

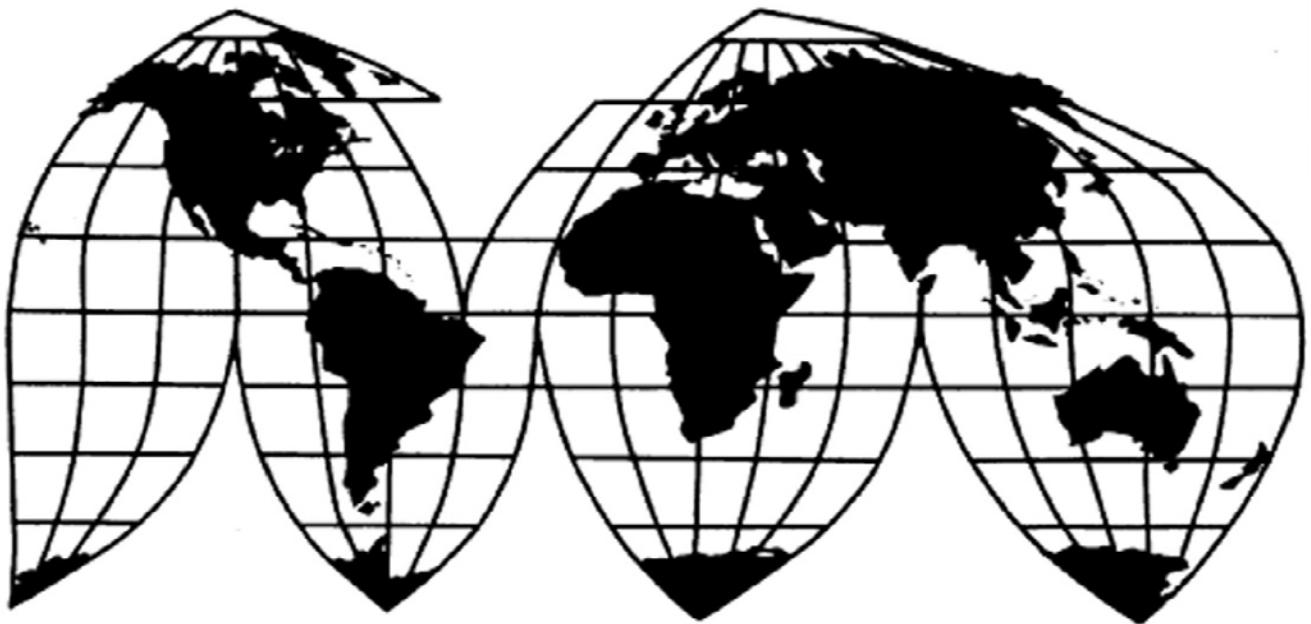
Magnesium From China and Russia

Investigation Nos. 731-TA-1071-1072 (Review)

Publication 4214

February 2011

U.S. International Trade Commission



Washington, DC 20436

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Note.—Information that would reveal confidential operations of individual concerns may not be published and therefore has been deleted from this report.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

UNITED STATES INTERNATIONAL TRADE COMMISSION

Investigation Nos. 731-TA-1071-1072 (Review)

MAGNESIUM FROM CHINA AND RUSSIA

DETERMINATIONS

On the basis of the record¹ developed in the subject five-year reviews, the United States International Trade Commission (Commission) determines, pursuant to section 751(c) of the Tariff Act of 1930 (19 U.S.C. § 1675(c)), that revocation of the antidumping duty order on 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. The Commission also determines,² pursuant to section 751(c) of the Tariff Act of 1930 (19 U.S.C. § 1675(c)), that revocation of the antidumping duty order on magnesium from Russia would not be likely to lead to continuation or recurrence of material injury to an industry in the United States within a reasonably foreseeable time.³

BACKGROUND

The Commission instituted these reviews on March 1, 2010 (75 FR 9252) and determined on June 4, 2010 that it would conduct full reviews (75 FR 35086, June 21, 2010). Notice of the scheduling of the Commission's reviews and of a public hearing to be held in connection therewith was given by posting copies of the notice in the Office of the Secretary, U.S. International Trade Commission, Washington, DC, and by publishing the notice in the *Federal Register* on August 10, 2010 (75 FR 48360). The hearing was held in Washington, DC, on December 7, 2010, and all persons who requested the opportunity were permitted to appear in person or by counsel.

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

² Commissioner Charlotte R. Lane dissenting.

³ Commissioner Dean A. Pinkert did not participate in these reviews.

VIEWS OF THE COMMISSION

Based on the record in these five-year reviews, we determine under section 751(c) of the Tariff Act of 1930, as amended (“the Act”), that revocation of the antidumping duty order covering alloy 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. We also determine that revocation of the antidumping duty order covering pure and alloy magnesium from Russia would not be likely to lead to continuation or recurrence of material injury to an industry in the United States within a reasonably foreseeable time.^{1 2}

I. BACKGROUND

The original investigations underlying these reviews were instituted in response to a petition filed on February 27, 2004, by US Magnesium Corp.,³ Salt Lake City, UT (“US Magnesium”); the United Steelworkers of America, Local 8319, Salt Lake City, UT; and the Glass, Molders, Pottery, Plastics & Allied Workers International, Local 374, Long Beach, CA, alleging that an industry in the United States was materially injured and threatened with material injury by reason of imports of alloy magnesium from China and pure and alloy magnesium from Russia, that were alleged to be sold in the United States at less than fair value.⁴

The Commission determined that an industry in the United States was materially injured by reason of imports of alloy magnesium from China and pure and alloy magnesium from Russia that Commerce found had been sold in the United States at less than fair value.⁵ On April 15, 2005, Commerce issued antidumping duty orders.⁶

On March 1, 2010, the Commission gave notice of its institution of these reviews.⁷ The Commission received one joint response from US Magnesium and The United Steel, Paper and Forestry, Rubber, Manufacturing, Energy, Allied Industrial and Service Workers International Union, Local 8319 (“Local 8319”), a labor union representing workers at US Magnesium’s plant in Rowley, Utah. The Commission determined that the individual response of US Magnesium/Local 8319 was adequate. The Commission also determined that the domestic interested party group response was adequate. The Commission received responses to the notice of institution from the following respondent interested parties: (i) PSC VSMPO-AVISMA Corp. (“AVISMA”), a producer and exporter in Russia of the subject merchandise; (ii) Solikamsk Magnesium Works OAO (“SMW”) and Solikamsk Desulphurizer Works Ltd. (“SZD”), producers in Russia of the subject merchandise; (iii) Alcoa, Inc., an importer of the subject merchandise from Russia; and (iv) Nanjin Yunhai Magnesium Co., Ltd., Taiyuan Tongxiang Magnesium Co., Ltd., Wenxi Regal Magnesium Industry Co. Ltd., and Winca (Hebi) Magnesium Co., Ltd., producers

¹ Commissioner Lane dissenting with regard to Russia.

² Commissioner Dean R. Pinkert did not participate in these reviews. Memorandum CO82-HH-021, April 6, 2010.

³ US Magnesium is the successor company to Magnesium Corporation of America (“Magcorp”).

⁴ Confidential Staff Report (“CR”) at I-2, Public Staff Report (“PR”) at I-2.

⁵ See Magnesium From China and Russia, Inv. Nos. 731-TA-1071 and 1072 (Final), USITC Pub. 3763 (April 2005) (“Original Injury Determinations”).

⁶ 70 Fed. Reg. 19928 and 19930 (April 15, 2005).

⁷ 75 Fed. Reg. 9252 (March 1, 2010).

in China of the subject merchandise.⁸ The Commission determined that the individual responses of the respondent interested parties named above were adequate. The Commission also determined that the respondent interested party group responses were adequate. Accordingly, the Commission determined to proceed to full reviews.

The Commission received briefs from US Magnesium, AVISMA, and Spartan Light Metal Products (“Spartan”) and the North American Die Casting Association (“NADCA”). These parties appeared at the hearing, as did representatives of the United Steelworkers, Local 8319 and Allegheny Technologies Inc., and two members of Congress and one Illinois state representative. In addition, the Ministry of Economic Development of the Russian Federation (“Russian Government”), SMW, and the Consuming Industries Trade Action Coalition (“CITAC”) made posthearing submissions.

II. DOMESTIC LIKE PRODUCT

A. Legal Standard

In making its determination under section 751(c) of the Act, the Commission defines “the domestic like product” and the “industry.”⁹ The 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.”¹⁰ The Commission’s practice in five-year reviews is to look to the like product definition from the original determination and any completed reviews and consider whether the record indicates any reason to revisit the prior findings.¹¹

B. Product Description

In its final expedited sunset reviews Commerce defined the subject merchandise as follows:

China:

The merchandise covered by the order is magnesium metal, which includes primary and secondary alloy magnesium metal, regardless of chemistry, raw material source, form, shape, or size. Magnesium is a metal or alloy containing by weight primarily the element magnesium. Primary magnesium is produced by decomposing raw materials into magnesium metal. Secondary magnesium is produced by recycling magnesium-based scrap into magnesium metal. The magnesium covered by the order includes blends of primary and secondary magnesium.

