT and remanded the determination.[5]

The Commission's negative determination on remand, which was affirmed by the CAFC,[6] only applied to imports of pure magnesium from Ukraine because Gerald Metals was the only party to appeal the Commission's original determinations. As a result of the Commission's negative determination on remand, Commerce revoked the antidumping duty order on pure magnesium from Ukraine.[7] The antidumping duty orders on pure magnesium from China and Russia remained in effect. In July 2000, however, Commerce revoked the antidumping duty

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[1] *Magnesium from China, Russia, and Ukraine*, Inv. Nos. 731-TA-696-698 (Final), USITC Pub. 2885 (May 1995) ("*Original Determination*").

[2] *Original Determination*, USITC Pub. 2885, at 15-16, 22. The Commission reached negative determinations on subject imports of alloy magnesium. *Id*. at 23-26.

[3] 60 Fed. Reg. 25691 (May 12, 1995).

[4] *Gerald Metals, Inc. v. United States*, 937 F. Supp. 930 (Ct. Int'l Trade 1996), *rev'd*, 132 F.3d 716 (Fed. Cir. 1997).

[5] *Gerald Metals, Inc. v. United States*, 132 F.3d 716 (Fed. Cir. 1997) ("*Gerald Metals II*").

[6] *Gerald Metals v. USITC*, 27 F. Supp. 2d 1351 (Ct. Int'l Trade 1998).

[7] *See* 63 Fed. Reg. 67854, 67854-55 (December 8, 1998).

order on pure magnesium from Russia because no domestic interested party wished to participate in the five-year review of the order.[8]

On April 3, 2000, the Commission instituted its first five-year review of the antidumping duty order on pure magnesium from China.[9] The Commission conducted an expedited review and in July 2000 determined that revocation of the antidumping duty order would be likely to lead to continuation or recurrence of material injury to an industry in the United States within a reasonably foreseeable time.[10]

On September 1, 2005, the Commission instituted its second five-year review of the antidumping duty order on pure magnesium from China.[11] The Commission conducted a full review and in July 2006 determined that revocation of the antidumping duty order would be likely to lead to continuation or recurrence of material injury to an industry in the United States within a reasonably foreseeable time.[12]

On June 1, 2011, the Commission instituted its third five-year review of the antidumping duty order on pure magnesium from China.[13] The Commission conducted an expedited review and in October 2011 determined that revocation of the antidumping duty order would be likely to lead to continuation or recurrence of material injury to an industry in the United States within a reasonably foreseeable time.[14]

The Current Review. The Commission instituted this review on October 3, 2016.[15] The Commission received one response to its notice of institution from US Magnesium, a domestic producer of magnesium, and the United Steel, Paper and Forestry, Rubber, Manufacturing, Energy, Allied Industrial and Service Workers International Union, Local 8319 (jointly, "Domestic Parties").[16] No respondent interested party filed a response. On January 6, 2017, the

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[8] 65 Fed. Reg. 41944 (July 7, 2000).

[9] 65 Fed. Reg. 17531 (April 3, 2000).

[10] *Pure Magnesium from China*, Inv. No. 731-TA-696 (Review), USITC Pub. 3346 (Sept. 2000) ("*First Five-Year Review*").

[11] 70 Fed. Reg. 52122 (September 1, 2005).

[12] *Pure and Alloy Magnesium from Canada and China*, Inv. Nos. 701-TA-309-A-B and 731-TA-696 (Second Review), USITC Pub. 3859 (July 2006) ("*Second Five-Year Review*"). For administrative convenience and efficiency, the Commission conducted its second five-year review of the antidumping duty order on pure magnesium from China concurrently with reviews of countervailing duty orders on pure and alloy magnesium from Canada. The Commission conducted a full review, notwithstanding an inadequate respondent party group response, to examine further the definition of the domestic like product. *Second Five-Year Review*, USITC Pub. 3859 at Appendix A (Explanation of Commission Determination on Adequacy).

[13] 76 Fed. Reg. 31635 (June 1, 2011).

[14] *Pure Magnesium from China*, Inv. No. 731-TA-696 (Third Review), USITC Pub. 4274 (October 2011) ("*Third Five-Year Review*").

[15] 81 Fed. Reg. 68046 (October 3, 2016).

[16] Domestic Parties Response to Notice of Institution (November 2, 2016) ("Domestic Parties Response").

Commission found the domestic interested party group response to the notice of institution adequate and the respondent interested party group response inadequate. The Commission did not find any circumstances that would warrant conducting a full review, and unanimously determined to conduct this expedited review.[17]

Data/Response Coverage. U.S. industry data for this review are based on the information US Magnesium provided in response to the notice of institution and information from prior proceedings.[18] US Magnesium accounted for *** percent of domestic pure magnesium production during 2015.[19] No U.S. importer, foreign producer, or exporter of pure magnesium participated in this review. U.S. import data and related information are based on official import statistics.[20] Foreign industry data and related information for the period of review are based on data provided by the Domestic Parties and available public sources.[21]

II. Domestic Like Product and Industry

A. Domestic Like Product

In making its determination under section 751(c) of the Tariff Act, the Commission defines the "domestic like product" and the "industry."[22] 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 under this subtitle."[23] The Commission's practice in five-year reviews is to examine the domestic like product definition from the original investigation and consider whether the record indicates any reason to revisit the prior findings.[24]

Commerce has defined the scope of the antidumping duty order in this five-year review as follows:

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[17] Commission Explanation on Adequacy, EDIS Doc. 600656.

[18] Confidential Report, INV-OO-122, EDIS Doc. 599283 (December 22, 2016) ("CR") at I-3, Table I-A, Public Report ("PR") at I-2, and Table I-A.

[19] CR at I-27, PR at I-18, and CR/PR at Table I-A.

[20] CR/PR at Table I-2.

[21] CR at I-36 to I-37, PR at I-22.

[22] 19 U.S.C. § 1677(4)(A).

[23] 19 U.S.C. § 1677(10); *see*, *e.g., Cleo Inc. v. United States*, 501 F.3d 1291, 1299 (Fed. Cir. 2007); *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); *Timken Co. v. United States*, 913 F. Supp. 580, 584 (Ct. Int'l Trade 1996); *Torrington Co. v. United States*, 747 F. Supp. 744, 748-49 (Ct. Int'l Trade 1990), *aff'd*, 938 F.2d 1278 (Fed. Cir. 1991); *see also* S. Rep. No. 249, 96th Cong., 1st Sess. 90-91 (1979).

[24] *See*, *e.g.*, *Internal Combustion Industrial Forklift Trucks from Japan*, Inv. No. 731-TA-377 (Second Review), USITC Pub. 3831 at 8-9 (Dec. 2005); *Crawfish Tail Meat from China*, Inv. No. 731-TA-752 (Review), USITC Pub. 3614 at 4 (July 2003); *Steel Concrete Reinforcing Bar from Turkey*, Inv. No. 731-TA-745 (Review), USITC Pub. 3577 at 4 (Feb. 2003).

Merchandise covered by the order is pure magnesium regardless of chemistry, form or size, unless expressly excluded from the scope of the order. Pure magnesium is a metal or alloy containing by weight primarily the element magnesium and produced by decomposing raw materials into magnesium metal. Pure primary magnesium is used primarily as a chemical in the aluminum alloying, desulfurization, and chemical reduction industries. In addition, pure magnesium is used as an input in producing magnesium alloy. Pure magnesium encompasses products (including, but not limited to, butt ends, stubs, crowns and crystals) with the following primary magnesium contents:

(1) Products that contain at least 99.95% primary magnesium, by weight (generally referred to as ''ultra pure'' magnesium);

(2) Products that contain less than 99.95% but not less than 99.8% primary magnesium, by weight (generally referred to as ''pure'' magnesium); and

(3) Products that contain 50% or greater, but less than 99.8% primary magnesium, by weight, and that do not conform to ASTM specifications for alloy magnesium (generally referred to as ''off–specification pure'' magnesium).

''Off–specification pure'' magnesium is pure primary magnesium containing magnesium scrap, secondary magnesium, oxidized magnesium or impurities (whether or not intentionally added) that cause the primary magnesium content to fall below 99.8% by weight. It generally does not contain, individually or in combination, 1.5% or more, by weight, of the following alloying elements: aluminum, manganese, zinc, silicon, thorium, zirconium and rare earths.

Excluded from the scope of the order are alloy primary magnesium (that meets specifications for alloy magnesium), primary magnesium anodes, granular primary magnesium (including turnings, chips and powder) having a maximum physical dimension (*i.e.,* length or diameter) of one inch or less, secondary magnesium (which has pure primary magnesium content of less than 50% by weight), and remelted magnesium whose pure primary magnesium content is less than 50% by weight.[25]

Magnesium is a silver-white metallic element and the lightest of all structural metals. Magnesium is available in two principal forms, pure and alloy. Pure magnesium in unwrought form contains at least 99.8 percent magnesium by weight.[26] Alloy magnesium is an alloy

[25] *Pure Magnesium from the People's Republic of China: Final Results of Expedited Fourth Sunset Review of the Antidumping Duty Order*, 82 Fed. Reg. 9198, 9199 (February 3, 2017) (Commerce final results of expedited sunset review). Commerce has issued five scope determinations with respect to the order. CR at I-22 to I-23, PR at I-16.

[26] CR at I-7, PR at I-5.

consisting of magnesium and other metals, typically aluminum and zinc, containing less than 99.8 percent magnesium by weight, with magnesium the largest metallic element in the alloy by weight.[27] Alloy magnesium is usually produced to improve certain properties such as strength, ductility, workability, corrosion resistance, density, or castability compared with pure magnesium. Pure magnesium is widely used in commercial and industrial applications because it has special chemical and electrical properties that allow it to alloy well with such metals as aluminum. Pure magnesium is typically used in the production of aluminum alloys for use in beverage cans and in some automotive parts, in iron and steel desulfurization, as a reducing agent for various nonferrous metals (titanium, zirconium, hafnium, uranium, beryllium), and in magnesium anodes for the protection of iron and steel in underground pipe and water tanks and various marine applications.[28]

Primary magnesium is derived from magnesium-bearing ores (dolomite, magnesite, brucite, and olivine) or seawater and well and lake brines, and is normally produced by either an electrolytic process or a silicothermic process.[29] Primary magnesium is typically cast into ingots or slabs.[30] Secondary magnesium is produced by recycling magnesium-based scrap metal and is cast into ingots or ground into a powder.[31]

1. The Original Investigation and Prior Reviews

The definition of the domestic like product in magnesium investigations has a long history. In its first investigations involving the issue of imported pure and alloy magnesium, the Commission found pure and alloy magnesium to constitute a single domestic like product.[32] A U.S.-Canada binational panel reversed the Commission's single domestic like product determination and held that pure and alloy magnesium were separate domestic like products.[33] In subsequent proceedings (including the original investigations underlying this review),[34] the

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[27] CR at I-7 to I-8, PR at I-5 to I-6.

[28] CR at I-8, PR at I-5. Alloy magnesium is principally used in structural applications, primarily in castings (die, permanent mold, and sand) and extrusions for the automotive industry. In contrast, pure magnesium is seldom used alone in structural applications because its specific tensile and yield strengths are low. CR at I-8 n.17, PR at I-6 n.17.

[29] CR at I-11 to I-12, PR at I-7 to I-8.

[30] CR at I-12, PR at I-8.

[31] CR at I-13, PR at I-9.

[32] *Magnesium from Canada*, Inv. Nos. 701-TA-309 and 731-TA-528 (Final), USITC Pub. 1992 at 8-11 (August 1992) ("*Canada Determination*").

[33] *In the Matter of Magnesium from Canada*, Case Nos. USA-92-1904-05 and USA 92-1904-06 (August 27, 1993), at 27.

[34] As previously discussed, the scope in the Commission's original investigation included both pure and alloy magnesium. The Commission made negative determinations with respect to alloy magnesium. *Original Determination*, USITC Pub. 2885, at 7-9.

Commission found pure and alloy magnesium to be separate like products.[35] In its first five-year review of this order, the Commission declined to define the domestic like product definition more broadly to encompass alloy magnesium.[36]

This treatment of pure and alloy magnesium as separate domestic like products changed with the original investigations in 2005 of alloy magnesium from China and pure and alloy magnesium from Russia. In these investigations, the Commission found pure and alloy magnesium constituted a single domestic like product.[37] It found that circumstances had changed sufficiently from other investigations involving magnesium products so as to blur the clear dividing line between pure and alloy magnesium. It based its decision on: (1) shared essential physical characteristics between pure and alloy magnesium; (2) overlap in the uses of pure and alloy magnesium, especially in aluminum production; (3) the recognition of increased competition between pure and alloy magnesium by many industry participants; (4) shared production facilities and employees; (5) general similarities in the channels of distribution for pure and alloy magnesium; and (6) the convergence in prices for the two types of magnesium.[38] The Commission also found that ingot and granular magnesium, and primary and secondary magnesium, were part of the same domestic like product.[39]

In the second five-year review of the order underlying the current review (which was conducted simultaneously with the five-year review of the orders on pure and alloy magnesium from Canada), the Commission was evenly divided on the question of whether pure and alloy magnesium constituted one or two domestic like products. The Commission found that pure and alloy magnesium constituted a single domestic like product; it also determined that

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[35] *Original Determination*, USITC Pub. 2885, at 7-9; *see also Magnesium from Canada*, Inv. Nos. 701-TA-309 (A-B) and 731-TA-528 (Review), USITC Pub. 3324, at 5-6.

[36] *First Five-Year Review*, USITC Pub. 3346, at 5-6.

[37] *Pure Magnesium from China, Israel, and Russia*, Inv. Nos. 701-TA-403 and 731-TA-895-897 (Preliminary), USITC Doc. 3376 (December 2000) at 7; *see also Magnesium from China and Russia*, Inv. Nos. 731-TA-1071 and 1072 (Final), USITC Doc. 3763 (April 2005) at 6-11 ("*Magnesium 2005 Final Determination*"). These investigations were also the first in which Commerce defined pure and alloy magnesium as a single class or kind of merchandise. We observe that the Commission is not required to conform its domestic like product definition to the scope of the investigation (*i.e.*, commensurate with Commerce's class or kind definition). The Commission may include, where appropriate, domestic articles in the domestic like product that are in addition to those described in the scope, or may find two or more domestic like products in a given investigation. *See, e.g., Hosiden Corp. v. Advanced Display Mfgrs.*, 85 F.3d 1561, 1568 (Fed. Cir. 1996)(Commission may find a single like product corresponding to several classes or kinds of merchandise as defined by Commerce).