⁸ The Commission also received a response to its notice of institution from the Magnesium Group of the North American Die Casting Association (“NADCA”), whose members are purchasers and consumers of magnesium. As such, they are not “interested parties.” See 19 U.S.C. § 1677(9).

⁹ 19 U.S.C. § 1677(4)(A).

¹⁰ 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).

¹¹ 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).

The subject merchandise includes the following alloy magnesium metal products made from primary and/or secondary magnesium including, without limitation, magnesium cast into ingots, slabs, rounds, billets, and other shapes, magnesium ground, chipped, crushed, or machined into raspings, granules, turnings, chips, powder, briquettes, and other shapes: Products that contain 50 percent or greater, but less than 99.8 percent, magnesium, by weight, and that have been entered into the United States as conforming to an “ASTM Specification for Magnesium Alloy”¹² and thus are outside the scope of the existing antidumping orders on magnesium from the PRC (generally referred to as “alloy” magnesium).

The scope of the order excludes the following merchandise: (1) All forms of pure magnesium, including chemical combinations of magnesium and other material(s) in which the pure magnesium content is 50 percent or greater, but less than 99.8 percent, by weight, that do not conform to an “ASTM Specification for Magnesium Alloy;”¹³ (2) magnesium that is in liquid or molten form; and (3) mixtures containing 90 percent or less magnesium in granular or powder form, by weight, and one or more of certain non-magnesium granular materials to make magnesium-based reagent mixtures, including lime, calcium metal, calcium silicon, calcium carbide, calcium carbonate, carbon, slag coagulants, fluorspar, nepheline syenite, feldspar, alumina (Al₂O₃), calcium aluminate, soda ash, hydrocarbons, graphite, coke, silicon, rare earth metals/mischmetal, cryolite, silica/fly ash, magnesium oxide, periclase, ferroalloys, dolomite lime, and colemanite.¹⁴

The merchandise subject to the order is currently classifiable under items 8104.19.00 and 8104.30.00 of the Harmonized Tariff Schedule of the United States (“HTSUS”). Although the HTSUS items are provided for convenience and customs purposes, the written description of the subject merchandise is dispositive.¹⁵

Russia:

The merchandise covered by the order are primary and secondary pure and alloy magnesium metal, regardless of chemistry, raw material source, form, shape, or size. Magnesium is a metal or alloy containing by weight primarily the element magnesium.

¹² The meaning of this term is the same as that used by the American Society for Testing and Materials in its Annual Book of ASTM Standards: Volume 01.02 Aluminum and Magnesium Alloys.

¹³ This material is already covered by existing antidumping orders. See Notice of Antidumping Duty Orders: Pure Magnesium From the People’s Republic of China, the Russian Federation and Ukraine; Notice of Amended Final Determination of Sales at Less Than Fair Value: Antidumping Duty Investigation of Pure Magnesium From the Russian Federation, 60 FR 25691, May 12, 1995; and Antidumping Duty Order: Pure Magnesium in Granular Form From the People’s Republic of China, 66 FR 57936, November 19, 2001.

¹⁴ This exclusion for magnesium-based reagent mixtures is based on the exclusion for reagent mixtures in the 2000-01 investigations of magnesium from China, Israel, and Russia. See Notice of Final Determination of Sales at Less Than Fair Value: Pure Magnesium in Granular Form From the People’s Republic of China, 66 FR 49345, September 27, 2001; Notice of Final Determination of Sales at Less Than Fair Value: Pure Magnesium From Israel, 66 FR 49349, September 27, 2001; Notice of Final Determination of Sales at Not Less Than Fair Value: Pure Magnesium From the Russian Federation, 66 FR 49347, September 27, 2001. These mixtures are not magnesium alloys because they are not chemically combined in liquid form and cast into the same ingot.

¹⁵ Magnesium Metal From the People’s Republic of China and the Russian Federation: Final Results of the Expedited Sunset Reviews of the Antidumping Duty Orders, 75 FR 38983, July 7, 2010.

Primary magnesium is produced by decomposing raw materials into magnesium metal. Secondary magnesium is produced by recycling magnesium-based scrap into magnesium metal. The magnesium covered by the order includes blends of primary and secondary magnesium.

The subject merchandise includes the following pure and alloy magnesium metal products made from primary and/or secondary magnesium, including, without limitation, magnesium cast into ingots, slabs, rounds, billets, and other shapes, and magnesium ground, chipped, crushed, or machined into raspings, granules, turnings, chips, powder, briquettes, and other shapes: (1) Products that contain at least 99.95 percent 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 magnesium, by weight (generally referred to as “pure” magnesium); and (3) chemical combinations of magnesium and other material(s) in which the magnesium content is 50 percent or greater, but less than 99.8 percent, by weight, whether or not conforming to an “ASTM Specification for Magnesium Alloy.”¹⁶

The scope of the order excludes: (1) magnesium that is in liquid or molten form; and (2) mixtures containing 90 percent or less magnesium in granular or powder form by weight and one or more of certain non-magnesium granular materials to make magnesium-based reagent mixtures, including lime, calcium metal, calcium silicon, calcium carbide, calcium carbonate, carbon, slag coagulants, fluorspar, nepheline syenite, feldspar, alumina (Al₂O₃), calcium aluminate, soda ash, hydrocarbons, graphite, coke, silicon, rare earth metals/mischmetal, cryolite, silica/fly ash, magnesium oxide, periclase, ferroalloys, dolomite lime, and colemanite.¹⁷

The merchandise subject to this investigation is classifiable under items 8104.11.00, 8104.19.00, and 8104.30.00 of the Harmonized Tariff Schedule of the United States (“HTSUS”). Although the HTSUS items are provided for convenience and customs purposes, the written description of the merchandise under investigation is dispositive.¹⁸

¹⁶ The meaning of this term is the same as that used by the American Society for Testing and Materials in its Annual Book of ASTM Standards: Volume 01.02 Aluminum and Magnesium Alloys.

¹⁷ This exclusion for magnesium-based reagent mixtures is based on the exclusion for reagent mixtures in the 2000-01 investigations of magnesium from China, Israel, and Russia. See Notice of Final Determination of Sales at Less Than Fair Value: Pure Magnesium in Granular Form From the People’s Republic of China, 66 FR 49345, September 27, 2001; Notice of Final Determination of Sales at Less Than Fair Value: Pure Magnesium From Israel, 66 FR 49349, September 27, 2001; Notice of Final Determination of Sales at Not Less Than Fair Value: Pure Magnesium From the Russian Federation, 66 FR 49347, September 27, 2001. These mixtures are not magnesium alloy because they are not chemically combined in liquid form and cast into the same ingot.

¹⁸ Magnesium Metal From the People’s Republic of China and the Russian Federation: Final Results of the Expedited Sunset Reviews of the Antidumping Duty Orders, 75 FR 38983, July 7, 2010.

C. The Original Determinations

The definition of the domestic like product in magnesium investigations has a long history.¹⁹ In the original injury determinations underlying these reviews the Commission found pure and alloy magnesium to constitute a single domestic like product.²⁰ It found that the evidence in these magnesium investigations showed that circumstances had changed sufficiently from other investigations involving magnesium products so as to blur the dividing line between pure and alloy magnesium. It based this decision on the shared essential physical characteristics of pure and alloy magnesium; the overlap in the uses of pure and alloy magnesium, especially in aluminum production; the recognition by many industry participants of increased competition between pure and alloy magnesium; the same general channels of distribution for pure and alloy magnesium; and the convergence in prices for the two types of magnesium.²¹ The Commission also found that cast and granular magnesium, and primary and secondary magnesium, were part of the same like product.²²

D. The Current Reviews

The Commission generally considers a number of factors in its domestic like product analysis, including: (1) physical characteristics and uses; (2) interchangeability; (3) channels of distribution; (4) customer and producer perceptions of the products; (5) common manufacturing facilities, production processes and production employees; and, where appropriate, (6) price.

The only domestic like product question in these reviews is whether to continue to treat pure and alloy magnesium as a single like product, as we did in the original injury determinations.²³

Physical Characteristics and Uses. No information has been developed in these reviews that suggests that the physical characteristics of pure and alloy magnesium have changed since the original investigations. Pure and alloy magnesium share the basic physical characteristics of being lightweight and strong and having low density. Pure magnesium contains at least 99.8 magnesium by weight. Alloy

¹⁹ In its first investigations involving imported pure and alloy magnesium the Commission found pure and alloy magnesium to constitute a single like product. Magnesium from Canada, Inv. Nos. 701-TA-309 and 731-TA-528 (Final), USITC Pub. 1992 (the “1992 Investigations”)(Aug. 1992) at 8-11. The Commission was reversed on this point by a U.S.-Canada binational panel, which found that pure and alloy magnesium were separate like products. In subsequent investigations and a sunset review involving magnesium of both types the Commission found pure and alloy magnesium to be separate domestic like products. Magnesium from China, Russia, and Ukraine, Inv. Nos. 731-TA-696-698 (Final), USITC Pub. 2885 (May 1995) at 7-9; Magnesium from Canada, Inv. Nos. 701-TA-309-A-B- and 731-TA-528 (Review), USITC Pub. 3324 (July 2000) at 5-6. In investigations involving pure magnesium only, the Commission declined to expand the like product to encompass alloy magnesium. Pure Magnesium from China, Israel and Russia, Inv. Nos. 701-TA-403 (Preliminary) and 731-TA-895-897 (Preliminary), USITC Pub. 3376 (Dec. 2000) at 7.

²⁰ The investigations underlying these reviews were the first in which the Commerce Department defined the two products as a single class or kind or merchandise. We note that the Commission is not required to conform its domestic like product definition to the scope of the investigation (*i.e.*, to Commerce’s class or kind definition). The Commission may, where appropriate, include 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 Mfrs.*, 85 F.3d 1561, 1568 (Fed. Cir. 1996) (Commission may find a single like product corresponding to several different classes or kinds defined by Commerce).

²¹ Original Injury Determinations at 6-11.

²² Original Injury Determinations at 6.

²³ No information has arisen in these reviews to suggest that we should reexamine our decision in the original injury determinations that primary and secondary magnesium, and cast and granular magnesium, are part of the same domestic like product, and no party has argued that we should do so.

magnesium consists of magnesium and other metals, typically aluminum and zinc, with magnesium as the largest metallic element in the alloy by weight. Alloy magnesium contains less than 99.8 percent, but more than 50 percent, magnesium by weight. The two products differ from each other in that alloy magnesium has certain properties that improve its strength, ductility, workability, corrosion resistance, density, and castability, as compared with pure magnesium.²⁴

There are four main applications for magnesium in the U.S. market: aluminum alloying, structural uses, iron and steel desulfurization, and other uses (including titanium sponge production).²⁵ Pure magnesium is used principally in the production of aluminum alloys, in iron and steel desulfurization, and in titanium sponge production. Alloy magnesium is used principally in structural applications, mostly in castings and extrusions for the automotive industry.²⁶ Respondents argue that titanium sponge production became a major use for pure magnesium during the period of review.²⁷ However, it is unclear exactly how much magnesium is currently being used in titanium sponge production.²⁸

The evidence of common uses for pure and alloy magnesium is less clear in these reviews than it was in the original injury investigations (in which the Commission found a single like product). In the original injury determinations the increasing use of alloy magnesium in the same principal applications as pure magnesium (mainly aluminum production but also iron and steel desulfurization) was a significant factor in the Commission's decision to find that pure and alloy magnesium constituted a single like product. The Commission recognized that aluminum producers might have a preference for using pure magnesium, but it noted that they were using significant quantities of alloy magnesium. It noted that *** percent of domestic magnesium producers' reported total commercial shipments to the aluminum industry in 2003 were alloy magnesium, and that significant amounts of the subject imports of alloy magnesium also were used in aluminum production.²⁹ The Commission also explained that a representative from Alcan predicted that, because of new technology that permitted the domestic production of high-quality magnesium from scrap material, the proportion of his firm's magnesium needs that would be met by

²⁴ CR at I-29-30, PR at I-21-22.

²⁵ Based on a U.S. Geological Survey publication, the percentages of U.S. apparent consumption of magnesium accounted for by these uses in 2009 were: aluminum alloying – 41 percent (down from 43 percent in 2004), structural uses – 32 percent (down from 38 percent in 2004), iron and steel desulfurization – 13 percent (down from 16 percent in 2004), and other uses (including titanium sponge production) – 14 percent (up from 3 percent in 2004). CR/PR at II-1. Data from purchaser questionnaire responses in these reviews (which present an incomplete picture in that not all magnesium purchasers responded to the Commission's questionnaire) show a somewhat different picture, with less magnesium being consumed by die casters and iron/steel desulfurizers, and more being consumed in titanium sponge production. See CR/PR at Table II-2. The questionnaire responses showed the following for U.S. producers' total commercial shipments in 2009: (i) aluminum manufacturing – *** percent; (ii) diecasting – *** percent; (iii) granule/reagent production – *** percent; and (iv) other uses (including titanium sponge production) – *** percent. CR at III-30, PR at III-9.

²⁶ See CR/PR at Table II-2.

²⁷ E.g., AVISMA Posthearing Brief at 4.

²⁸ US Magnesium estimated that titanium sponge production accounted for *** percent of apparent U.S. consumption in 2009. US Magnesium Posthearing Brief, Responses to Questions at 7. However, titanium sponge production accounted for *** percent of total purchases in 2009 by those purchasers responding to the Commission's questionnaire. CR/PR at Table II-2. It seems likely that the amount of domestically-produced magnesium devoted to titanium sponge production will grow somewhat as Allegheny Technologies Inc.'s ("ATI") Rowley, Utah plant becomes fully operational. ***. US Magnesium Posthearing Brief, Exhibit 6. Once ***. US Magnesium Posthearing Brief, Responses to Questions at 7-8.

²⁹ Confidential Views in Original Injury Determinations at 12.

recycled alloy magnesium would continue to grow dramatically over the next few years and would surpass the quantity of magnesium obtained from other sources.³⁰

In these reviews, *** percent of domestic magnesium producers' reported total U.S. commercial shipments to the aluminum industry in 2009 were alloy magnesium,³¹ and *** subject imports of alloy magnesium were used in aluminum production in that year.³² Purchases of alloy magnesium by the aluminum producers that responded to the Commission's purchaser questionnaire amounted to *** percent of total reported magnesium purchases (by all types of purchasers) in 2009, whereas their purchases of pure magnesium amounted to *** percent of total reported magnesium purchases.³³ These levels of reported alloy and pure magnesium purchases were fairly constant over the period of review, except for a small uptick in alloy magnesium purchases in 2007 and 2008.³⁴ The evidence in the record of these reviews generally supports the notion that while aluminum producers may prefer to use pure magnesium, some producers will use certain kinds of alloy magnesium when it is advantageous to do so.³⁵

Manufacturing Facilities and Employees. No information has been developed in these reviews that suggests that the nature of the manufacturing facilities and employees used to make pure and alloy magnesium have changed since the original investigations. Primary production of pure and alloy magnesium generally occurs in the same facilities and by the same employees, except that additional equipment and labor are involved for the additional step of adding alloying elements.³⁶ Primary magnesium production accounts for most of the magnesium produced in the United States.³⁷ Where alloy magnesium is made in secondary production (*i.e.*, by recyclers), the manufacturing facilities and employees involved are different from those involved in the production of pure magnesium (which is made only in primary production).³⁸

Interchangeability and Customer and Producer Perceptions. Aluminum producers had mixed responses when asked how difficult it would be to use pure and alloy magnesium interchangeably; five of nine responding producers reported that pure and alloy magnesium are interchangeable, and four reported that they are not.³⁹ The one desulfurizer addressing this issue reported that it would not be difficult to interchange pure and alloy, except in specialty products.⁴⁰ On the other hand, die casters were unanimous in reporting that the use of pure magnesium would be extremely difficult and most likely impossible in their business.⁴¹ Among 12 other end users, only one reported using both pure and alloy magnesium.⁴² Thus, the record generally supports a finding of limited one-way substitutability of alloy magnesium for

³⁰ *Id.*

³¹ CR/PR at Table III-6.

³² CR/PR at Table IV-4. We note that subject imports of alloy magnesium in 2009 were minimal, only 142 tons. CR/PR at Table C-1.

³³ CR/PR at Table II-2.

³⁴ *See* CR/PR at Table II-2. The responding iron/steel desulfurizers reported *** purchases of alloy magnesium during the period of review.

³⁵ An example of this can be seen in ***.

³⁶ CR at I-42, PR at I-28-29.

³⁷ In 2009, US Magnesium's production of pure and alloy magnesium accounted for *** percent of total magnesium production in the United States. CR/PR at Table I-7.

³⁸ CR at I-48, PR at I-32.

³⁹ CR at II-7-8, PR at II-4.

⁴⁰ CR at II-8, PR at II-4.

⁴¹ CR at II-8, PR at II-4.

⁴² CR at II-8, PR at II-4.

pure magnesium in aluminum production (the market segment that accounts for the largest share of U.S. magnesium producers' commercial shipments) and iron and steel desulfurization.

While the increase in the use of alloy magnesium by aluminum manufacturers seen in the original investigations may have been at least in part fueled by the availability of lower priced imported alloy magnesium, the presence or absence of low-priced imports does not detract from the fact that the two types of magnesium are indeed somewhat interchangeable for those users. Although the current record does not show a similar degree of actual usage by aluminum manufacturers as in the original investigations (which may be due in part to the exit of low-priced Chinese alloy magnesium from the domestic market and the closure of several domestic secondary alloy producers), it is clear even on the current record that alloy and pure magnesium are actually interchangeable for some aluminum manufacturers. Although aluminum producers may have a preference for using pure magnesium in aluminum production,⁴³ the record shows that they will use alloy magnesium when it is available at relatively attractive prices.