[38] *Magnesium 2005 Final Determination*, USITC Doc. 3763, at 6-11.

[39] *Magnesium 2005 Final Determination*, USITC Doc. 3763, at 6. *See also Magnesium from China and Russia*, Inv. Nos. 731-TA-1071 and 1072 (Review), USITC Pub. 4214 (February 2011) ("*2011 China/Russia Review*"), at 7-10. The Commission found no reason to re-examine its determination in the original determinations that primary and secondary magnesium, and ingot (cast) and granular magnesium, are part of the same single domestic like product. *Id*. at 7 n.7. The Commission reiterated this finding in the most recent review of alloy magnesium from China. *Alloy Magnesium from China*, Inv. No. 731-TA-1071 (Second Review), USITC Pub. 4618 (June 2016) ("*2016 China Alloy Review*"), at 6-7.

primary and secondary magnesium, as well as ingot and granular magnesium, were also part of the single domestic like product.[40] Three Commissioners, however, found pure and alloy magnesium constituted two separate domestic like products; they also found that secondary magnesium was part of the domestic like product that included alloy magnesium, but they declined to define the like product more broadly to include granular magnesium.[41]

In the expedited third review of the antidumping duty order on pure magnesium from China, the Commission defined a single domestic like product to include pure and alloy magnesium, including primary and secondary magnesium and ingot and granular magnesium. It explained that a domestic producer requested the Commission to define the domestic like product to include alloy magnesium, that no party had argued against the broader definition, and that there was no information on the record that would call into question the Commission's definition of a domestic like product consisting of pure and alloy magnesium.[42]

2. The Current Review

In this review, the Domestic Parties have indicated that they agree with the Commission's definition of the domestic like product in the third five-year review.[43] There is no new information obtained during this review that would suggest any reason to revisit the domestic like product definition.[44] We therefore define a single domestic like product consisting of pure and alloy magnesium, including primary and secondary magnesium and ingot (cast) and granular magnesium.

B. Domestic Industry

Section 771(4)(A) of the Tariff Act defines the relevant industry 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."[45] In defining the domestic industry, the Commission's general practice has been to include in the industry producers of all domestic production of the domestic like product, whether toll-produced, captively consumed, or sold in the domestic merchant market.

In the original investigation and the first review the Commission defined the domestic industry as consisting of all domestic producers of pure magnesium.[46] In the second review,

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[40] *Second Five-Year Review*, USITC Pub. 3859, at 7-11.

[41] *Second Five-Year Review*, USITC Pub. 3859, at 40-42.

[42] *Third Five-Year Review*, USITC Doc. 4274, at 6-7.

[43] Domestic Parties Response at 25.

[44] *See generally* CR at I-14 to I-17, PR at I-9 to I-11.

[45] 19 U.S.C. § 1677(4)(A). The definitions in 19 U.S.C. § 1677 are applicable to the entire subtitle containing the antidumping and countervailing duty laws, including 19 U.S.C. §§ 1675 and 1675a. *See* 19 U.S.C. § 1677.

[46] *Original Determination*, USITC Pub. 2885, at 10 and *First Five-Year Review*, USITC Pub. 3346, at 6.

those Commissioners who defined the domestic like product as including pure and alloy magnesium defined the domestic industry as consisting of the domestic producers of pure and alloy magnesium, including primary and secondary magnesium, and magnesium in ingot and granular form.[47] Those Commissioners who found pure and alloy magnesium to be separate domestic like products defined the domestic industry producing pure magnesium as consisting of the sole domestic producer of pure magnesium at that time, US Magnesium.[48] In the third five-year review, the Commission defined the domestic industry as consisting of all domestic producers of pure and alloy magnesium, including primary and secondary magnesium, and magnesium in ingot and granular form.[49]

In this review, the Domestic Parties agree with the domestic industry definition used in the third five-year review; they argue against the inclusion of magnesium die-casters that recycle their own scrap in the definition of the domestic industry.[50] Only one domestic producer, US Magnesium, responded to the notice of institution for the current review and provided the Commission with data on its operations. Because US Magnesium is not a related party, there are no related party issues in this review.[51] We consequently define the domestic industry to include all domestic producers of pure and alloy magnesium, including primary and secondary magnesium, and magnesium in ingot and granular form. Because the record does not contain any information about current die-casting activities, and no die-caster provided data to the Commission, there is no need here for us to determine whether die-casting constitutes domestic production.

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[47] *Second Five-Year Review*, USITC Pub. 3859, at 13-15. These Commissioners considered whether grinders and certain magnesium die-casters that produced secondary magnesium by recycling scrap engaged in sufficient production-related activity to qualify as domestic producers. Although the Commission included grinders in the domestic industry, it observed that it had not obtained any industry data from grinders. It also determined, based on the limited information in the record, that the certain die-casters were not part of the domestic industry producing secondary magnesium. *Id*. at 14.

[48] *Second Five-Year Review*, USITC Pub. 3859, at 43.

[49] *Third Five-Year Review*, USITC Pub. 4274, at 7.

[50] Domestic Parties Response at 25-26. The Commission has reached divergent findings in prior proceedings in which it found pure and alloy magnesium within the same domestic like product concerning whether die-casters engage in sufficient production-related activities to be considered domestic producers. *Compare Second Five-Year Review*, USITC Pub. 3859, at 14-15 (three Commissioners who reached the issue found die-casters did not engage in sufficient production-related activities) *with 2011 China/Russia Review*, USITC Pub. 4214, at 12 (finding specific die-caster was a domestic producer) *and Third Five-Year Review*, USITC Pub. 4274, at 8 (not squarely resolving the issue).

[51] CR at I-25, PR at I-17 to I-18; *see also* Domestic Parties Response at 21 and Attachment 12. The Domestic Parties listed eight domestic producers of the domestic like product in addition to US Magnesium. *See* Domestic Parties Response at Attachment 12.

III. Revocation of the Antidumping Duty Order Would Likely Lead to Continuation or Recurrence of Material Injury Within a Reasonably Foreseeable Time

A. Legal Standards

In a five-year review conducted under section 751(c) of the Tariff Act, Commerce will revoke an antidumping or countervailing duty order unless: (1) it makes a determination that dumping or subsidization is likely to continue or recur and (2) the Commission makes a determination that revocation of the antidumping or countervailing duty order "would be likely to lead to continuation or recurrence of material injury within a reasonably foreseeable time."[52] The Uruguay Round Agreements Act Statement of Administrative Action ("SAA") states that "under the likelihood standard, the Commission will engage in a counterfactual analysis; it must decide the likely impact in the reasonably foreseeable future of an important change in the status quo – the revocation or termination of a proceeding and the elimination of its restraining effects on volumes and prices of imports."[53] Thus, the likelihood standard is prospective in nature.[54] The U.S. Court of International Trade has found that "likely," as used in the five-year review provisions of the Act, means "probable," and the Commission applies that standard in five-year reviews.[55]

The statute states that "the Commission shall consider that the effects of revocation or termination may not be imminent, but may manifest themselves only over a longer period of time."[56] According to the SAA, a "'reasonably foreseeable time' will vary from case-to-case, but

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[52] 19 U.S.C. § 1675a(a).

[53] SAA, H.R. Rep. 103-316, vol. I, at 883-84 (1994). The SAA states that "{t}he likelihood of injury standard applies regardless of the nature of the Commission's original determination (material injury, threat of material injury, or material retardation of an industry). Likewise, the standard applies to suspended investigations that were never completed." *Id*. at 883.

[54] While the SAA states that "a separate determination regarding current material injury is not necessary," it indicates that "the Commission may consider relevant factors such as current and likely continued depressed shipment levels and current and likely continued {sic} prices for the domestic like product in the U.S. market in making its determination of the likelihood of continuation or recurrence of material injury if the order is revoked." SAA at 884.

[55] *See NMB Singapore Ltd. v. United States*, 288 F. Supp. 2d 1306, 1352 (Ct. Int'l Trade 2003) ("'likely' means probable within the context of 19 U.S.C. § 1675(c) and 19 U.S.C. § 1675a(a)"), *aff'd mem.*, 140 Fed. Appx. 268 (Fed. Cir. 2005); *Nippon Steel Corp. v. United States*, 26 CIT 1416, 1419 (2002) (same); *Usinor Industeel, S.A. v. United States*, 26 CIT 1402, 1404 nn.3, 6 (2002) ("more likely than not" standard is "consistent with the court's opinion;" "the court has not interpreted 'likely' to imply any particular degree of 'certainty'"); *Indorama Chemicals (Thailand) Ltd. v. United States*, 26 CIT 1059, 1070 (2002) ("standard is based on a likelihood of continuation or recurrence of injury, not a certainty"); *Usinor v. United States*, 26 CIT 767, 794 (2002) ("'likely' is tantamount to 'probable,' not merely 'possible'").

[56] 19 U.S.C. § 1675a(a)(5).

normally will exceed the 'imminent' timeframe applicable in a threat of injury analysis in original investigations."[57]

Although the standard in a five-year review is not the same as the standard applied in an original investigation, it contains some of the same fundamental elements. The statute provides that the Commission is to "consider the likely volume, price effect, and impact of imports of the subject merchandise on the industry if the orders are revoked or the suspended investigation is terminated."[58] It directs the Commission to take into account its prior injury determination, whether any improvement in the state of the industry is related to the order or the suspension agreement under review, whether the industry is vulnerable to material injury if an order is revoked or a suspension agreement is terminated, and any findings by Commerce regarding duty absorption pursuant to 19 U.S.C. § 1675(a)(4).[59] The statute further provides that the presence or absence of any factor that the Commission is required to consider shall not necessarily give decisive guidance with respect to the Commission's determination.[60]

In evaluating the likely volume of imports of subject merchandise if an order under review is revoked and/or a suspended investigation is terminated, the Commission is directed to consider whether the likely volume of imports would be significant either in absolute terms or relative to production or consumption in the United States.[61] In doing so, the Commission must consider "all relevant economic factors," including four enumerated factors: (1) any likely increase in production capacity or existing unused production capacity in the exporting country; (2) existing inventories of the subject merchandise, or likely increases in inventories; (3) the existence of barriers to the importation of the subject merchandise into countries other than the United States; and (4) 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.[62]

In evaluating the likely price effects of subject imports if an order under review is revoked and/or a suspended investigation is terminated, the Commission is directed to consider whether there is likely to be significant underselling by the subject imports as compared to the domestic like product and whether the subject imports are likely to enter the

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[57] SAA at 887. Among the factors that the Commission should consider in this regard are "the fungibility or differentiation within the product in question, the level of substitutability between the imported and domestic products, the channels of distribution used, the methods of contracting (such as spot sales or long-term contracts), and lead times for delivery of goods, as well as other factors that may only manifest themselves in the longer term, such as planned investment and the shifting of production facilities." *Id*.

[58] 19 U.S.C. § 1675a(a)(1).

[59] 19 U.S.C. § 1675a(a)(1). Commerce has not made any duty absorption findings with respect to the antidumping duty order on pure magnesium from China. CR at I-22, PR at I-16.

[60] 19 U.S.C. § 1675a(a)(5). Although the Commission must consider all factors, no one factor is necessarily dispositive. SAA at 886.

[61] 19 U.S.C. § 1675a(a)(2).

[62] 19 U.S.C. § 1675a(a)(2)(A-D).

United States at prices that otherwise would have a significant depressing or suppressing effect on the price of the domestic like product.[63]

In evaluating the likely impact of imports of subject merchandise if an order under review is revoked and/or a suspended investigation is terminated, the Commission is directed to consider all relevant economic factors that are likely to have a bearing on the state of the industry in the United States, including but not limited to the following: (1) likely declines in output, sales, market share, profits, productivity, return on investments, and utilization of capacity; (2) likely negative effects on cash flow, inventories, employment, wages, growth, ability to raise capital, and investment; and (3) likely negative effects on the existing development and production efforts of the industry, including efforts to develop a derivative or more advanced version of the domestic like product.[64] All relevant economic factors are to be considered within the context of the business cycle and the conditions of competition that are distinctive to the industry. As instructed by the statute, we have considered the extent to which any improvement in the state of the domestic industry is related to the orders under review and whether the industry is vulnerable to material injury upon revocation.[65]

As discussed above, no respondent interested party participated in this expedited review. The record, therefore, contains limited information with respect to the magnesium industry in China. There is also limited information on the magnesium market in the United States during the period of review. Accordingly, for our determination, we rely as appropriate on the facts available from the original investigation, the prior reviews, and the limited new information on the record in this expedited fourth five-year review.

B. Likely Conditions of Competition

1. The Original Investigation and Prior Five-Year Reviews

In the original injury determination, the Commission identified a number of conditions of competition pertinent to the domestic pure magnesium industry, including the relationship between the demand for pure magnesium and the demand for the products in which it is used, and the need to keep electrolytic cells in constant operation to avoid their deterioration.[66]

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[63] *See* 19 U.S.C. § 1675a(a)(3). The SAA states that "{c}onsistent with its practice in investigations, in considering the likely price effects of imports in the event of revocation and termination, the Commission may rely on circumstantial, as well as direct, evidence of the adverse effects of unfairly traded imports on domestic prices." SAA at 886.

[64] 19 U.S.C. § 1675a(a)(4).

[65] The SAA states that in assessing whether the domestic industry is vulnerable to injury if the order is revoked, the Commission "considers, in addition to imports, other factors that may be contributing to overall injury. While these factors, in some cases, may account for the injury to the domestic industry, they may also demonstrate that an industry is facing difficulties from a variety of sources and is vulnerable to dumped or subsidized imports." SAA at 885.

[66] *Original Determination*, USITC Pub. 2885, at 16-17.