Channels of Distribution. No information has been developed in these reviews that suggests that the channels of distribution of pure and alloy magnesium have changed since the original investigations. Most pure and alloy magnesium is sold to end users, albeit to different classes of end users. Pure magnesium is *** sold to aluminum and iron and steel producers, while alloy magnesium is *** sold to die casters.⁴⁴

Price. Domestic prices for pure and alloy magnesium were closely correlated during the period of review until ***, with pure magnesium selling at ***. After ***, the prices of the two types of magnesium diverged, with pure magnesium increasingly selling at *** alloy magnesium.⁴⁵

Conclusion. In sum, based on the Commission's findings in the original investigations, and on the current record showing shared essential physical characteristics; the overlap in the uses of pure and alloy magnesium in aluminum production (the single largest use for magnesium); the recognition by some industry participants of increased competition between pure and alloy magnesium; the general similarities in channels of distribution for pure and alloy magnesium; and the correlation in prices for the two types of magnesium for much of the period of review, we find pure and alloy magnesium to be part of the same like product.⁴⁶

III. DOMESTIC INDUSTRY

A. Legal Standard

Section 771(4)(A) of the Act defines the relevant industry as the domestic "producers as a [w]hole of a domestic like product, or those producers whose collective output of a domestic like product

⁴³ E.g., ***, dated November 17, 2010.

⁴⁴ CR at I-45-46, PR at I-30.

⁴⁵ CR at II-5-6 and Figure II-2, PR at II-3 and Figure II-2.

⁴⁶ Commissioner Aranoff concurs with the definition of a single domestic like product consisting of pure and alloy magnesium. She was not part of the Commission at the time of the original determinations underlying these current reviews. Although in other previous investigations involving magnesium she had defined pure and alloy magnesium as separate like products, 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) at 36-40, and Pure Magnesium From China, Inv. No. 731-TA-895 (Review), USITC Pub. 3908 (March 2007) at 10 n.52, she notes that the record in those cases presented different circumstances and fact patterns. She finds that in these current reviews, and while a close call, the record supports a single like product based on the six factor analysis and in particular an overlap of uses of pure and alloy magnesium in aluminum production.

constitutes a major proportion of the total domestic production of the product.”⁴⁷ 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, provided that adequate production-related activity is conducted in the United States.⁴⁸

B. The Original Determinations

In its original injury determinations, the Commission defined the domestic industry as consisting of all producers of magnesium. It addressed the following three issues concerning the domestic industry: (i) whether grinders engaged in sufficient production-related activities in the United States to be deemed to be domestic producers (it found that they did); (ii) whether die casters that recycled magnesium scrap engaged in sufficient production-related activities in the United States to be deemed to be domestic producers (it found that they did); and (iii) whether appropriate circumstances existed to exclude a related party (it found that appropriate circumstances did not exist to exclude the related party).⁴⁹

C. The Current Reviews

None of the parties to these reviews addressed the question of how the Commission should define the domestic industry, except that US Magnesium took the position in its response to the notice of institution that die casters that recycle their own scrap generated in their die casting operations should not be treated as domestic producers if the die casters simply recycle “run-around scrap” and are not producing a saleable product.⁵⁰ In light of US Magnesium’s earlier position, we considered whether Spartan, a die caster that recycles magnesium scrap, engages in sufficient production-related activity to be treated as a domestic producer.

In deciding whether a firm qualifies as a domestic producer, the Commission generally has analyzed the overall nature of a firm’s production-related activities in the United States. The Commission generally considers six factors:

- (1) source and extent of the firm’s capital investment;
- (2) technical expertise involved in U.S. production activities;
- (3) value added to the product in the United States;
- (4) employment levels;
- (5) quantity and type of parts sourced in the United States; and
- (6) any other costs and activities in the United States directly leading to production of the like product.

No single factor is determinative and the Commission may consider any other factors it deems relevant in light of the specific facts of any investigation or review.⁵¹

There is no direct information as to the first factor, the source and extent of Spartan’s capital investment in its scrap recycling operations, but Spartan’s questionnaire response states that it has ***

⁴⁷ 19 U.S.C. § 1677(4)(A).

⁴⁸ See, e.g., United States Steel Group v. United States, 873 F. Supp. 673, 682-83 (Ct. Int’l Trade 1994), aff’d, 96 F.3d 1352 (Fed. Cir. 1996).

⁴⁹ Original Injury Determinations at 11-12.

⁵⁰ Response of US Magnesium to the Commission’s Notice of Institution, March 31, 2010, p. 18.

⁵¹ See, e.g., Internal Combustion Industrial Forklift Trucks from Japan, Inv. No. 731-TA-377 (Second Review), USITC Pub. 3831 (December 2005) at 10-14; and Sebacic Acid from China, Inv. No. 731-TA-653 (Second Review), USITC Pub. 3775 (May 2005) at 12-14.

metric tons.⁵² As to the second factor, it appears, although nothing on the record directly demonstrates, that the technical expertise involved in Spartan's scrap recycling production activities is comparable to the technical expertise involved in secondary magnesium production. Spartan explained its production process in its questionnaire response as follows: it ***.⁵³ We note that Spartan's production does not consist entirely of recycling "run-around scrap." The company also purchases scrap to use in its alloy magnesium production; it reported that *** percent of its production is from "run-around scrap" and *** percent is from purchased scrap.⁵⁴ As to the third factor, the value added in scrap recycling operations at Spartan ***.⁵⁵ As to the fourth factor, the employment levels in scrap recycling at Spartan were *** than those at *** secondary alloy magnesium producers, but not markedly so.⁵⁶ The fifth factor, the quantity and type of parts sourced in the United States, is not relevant to alloy magnesium recycling, because such recycling merely involves remelting scrap. Finally, there is no information in the record as to the sixth factor, any other costs and activities in the United States directly leading to production of the domestic like product.

In light of Spartan's seemingly significant capital investment in its scrap recycling operations, the not insignificant employment in these operations, and especially the fact that the technical expertise involved in Spartan's scrap recycling production activities appears to be comparable to that involved in secondary magnesium production at other producers, we find that Spartan engages in sufficient production-related activity to qualify as a domestic producer.

No new facts have been presented in these reviews to warrant defining the domestic industry differently than we did in the original injury investigations, and no party raised any objection to that definition, except as noted above. Therefore, based on our definition of the domestic like product, we determine that there is 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.⁵⁷

⁵² Spartan U.S. Producer Questionnaire Response at 9.

⁵³ Spartan U.S. Producer Questionnaire Response at 10.

⁵⁴ CR at III-8, PR at III-5.

⁵⁵ See U.S. Producer Questionnaire Responses of US Magnesium, MagReTech, KB Alloys, Amacor, and Spartan.

⁵⁶ Spartan employed *** production related workers over the period of review. The numbers for other secondary magnesium producers for which information is available were: Amacor – ***, KB Alloys- ***, and MagReTech - ***. U.S. Producer Questionnaire Response of Spartan, Amacor, KB Alloys, and MagReTech at p. 15.

⁵⁷ The Commission also determines whether any producer of the domestic like product should be excluded from the domestic industry pursuant to section 771(4)(B) of the Act. That provision allows the Commission, if appropriate circumstances exist, to exclude from the domestic industry producers that are related to an exporter or importer of subject merchandise, or which are themselves importers. 19 U.S.C. § 1677(4)(B).

There are two related party issues in these reviews. First, the U.S. grinder ESM is a related party by virtue of common ownership. ESM is wholly owned by SKW Stahl-Metallurgie Holding AG in Germany, which also owns ESM Tianjin Co., Ltd., a producer of magnesium in China. CR at I-55, PR at I-35 We find that appropriate circumstances do not exist to exclude ESM from the industry. ***. It accounted for *** percent of the ground magnesium produced by the three responding grinders in 2009. CR at III-4, PR at II-3. There is no information in the record suggesting that ESM might be shielded from any injury on account of its affiliation with a Chinese magnesium producer. We note that the decision whether to exclude ESM has no bearing on the data considered, given that data submitted by the U.S. grinders are not included in the aggregated U.S. producer data presented in the staff report, in order to avoid double-counting. CR at I-18 n.18, PR at I-12 n.18.

The second related party issue is that two U.S. producers, ***, purchased subject merchandise from Russia that they did not directly import. CR at III-30 and Table III-7, PR at III-8 and Table III-7. The Commission has concluded that a domestic producer that does not itself import subject merchandise, or does not share a corporate affiliation with an importer, may nonetheless be deemed a related party if it controls large volumes of imports. The

(continued...)

IV. CUMULATION

A. Original Determinations

In its original injury determinations, the Commission cumulated subject imports from China and Russia. It found that there was a significant degree of fungibility between imports from China and Russia, and between these imports and the domestic like product. It noted that U.S. producers, importers, and purchasers of magnesium generally reported that magnesium of the same type was always or frequently interchangeable, regardless of the source. The Commission recognized that imports from Russia were mainly pure magnesium, and the scope of the investigation with regard to China was limited to alloy magnesium. However, it noted that imports of alloy magnesium from Russia were not insignificant, and that the degree of fungibility between subject imports from China and subject imports from Russia was greater than the amount of imports of alloy magnesium from Russia would suggest, because imports of alloy magnesium from China competed with imports of pure magnesium from Russia in sales to aluminum producers. Furthermore, alloy magnesium from China, Russia, and domestic producers was purchased by U.S. die casters.⁵⁸

The Commission also found overlapping geographic markets for subject imports and the domestically produced product. While the channels of distribution for imports from China and Russia appeared to be somewhat different – *** – in both cases sales were made to end users and not to distributors that maintain inventories. The same was true for the domestic like product. Finally, the Commission found that subject imports from both China and Russia had been simultaneously present in the U.S. market. On this basis, the Commission found that there was a reasonable overlap of competition between the subject imports of magnesium from China and Russia, and between the subject imports and the domestic like product.⁵⁹

B. Legal Standard

Section 752(a) of the Act provides as follows:

the Commission may cumulatively assess the volume and effect of imports of the subject merchandise from all countries with respect to which reviews under section 1675(b) or (c) of this title were initiated on the same day, if such imports would be likely to compete with each other and with domestic like products in the United States market. The Commission shall not cumulatively assess the volume and effects of imports of the subject merchandise in a case in which it determines that such imports are likely to have no discernible adverse impact on the domestic industry.⁶⁰

⁵⁷ (...continued)

Commission has found such control to exist where the domestic producer was responsible for a predominant proportion of an importer's purchases and the importer's purchases were substantial. See, e.g., Foundry Coke from China, Inv. No. 731-TA-891 (Final), USITC Pub. 3449 (September 2001) at 8-9. Based on the limited nature of the purchases at issue here (see CR/PR at Tables I-1 and III-7), we find that the standard for finding such purchasers to be related parties is not met and that *** are not related parties on the basis of their purchases of subject imports.

⁵⁸ Original Injury Determinations at 13-14.

⁵⁹ Id. at 14.

⁶⁰ 19 U.S.C. § 1675a(a)(7).

Cumulation therefore is discretionary in five-year reviews, unlike original investigations which are governed by section 771(7)(G)(I) of the Act.⁶¹ The Commission may exercise its discretion to cumulate, however, only if the reviews are initiated on the same day, the Commission determines that the subject imports are likely to compete with each other and the domestic like product in the U.S. market, and imports from each such subject country are not likely to have no discernible adverse impact on the domestic industry in the event of revocation. Our focus in five-year reviews is not only on present conditions of competition, but also on likely conditions of competition in the reasonably foreseeable future.

The statutory threshold for cumulation is satisfied in these reviews because both reviews were initiated on the same day: March 1, 2010.⁶² We consider three issues in deciding whether to exercise our discretion to cumulate the subject imports as follows: (1) whether imports from China or Russia are precluded from cumulation because they are likely to have no discernible adverse impact on the domestic industry; (2) whether there is a likelihood of a reasonable overlap of competition among imports of magnesium from China and Russia and the domestic like product; and (3) other considerations, such as similarities and differences in the likely conditions of competition under which subject imports are likely to compete in the U.S. market for magnesium.⁶³

C. Likelihood of No Discernible Adverse Impact

The statute precludes cumulation if the Commission finds that subject imports from a country are likely to have no discernible adverse impact on the domestic industry.⁶⁴ Neither the statute nor the Uruguay Round Agreements Act (“URAA”) Statement of Administrative Action (“SAA”) provides specific guidance on what factors the Commission is to consider in determining that imports “are likely to have no discernible adverse impact” on the domestic industry.⁶⁵ With respect to this provision, the

⁶¹ 19 U.S.C. § 1677(7)(G)(i); see also, e.g., Allegheny Ludlum Corp. v. United States, 475 F. Supp. 2d 1370, 1378 (Ct. Int’l Trade 2006) (recognizing the wide latitude the Commission has in selecting the type of factors it considers relevant in deciding whether to exercise discretion to cumulate subject imports in five-year reviews); Nucor v. United States, 569 F. Supp. 2d 1328, 1337-38 (Ct. Int’l Trade 2008); United States Steel Corp. v. United States, Slip Op. 08-82 (Aug. 5, 2008).

⁶² See 75 Fed. Reg. 9252 (March 1, 2010).

⁶³ Chairman Okun and Commissioner Pearson find that subject imports from China and Russia are likely to compete under different conditions of competition in the U.S. market for magnesium and they do not join Sections IV.C. and D. but join Section IV.E. of this opinion. They note that while they consider the same issues discussed in this section in determining whether to exercise their discretion to cumulate the subject imports, their analytical framework begins with whether imports from the subject countries are likely to face similar conditions of competition. For those subject imports which are likely to compete under similar conditions of competition, they next proceed to consider whether there is a likelihood of a reasonable overlap of competition whereby those imports are likely to compete with each other and with the domestic like product. Finally, if based on that analysis they intend to exercise their discretion to cumulate one or more subject countries, they analyze whether they are precluded from cumulating such imports because the imports from one or more subject countries, assessed individually, are likely to have no discernible adverse impact on the domestic industry. See Steel Concrete Reinforcing Bar From Belarus, China, Indonesia, Korea, Latvia, Moldova, Poland, and Ukraine, Invs. Nos. 731-TA-873 to 875, 877 to 880, and 882 (Review), USITC Pub. 3933 (July 2007) (Separate and Dissenting Views of Chairman Daniel R. Pearson and Commissioner Deanna Tanner Okun Regarding Cumulation). Accord Nucor Corp. v. United States, 605 F. Supp.2d 1361, 1372 (Ct. Int’l Trade 2009); Nucor Corp. v. United States, 594 F. Supp.2d 1320, 1345-47 (Ct. Int’l Trade 2008), aff’d, Slip Op. 2009-1234 (Fed Cir. April 7, 2010).

⁶⁴ 19 U.S.C. § 1675a(a)(7).

⁶⁵ SAA, H.R. Rep. No. 103-316, vol. I at 887 (1994).

Commission generally considers the likely volume of subject imports and the likely impact of those imports on the domestic industry within a reasonably foreseeable time if the orders are revoked.

Based on the record, we do not find that imports from either China or Russia are likely to have no discernible adverse impact on the domestic industry in the event of revocation of the orders. Our analysis for each of the subject countries takes into account the nature of the product and the behavior of subject imports in the original investigations. We recall that in the original investigations the Commission found that price was an important factor in purchasing decisions. It further found that the subject imports, regardless of source, were generally substitutable for the domestic like product.⁶⁶

China. In the original investigations, the quantity of subject imports from China increased from 6,671 metric tons (** percent of apparent U.S. consumption) in 2000 to 12,906 metric tons (** percent of apparent U.S. consumption) in 2003.⁶⁷ The quantity of subject imports from China was 13,262 metric tons (** percent of apparent U.S. consumption) in 2004. After the imposition of the order in 2005, subject imports from China continued to be present in the U.S. market in small amounts ranging from 34 metric tons in 2006 to 287 metric tons in 2008 (accounting for, at the most, (** percent of apparent U.S. consumption).⁶⁸ We find that the sharp decline in subject imports from China after 2004 resulted from the imposition of the order. As addressed more fully below, we further find that subject imports from China are likely to return to the U.S. market if the order is revoked, in light of the significant quantities of subject imports in the U.S. market during the original period of investigation, the significant capacity and export orientation of the Chinese industry,⁶⁹ the substitutability of subject imports and the domestic like product (within the same type of magnesium), and the importance of price in purchasing decisions. We consequently do not find that subject imports from China would likely have no discernible adverse impact on the domestic industry if the order is revoked.

Russia. In the original investigations, the quantity of subject imports from Russia increased from 13,685 metric tons (** percent of apparent U.S. consumption) in 2000 to 21,745 metric tons (** percent of apparent U.S. consumption) in 2003.⁷⁰ The quantity of subject imports from Russia was 23,439 metric tons (** percent of apparent U.S. consumption) in 2004. After the imposition of the order in 2005, subject imports declined irregularly, from 12,573 metric tons (** percent of apparent U.S. consumption) in 2005 to 315 metric tons (** percent of apparent U.S. consumption) in 2009.⁷¹ We find that the sharp decline in subject imports from Russia after 2004 resulted at least in part from the imposition of the order. We further find that subject imports from Russia are likely to return to the U.S. market (albeit not in significant quantities) if the order is revoked, in light of the significant quantities of subject imports in the U.S. market during the original period of investigation, the continued albeit declining export orientation of the Russian industry,⁷² the substitutability of subject imports and the domestic like product (within the same type of magnesium), and the importance of price in purchasing decisions. We consequently do not find that subject imports from Russia would likely have no discernible adverse impact on the domestic industry if the order is revoked.

⁶⁶ Original Injury Determinations at 18.

⁶⁷ CR/PR at Table I-1.

⁶⁸ CR/PR at Table I-1.

⁶⁹ The Chinese magnesium industry as a whole relies on exports to a significant degree. For example, the industry's overall magnesium exports (including nonsubject pure magnesium) accounted for 47 percent of total production in 2009 and 69 percent of total production in 2008. See CR/PR at Tables IV-20 and IV-22.

⁷⁰ CR/PR at Table I-1.

⁷¹ CR/PR at Table I-1.

⁷² The percentage of magnesium shipments exported by these firms was ** percent in 2003 and ** percent in 2009. CR/PR at Table IV-16.