In the first and second reviews, the Commission reiterated these conditions and also described a number of other conditions affecting the domestic industry, finding that the production processes for pure and alloy magnesium are very similar and are typically performed at common manufacturing facilities by the same employees; domestic pure magnesium and subject imports are substitutable with each other and with nonsubject imports; the market for pure magnesium is price competitive; and nonsubject imports play a role in the U.S. market.[67] [68]

In the third five-year review, the Commission found that the conditions of competition it relied upon in making its determinations in the prior reviews generally continued. It found that demand for magnesium is dictated largely by the demand for its end-use products. Pure magnesium was typically used in such end uses as production of aluminum alloys for use in beverage cans and in some automotive parts; iron and steel desulfurization, as a reducing agent for various nonferrous metals; magnesium anodes for the protection of iron and steel in underground pipe and water tanks and various marine applications; and the production of titanium sponge. It also found that alloy magnesium was principally used in structural applications, primarily in casting and extrusions for the automotive industry, with some alloy magnesium also being used in aluminum production. The Commission observed that demand for magnesium in the United States declined as a result of the general recession. It found that there were ten domestic producers of the domestic like product during the period of review. It also noted that primary magnesium producers that used the electrolytic process had a strong incentive to maintain a continuous level of production because the electrolytic cells used to make primary magnesium had to be kept in constant operation to avoid deterioration and significant rebuilding costs.[69] The Commission also determined that the nonsubject imports continued to play a role in the U.S. market, albeit a declining one.[70]

1. The Current Review

Demand Conditions. Demand for magnesium is derived from demand for applications in which magnesium is used, including aluminum production, die-casting, and iron and steel

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[67] *First Five-Year Review*, USITC Pub. 3346, at 8-10 and *Second Five-Year Review*, USITC Pub. 3859, at 27-29 and 59-61.

[68] In the 2011 China/Russia review, the conditions of competition identified by the Commission included demand that was derived from the applications in which magnesium is used, mixed expectations as to future demand by industry participants, capacity expansions by US Magnesium, an apparent sharp expansion of the Chinese alloy magnesium industry's capacity during the period of review, the continued significant presence of nonsubject suppliers in the U.S. market combined with a shutdown of most or all of the Canadian industry and increased imports from Israel, the continued interchangeability of magnesium of the same type, and continued price competitiveness in the magnesium market. *2011 China/ Russia Review*, USITC Pub. 4214, at 23-25.

[69] *Third Five-Year Review*, USITC Pub. 4274, at 11-12.

[70] *Third Five-Year Review*, USITC Pub. 4274, at 12.

desulfurization, and remains closely correlated with general economic activity.[71] Apparent U.S. consumption of pure and alloy magnesium was *** pounds in 2015, lower than the peak levels reported in the second five-year review, but an improvement from the third five-year review.[72] There has been a recent reduction in demand for pure and alloy magnesium in the U.S. market due to the closure of a U.S. titanium sponge production facility, reportedly due to market conditions.[73] The record of this review does not indicate that there have been any other changes in the factors driving demand for the domestic like product from those the Commission found in the third five-year review.[74]

Supply Conditions. US Magnesium identified itself and nine other current domestic producers of the domestic like product.[75] US Magnesium has increased its capacity since the prior five-year review and also identified a new company, Nevada Clean Magnesium, which is considering whether to construct a new magnesium production facility in Nevada.[76] Primary magnesium producers that use the electrolytic process (*i.e.,* US Magnesium) have a strong incentive to maintain a continuous level of production because the electrolytic cells used to make primary magnesium must be kept in constant operation to avoid their deterioration and significant rebuilding costs.[77] The domestic industry's share of apparent U.S. consumption was *** percent in 2015, which was lower than the domestic industry's market share in the second and third five-year reviews.[78] Subject imports accounted for *** percent of apparent U.S. consumption in 2015.[79]

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[71] *See, e.g., Second Five-Year Review*, USITC Pub. 3859, at 27-28 and *Magnesium 2005 Final Determination*, USITC Doc. 3763, at 16; *see also* Domestic Parties Response at 24 and Domestic Parties Final Comments (February 23, 2017) ("Final Comments") at 4.

[72] CR/PR at Tables I-3, Appendix B.

[73] Allegheny Technologies Incorporated ("ATI"), a U.S. titanium sponge producer, announced that it is closing its Utah plant due to market conditions. ATI was *** of pure magnesium. Domestic Parties Response at 23 and Attachment 1.

[74] *See Third Five-Year Review*, USITC Pub. 4274, at 11.

[75] Domestic Parties Response at 21 and Attachment 12. Domestic Parties report that six of "{t}hese producers are believed to produce the domestic like product, but are not believed to produce pure magnesium ingot, including off-specification pure magnesium." Domestic Parties Response, Attachment 12 at note.

[76] Domestic Parties Response at 11, 23 and n.64, and Attachment 1.

[77] Domestic Parties Response at 5; Final Comments at 4.

[78] CR/PR at Table I-4. The domestic industry's market share was *** percent in 2005 and *** percent in 2010. *Id*.

[79] CR/PR at Table I-4. Subject import data are based on official import statistics for all HTS numbers included in the scope definition. Because some of these HTS numbers include out-of-scope products (including alloy magnesium), subject import data and market penetration for the period of review are likely overstated.

Nonsubject imports accounted for *** percent of apparent U.S. consumption in 2015, which was lower than their share found in the second five-year review.[80] Israel, Russia, Canada, Brazil, and Kazakhstan were the largest sources of nonsubject imports in 2015.[81]

Substitutability. The available information in the current record indicates that there continues to be a moderate to high degree of substitutability between the domestic like product and subject imports and that price remains an important factor in purchasing decisions.[82] Moreover, magnesium is a fungible commodity product that competes primarily on price.[83]

C. Likely Volume of Subject Imports

The Original Investigations and Prior Reviews. In the original investigation, the Commission found that the volume of cumulated subject imports was significant and increased substantially from 1992 through the first half of 1994. The Commission further found that the market share of subject imports of pure magnesium, by both quantity and value, increased significantly during the period of investigation.[84]

In the first and second five-year reviews, the Commission found that subject import volume would likely be significant if the antidumping duty order on pure magnesium were revoked. The Commission based its findings on the rapid growth and substantial capacity of the Chinese magnesium industry, that industry's significant dependence on export markets, the presence of import barriers on pure magnesium from China in third country markets, the surge in U.S. imports of subject merchandise under temporary importation bonds since the imposition of the order, and the ability of Chinese producers to switch production from alloy magnesium to pure magnesium if the order on pure magnesium were revoked.[85] In the second five-year review, the Commission also based its findings on the strong interest of Chinese producers in supplying the U.S. market, as demonstrated by their shift to exporting other types

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[80] CR/PR at Table I-4. Nonsubject imports' market share was *** percent in 2005. *Id*.

[81] CR at I-37, PR at I-22. These five countries accounted for 99.7 percent of nonsubject imports in 2015. *Id*. Domestic Parties report that nonsubject imports of pure magnesium from Turkey also entered the U.S. market in 2016. Domestic Parties Response at 23.

[82] *See, e.g.,* Domestic Parties Response at 11; Final Comments at 4; *see also*, *Original Determination*, USITC Pub. 2885, at 27-28 and *Third Five-Year Review*, USITC Pub. 4274, at 11.

[83] Domestic Parties Response at 24 and Final Comments at 4; *see also, Third Five-Year Review*, USITC Pub. 4274, at 11; *Second Five-Year Review*, USITC Pub. 3859, at 27-28; and *Magnesium 2005 Final Determination*, USITC Doc. 3763, at 16.

[84] *Original Determination*, USITC Pub. 2885, at 19-20. Cumulated subject imports included imports from Russia and Ukraine. *See Id*. at 15-16.

[85] *First Five-Year Review*, USITC Pub. 3346, at 10-12 and *Second Five-Year Reviews*, USITC Pub. 3859, at 29-31 and 61-62.

of magnesium to the United States whenever an order on one type of magnesium was imposed.[86]

In the third five-year review, the Commission found subject imports from China continued to enter the U.S. market in significant quantities in some years of the period of review notwithstanding the antidumping duty order, indicating that the United States was still a market of interest to the Chinese industry. Chinese producers also had massive production capacity and considerable unused capacity, reportedly accounting for 80 percent of world capacity for primary magnesium. It observed that the U.S. Geological Survey ("USGS") reported that subject producers in China had the capacity to produce 1,030,000 metric tons of primary magnesium and had produced 501,000 metric tons in 2009, indicating a capacity utilization rate of only 48.6 percent. Moreover, the Commission found that, even though the proportion of subject magnesium production that the Chinese industry exported declined in 2010, exports accounted for more than half of total Chinese production, demonstrating that the subject industry remained export oriented.[87]

The Commission also found that subject producers could easily switch production from alloy magnesium to pure magnesium. It observed that the antidumping duty orders in place against Chinese alloy and granular magnesium drastically reduced these imports and, given the relative ease with which Chinese producers could switch production from alloy magnesium to pure magnesium, Chinese magnesium producers would have a powerful incentive to switch production and export pure magnesium to the United States upon revocation of the antidumping duty order on pure magnesium. Furthermore, it found that the United States remained an attractive market for subject producers as prices for pure magnesium in the United States were higher than prices in other markets.[88] With respect to barriers to entry in other export markets, it noted that Brazil had maintained antidumping duties on imports of pure magnesium from China since 2004.[89] Thus, the Commission determined that the likely volume of subject imports, both in absolute terms and as a share of the U.S. market, would be significant if the order were revoked.[90]

The Current Review. The information available in the current review indicates that subject import volume is likely to be significant if the order is revoked. Subject import volume fluctuated during the period of review, but was higher in 2015 than in 2011, and subject imports were present in appreciable quantities in the U.S. market throughout the period.[91]

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[86] *Second Five-Year Reviews*, USITC Pub. 3859, at 29-31 and 61-62.

[87] *Third Five-Year Review*, USITC Pub. 4274, at 13.

[88] *Third Five-Year Review*, USITC Pub. 4274, at 13.

[89] *Third Five-Year Review*, USITC Pub. 4274, at 13-14.

[90] *Third Five-Year Review*, USITC Pub. 4274, at 14.

[91] Subject import volume was *** metric tons in 2011, *** metric tons in 2012, *** metric tons in 2013, *** metric tons in 2014, and *** metric tons in 2015. CR/PR at Table I-2. As previously stated, because the official import statistics used to compile import data included out-of-scope magnesium products, they likely overstate subject imports.

The Chinese magnesium industry has the ability to increase exports of pure magnesium substantially in the event of revocation. The information available indicates that the industry possesses significant capacity and excess capacity. According to data on the record, the Chinese industry's capacity to produce primary magnesium was 1.6 million metric tons in 2014, which was higher than in the original investigation or any prior review, and also vastly exceeded apparent U.S. consumption in 2015.[92] Consequently, subject pure magnesium producers will likely have the ability to increase shipments significantly to the United States should the antidumping duty order be revoked.

The information available also indicates that the magnesium industry in China remains export oriented. China is the world's largest exporter of magnesium; Chinese producers accounted for approximately 11.0 percent by value of global exports of magnesium in 2015.[93] As observed above, subject producers have continued to be present in the U.S. market since the imposition of the antidumping duty order and subject imports were present in appreciable quantities during the current period of review. There is evidence that prices for magnesium are higher in the United States than in other markets.[94] Moreover, Brazil has maintained antidumping duties on imports of pure magnesium from China since 2004.[95] Thus, the record indicates that the United States remains an attractive market for pure magnesium producers in China.[96] The record also shows that the Chinese producers can easily switch production from alloy magnesium to pure magnesium.[97]

Accordingly, based on the demonstrated ability of Chinese pure magnesium producers to increase imports into the U.S. market rapidly, their substantial production capacity and

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[92] Domestic Parties Response at 15-16 and Attachment 3 (USGS, 2014 Minerals Yearbook, Magnesium {Advance Release}) at Tables 7 and 8 (showing the Chinese industry with an estimated capacity utilization rate of 54.5 percent in 2015); Final Comments at 7. The record evidence also indicates that subject producers have increased their production capacity for pure magnesium by 48.1 percent from 2011 to 2014 with plans for further capacity expansion. Domestic Parties Response at 16-17 and Attachment 6.

[93] Calculated from CR/PR at I-5.

[94] The reported U.S. spot price for pure and alloy magnesium averaged around $1.80 per pound; spot prices for magnesium from the European Union were quoted at an AUV of $1.06 per pound. Domestic Parties Response at Attachment 7 (*Platts Metals Week* for the week of October 8, 2016); Final Comments at 9-10.

[95] CR/PR at I-36 to I-37, PR at I-22. The Chinese government imposed a ten percent export tax on magnesium ingot and alloys in 2008; the tax was removed on January 1, 2013. Final Comments at 9.

[96] In light of the expedited nature of this review, the record does not contain information regarding any existing or likely inventories of the subject merchandise held by importers or Chinese producers and exporters. *See also* Domestic Parties Response at 18.

[97] Chinese magnesium producers have switched production from alloy magnesium to pure magnesium. In our 2011 five-year review of the antidumping duty order on alloy magnesium from China, we found that Chinese producers switched from production of pure magnesium to alloy magnesium during the original period of investigation after the antidumping duty order on pure magnesium from China was issued. *See 2011 China/Russia Review*, USITC Pub. 4214, at 11-12; *see also Third Five-Year Review*, USITC Pub. 4274, at 13 and Domestic Parties Response at 17.

excess capacity, their export orientation, and the attractiveness of the U.S. market, we find that the likely volume of subject imports, both in absolute terms and as a share of the U.S. market, would be significant if the order were revoked.

D. Likely Price Effects

The Original Investigations and Prior Reviews. In the original investigation, the Commission found that the large and increasing volume of subject imports during the period of investigation depressed prices or prevented price increases that otherwise would have occurred to a significant degree. Noting the general substitutability between the domestic like product and subject imports, the Commission observed that prices for domestic pure magnesium rose and fell in relation to the presence in the U.S. market of unfairly traded imports. Additionally, the cumulated subject imports undersold domestically produced pure magnesium in the vast majority of pricing comparisons. In particular, price data collected from U.S. purchasers during the original investigation showed underselling by imports from China in nine of 13 price comparisons.[98]

In the first five-year review, the Commission determined that revocation of the antidumping duty order on pure magnesium would be likely to lead to significant underselling of the domestic like product by subject imports, as well as significant price depression and suppression. The Commission relied on pricing patterns for subject imports both during and subsequent to the original period of investigation to conclude that subject imports would likely be priced aggressively if the order were revoked.[99]

In the second five-year review, the Commission again found that revocation of the antidumping duty order on pure magnesium would be likely to lead to significant underselling of the domestic like product by subject imports, as well as significant price depression and suppression. The Commission relied on limited average unit value ("AUV") data for the period of review, as well as pricing patterns for subject imports during the original period of investigation and the first review, to conclude that subject imports would likely be priced aggressively if the order were revoked.[100]

In the third five-year review, the Commission found that the AUVs of subject imports were considerably higher than that of the domestic like product, although it placed little weight on these data given that the volume of subject imports was so small. It observed that magnesium prices were significantly lower at year-end 2009 than year-end 2008 due to weakness in the global economy and magnesium demand. The Commission also found that prices for pure magnesium in the United States were higher than prices in other markets. Given this price differential, the Commission concluded that subject producers and exporters would have an incentive to price significantly below the prevailing U.S. price if the antidumping duty order was revoked to induce U.S. purchasers to switch to subject imports. The

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[98] *Original Determination*, USITC Pub. 2885, at 20-21.
[99] *First Five-Year Review*, USITC Pub. 3346, at 10-12.
[100] *Second Five-Year Review*, USITC Pub. 3859, at 31-32 and 62-63.