D. Likelihood of a Reasonable Overlap of Competition

The Commission generally has considered four factors intended to provide a framework for determining whether the imports compete with each other and with the domestic like product.⁷³ Only a “reasonable overlap” of competition is required.⁷⁴ In five-year reviews, the relevant inquiry is whether there likely would be competition even if none currently exists because the subject imports are absent from the U.S. market.⁷⁵

*Fungibility.*⁷⁶ Market participants were asked whether magnesium from China, Russia, and the United States were interchangeable. All responding U.S. producers said that magnesium from the United States and either China or Russia are always interchangeable.⁷⁷ The majority of importers and purchasers reported that magnesium from the United States and either China and Russia are always or frequently interchangeable.⁷⁸ Purchasers also were asked to compare the domestic like product with subject imports with respect to a number of factors. Most purchasers reported that the domestic product was superior in terms of availability and delivery time. For nearly all other factors, the majority of the responding purchasers rated the domestic product and subject imports as comparable.⁷⁹

As in the original investigations, no party in these reviews has argued that magnesium of the same type (*i.e.*, pure or alloy magnesium) is not fungible, regardless of whether it is obtained domestically or from China or Russia. We recognize that the fungibility of imports from China and Russia is limited somewhat by the fact that imports from Russia were mainly pure magnesium during the original period of investigation (and were almost exclusively pure magnesium during the period of review, during which Russian producers stopped shipping alloy magnesium to the United States) and that the scope of the order with regard to China is limited to alloy magnesium. Moreover, the Russian magnesium industry’s

⁷³ The four factors generally considered by the Commission in assessing whether imports compete with each other and with the domestic like product are as follows: (1) the degree of fungibility between the imports from different countries and between imports and the domestic like product, including consideration of specific customer requirements and other quality related questions; (2) the presence of sales or offers to sell in the same geographical markets of imports from different countries and the domestic like product; (3) the existence of common or similar channels of distribution for imports from different countries and the domestic like product; and (4) whether the imports are simultaneously present in the market. *See, e.g., Wieland Werke, AG v. United States*, 718 F. Supp. 50 (Ct. Int’l Trade 1989).

⁷⁴ *See Mukand Ltd. v. United States*, 937 F. Supp. 910, 916 (Ct. Int’l Trade 1996); *Wieland Werke*, 718 F. Supp. at 52 (“Completely overlapping markets are not required.”); *United States Steel Group v. United States*, 873 F. Supp. 673, 685 (Ct. Int’l Trade 1994), *aff’d*, 96 F.3d 1352 (Fed. Cir. 1996). We note, however, that there have been investigations where the Commission has found an insufficient overlap in competition and has declined to cumulate subject imports. *See, e.g., Live Cattle From Canada and Mexico*, Inv. Nos. 701-TA-386 and 731-TA-812 to 813 (Prelim.), USITC Pub. 3155 at 15 (Feb. 1999), *aff’d sub nom. Ranchers-Cattlemen Action Legal Foundation v. United States*, 74 F. Supp. 2d 1353 (Ct. Int’l Trade 1999); *Static Random Access Memory Semiconductors from the Republic of Korea and Taiwan*, Inv. Nos. 731-TA-761 to 762 (Final), USITC Pub. 3098 at 13-15 (Apr. 1998).

⁷⁵ *See generally Cheflene Corp. v. United States*, 219 F. Supp. 2d 1313, 1314 (Ct. Int’l Trade 2002).

⁷⁶ Commissioner Lane notes that, with respect to fungibility, her analysis does not require such similarity of products that a perfectly symmetrical fungibility is required and that this factor would be better described as an analysis of whether subject imports from each country and the domestic like product could be substituted for each other. *See Separate Views of Commissioner Charlotte R. Lane, Certain Lightweight Thermal Paper from China, Germany, and Korea*, Inv. Nos. 701-TA-451 and 731-TA-1126-1128 (Preliminary), USITC Pub. 3964 (Nov. 2007).

⁷⁷ CR at II-42, PR at II-23.

⁷⁸ CR at II-42 and Table II-10, PR at II-23 and Table II-10.

⁷⁹ CR/PR at Table II-12.

capacity to produce alloy magnesium declined *** over the period of review⁸⁰ and this could result in less alloy magnesium being exported from Russia to the United States in the event of revocation of the orders.

Geographic Overlap. Because imports of the subject merchandise from China were only sporadic after 2005, there is not much information on the record as to the geographic overlap of imports from China with imports from Russia and the domestic product over the period of review. The imports from China that occurred in the 2004-2005 period were entered through a larger number of customs districts than imports from Russia, which were entered principally through Baltimore and Philadelphia.⁸¹ In its original injury determinations, the Commission found that subject imports from China and Russia were sold in the same geographic markets as the domestic like product.⁸² There is no indication in the record of these reviews that this would not again be the case if the orders were revoked.

Channels of Distribution. The predominant channel of distribution for sales of domestically produced magnesium and the subject imports from both countries during the period of review (to the extent that there were imports from China) was directly to end users, except that ***.⁸³ In its original injury determinations, the Commission found that, while the channels of distribution for imports from China and Russia appeared to be somewhat different – *** – in both cases sales are made to end users and not to distributors that maintain inventories. The same was true for the domestic like product.⁸⁴ The *** for imports from Russia to sales ***, towards the end of the period of review, could indicate that imports from China and Russia would be sold in different channels of distribution if the orders were revoked.

Simultaneous Presence in Market. Because imports of the subject merchandise from China were only sporadic after 2005, subject imports from China and Russia were not simultaneously present during much of the period of review.⁸⁵ This lack of presence appears to be a function of the existence of the orders. In its original injury determinations, the Commission found that subject imports from both China and Russia had entered the U.S. market in significant quantities during each year of the period of investigation, and accordingly had been simultaneously present in the U.S. market.⁸⁶ As discussed below, given declining magnesium production capacity in Russia, shortages of the raw material used to produce magnesium in Russia, and a trend towards greater internal consumption of magnesium in titanium sponge production, we conclude that subject imports from Russia are unlikely to enter the U.S. market in significant volumes in the reasonably foreseeable future if the order on Russia is revoked. We find, however, that they likely will be present in sufficient quantities to establish a reasonable overlap of competition.⁸⁷

Conclusion. Market participants in most cases find magnesium from different sources to be always interchangeable. The interchangeability of subject imports with each other is limited somewhat by the fact that imports from Russia are likely to be predominantly pure magnesium while the scope of the order with regard to China is limited to alloy magnesium. Nonetheless, enough of the U.S. market is likely to be subject to competition by imports from China and Russia, and the domestic like product, to support a finding of fungibility for purposes of this analysis. The domestic like product and imports from subject sources were sold mostly directly to end users during the period of review, except that ***. This

⁸⁰ CR/PR at Table IV-17.

⁸¹ CR at IV-25 and Table IV-6, PR at IV-10 and Table IV-6.

⁸² Original Injury Determinations at 14.

⁸³ CR at II-10 and Table II-1, PR at II-5-6 and Table II-1.

⁸⁴ Confidential Original Injury Determinations at 19.

⁸⁵ CR at IV-28 and Table IV-8, PR at IV-10 and Table IV-8.

⁸⁶ Original Injury Determinations at 14.

⁸⁷ See *Steel Authority of India v. United States*, 25 CIT 472, 477, 146 F. Supp. 2d 900, 906-07 (2001); *Nucor Corp. v. United States*, 318 F. Supp.2d 1207, 1269-70 (Ct. Int'l Trade 2004).

may indicate that some Russian imports would be sold in a different channel of distribution than imports from China and the domestic product, were the orders to be revoked. While imports from China were absent from the U.S. market during much of the period of review, this was likely due to the imposition of the antidumping duty order. Upon revocation of the orders, the subject imports will likely be sold throughout the United States and simultaneously present in the market as they were during the original investigations. In view of the foregoing, we conclude that there likely will be a reasonable overlap of competition between the domestic like product and subject imports, and between imports from China and Russia, should the orders be revoked.

E. Other Considerations⁸⁸

In determining whether to exercise our discretion to cumulate the subject imports, we assess whether the subject imports from China and Russia are likely to compete under similar or different conditions in the U.S. market in the event of revocation.⁸⁹ Imports from Russia have been, and are likely to remain, primarily pure magnesium, whereas the scope of the order with respect to China is limited to alloy magnesium. The Russian magnesium industry's capacity to produce alloy magnesium, and its production thereof, declined ***.⁹⁰ ***.⁹¹ Also, the record in these reviews – which is complete for the Russian industry but based on limited responses from the Chinese industry – shows that the trends in capacity, production, and shipments of the magnesium industry in Russia and the alloy magnesium industry in China were significantly different during the period of review. Russian pure and alloy magnesium capacity, production, and shipments declined *** since the original investigations,⁹² while the

⁸⁸ Commissioner Lane does not join in this section. She explains her analysis of other considerations as follows. Where, in a five-year review, I do not find that the subject imports would be likely to have no discernible adverse impact on the domestic industry if the orders were revoked, and I find that such imports would be likely to compete with each other and with the domestic like product in the U.S. market, I cumulate such imports unless there is a condition or propensity – not merely a trend – that is likely to persist for a reasonably foreseeable time and that significantly limits competition such that cumulation is not warranted. Based on the record in these reviews, I find that there is no such condition or propensity with respect to the subject imports. Therefore, I find no justification for exercising my discretion not to cumulate the subject imports from China and Russia and I have cumulated them in these reviews.

⁸⁹ See, e.g., Nucor Corp. v. United States, ___ F.3d ___, App. No. 2009-1234, Slip Op. at 7-8 (Fed. Cir. Apr. 7, 2010) (Commission may reasonably consider likely differing conditions of competition in deciding whether to cumulate subject imports in five-year reviews); Allegheny Ludlum Corp., 475 F. Supp. 2d at 1378 (recognizing the wide latitude the Commission has in selecting the type of factors it considers relevant in deciding whether to exercise discretion to cumulate subject imports in five-year reviews); Nucor Corp., 569 F. Supp. 2d at 1337-38.

⁹⁰ CR/PR at Table IV-16.

⁹¹ CR/PR at Table IV-18.

⁹² The Russian industry's reported capacity declined from *** metric tons in 2004 to *** metric tons in 2009. CR/PR at Table IV-17. Its production declined from *** metric tons in 2004 to *** metric tons in 2009, and its shipments fell from *** metric tons to *** metric tons over the same period. Id. US Magnesium urged the Commission to disregard the Russian producers' reported capacity data and rely instead on a report by the U.S. Geological Survey ("USGS") which estimated Russian production capacity at 80,000 metric tons in 2008. US Magnesium Prehearing Brief at 62-65. It appears, however, that the USGS data are flawed in that they include capacity ***. CR at IV-33-34, PR at IV-16. US Magnesium argues that AVISMA's "technical grade" magnesium should be included in the Russian capacity data, given that ***. US Magnesium Final Comments at 7. However, the "technical grade" magnesium produced for internal consumption by AVISMA cannot be sold commercially, but there is no evidence in the record that the magnesium produced by US Magnesium for ATI could not be sold commercially if it were cast into ingots, or that the magnesium produced for internal consumption by SMW could

(continued...)

Chinese alloy magnesium industry expanded significantly.⁹³ Declines in Russian capacity, production, and shipments for alloy magnesium were *** than for pure magnesium.⁹⁴ Furthermore, while the Russian industry has been hampered by a shortage of carnallite, the raw material that it uses in magnesium production,⁹⁵ the record does not show any comparable raw material shortages affecting the alloy magnesium industry in China. Finally, an increasing proportion of the Russian industry's production has been directed towards its home market and internal consumption, particularly in the production of titanium sponge.⁹⁶ In contrast, the expanding Chinese alloy magnesium industry has been increasingly more export-oriented.⁹⁷

For these reasons, we find that there are different conditions of competition likely to prevail between subject imports from China and Russia, and accordingly we decline to exercise our discretion to cumulate subject imports from China and Russia in these reviews.

V. WHETHER REVOCATION OF THE ANTIDUMPING DUTY ORDERS ON ALLOY MAGNESIUM FROM CHINA AND PURE AND ALLOY MAGNESIUM FROM RUSSIA IS LIKELY TO 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 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.”⁹⁸ The 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

⁹² (...continued)
not also be sold commercially.

⁹³ The Commission received questionnaire responses in these reviews from four magnesium producers in China that represented approximately *** percent of total production of alloy magnesium in China in 2009. CR at IV-41, PR at IV-21. The capacity of the responding firms grew from *** metric tons in 2004 to *** metric tons in 2009. CR/PR at Table IV-12. Their production rose from *** metric tons in 2004 to *** metric tons in 2009, and their shipments increased from *** metric tons to *** metric tons over the same period. *Id.* These sharp increases in capacity, production, and shipments are largely due to the fact that two of the responding producers started their production during the period of review. CR at IV-45, PR at IV-22. The increases in capacity, production, and shipments for the Chinese alloy magnesium industry overall was likely much larger than the data for the four responding producers shows, given that the capacity of the entire Chinese magnesium industry more than doubled during the period of review, rising from 447,000 metric tons in 2004 to 1.3 million metric tons in 2009. CR/PR at Table IV-20.

⁹⁴ CR/PR at Table IV-16.

⁹⁵ Hearing Transcript at 194-195 (Gurley).

⁹⁶ CR/PR at Table IV-16. During the period of review, AVISMA merged with VSMPO, a company that is primarily a titanium producer, and the main commercial focus of the merged firm is on titanium product. AVISMA Prehearing Brief at 15-16. Hearing Transcript at 27-28 and 205 (Gurley). The other Russian magnesium producer, SMW, ***. CR/PR at Table IV-18.

⁹⁷ Indeed, alloy magnesium cannot be used in titanium sponge production. CR at I-29 and II-3, PR at I-21 and II-2.

⁹⁸ 19 U.S.C. § 1675a(a).

a proceeding and the elimination of its restraining effects on volumes and prices of imports.”⁹⁹ Thus, the likelihood standard is prospective in nature.¹⁰⁰ 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.^{101 102 103}

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.”¹⁰⁴ According to the SAA, a “‘reasonably foreseeable time’ will vary from case-to-case, but normally will exceed the ‘imminent’ timeframe applicable in a threat of injury analysis in original investigations.”¹⁰⁵

Although the standard in a five-year review is not the same as the standard applied in an original antidumping duty 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.”¹⁰⁶ 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 the orders are revoked or the suspension agreement is terminated, and any findings by Commerce regarding duty absorption pursuant to 19 U.S.C. §

⁹⁹ SAA at 883-84. 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.

¹⁰⁰ 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.

¹⁰¹ 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*, Slip Op. 02-105 at 20 (Ct. Int’l Trade Sept. 4, 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’”).

¹⁰² For a complete statement of Chairman Okun’s interpretation of the likely standard, see Additional Views of Vice Chairman Deanna Tanner Okun Concerning the “Likely” Standard in *Certain Seamless Carbon and Alloy Steel Standard, Line and Pressure Pipe From Argentina, Brazil, Germany, and Italy*, Invs. Nos. 701-TA-362 (Review) and 731-TA-707 to 710 (Review)(Remand), USITC Pub. 3754 (Feb. 2005).

¹⁰³ Commissioner Lane notes that, consistent with her views in *Pressure Sensitive Plastic Tape From Italy*, Inv. No. AA1921-167 (Second Review), USITC Pub. 3698 (June 2004), she does not concur with the U.S. Court of International Trade’s interpretation of “likely,” but she will apply the Court’s standard in these reviews and all subsequent reviews until either Congress clarifies the meaning or the U.S. Court of Appeals for the Federal Circuit addresses this issue.

¹⁰⁴ 19 U.S.C. § 1675a(a)(5).

¹⁰⁵ 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.*

¹⁰⁶ 19 U.S.C. § 1675a(a)(1).

1675(a)(4).¹⁰⁷ 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.¹⁰⁸

In evaluating the likely volume of imports of subject merchandise if the orders under review are revoked and the suspended investigations are 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.¹⁰⁹ 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.¹¹⁰

In evaluating the likely price effects of subject imports if the orders and finding under review were revoked, 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 United States at prices that otherwise would have a significant depressing or suppressing effect on the price of the domestic like product.¹¹¹

In evaluating the likely impact of imports of subject merchandise if the orders under review are revoked, 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.¹¹² 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 at issue and whether the industry is vulnerable to material injury if the orders were revoked.¹¹³

Finally, when appropriate in these reviews, we have relied on the facts otherwise available, which consist of information from the original investigations, as well as information submitted in these reviews, including information provided by the domestic industry, questionnaire responses, and information

¹⁰⁷ 19 U.S.C. § 1675a(a)(1). We note that no duty absorption findings have been made by Commerce.

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

¹⁰⁹ 19 U.S.C. § 1675a(a)(2).

¹¹⁰ 19 U.S.C. § 1675a(a)(2)(A-D).

¹¹¹ 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.

¹¹² 19 U.S.C. § 1675a(a)(4).

¹¹³ 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.

available from published sources.^{114 115} The Commission received questionnaire responses in these reviews from all known U.S. producers of magnesium, with the possible exception of Rossborough and Meridian Technologies,¹¹⁶ from four producers in China that are estimated to have accounted for *** percent of total production of alloy magnesium in China in 2009,¹¹⁷ and from all three known magnesium producers in Russia.¹¹⁸

B. Conditions of Competition and the Business Cycle

In evaluating the likely impact of the subject imports on the domestic industry if an order is revoked, the statute directs the Commission to consider all relevant economic factors “within the context of the business cycle and conditions of competition that are distinctive to the affected industry.”¹¹⁹ The following conditions of competition inform our determinations.