Commission concluded that the United States would be an attractive export market for Chinese producers if the antidumping duty order was revoked, given their substantial unused capacity, their export orientation, and the prices in the U.S. market. Because of the interchangeability between subject imports and domestic pure magnesium and the importance of price in purchasing decisions, it found that underselling was likely to result in significant price effects, similar to those found in the original investigation.[101]

The Current Review. Due to the expedited nature of this review, the record contains no direct price comparison data. Limited information submitted by the Domestic Parties indicates that spot prices and offers for pure magnesium from China were below prices for the domestic like product.[102] As discussed above, magnesium of the same type is a commodity product and price continues to be an important factor in purchasing decisions. Also, there is evidence that prices for pure magnesium in the United States are higher than prices in other markets.[103] Given this price differential, if the antidumping duty order were revoked, subject producers and exporters would have an incentive to price significantly below the prevailing U.S. price to induce U.S. purchasers to switch to subject pure magnesium, as they did in the original investigation.[104]

Because price is important to purchasing decisions, the presence of significant quantities of subject imports that would likely enter the United States in the event of revocation and that would likely undersell the domestic like product would force the domestic industry either to lower prices or lose sales. In light of these considerations, we conclude that absent the disciplining effects of the antidumping duty order, subject imports of pure magnesium would likely have significant depressing or suppressing effects on prices for the domestic like product.

E. Likely Impact

The Original Investigations and Prior Reviews. In the original investigation, the Commission found that the significant and increasing volume of subject imports and the declines in their prices from 1992 to mid-1994 had a significant adverse impact on the domestic pure magnesium industry. The entry of these imports resulted in increased domestic inventories and placed significant pressure on the domestic producers to lower their prices. The Commission determined that the losses in market share and price pressures resulted in reductions in capacity to produce pure magnesium, and declines in employment.[105]

In the first five-year review, the Commission found that the domestic industry was not vulnerable. Nonetheless, the Commission found that, given the vast amounts of Chinese production capacity and increasing worldwide magnesium capacity, the likely return of

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[101] *Third Five-Year Review*, USITC Pub. 4274, at 15.

[102] Domestic Parties Response at 18-19 and Attachments 7 and 8; Final Comments at 9-10.

[103] Domestic Parties Response at Attachment 7 (*Platts Metals Week* for the week of October 8, 2016); Final Comments at 10.

[104] *Original Determination*, USITC Pub. 2885, at 20-21.

[105] *Original Determination*, USITC Pub. 2885, at 22.

significant volumes of pure magnesium from China upon revocation of the order would likely send the domestic industry into decline. It concluded that, in light of the likely significant increases in the volume of subject imports at prices that would likely undersell the domestic like product and significantly depress U.S. prices, revocation of the order would likely have a significant adverse impact on the domestic industry.[106]

In the second five-year review, the Commission found that the domestic industry was vulnerable. The industry's trade and financial indicators were mixed during the 2000-2005 period of review. The Commission found that, given the vast amounts of Chinese production capacity, the likely return of significant volumes of pure magnesium from China upon revocation of the order would likely push the domestic industry back into decline and prevent it from improving its financial condition. It concluded that in light of the likely significant increases in the volume of subject imports at prices that would likely undersell the domestic like product and significantly depress U.S. prices, revocation of the order would likely have a significant adverse impact on the domestic industry.[107]

In the third five-year review, the Commission observed that the record information on the domestic industry's condition was based only on data for 2010 provided in response to the notice of institution by one (albeit the largest) domestic producer, US Magnesium. On that basis, the Commission found it could not determine whether the domestic industry was vulnerable. Based on the available record, the Commission determined that the likely significant volume and price effects of the subject imports would likely have a significant impact on the production, shipments, sales, market share, and revenues of the domestic industry. It observed that declines in the indicators of industry performance would have a direct adverse impact on the industry's profitability and employment, as well as its ability to raise capital, to make and maintain capital investments, and to fund research and development.[108]

The Commission also considered the role of factors other than subject imports, including weakened demand due to the 2009 recession and the presence of nonsubject imports. It recognized that the 2009 economic downturn depressed demand for magnesium and that the recovery from this downturn was not complete. It found that, while nonsubject imports declined irregularly during the period of review, they continued to be a significant factor in the U.S. market. Thus, the Commission found that any lingering effects of the economic downturn and the continued presence of nonsubject imports were not likely to sever the causal nexus between subject imports and their likely significant impact on the domestic industry if the order were revoked.[109]

The Current Review. In this expedited review, the record information on the domestic industry's condition is based on data for 2015 provided in response to the notice of institution by one domestic producer, US Magnesium. The limited record is insufficient for us to make a

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[106] *First Five-Year Review*, USITC Pub. 3346, at 14-16.
[107] *Second Five-Year Review*, USITC Pub. 3859, at 32-33 and 63-65.
[108] *Third Five-Year Review*, USITC Pub. 4274, at 17.
[109] *Third Five-Year Review*, USITC Pub. 4274, at 17.

finding on whether the domestic industry is vulnerable to the continuation or recurrence of material injury in the event of revocation of the order.

In 2015, US Magnesium's capacity for pure and alloy magnesium was *** metric tons, its production was *** metric tons, its rate of capacity utilization was *** percent, and its U.S. shipments were *** metric tons.[110] In that year, US Magnesium had net sales of $***, earned operating income of $***, and reported an operating margin of *** percent.[111]

Based on the record of this review, we find that, should the order be revoked, the likely significant volume and price effects of the subject imports would likely have a significant impact on the production, shipments, sales, market share, and revenues of the domestic industry. Declines in these indicators of industry performance would have a direct adverse impact on the industry's profitability and employment, as well as its ability to raise capital, and to make and maintain capital investments.

We also have considered the role of factors other than subject imports, so as not to attribute injury from other factors to the subject imports. Although nonsubject imports continue to be a significant factor in the U.S. market during the period of review, increasing from 2011 to 2014 before declining in 2015, the domestic industry's production, capacity utilization, and U.S. shipments were higher in 2015 than in 2010.[112] Moreover, because the domestic industry in 2015 was the largest supplier in the market,[113] any increase in subject import volume and market penetration is likely to come at least in part at the expense of the domestic industry. Nevertheless, we find that the effects we have attributed to the subject imports are distinguishable from any effects likely from nonsubject imports.

Accordingly, we conclude that, if the antidumping duty order were revoked, subject imports from China would likely have a significant impact on the domestic industry within a reasonably foreseeable time.

IV. Conclusion

For the foregoing reasons, we determine that that revocation of the antidumping duty order on pure magnesium from China would be likely to lead to a continuation or recurrence of material injury to the domestic industry within a reasonably foreseeable time.

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[110] CR/PR at Table I-1.

[111] CR/PR at Table I-1. Reported capacity, production, capacity utilization, and U.S. shipments were higher for the domestic industry in 2015 than in 2010. Sales revenues, operating income, and operating income margins were all lower. *Id*.

[112] CR/PR at Table I-2. Nonsubject imports were *** metric tons in 2011, *** metric tons in 2012, *** metric tons in 2013, *** metric tons in 2014, and *** metric tons in 2015. Id.

[113] CR/PR at Table I-2.

INFORMATION OBTAINED IN THIS REVIEW

BACKGROUND

On October 3, 2016, the U.S. International Trade Commission ("Commission") gave notice, pursuant to section 751(c) of the Tariff Act of 1930, as amended ("the Act"),[1] that it had instituted a review to determine whether revocation of the antidumping order on pure magnesium from China would likely lead to the continuation or recurrence of material injury to a domestic industry.[2] All interested parties were requested to respond to this notice by submitting certain information requested by the Commission.[3] [4] The following tabulation presents information relating to the background and schedule of this proceeding:

Effective or statutory date	Action
October 3, 2016	Notice of initiation and institution by Commerce and Commission
January 6, 2017	Commission vote on adequacy
February 1, 2017	Commerce results of its expedited review
March 15, 2017	Commission vote
March 29, 2017	Determination and views to Commerce

[1] 19 U.S.C. 1675(c).

[2] *Pure Magnesium from China; Institution of a Five-Year Review*, 81 FR 68046, October 3, 2016. In accordance with section 751(c) of the Act, the U.S. Department of Commerce ("Commerce") published a notice of initiation of a five-year review of the subject antidumping duty order concurrently with the Commission's notice of institution. *Initiation of Five-Year ("Sunset") Review*, 81 FR 67697, October 3, 2016. Pertinent *Federal Register* notices are referenced in app. A, and may be found at the Commission's website (www.usitc.gov).

[3] As part of their response to the notice of institution, interested parties were requested to provide company-specific information. That information is presented in app. B. Summary data compiled in prior proceedings is presented in app. C.

[4] Interested parties were also requested to provide a list of three to five leading purchasers in the U.S. market for the subject merchandise. Presented in app. D are the responses received from purchaser surveys transmitted to the purchasers identified in the adequacy phase of this review.

RESPONSES TO THE COMMISSION'S NOTICE OF INSTITUTION

Individual responses

The Commission received one submission in response to its notice of institution in the subject review. It was filed on behalf of the following entities:

1. US Magnesium LLC ("US Magnesium"), domestic producers of magnesium, and
2. The United Steel, Paper and Forestry, Rubber, Manufacturing, Energy, Allied Industrial and Service Workers International Union, Local 8319 ("Local 8319") (collectively referred to herein as "domestic interested parties")

A complete response to the Commission's notice of institution requires that the responding interested party submit to the Commission all the information listed in the notice. Responding firms are given an opportunity to remedy and explain any deficiencies in their responses. A summary of the number of responses and estimates of coverage for each is shown in table I-1.

Table I-A
Pure magnesium : Summary of responses to the Commission's notice of institution

Type of interested party	Completed responses	
	Number	Coverage
Domestic:		
U.S. producer	1	***%[1]
Respondent:		
U.S. importer	0	([2])
Foreign producer/exporter	0	([3])

[1] The coverage figure presented, as provided by the domestic interested parties in their response, represents "US Magnesium's share of total U.S. production of the domestic like product, which consists of pure and alloy magnesium, including primary and secondary magnesium and cast and granular magnesium" during 2015.
[2] The Commission did not receive any responses from U.S. importers.
[3] The Commission did not receive any responses from foreign producers/exporters.

Party comments on adequacy

The Commission received one submission from parties commenting on the adequacy of responses to the notice of institution and whether the Commission should conduct expedited or full reviews. These submissions were filed on behalf of U.S. Magnesium and Local 8319. The domestic interested parties argue that the Commission should conclude that the response of the domestic industry to the Commission's notice of institution is adequate. However, in the absence of responses from foreign producers/exporters or U.S. importers of pure magnesium from China, the domestic interested parties argue that the Commission should determine that the respondent interest party group responses are inadequate, and they request that the Commission conduct an expedited review of the order.

RECENT DEVELOPMENTS IN THE INDUSTRY

Since the Commission's last five-year review, the following developments have occurred in the magnesium industry. U.S. Magnesium, the sole producer of primary magnesium metal currently operating in the United States, expanded the production capacity at its electrolytic processing facility in Rowley, UT that recovers magnesium metal from brines deposits on the shores of the Great Salt Lake.[5] A 21,500 metric tons per year (mtpy) expansion was completed in July 2012, to raise total processing capacity to 63,500 mtpy,[6] with increased orders being cited as the reason for accelerating the start-up ahead of the planned year-end completion date.[7] In 2014, plans were announced for further expansion by 13,000 mtpy to a total of 76,500 mtpy by year-end 2015.[8] However, expansion plans were subsequently announced as being placed on-hold until 2018 or later, after local-customer Allegheny Technologies Inc. announced in October 2016 its decision to curtail titanium sponge production at its nearby Rowley, UT facility.[9]

Vancouver, British Columbia-based Nevada Clean Magnesium Inc. ("Nevada CMI," formerly Molycor Gold Corp. prior to 2012) has been evaluating the resource base of its Tami-Mosi magnesium property near Ely, NV since 2007.[10] In January 2012, the firm completed a preliminary economic assessment for a 30,000 mtpy processing facility to produce primary magnesium metal from a high-purity dolomite (a calcium-magnesium carbonate mineral) mined

[5] U.S. Magnesium, "About Us," company Internet website, 2011.

[6] Waite, Suzy, "U.S. Mag Run Rate Increases as Utah Expansion Finished," *American Metal Market*, July 11, 2012, p. 11. Cited by Bray, E. Lee, "Magnesium (Advance Release)," *2012 Minerals Yearbook*, U.S. Geological Survey, November 2013, p. 45.2.

[7] McBeth, "U.S. Magnesium Accelerates Expansion, Expects Output Mid-Year," *Platts Metals Week*, April 11, 2011, pp. 14–15. Cited by Kramer, Deborah A., "Magnesium (Advance Release)," *2011 Minerals Yearbook*, U.S. Geological Survey, November 2012, p. 45.2.

[8] Cowden, Michael, "U.S. Magnesium to Increase Capacity," *American Metal Market,* February 12, 2015. Cited by Bray, E. Lee, "Magnesium (Advance Release)," *2014 Minerals Yearbook*, U.S. Geological Survey, February 2016, p. 45.1; and *2013 Minerals Yearbook*, February 2015, p. 45.1.

[9] Maltais, Kirk, "US Mag's Rowley Plant Expansion On Hold," *American Metal Market*, October 17, 2016. Attachment 1, U.S. Magnesium and U.S. Steelworkers Local 8319, response to the Commission's Notice of Institution, November 2, 2016.

[10] Molycor Gold Corp., "Positive Preliminary Economic Assessment Study Completed for Tami-Mosi Magnesium Project," press release, August 5, 2011. Cited by Kramer, Deborah A., "Magnesium (Advance Release)," *2011 Minerals Yearbook*, U.S. Geological Survey, November 2012, p. 45.2.

from a deposit on the project site,[11] with subsequent revisions to the economic assessment announced in July 2014.[12]

THE PRODUCT

Commerce's scope

Commerce has defined the subject merchandise as:

> "... pure primary magnesium regardless of chemistry, form or size, unless expressly excluded from the scope of this order. Pure magnesium is a metal or alloy containing by weight primarily the element magnesium and produced by decomposing raw materials into magnesium metal. Pure primary magnesium is used primarily as a chemical in the aluminum alloying, desulfurization, and chemical reduction industries. In addition, pure magnesium is used as an input in producing magnesium alloy. Pure magnesium encompasses products (including, but not limited to, butt-ends, stubs, crowns and crystals) with the following primary magnesium contents: (1) Products that contain at least 99.95 percent primary magnesium, by weight (generally referred to as "ultra–pure" magnesium); (2) Products that contain less than 99.95 percent but not less than 99.8 percent primary magnesium, by weight (generally referred to as "pure" magnesium); and (3) Products that contain 50 percent or greater, but less than 99.8 percent primary magnesium, by weight, and that do not conform to ASTM specifications for alloy magnesium (generally referred to as "off–specification pure" magnesium). "Off–specification pure" magnesium is pure primary magnesium containing magnesium scrap, secondary magnesium, oxidized magnesium, or impurities (whether or not intentionally added) that cause the primary magnesium content to fall below 99.8 percent by weight. It generally does not contain, individually or in combination, 1.5 percent or more, by weight, of the following alloying elements: aluminum, manganese, zinc, silicon, thorium, zirconium and rare earths.
>
> Excluded from the scope of this order are alloy primary magnesium (that meets specifications for alloy magnesium), primary magnesium anodes, granular primary magnesium (including turnings, chips and powder), having a maximum physical dimension (i.e., length or diameter) of one inch or less, secondary magnesium (which

[11] Fundamental Research Corp., "Molycor Gold Corporation (TSXV: MOR, Frankfurt: M1V, OTCPK: MLLYFF)— Positive PEA on Tami Mosi Magnesium Project," January 19, 2012. Cited by Bray, E. Lee, "Magnesium (Advance Release)," *2012 Minerals Yearbook*, U.S. Geological Survey, November 2013, p. 45.2. Nevada CMI, "About Nevada Clean Magnesium Inc.;" and "Tami-Mosi, Nevada, USA (Magnesium)," company Internet websites, 2016.

[12] Nevada CMI, "Nevada Clean Magnesium Files Amended and Restated 43-101 Technical Report," press release, July 10, 2014; and "Nevada Clean Magnesium Receives Final Designs for Pilot Reduction Furnace for Tami-Mosi Project in Nevada," press release, July 21, 2014. Cited by Bray, E. Lee, "Magnesium (Advance Release)," *2014 Minerals Yearbook*, U.S. Geological Survey, February 2016, p. 45.1.

has pure primary magnesium content of less than 50 percent by weight), and remelted magnesium whose pure primary magnesium content is less than 50 percent by weight. Pure magnesium products covered by this order are currently classifiable under the Harmonized Tariff Schedule of the United States ("HTSUS") subheadings 8104.11.00, 8104.19.00, 8104.20.00, 8104.30.00, 8104.90.00, 3824.90.11, 3824.90.19 and 9817.00.90. Although the HTSUS subheadings are provided for convenience and customs purposes, our written description of the scope is dispositive."[13]

Description and uses

Magnesium, the eighth most abundant element in the earth's crust and the third most plentiful element dissolved in seawater, is a silver-white metallic element. It is the lightest of all structural metals with a density approximately 63 percent that of aluminum, the principal metal with which it competes in the U.S. market. [14] Magnesium is available in two principal forms, pure and alloy, with pure magnesium accounting for the majority of sales in the U.S. market during the original investigation (*** percent, by quantity, in 1994); in 1999 it accounted for a *** percent share.[15] The subject pure magnesium in unwrought form' contains at least 99.8 percent magnesium by weight. Nonsubject alloy magnesium is an alloy consisting of magnesium and other metals, typically aluminum and zinc, containing less than 99.8 percent magnesium by weight, with magnesium the largest metallic element in the alloy by weight. Alloy magnesium is usually produced to improve certain properties such as strength, ductility, workability, corrosion resistance, density, or castability as compared with pure magnesium.[16]

Pure magnesium is widely used in commercial and industrial applications because it has special chemical and electrical properties that allow it to alloy well with such metals as aluminum. In contrast to the alloy product, pure magnesium is typically used in the production of aluminum alloys for use in beverage cans and in some automotive parts, in iron and steel desulfurization, as a reducing agent for various nonferrous metals (titanium, zirconium, hafnium, uranium, beryllium), and in magnesium anodes for the protection of iron and steel in

[13] *Pure Magnesium from the People's Republic of China; Notice of Final Results of Expedited Sunset Review of Antidumping Duty Order,* 76 FR 62040, October 6, 2011.

[14] *Magnesium from China, Inv. No. 731-TA-696 (Review)*, Confidential Staff Report, August 2000, pp. I-8-11.

[15] In addition, magnesium can be recovered by aluminum recyclers from secondary sources such as old and new scrap and recycled products. These recyclers do not, however, separate the magnesium from the aluminum and sell it on the open market; rather they reuse the magnesium with the aluminum to produce new two-piece beverage cans, or other aluminum alloy products. Secondary magnesium is not subject to this review. Further, in its earlier investigations for Canada and Norway, the Commission determined that secondary magnesium was not "like" imported primary magnesium. *Magnesium from Canada and Norway* (Preliminary), USITC Publication 2443, October 1991, p. 1-7, n. 7.

[16] *Magnesium from China, Inv. No. 731-TA-696 (Review)*, Confidential Staff Report, August 2000, pp. I-8-11.

underground pipe and water tanks and various marine applications.[17] According to ***, there are no practical substitutes for pure magnesium with the exception of calcium carbide for desulfurization of iron and steel.[18]

Differences of opinion existed during the original investigation with regard to the quality of the subject imports compared to the domestic product.[19] Another difference involved ingot size: imported ingots from subject sources (including China) were smaller in size than domestically-produced ingots, which were available in a variety of sizes (such as 16-, 25- and 50-pound ingots).[20] The Commission stated in its original views that "{a) number of producers, importers, and purchasers indicated that domestically-produced pure magnesium and the subject imports of pure magnesium are generally comparable." It added that there was a consensus "that the imports and the domestic product are used in the same range of uses."[21]

Both pure magnesium and alloy magnesium are typically sold directly to end users, although pure magnesium used for iron and steel desulfurization is subjected to further processing before being consumed by iron and steel mills. The majority of purchasers responding to questionnaires issued during the Canadian investigations indicated that they require their suppliers to become certified or prequalified. The qualification process can take anywhere from 1 to 6 months.[22] The product is sold on both a spot and contract basis, with pricing quoted on a per-pound basis. Magcorp reported during the original investigation that *** were made by contract. Approximately, *** percent of Northwest Alloys' sales were on a contract basis. In contrast, the majority of responding importers indicated that most of their sales were on a spot basis. Contracts in the magnesium industry in 1995 varied in length from

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[17] Alloy magnesium is principally used in structural applications, primarily in castings (die, permanent mold, and sand) and extrusions for the automotive industry. In contrast, pure magnesium is seldom used alone in structural applications because its specific tensile and yield strengths are low.

[18] *Pure and Alloy Magnesium from Canada and Pure Magnesium from China, Inv. Nos. 701-TA-309-A-B and 731-TA-696 (Second Review)*, Confidential Staff Report (May 19, 2006), p. II-12.

[19] About one-half of the purchasers responding to Commission questionnaires issued in the original investigation indicated that the quality of the Chinese product was comparable to that of the domestic product; the remaining firms reported that the quality of the subject imports was inferior. Information from purchasers indicated that the quality differences were not usually in the basic chemistry of the magnesium but rather in other areas such as surface conditions, packaging, and sizing. *** reported that quality differences between domestic and imported magnesium were not a significant factor in their sales of magnesium. *** disagreed, indicating that some of its customers were unable to obtain certificates of analysis as to product quality from subject country producers. *Pure Magnesium from China, Inv. No. 731-TA-696 (Review),* Publication 3346, p. I-8.

[20] Users indicated that there is some melt loss on the smaller-sized imported material.

[21] *Magnesium from China, Russia, and Ukraine, Inv. Nos. 731-TA-696-968 (Final),* Publication 2885, p. 20.

[22] *Magnesium from China, Russia, and Ukraine, Inv. Nos. 731-TA-696-968 (Review),* Publication 3346, p. I-8.

less than a year to five years, with the "typical" contract being one to two years induration.[23] The agreements contained volume requirements but did not generally fix price for the duration of the contract. Prices were usually negotiated at the onset of the agreement and took into account the overall competitive pricing levels of magnesium in the U.S. market. Most agreements allowed for price changes during the length of the contract as market prices changed. All three U.S. producers reported that the contracts contained meet-or-release clauses. Also, some U.S. suppliers maintained list prices for pure (and alloy) magnesium; however these prices were reported to rarely, if ever, be adhered to. Rather, list prices were generally used as starting points for spot sales and contract price negotiations.[24] [25]

Manufacturing process

Primary Magnesium

Worldwide, most magnesium is derived from magnesium-bearing ores (dolomite, magnesite, brucite, and olivine) or seawater and well and lake brines. Large deposits of dolomite are widely distributed throughout the world, and dolomite is the principal magnesium-bearing ore found in the United States. [26] Magnesium-bearing ores are mined by the open-pit method. In the United States, the production of primary magnesium is currently solely from the extraction of magnesium from brines of the surface waters of the Great Salt Lake in Utah by US Magnesium, while former U.S. producer Northwest Alloys used dolomite in its process.[27]

Magnesium metal is normally produced by either an electrolytic process or a silicothermic process, with the electrolytic process dominating in terms of the volume of United States and world production. The silicothermic process (also known as the Pidgeon process) is used by a majority of the largest producers in China. The silicothermic process is said to be less cost-effective than the electrolytic process for production of magnesium.[28]

US Magnesium uses the electrolytic method to produce magnesium. In the electrolytic process, seawater or brine is evaporated and treated to produce a concentrated solution of magnesium chloride, which is further concentrated and dried to yield magnesium chloride

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[23] *Magnesium from China, Russia, and Ukraine, Inv. Nos. 731-TA-696-968 (Review),* Confidential Staff Report, p. I-10.

[24] Published price series for magnesium are found in *American Metals Market;* these prices are based upon list prices and, thus, do not necessarily reflect current market transaction prices.

[25] The discussion of pricing practices in the original staff report did not differentiate between pure magnesium and the alloy product. Further, it was based, at least in part, on reports from DOW, a then-U.S. producer who is no longer manufacturing.

[26] *Magnesium from China, Inv. No. 731-TA-696 (Third Review)*, Confidential Staff Report, October 2011, pp. I-17-19.

[27] *Pure and Alloy Magnesium from Canada and Pure Magnesium from China, Inv. Nos. 701-TA-309-A-B and 731-TA-696 (Second Review)*, Publication 3859 (June 2, 2006), p. I-21.

[28] Ibid., pp. I-21-22.

powder. The powder is then melted, further purified, and fed into electrolytic cells operating at 700° Celsius. Direct electrical current is sent through the cells to break down the magnesium chloride into chlorine gas and molten magnesium metal. The metal rises to the surface where it is guided into storage wells and cast into ingots.[29]

In the silicothermic process, magnesium-bearing ores, typically dolomite, are the primary feed material. Calcined dolomite, ferrosilicon, and alumina are ground, heated, and briquetted. The briquettes are subsequently reduced in a heated vacuum, producing magnesium vapor. The vapor is crystallized in a condensing chamber, melted, and ladled into casting forms.[30]

Once the electrolytic or silicothermic reduction of magnesium is completed, the manufacturing processes used for the production of both pure and alloy magnesium ingot are very similar. In US Magnesium's facility that produces both pure magnesium and alloy magnesium, the same production workers tend to work on both lines.[31]

Primary magnesium is typically cast into ingots or slabs. Aluminum producers typically purchase larger pure cast shapes such as rounds, billets, peg-lock ingots, or T-shapes. Producers of magnesium powder for steel desulfurization applications typically purchase smaller ingots or magnesium "chips" that are then ground into powder and used internally to produce magnesium-based reagent mixtures or, to a lesser extent, pyrotechnic products. Diecasters can purchase ingots and granular primary alloy magnesium for use in magnesium alloy castings, and/or recycle scrap magnesium generated in their diecasting operations into secondary alloy magnesium.[32]

"Off-Specification Pure" Magnesium

"Off-specification pure" magnesium is pure primary magnesium containing magnesium scrap, secondary magnesium, oxidized magnesium, or impurities (whether or not intentionally added) that cause the primary magnesium content to fall below 99.8 percent by weight. "Off-specification pure" magnesium products contain 50 percent or greater, but less than 99.8 percent primary magnesium, by weight, do not conform to ASTM specifications for alloy magnesium, and generally do not contain individually or in combination, 1.5 percent or more, by weight, of the following alloying elements: aluminum, manganese, zinc, silicon, thorium, zirconium, and rare earths. No U.S. producers reported producing "off-specification pure" magnesium during the second review of the antidumping order on pure magnesium from China.[33]

[29] Ibid., p. I-22.
[30] Ibid., p. I-23.
[31] Ibid., pp. I-23-24.
[32] Ibid., pp. I-24.
[33] Ibid., pp. I-24-25.

Secondary Magnesium

Secondary magnesium is produced from recycling magnesium-based "scrap." Magnesium scrap arrives at the recycler either in a loose form or contained in boxes. After the magnesium is separated from other alloys by the recycler, the sorted magnesium is heated in a steel crucible to nearly 675° Celsius. Alloying elements such as aluminum, manganese, or zinc can then be added to the liquid magnesium and the alloyed magnesium can then be transferred to ingot molds by hand ladling, pumping, or tilt pouring. Magnesium scrap can also be generated by the direct grinding of scrap into powder for iron and steel desulfurization applications. Finally, recycled aluminum alloys that contain magnesium such as used aluminum beverage cans typically remain with the recycled can since virtually all aluminum beverage can scrap is melted and converted into body stock and then converted into new aluminum beverage cans.[34]

U.S. tariff treatment

Pure and ultra-pure magnesium is currently imported under HTS statistical reporting number 8104.11.00 ("unwrought magnesium: containing at least 99.8 percent by weight of magnesium"). Subject pure primary magnesium products may also be imported under the following subheadings: 8104.20.00 (magnesium waste and scrap); 8104.30.00 (magnesium raspings, turnings, and powders); 8104.90.00 (other magnesium shapes); 3824.90.11 and 3824.90.19 (chemical products and preparations . . . not elsewhere specified or included); and 9817.00.90 (remelt scrap ingot). Pure magnesium imported from China under HTS 8104.11 are subject to a duty rate of 8 percent.

The definition of the domestic like product and domestic industry

The domestic like product is defined as the domestically produced product or products which are like, or in the absence of like, most similar in characteristics and uses with, the subject merchandise. The Commission has ruled on a number of other investigations and reviews involving a variety of magnesium products.[35] The domestic like products, as defined by the commission, and the corresponding scopes of the investigations and reviews, as defined by Commerce, have varied. In its first investigations involving imported pure and alloy magnesium, the Commission found pure and alloy magnesium to constitute a single domestic like product.[36] The Commission was reversed on this point by a U.S.-Canada binational panel, which found that pure and alloy magnesium were separate domestic like products. In a subsequent investigation and a sunset review involving magnesium of both types, the

[34] Ibid., p. I-24.

[35] See tabulation on page I-16 of this report.

[36] *Magnesium from Canada*, Inv. Nos. 701-TA-309 and 731-TA-528 (Final), USITC Pub. 1992 (August 1992), pp. 8-11.

Commission found pure and alloy magnesium to be separate domestic like products.[37] Commerce's scope of the imported subject merchandise in the original 1995 investigation underlying this current fourth five-year review consisted of pure and alloy magnesium. In its preliminary determinations, the Commission found that pure and alloy magnesium constituted a single domestic like product. However, in its final determinations, the Commission found two separate domestic like products (pure magnesium and alloy magnesium) corresponding to each class or kind defined by Commerce, and accordingly defined two domestic industries composed respectively of the domestic producers of pure magnesium and the domestic producers of alloy magnesium.[38] The Commission also found the domestic product like the imported pure magnesium to include off-spec pure magnesium.[39] The Commission made affirmative final determinations with respect to imports of pure magnesium from China, Russia, and Ukraine, and negative final determinations with respect to imports of alloy magnesium from China and Russia.[40] In the expedited initial five-year review, which concerned pure magnesium only, the Commission defined the domestic like product as pure magnesium, including off-spec pure magnesium, coextensive with Commerce's scope definition, and found the domestic industry to consist of all domestic producers of pure magnesium.[41]

In the second review concerning pure magnesium from China, where the scope of the subject merchandise was pure magnesium in cast or ingot form, Commissioners Pearson, Okun, and Lane found one domestic like product encompassing pure and alloy magnesium, including primary and secondary magnesium, and magnesium in ingot and granular form. They also determined that there was one domestic industry composed of the domestic producers of pure and alloy magnesium, including primary and secondary magnesium, and magnesium in ingot and granular form and included grinders but not magnesium diecasters in the domestic industry.[42] Commissioners Aranoff, Hillman, and Koplan determined not to expand the domestic like product beyond the scope definition to include alloy magnesium, secondary magnesium, and granular magnesium. Instead, they found one domestic like product encompassing pure magnesium coextensive with the scope of the review and one domestic

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[37] *Magnesium from China, Russia, and Ukraine, Inv. Nos. 731-TA-696-698 (Final*), USITC Pub. 2885 (May 1995), pp. 7-9; *Magnesium from Canada*, Inv. Nos. 701-TA-309-A-B and 731-TA-528 (Review), USITC Pub. 3324 (July 2000), pp. 5-6.

[38] Commissioner Crawford dissented from the majority in the final investigations with respect to the definition of the domestic like product, instead finding a single domestic like product consisting of primary magnesium. *Magnesium from China, Russia, and Ukraine*, Inv. Nos. 731-TA-696-698 (Final), USITC Pub. 2885 (May 1995), pp. 39-41.

[39] [39] *Magnesium from China, Russia, and Ukraine, Inv. Nos. 731-TA-696-698 (Final*), USITC Pub. 2885 (May 1995), p. 6.

[40] *Magnesium from China, Russia, and Ukraine,* Inv. Nos. 731-TA-696-698 (Final), USITC Pub. 2885 (May 1995), pp. 5-10.

[41] *Pure Magnesium from China,* Inv. No. 731-TA-696 (Review), USITC Pub. 3346 (August 2000), p. 5.

[42] *Pure and Alloy Magnesium from Canada and Pure Magnesium from China, Inv. Nos. 701-TA-309-A-B and 731-TA-696 (Second Review)*, Publication 3859 (July, 2006), p.6, pp. 13-15.

industry composed of the domestic producer of pure magnesium, US Magnesium.[43] In the most recent five-year review, the Commission defined the domestic like product as consisting of pure and alloy magnesium, including primary and secondary magnesium and cast and granular magnesium.[44]

In its notice of institution for this review, the Commission solicited comments from interested parties regarding the appropriate domestic like product and domestic industry. In its response to the Commission's notice of institution, US Magnesium indicated that the Commission should continue to define the domestic like product as consisting of pure and alloy magnesium. However, US Magnesium disagrees with the inclusion of magnesium die-casters that recycle their own scrap in domestic producers of magnesium.[45]

THE ORIGINAL INVESTIGATION AND SUBSEQUENT REVIEWS

The original investigation

The original investigation resulted from a petition filed in March, 1994 with Commerce and the Commission by Magcorp, Salt Lake City, UT, the United Steel Workers of America, Local 8319, Salt Lake City UT, and the USWA International. In the original investigation, the Commission determined that an industry in the U.S. was materially injured due to pure magnesium imports being sold in the U.S. at less than fair value.[46]

Beginning in 1991, the Commission has conducted a series of Title VII investigations and five year reviews of existing orders on magnesium from six countries: Canada, China, Israel, Norway, Russia, and Ukraine. The following tabulation presents actions taken by the Commission and Commerce with respect to these proceedings. As shown in the following tabulation, there are currently three separate orders covering magnesium products from China, all of which are antidumping duty orders concerning imports of the following magnesium products: pure ingot, pure granular, and alloy.

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[43] *Pure and Alloy Magnesium From Canada and Pure Magnesium From China*, Inv. Nos. 701-TA-309-A-B and 731-TA-696 (Second Review), USITC Pub. 3859 (July 2006), pp. 13 and 42-43.

[44] *Pure Magnesium From China,* Inv. No. 731-TA-696 (Third Review), USITC Pub. 4274 (October, 2011), p. 8.

[45] Domestic Industry Response to the Notice of Institution, p. 25.

[46] *Magnesium from China, Russia, and Ukraine, Inv. Nos. 731-TA-696-698, (Final),* Publication 2885, May, 1995, p. 3.

Action	Date
Canada:[1]	
Commission's affirmative determinations in 701-TA-309 and 731-TA-528 (Final)	8/26/1992
Countervailing duty ("CVD") orders issued (C-122-814) (*pure and alloy ingot*)	8/31/1992
Antidumping duty ("AD") order issued (A-122-814) (*pure ingot*)	8/31/1992
Institution of first five-year reviews of AD and CVD orders (full)	8/2/1999
Commission's affirmative determinations in first five-year reviews	8/2/2000
Continuation of AD and CVD orders	8/16/2000
Revocation of AD order	12/7/2004
Institution of second five-year reviews of CVD orders (full)	7/1/2005
Commission's negative CVD determinations in second five-year reviews	6/26/2006
Revocation of CVD orders	7/6/2006
China (Inv. No. 731-TA-696):[2]	
Commission's affirmative determination in 731-TA-696 (Final)	5/17/1995
AD order issued (A-570-832) (*pure ingot*)	5/12/1995
Institution of first five-year review (expedited)	4/3/2000
Commission's affirmative determination in first five-year review	9/12/2000
Continuation of AD order	10/27/2000
Institution of second five-year review (full)	7/1/2005
Commission's affirmative determination in second five-year review	6/26/2006
Continuation of AD order	7/10/2006
Institution of third five-year review	6/1/2011
Commission's affirmative determination in third five-year review	10/19/2011
Continuation of AD order	11/22/2011
China (Inv. No. 731-TA-895):	
Commission's affirmative determination in 731-TA-895 (Final)	11/20/2001
AD order issued (A-570-864) (*pure granular*)	11/19/2001
Institution of first five-year review (expedited)	10/2/2006
Commission's affirmative determination in first five-year review	3/7/2007
Continuation of AD order	3/26/2007
Institution of second five-year review (expedited)	2/1/2012
Commission's affirmative determination in second five-year review	10/1/2012
Continuation of AD order	10/172012

Continued on next page

China (Inv. No. 731-TA-1071):	
Commission's affirmative determination in 731-TA-1071 (Final)	4/15/2005
AD order issued (A-570-896) (*alloy*)	4/15/2005
Institution of first five-year review (full)	3/1/2010
Commission's affirmative determination in first five-year review	3/3/2011
Continuation of AD order	3/11/2011
Institution of second five-year review	2/1/2016
Commission's affirmative determination in second five-year review	7/7/2016
Continuation of AD order	7/21/2016
Israel:	
Commission's institution of 701-TA-403 and 731-TA-896 (Preliminary)	10/25/2000
Commission's negative determinations in 701-TA-403 and 731-TA-896 (Final)	11/20/2001
Norway:	
Commission's institution of 701-TA-310 and 731-TA-529 (Preliminary)	9/12/1991
Commerce's dismissal of CVD petition and termination of CVD proceeding	10/1/1991
Commission's termination of CVD investigation (701-TA-310 (Preliminary))	10/23/1991
Commerce's final negative AD determination (A-403-803) (*pure*) and rescission of investigation and partial dismissal of petition (*alloy*)	7/13/1992
Commission terminates 731-TA-529 (Final)	8/4/1992
Russia (731-TA-697):[3]	
Commission's affirmative determination in 731-TA-697 (Final)	5/17/1995
AD issued (A-821-805) (*pure ingot*)	5/12/1995
Institution of five-year review (expedited)	4/3/2000
Revocation of AD order	7/7/2000
Termination of five-year review	7/17/2000
Russia (731-TA-897):	
Institution of 731-TA-897 (Preliminary)	10/25/2000
Commerce's negative final AD determination (A-821-813) (*pure ingot and granules*)	9/27/2001
Commission terminates 731-TA-897 (Final)	10/4/2001
Russia (731-TA-1072):[4]	
Commission's affirmative determination in 731-TA-1072 (Final)	4/15/2005
AD order issued (A-821-819) (*pure and alloy*)	4/15/2005
Institution of first five-year review (full)	3/1/2010
Revocation of the AD order	3/10/2011

Continued on next page

Ukraine:[5]	
Commission's affirmative determination in 731-TA-698 (Final)	5/17/1995
AD order issued (A-823-806) (*pure ingot*)	5/12/1995
Commission's negative determination on remand	June 1998
Revocation of the AD order	8/24/1999

[1] On October 7, 2004, an Extraordinary Challenge Committee issued a determination affirming the final remand opinion of the Binational panel concerning alloy magnesium from Canada. Subsequently, Commerce revoked the AD order on pure magnesium ingot from Canada retroactively effective August 1, 2000, after the NAFTA Binational Panel's final decision. Commerce revoked the CVD orders on pure and alloy magnesium ingot from Canada retroactively effective August 16, 2005 after the Commission's negative second five-year review determinations.
[2] The Commission made a negative determination with respect to alloy magnesium.
[3] The Commission made a negative determination with respect to alloy magnesium. On September 5, 2000, Commerce issued a correction to the revocation order making the effective date of revocation May 12, 2000, the fifth anniversary of the date of publication of the original order (65 FR 53700, September 5, 2000).
[4] The Commission made a negative determination in the first five-year review. That determination was appealed by U.S. Magnesium.
[5] The Commission made a negative determination with respect to alloy magnesium.
Source: *Federal Register* notices.

The first five-year review

On September 12, 2000, the Commission completed its first expedited five-year review of the subject order and determined that revocation of the antidumping duty order on pure magnesium from China would be likely to lead to continuation or recurrence of material injury to an industry in the United States within a reasonably foreseeable time.[47] Following affirmative determinations in the first five-year reviews by Commerce and the Commission,[48] Commerce issued a notice of continuation of the antidumping duty orders on pure magnesium from China, effective October 27, 2000.[49] [50]

The second five-year review

On June 26, 2006, the Commission completed its second full five-year review of the subject order and determined that revocation of the antidumping duty order on pure magnesium from China would be likely to lead to continuation or recurrence of material injury

[47] *Pure Magnesium from China,* Inv. No. 731-TA-696 (Review), USITC Pub. 3346 (August 2000), p. 16.
[48] *Pure Magnesium from the People's Republic of China: Final Results of Antidumping Sunset Review,* 65 FR 47713, August 3, 2000.
[49] *Continuation of Antidumping Duty Order: Pure Magnesium From the People's Republic of China,* 65 FR 64422, October 31, 2000.
[50] After initiating the first five-year review of pure magnesium from Russia, Commerce reached a negative determination and the Commission terminated its five-year review. The original affirmative decision regarding pure magnesium from Ukraine was overturned upon the Commission's negative determination during the remand in 1998 and the antidumping duty orders were revoked in 1999. *Pure Magnesium from Russia: Termination of Five Year Review,* 65 FR 44076, July 17, 2000 and *Pure Magnesium from Ukraine: Notice of Revocation of the Antidumping Duty Order,* 64 FR 46182, August 24, 1999.

to an industry in the United States within a reasonably foreseeable time.[51] This full review was conducted in a combined full review of pure magnesium from China and pure and alloy magnesium from Canada.[52] Following affirmative determinations in the second five-year reviews by Commerce and the Commission,[53] Commerce issued a notice of continuation of the antidumping duty orders on pure magnesium from China.[54]

The third five-year review

On October 19, 2011, the Commission completed its third expedited five-year review of the subject order and determined that revocation of the antidumping duty order on pure magnesium from China would be likely to lead to continuation or recurrence of material injury to an industry in the United States within a reasonably foreseeable time.[55] Following affirmative determinations in the third five-year reviews by Commerce and the Commission,[56] Commerce issued a notice of continuation of the antidumping duty orders on pure magnesium from China, effective November 22, 2011.[57]

PRIOR RELATED INVESTIGATIONS

Pure magnesium has been the subject of several prior related antidumping or countervailing duty investigations in the United States. See above tabulation (page I-18) for more details.

ACTIONS AT COMMERCE

Commerce has not revoked the order on pure magnesium from China with respect to any individual firms. Commerce has not issued any duty absorption or anti-circumvention findings with respect to pure magnesium from China. Additionally, there have not been any critical circumstances or changed circumstances reviews conducted since the third five-year review continuation orders.

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[51] *Pure and Alloy Magnesium from Canada and Pure Magnesium from China: Determinations*, 71 FR 36359, June 26, 2006.

[52] *Pure and Alloy Magnesium From Canada and Pure Magnesium From China*, Inv. Nos. 701-TA-309-A-B and 731-TA-696 (Second Review), USITC Pub. 3859 (July 2006), pp. 33 and 65.

[53] *Pure Magnesium From China: Determination*, 71 FR 580, January 5, 2006.

[54] *Continuation of Antidumping Duty Order: Pure Magnesium From the People's Republic of China,* 70 FR 35630, July 10, 2006.

[55] *Pure Magnesium From China,* Inv. No. 731-TA-696 (Third Review), USITC Pub. 4274 (October, 2011), p. 18.

[56] *Pure Magnesium From China: Determination,* 76 FR 69284 and *Pure Magnesium From the People's Republic of China: Final Results of Expedited Third Sunset Review of the Antidumping Duty Order,* 76 FR 62040.

[57] *Continuation of Antidumping Duty Order: Pure Magnesium From the People's Republic of China,* 76 FR 72172.

Scope rulings

In response to a July 22, 1999 request by Rossborough Manufacturing Co., LP, Commerce ruled on July 7, 2000 that AZ10A magnesium is off-specification pure magnesium within the scope.[58] On July 19, 2005, US Magnesium requested a scope ruling as to whether pure and alloy magnesium processed in Canada, France, or any third country and exported to the United States using pure magnesium ingots originally produced in the PRC is within the scope of the antidumping duty order.[59] In response to US magnesium's July 19, 2005 request, Commerce ruled on February 7, 2007 that pure magnesium produced in France using pure magnesium from the PRC is within the scope of the antidumping duty order.[60] In response to a another request by US Magnesium, also Commerce ruled on February 7, 2007 that alloy magnesium extrusion billets produced in Canada by Timminco, Ltd., from pure magnesium of Chinese origin are not within the scope of the antidumping duty order.[61] On October 28, 2011, Commerce found that granular magnesium ground in a third-country, such as Mexico, from pure magnesium ingots produced in the People's Republic of China was within the scope of the Antidumping duty order.[62]

Current five-year review

Commerce is conducting an expedited review on the antidumping duty order with respect to pure magnesium from China and intends to issue the final results of these reviews based on the facts available not later than February 1, 2017.[63]

THE INDUSTRY IN THE UNITED STATES

U.S. producers

At the time of the original investigation, there were three producers of pure magnesium: Magcorp, Northwest Alloys (a wholly owned subsidiary of Alcoa), and Dow. During the period of the first review, Magcorp and Northwest Alloys were the only known and operating U.S. producers of pure magnesium. Dow shut down its domestic pure magnesium operations in November 1998 after its 65,000 metric ton facility in Texas suffered extensive damage from lightning strikes and flooding.[64] During the period of the second review, there were initially two producers of pure magnesium, U.S. Magnesium (formerly Magcorp) and

[58] *Notice of Scope Rulings,* 65 FR 41959, July 7, 2000.
[59] *Notice of Scope Rulings,* 70 FR 70785, November 23, 2005.
[60] *Notice of Scope Rulings,* 72 FR 5678, February 7, 2007.
[61] Ibid.
[62] *Notice of Scope Rulings*, 77 FR 38,767 June 29, 2012.
[63] Edward Yang, letter to Catherine DeFilippo, November 15, 2016.
[64] *Pure Magnesium from China*, Inv. No. 731-TA-696, USITC Publication 3346, August 2000, p. I-10.

Northwest Alloys. However, Northwest Alloys, ceased production of magnesium in October 2001.[65]

US Magnesium, the successor to the petitioner in the original investigations, is a wholly owned subsidiary of Renco Metals, Inc., Salt Lake City, UT. US Magnesium has production facilities in Rowley, UT, and produces a variety of magnesium products, including both pure and alloy magnesium, using the electrolytic process with lake brine as the raw material.[66] [67]

Definition of the domestic industry and related party issues

In its original determination and the first five-year review determination, the Commission defined the domestic industry as consisting of all domestic producers of pure magnesium. In the second five-year review, those Commissioners who defined the domestic like product as including pure and alloy magnesium defined the domestic industry as consisting of the domestic producers of pure and alloy magnesium, including primary and secondary magnesium, and magnesium in ingot and granular form, including grinders. Those Commissioners who found pure and alloy magnesium to be separate domestic like products defined the domestic industry producing pure magnesium as consisting of the sole domestic producer of pure magnesium at that time, U.S. Magnesium. In the most recent five-year review of this order, the Commission defined the domestic industry as consisting of all domestic

[65] *Pure and Alloy Magnesium from Canada and Pure Magnesium from China*, Inv. Nos. 701-TA-309-A-B and 731-TA-696 (Second Review) USITC Pub. 3859, July 2006, p. III-1.

[66] Ibid.

[67] Environmental issues are important in the magnesium industry. According to the USGS, after an investigation begun in late 2008, the Environmental Protection Agency ("EPA") added US magnesium's Toole County, UT, operations to the national priorities list of Superfund sites. (Designation as a Superfund site allows the EPA to clean up such sites and to compel responsible parties to perform cleanups or reimburse the Government for EPA-led cleanups. The USGS indicated that contaminants at he site included acidic wastewater, dioxins, furans, heavy metals, hexachlorobenzene, polychlorinated biphenyls, and polycyclic aromatic hydrocarbons. The USGS reported that as of 2009 US Magnesium planned to challenge the designation.

According to TMI in the third review, ongoing environmental problems at US Magnesium's production facility in Utah raises concern about its ability to supply magnesium to the U.S. market at prices which allow U.S. users to remain competitive in the world.

In 2001, the EPA brought a suit that alleged US Magnesium violated the Resource Conservation and Recovery Act. The EPA alleged that dioxins and other cancer-causing agents that are byproducts of the magnesium extraction process are a threat to workers, wildlife, and public health. US Magnesium claimed that Congress excluded the company from the law and that he EPA was retroactively applying new guidelines. In a 2007 ruling, a U.S. District Court judge ruled in favor of US Magnesium, and the EPA appealed the decision. (*Pure Magnesium from China,* Inv. No 731-TA-696 (Third Review), USITC Pub. 4274, October, 2011 p. I-19).

producers of pure and alloy magnesium, including primary and secondary magnesium, and magnesium in ingot and granular form.[68]

U.S. producers' trade and financial data

The Commission asked domestic interested parties to provide trade and financial data in their response to the notice of institution of the current five-year review.[69] Table I-2 presents a compilation of the data submitted from all responding U.S. producers as well as trade and financial data submitted by U.S. producers in the prior five year review.

Table I-1
Pure Magnesium: Trade and financial data submitted by U.S. producers, 1994, 1999, 2005, 2010, and 2015

* * * * * * *

U.S. IMPORTS AND APPARENT CONSUMPTION

U.S. importers

In the original 1992 investigation concerning China, the Commission indicated that there were 20 U.S. importers of the subject merchandise from China. In its response to the Commission's notice of institution for the first review, Magcorp indicated that nine U.S. importers were listed in PIERS as having imported the subject merchandise during the period from 1998 to February 2000.[70] During the second review, the Commission sent importers' questionnaires to 60 firms believed to be importing pure or alloy magnesium from Canada or China from 2000-05; however, no responding U.S. importers were believed to account for imports of pure magnesium from China as there were virtually no U.S. imports of pure magnesium from China during the period 2000-05.[71] During the third review, U.S. Magnesium listed two U.S. importers, China Direct Industries, Inc. and Tianjin Magnesium International Co., Ltd. ("TMI") and twelve Chinese producers/exporters (including TMI). [72]

In their response to the Commission's notice of institution in this review, domestic producers provided a list of three known and currently operating U.S. importers of pure

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[68] *Magnesium From China, Russia, and Ukraine, Inv. Nos. 731-TA-696-698 (Final)*, USITC Publication 2885, May 1995, pp. 7-9; *Magnesium From China, Inv. No. 731-TA-696 (Review)*, USITC Publication 3346, August 2000, pp. 5-6. *Magnesium from Canada, Inv. Nos. 701-TA-309-A-B and 731-TA-528 (Second Review)*, USITC Pub. 3859 (July 2006), pp. 13-15.

[69] Individual company trade and financial data are presented in app. B.

[70] *Pure Magnesium from China*, Inv. No. 731-TA-696 (Review), USITC Pub. 3346, August 2000, p. I-12.

[71] *Pure and Alloy Magnesium from Canada and Pure Magnesium from China*, Inv. Nos. 701-TA-309-A-B and 731-TA-696, USITC Pub. 3859, July 2006, p. IV-1.

[72] *Pure Magnesium from China,* Inv. No 731-TA-696 (Third Review), USITC Pub. 4274, October, 2011 p. I-20.

magnesium from China, China Direct Industries, Inc., TMI and Tianjin Magnesium Metal Co., Ltd. ("TMM").[73] [74] U.S. Magnesium listed ten Chinese producers/exporters (including TMI and TMM) that have the interest and ability to export substantial quantities of pure magnesium from China.[75]

U.S. imports

In its original investigation, the Commission found that the volume of subject imports and the increase in that volume were significant, both in absolute terms and relative to consumption and production in the United States.[76] During the current review period, volume decreased by 3.79% from 14,155 metric tons in 2011 to 13,619 in 2015, though volume spiked at 18,989 in 2014.

Table I-2 presents the quantity, value, and unit value for imports from China as well as the other sources of U.S. imports. Though lower in quantity than during 2011-15, pure magnesium from China retains a presence in the U.S. market, with unit values below the average for total imports in 2014 and 2015.

Table 1-2
Pure Magnesium: U.S. imports, 2011-15

* * * * * * *

Apparent U.S. consumption and market shares

Table I-3 presents data on U.S. producers' U.S. shipments, U.S. imports, and apparent U.S. consumption, while table I-4 presents data on U.S. market shares of U.S. apparent consumption. Between 1992 and 1994, the domestic industry's share of apparent U.S. consumption of pure magnesium fell from *** percent in 1992 to *** percent in 1994. During the first review, the domestic industry's share was *** percent in 1998, which declined to *** percent in 1999. The domestic industry's share of apparent consumption of pure magnesium for the second five-year review decreased irregularly from *** percent in 2000 to *** percent in 2005. During the third review, the domestic industry's share of apparent consumption of pure magnesium was *** percent in 2010.

[73] *Domestic Parties' Response to the Notice of Institution*, November 2, 2016 exh. 13.

[74] In a 2011-2012 administrative review, Commerce found TMI and Tianjin Magnesium Metal Co., Ltd. to be a single company for the purposes of its proceedings.

[75] *Domestic Parties' Response to the Notice of Institution*, November 2, 2016 exh. 14.

[76] Original Determination, USITC Pub. 2885 p. 20.

Table I-3
Pure Magnesium: U.S. producers' U.S. shipments, U.S. imports, and apparent U.S. consumption,1994, 1999, 2005, 2010, and 2015

* * * * * * *

Table I-4
Pure Magnesium: Apparent U.S. consumption and U.S. market shares, 1994, 1999, 2005, 2010, and 2015

* * * * * * *

The share of apparent consumption accounted for by imports of pure magnesium from China increased from *** percent in 1992 to *** percent in 1993 before decreasing to *** percent in 1994. During 1998, the share of apparent consumption accounted for by imports of pure magnesium from China was *** percent. In 1999, China had no imports or negligible imports of subject merchandise. During the second review, imports of pure magnesium from China accounted for *** percent of apparent consumption in 2000, and *** percent of apparent consumption during 2001-03. Imports of pure magnesium from China accounted for *** percent of apparent consumption in 2004 and 2005. The share of apparent consumption accounted for by imports of pure magnesium from all other sources rose from *** percent in 1992 to *** percent in 1993, then slipped to *** percent in 1994. The share of apparent consumption accounted for by imports of pure magnesium from all other sources increased irregularly from *** percent in 2000 to *** percent in 2005. Specifically, imports of pure magnesium from all other sources were *** percent in 2000; *** percent in 2001; *** percent in 2002; *** percent in 2003; *** percent in 2004; and *** percent in 2005. During the third review, imports of pure magnesium from all other sources accounted for *** percent of apparent consumption in 2010. In the current review, the U.S. share of apparent consumption was ***, down from 2010. The share of apparent consumption accounted for by imports of pure magnesium from China increased from *** percent in 2010 to *** percent in 2015 and decreased for nonsubject imports from *** percent in 2010 to *** percent in 2015.

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. Additional information concerning geographical markets and simultaneous presence in the market is presented below.[77]

[77] In addition, available information concerning subject country producers and the global market is presented in the next section of this report.

Fungibility

In the original investigations and subsequent five-year reviews, the Commission found a moderate to high degree of substitutability between U.S.-produced pure magnesium and the pure magnesium imported from China.[78]

Geographic markets

During 2011-2015, the top Customs district for imports of pure magnesium from China was Chicago, Illinois.

Presence in the market

Imports from China were present in every month of the period during 2011-15, with an increase of imports coming in the spring (March, April, and May) and a decrease during the summer months (June, July, and August).

THE INDUSTRY IN CHINA

During its original investigation concerning China, the Commission identified four producers of primary magnesium in China: Fushon, Min He, Ning-Xia, and Yin Chuan. At the time, only Yin Chuan did not export the magnesium it produced in China. The number of magnesium plants in China was reported to have grown from one plant in 1987 to 300 plants in 1995 before a period of production adjustment and consolidation reduced the number of plants to 85 in 1999 during the first five-year review.[79] In response to the Commission's notice of institution of the second five-year review, U.S. Magnesium reported that pure magnesium was produced by 136 companies in 10 provinces in China in 2004 and that China accounts for over 80 percent of world capacity for primary magnesium.[80] In the third review, U.S. Magnesium reported 12 foreign producers/exporters in China.[81] In response to the Commission's notice of institution of this fourth five-year review, the domestic industry reported 10 foreign producers/exporters, though two were considered to be the same firm by Commerce.[82]

The Commission did not receive any responses to the notice of institution from foreign producers or exporters. Domestic producers also presented in their response to the notice of institution data published by the USGS Minerals Yearbook indicating that Chinese production of

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[78] *Pure Magnesium From China, 731-TA-686 (Third Review),* Publication 4274, October, 2011, p. 11.

[79] *Magnesium from China*, *Investigation No. 731-TA-696 (Review)* (Publication 3346) August 2000, p. I-20.

[80] *Pure and Alloy Magnesium from Canada and Pure Magnesium from China, Investigation Nos. 701-TA-309-AB and 731-TA-696 (Second Review)* (Publication 3859), July 2006, p. IV-7, and US Magnesium's *Response*, p. 26.

[81] *Pure Magnesium From China, 731-TA-686 (Third Review),* Publication 4274, October, 2011, p. I-24.

[82] Domestic party response to the Notice of Institution, App. 14.

increased from 654,000 metric tons in 2010 to 874,000 metric tons in 2014 and production capacity increased from 1,030,000 metric tons in 2009 to 1,600,000 metric tons in 2014.[83]

ANTIDUMPING OR COUNTERVAILING DUTY ORDERS IN THIRD-COUNTRY MARKETS

India reportedly applied definitive antidumping duties on imports of magnesium from China from July 24, 1998, until May 1, 2003. The duties were withdrawn upon a request by the affected domestic industry. Beginning in 1999, the European Union had an antidumping duty order on imports of pure magnesium (unwrought unalloyed magnesium) from China; the order expired in 2003.[84]

On April 29, 2003, Brazil initiated antidumping investigations on imports from China of magnesium ingot and magnesium powder and on October 11, 2004, imposed antidumping duties of $1.18 per kilogram ($0.535 per pound) on pure magnesium ingot and $0.99 per kilogram ($0.449 per pound) on magnesium granules. Furthermore, in October 2005 Brazil expanded duties to include alloy magnesium (magnesium content less than 99.8 percent) from China.[85]

On June 7, 2011, following a request from Brazilian magnesium producer Rima Industrial, Brazil's Ministry of Development, industry and Exterior Commerce opened an investigation into dumping of Russian magnesium. According to press accounts, the Brazilian government decided to tax magnesium imports in retaliation for the Russian freeze on Brazilian meat exports. These allegations were denied by a ministry spokesman.[86]

THE GLOBAL MARKET

The USGS reported world magnesium production capacity of 1.2 million metric tons and world magnesium production of 910,000 metric tons in 2015.[87] According to US Magnesium, Israel's Dead Sea Magnesium plant has been the principle source of U.S. nonsubject pure magnesium imports and two new pure magnesium producers have entered the global market in the past five years, one in South Korea in 2012 and the other in Malaysia.[88]

The primary sources of nonsubject U.S. imports of pure magnesium in 2015 by quantity were Brazil (4.3 percent), Canada (8.2 percent), Israel (71.8 percent), Kazakhstan (1.6 percent), and Russia (13.8 percent). Cumulatively, these five countries accounted for 99.7 percent of U.S. imports of pure magnesium by quantity in 2015.

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[83] Domestic party response to the Notice of Institution, Apps. 3 and 6.

[84] *Pure and alloy Magnesium from Canada and Pure Magnesium from China, Investigation Nos. 701-TA-309-AB and 731-TA-696,* Publication 3859, July, 2006, p. IV-9.

[85] Ibid.

[86] *Pure Magnesium From China, 731-TA-686 (Third Review),* Publication 4274, October, 2011, p. I-24.

[87] Bray, E. Lee, "Magnesium Metal," U.S. Geological Survey, Mineral Commodity Summaries, January 2016, p. 105.

[88] Domestic party response to the Notice of Institution, p. 23.

Brazil

No information on the pure magnesium industry in Brazil is on the record for the current review.

Canada

According to the USGS Minerals Yearbook for 2014, three companies proposed magnesium production projects in Canada. Alliance Magnesium Inc. was constructing a pilot plant in 2014 to test the recovery of magnesium from asbestos mine tailings in Asbestos, Quebec. Mag One Products Inc., formerly Acana Capital Corp. and Magnesium Products LLC, planned to build a magnesium smelter to also produce magnesium from asbestos mine tailings in Quebec. Lastly, West High Yield Resources Inc. proposed building a magnesium smelter to produce metal from a serpentine deposit in British Columbia.[89] Canada has not had any recorded production of either primary, or secondary, magnesium since 2008.[90]

Israel

Although Israel is the largest source of U.S. imports of pure magnesium and production was planned to increase in 2011,[91] some uncertainty developed about this supply beginning in August 2014 after the Israeli government recommended levying a 42 percent tax on the production of natural resources in the country.[92] Dead Sea Magnesium (DSM), operated by Israel Chemicals Ltd (ICL), prepared to close its plant in January 2017 with the implementation of the tax, but reconsidered after the Israeli socioeconomic cabinet decided a "special mechanism" would be written into the law to protect DSM.[93] However, as of February 2015 and despite increased magnesium sales to North America, ICL still retained an outline to close DSM.

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[89] Bray, E. Lee, "Magnesium," U.S. Geological Survey Minerals Yearbook--2014, February 2016, p. 45.3.

[90] US Magnesium's *Response*, p. 64.

[91] Kramer, Deborah A., "Magnesium," U.S. Geological Survey Minerals Yearbook--2011, November 2012, p. 45.3.

[92] Metal Bulletin, "ICL Prepares to Close Magnesium Plant as Israel Plans Big Tax Levy," August 28, 2014, https://www.metalbulletin.com/Article/3374878/Search-results/ICL-prepares-to-close-magnesium-plant-as-Israel-plans-big-tax-levy.html (retrieved November 21, 2016).

[93] Metal Bulletin, "Israel Chemicals Reconsiders Plans to Close Dead Sea Magnesium Plant," November 18, 2014, https://www.metalbulletin.com/Article/3401485/Search-results/Israel-Chemicals-reconsiders-plans-to-close-Dead-Sea-Magnesium-plant.html (retrieved November 21, 2016).

Additionally, due to the planned tax and "deteriorating business conditions in Israel," ICL had also cancelled $750 million of planned investments on its facilities.[94]

Kazakhstan

No information on the pure magnesium industry in Kazakhstan is on the record for the current review.

Malaysia

US Magnesium noted that small amounts of primary magnesium were produced in 2011 and 2013 in Malaysia.[95] According to the U.S. Geological Survey (USGS), CVM Minerals Ltd. (CVM) began magnesium production at its plant in Perak in late 2011. However, maintenance issues delayed increased production from the facility.[96] Although maintenance work was completed at the end of 2012, only trial runs of magnesium ingot were produced by CVM in 2013 with further full production delays attributed to weak markets and financial difficulties.[97]

South Korea

POSCO Co. Ltd., the Korean steel producer, announced in 2011 that it would begin construction of a primary magnesium plant in Gangneung City, South Korea.[98] Shipments of magnesium ingot began in October 2012, mostly for internal POSCO consumption.[99]

Russia

U.S. antidumping duties were revoked on Russian pure magnesium in 2011. Although the U.S. import volume remains small, following 2011 the quantity of U.S. imports of pure magnesium from Russia increased from 518 short tons to 2,100 short tons in 2015.

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[94] Metal Bulletin, "ICL;s Magnesium Sales to North America Climb," February 12, 2015, https://www.metalbulletin.com/Article/3426799/Search-results/ICLs-magnesium-sales-to-North-America-climb.html (retrieved November 21, 2016).

[95] US Magnesium's *Response*, pp. 23-24.

[96] Bray, E. Lee, "Magnesium," U.S. Geological Survey Minerals Yearbook--2012, November 2013, p. 45.4.

[97] Bray, E. Lee, "Magnesium," U.S. Geological Survey Minerals Yearbook--2013, February 2015, p. 45.4.

[98] Kramer, Deborah A., "Magnesium," U.S. Geological Survey Minerals Yearbook--2011, November 2012, p. 45.3.

[99] Bray, E. Lee, "Magnesium," U.S. Geological Survey Minerals Yearbook--2012, November 2013, p. 45.4.

The largest source of global exports of pure magnesium (HS 810411) in 2015 was China (78.6 percent) followed by the Netherlands (10.1 percent). All other exporters comprised less than 3 percent each of global export volumes.

Table I-5 presents the largest global export sources of pure magnesium during 2011-15.

Table I-5
Pure Magnesium: Global exports by major sources, 2009-13

Reporting Countries Export Statistics (Partner Country: World) Commodity: 810411, Magnesium, Containing 99.8% Or More Magnesium By Weight, Unwrought					
Annual Series: 2011 - 2015					
	Value ($1000)				
Reporting Country	2011	2012	2013	2014	2015
China	555,105	546,895	589,141	585,879	496,168
Netherlands	135,518	132,872	136,419	89,795	60,693
USA	16,615	22,547	18,040	22,353	19,189
Germany	21,260	22,076	19,106	14,854	17,960
Slovenia	19,048	16,046	12,576	12,407	12,194
Russia	9,476	9,309	7,958	11,530	9,789
Malaysia	2,142	1,981	2,234	10,156	5,366
Belgium	20,234	11,241	5,845	3,495	4,503
Italy	1,971	1,051	1,568	4,187	2,866
Czech Republic	0	1	84	3	1,340
All others	89,494,498	91,371,993	57,049,186	6,192,967	4,633,907
Total	870,865	855,390	850,019	760,852	634,700

Note.--Because of rounding, figures may not add to total shown.

Source: Global Trade Information Services, Inc., Global Trade Atlas, HS subheadings 8104.11.00, 8104.19.00, 8104.30.00, 8104.90.00, 3824.90.11, 3824.90.19, 9817.00.90.

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
81 FR 67967 October 3, 2016	*Pure Magnesium From the People's Republic of China: Initiation of Five-Year (''Sunset'') Review*	https://www.gpo.gov/fdsys/pkg/FR-2016-10-03/pdf/2016-23828.pdf
81 FR 68046 October 3, 2016	*Pure Magnesium From China; Institution of a Five-Year Review*	https://www.gpo.gov/fdsys/pkg/FR-2016-10-03/pdf/2016-23717.pdf

APPENDIX B

COMPANY-SPECIFIC DATA

RESPONSE CHECKLIST FOR U.S. PRODUCERS

Item	US Magnesium LLC	Local 8319	Total
	Quantity=MT; value=1,000 dollars;		
	Unit values, unit labor costs, and unit financial data are per pound		
Nature of operation	✓	✓	
Statement of intent to participate	✓	✓	
Statement of likely effects of revoking the order	✓	✓	
U.S. producer list	✓	✓	
U.S. importer/foreign producer list	✓	✓	
List of 3-5 leading purchasers	✓	✓	
List of sources for national/regional prices	✓	✓	
Production:			
Quantity	***	NA	***
Percent of total reported	***	NA	***
Capacity	***	NA	***
Commercial shipments:			
Quantity	***	NA	***
Value	***	NA	***
Internal consumption:			
Quantity	***	NA	***
Value	***	NA	***
Net sales	***	NA	***
COGS	***	NA	***
Gross profit or (loss)	***	NA	***
SG&A expenses (loss)	***	NA	***
Operating income/(loss)	***	NA	***
Changes in supply/demand	✓	✓	

Note.—The production, capacity, and shipment data presented are for calendar year 2015. The financial data are for fiscal year ended October 31, 2015

✓ = response provided; **×** = response not provided; **NA** = not applicable; ? = indicated that the information was not known.

APPENDIX C

SUMMARY DATA COMPILED IN PRIOR INVESTIGATIONS

Table C-1
Pure and alloy magnesium: Trade, employment, and financial data, 1992-94, 1998-99, 2000-05, and 2010

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Table C-2
Pure and alloy magnesium: U.S. imports, by sources, 1992-94, 1998-99, and 2000-05

* * * * * * *

Table C-3
Pure and alloy magnesium: U.S. imports, by sources, 2006-10

Source	Calendar year				
	2006	2007	2008	2009	2010
	Quantity (*metric tons*)				
Subject:					
China	35	3,500	19,400	5,110	115
Nonsubject:					
Canada	28,138	14,393	2,205	173	30
Israel	10,757	17,188	26,102	16,470	18,558
Russia	13,038	6,105	2,210	307	618
All others	5,786	8,787	7,518	3,860	9,090
Subtotal, nonsubject	57,718	46,473	38,036	20,809	28,295
Total imports	57,753	49,973	57,436	25,919	28,410
	Value[1] (*$1,000*)				
Subject:					
China	109	11,434	107,721	25,919	720
Nonsubject:					
Canada	85,307	50,125	14,526	850	133
Israel	31,316	50,915	100,815	65,250	87,950
Russia	29,616	14,198	8,475	1,340	2,024
All others	20,737	30,917	46,581	25,680	44,709
Subtotal, nonsubject	166,977	146,155	170,398	93,121	134,815
Total imports	167,086	157,589	278,119	119,040	135,535
	Unit value (*dollars per pound*)				
Subject:					
China	$1.40	$1.48	$2.52	$2.30	$2.85
Nonsubject:					
Canada	1.38	1.58	2.99	2.23	2.02
Israel	1.32	1.34	1.75	1.80	2.15
Russia	1.03	1.05	1.74	1.98	1.49
All others	1.63	1.60	2.81	3.02	2.23
Subtotal, nonsubject	1.31	1.45	2.03	2.03	2.16
Total imports	1.31	1.43	2.20	2.08	2.16

Table continued on next page.

Table C-3--*Continued*
Pure and alloy magnesium:[1] U.S. imports, by sources, 2006-10

Source	Calendar Year				
	2006	2007	2008	2009	2010
	Share of quantity (*percent*)				
Subject:					
China	0.1	7.0	33.8	19.7	0.4
Nonsubject:					
Canada	48.7	28.8	3.8	0.7	0.1
Israel	18.6	34.4	45.4	63.5	65.3
Russia	22.6	12.2	3.8	1.2	2.2
All others	10.0	17.6	13.1	14.9	32.0
Subtotal, nonsubject	99.1	93.0	66.2	80.3	99.6
Total imports	100.0	100.0	100.0	100.0	100.0
	Share of value (*percent*)				
Subject:					
China	0.1	7.3	38.7	21.8	0.5
Nonsubject:					
Canada	51.1	31.8	5.2	0.7	0.1
Israel	18.7	32.3	36.2	54.8	64.9
Russia	17.7	9.0	3.0	1.1	1.5
All others	12.4	19.6	16.7	21.6	33.0
Subtotal, nonsubject	99.1	92.7	61.3	78.4	99.5
Total imports	100.0	100.0	100.0	100.0	100.0

Note.--Principal 2010 nonsubject import sources for pure magnesium include Brazil, Canada, Israel, Kazakhstan, and Russia; principal 2010 nonsubject import sources for alloy magnesium include Israel, Taiwan, Mexico, Japan, and the United Kingdom.

[1] Landed, duty-paid.

Source: Compiled from official Commerce statistics (HTS 8104.11.0000 and 8104.19.0000).

Table C-4
Pure and alloy magnesium: U.S. apparent consumption and market shares, 1992-94, 1998-99, 2000-05 and 2010

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