1. The Original Determinations

Demand: The Commission explained that demand for magnesium is derived from the demand for the applications in which it is used, and thus generally follows the cyclical demand in the industries that consume magnesium, which, in turn, generally tracks overall economic activity. The information on the record of the original investigations as to actual demand was mixed. The Commission noted that magnesium has few substitutes. Prices for alloy magnesium sold to die casters were higher than prices for pure magnesium at the beginning of the period of investigation, but they converged later in the period. The Commission observed that domestically produced magnesium was sold predominantly through short- or long-term contracts, whereas subject imports were more likely to be sold on the spot market.¹²⁰

¹¹⁴ 19 U.S.C. § 1677e(a) authorizes the Commission to “use the facts otherwise available” in reaching a determination when (1) necessary information is not available on the record or (2) an interested party or any other person withholds information requested by the agency, fails to provide such information in the time or in the form or manner requested, significantly impedes a proceeding, or provides information that cannot be verified pursuant to 19 U.S.C. § 1677m(I). The verification requirements in 19 U.S.C. § 1677m(I) are applicable only to Commerce. See Titanium Metals Corp. v. United States, 155 F. Supp. 2d 750, 765 (Ct. Int’l Trade 2002) (“the ITC correctly responds that Congress has not required the Commission to conduct verification procedures for the evidence before it, or provided a minimum standard by which to measure the thoroughness of Commission investigations.”).

¹¹⁵ Chairman Okun notes that the statute authorizes the Commission to take adverse inferences in five-year reviews, but such authorization does not relieve the Commission of its obligation to consider the record evidence as a whole in making its determination. See 19 U.S.C. § 1677e. She generally gives credence to the facts supplied by the participating parties and certified by them as true, but bases her decision on the evidence as a whole, and does not automatically accept participating parties’ suggested interpretations of the record evidence. Regardless of the level of participation, the Commission is obligated to consider all evidence relating to each of the statutory factors and may not draw adverse inferences that render such analysis superfluous. “In general, the Commission makes determinations by weighing all of the available evidence regarding a multiplicity of factors relating to the domestic industry as a whole and by drawing reasonable inferences from the evidence it finds most persuasive.” SAA at 869.

¹¹⁶ CR at III-2-3, PR at III-2. It is not known whether Rossborough or Meridian Technologies are still producing magnesium.

¹¹⁷ CR at IV-41, PR at IV-21.

¹¹⁸ CR at IV-47, PR at IV-24. One of the three, Russian producer SZD, produces magnesium only in granular form. CR at IV-47 n.44, PR at IV-24 n.44.

¹¹⁹ 19 U.S.C. § 1675a(a)(4).

¹²⁰ Original Injury Determinations at 16.

Supply. The Commission noted that there were two domestic primary producers of both pure and alloy magnesium during the period of investigation: US Magnesium and Northwest Alloys (which ceased production in 2001). There were also four domestic secondary producers of magnesium and three grinders. The Commission observed that secondary magnesium production had become more significant in recent years. Primary magnesium producers that used the electrolytic process (*i.e.*, US Magnesium) had 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. Thus, when faced with price competition, primary magnesium producers would tend to cut prices to maintain production volume. The Commission noted that nonsubject imports from several countries had been an important source of supply throughout the period of investigation, but that certain nonsubject supply sources had been idled, including Norsk Hydro in Norway, Pechiney in France, and Noranda's Magnola plant in Canada.¹²¹

Substitutability. The Commission observed that magnesium of the same type (*i.e.*, pure or alloy) is a fungible, commodity product, for which price is an important factor in purchasing decisions.¹²²

2. The Current Reviews

Demand. Demand for magnesium continues to be derived from the demand for the applications in which it is used.¹²³ As noted above, the principal uses for magnesium are in aluminum alloying, structural uses, iron and steel desulfurization, and other uses (including titanium sponge production). The record in these reviews indicates that titanium sponge production has become a more significant use for magnesium than it was during the original investigations, and that the use of magnesium for this application is likely to grow.¹²⁴

Apparent U.S. consumption of magnesium declined over the period of review, especially towards the end of the period. It was *** metric tons in 2004, *** metric tons in 2005, *** metric tons in 2006, *** metric tons in 2007, *** metric tons in 2008, and *** metric tons in 2009.¹²⁵ Data for the interim periods shows some evidence of a recovery in demand from the *** depressed level of 2009. Apparent U.S. consumption of magnesium was *** metric tons in interim 2010 as compared with *** metric tons in interim 2009.

The reported expectations of industry participants as to future demand were mixed, with generally more optimistic expectations for demand for pure magnesium than for alloy magnesium. A plurality of U.S. producers, foreign producers, and purchasers that responded to the Commission's questionnaires reported that they anticipated future increases in U.S. demand for pure magnesium.¹²⁶ Most U.S. importers, on the other hand, anticipated that demand for pure magnesium would fluctuate or decline.¹²⁷ For alloy magnesium, a plurality of U.S. producers and foreign producers anticipated that future U.S. demand would increase, but a plurality of importers and purchasers anticipated declining demand.¹²⁸

¹²¹ Original Injury Determinations at 16-17.

¹²² Original Injury Determinations at 16.

¹²³ CR at I-61, PR at I-40.

¹²⁴ Hearing Transcript at 71-73 (Hassey), CR at II-22 and II-26, CR at II-12 and II-14.

¹²⁵ CR/PR at Table C-1.

¹²⁶ CR at II-26 and Table II-4, PR at II-14 and Table II-4.

¹²⁷ *Id.*

¹²⁸ CR at II-27 and Table II-4, PR at II-14 and Table II-4.

Supply. During most of the period of review, US Magnesium was the only primary producer of magnesium in the United States.¹²⁹ US Magnesium expanded its production capacity during the period of review from a practical capacity to produce *** metric tons of pure magnesium or *** metric tons of alloy magnesium in 2003, to a current capacity of *** metric tons of pure magnesium or *** metric tons of alloy magnesium.¹³⁰ A second firm, MagPro, which is ***, began producing ***.¹³¹ There were also at least five domestic secondary producers of magnesium¹³² and three grinders during the period of review.¹³³

As noted above, based on the limited information available to us, it appears that the production capacity of the Chinese alloy magnesium industry expanded sharply during the period of review.¹³⁴ The capacity of the Russian magnesium industry, on the other hand, contracted, and an increasing proportion of the Russian industry's production has been directed towards internal consumption for production of titanium sponge.¹³⁵

Nonsubject suppliers of magnesium continued to hold a significant share of the U.S. market during the period of review.¹³⁶ Perhaps the most significant developments among nonsubject suppliers were the shutdown of most or all of the magnesium industry in Canada and a subsequent increase in nonsubject imports from Israel.¹³⁷

Substitutability. Magnesium of the same type continues to be a fungible, commodity product. The record in these reviews indicates that there is a moderately high degree of substitutability between magnesium produced in the United States and the subject imports.¹³⁸ Most producers, importers, and purchasers in these reviews agreed that domestically produced magnesium and the subject imports could always or frequently be used interchangeably.¹³⁹ The market for magnesium continues to be price competitive. A plurality of purchasers responding to the Commission's questionnaire reported that price was the number one factor in their purchasing decisions.¹⁴⁰

¹²⁹ CR at III-1, PR at III-1.

¹³⁰ CR/PR at Table III-1.

¹³¹ MagPro produced *** metric tons of pure magnesium in *** and *** metric tons in the first half of 2010. CR at III-6 n.14, PR at III-4 n.14.

¹³² The Commission received responses to its U.S. Producer Questionnaire from the following five secondary producers: Amacor, KB Alloys, MagPro, MagReTech, and Spartan. CR at III-2, PR at III-2. KB Alloys is a magnesium/aluminum alloyer. CR at III-5, PR at III-3. Spartan is a die caster that produces alloy magnesium for internal consumption from internally generated scrap and scrap that it purchases. CR at III-8, PR at III-5. Two other firms that may be secondary producers – Rossborough and Meridian Technologies – did not respond to the U.S. Producer Questionnaire. CR at III-3 n.8, PR at III-2 n.8.

¹³³ CR at III-2, PR at III-2.

¹³⁴ CR/PR at Table IV-12.

¹³⁵ Hearing Transcript at 27-28 and 194-195 (Gurley), and CR/PR at Table IV-17, IV-18, and IV-19.

¹³⁶ The market share of nonsubject suppliers ranged from *** percent to *** percent during the original period of investigation, and from *** percent to *** percent during the period of review. CR/PR at Table I-1.

¹³⁷ Kramer, Deborah A., "Magnesium," *Minerals Yearbooks 2004-08*, U.S. Department of the Interior, U.S. Geological Survey. The U.S. market share of imports from Canada fell from *** percent in 2004 to *** percent in 2009, and the U.S. market share of imports from Israel increased from *** percent to *** percent in this period. CR/PR at Table C-1.

¹³⁸ CR at II-39, PR at II-20-21.

¹³⁹ CR at II-42 and Table II-10, PR at II-23 and Table II-10.

¹⁴⁰ CR at II-39 and Table II-8, PR at II-20-21 and Table II-8.

We find that the foregoing conditions of competition are likely to prevail for the reasonably foreseeable future and thus provide an adequate basis by which to assess the likely effects of revocation within the reasonably foreseeable future.

C. Revocation Of the Antidumping Duty Order On Alloy Magnesium From China Would Be Likely To Lead To Continuation or Recurrence of Material Injury Within a Reasonably Foreseeable Time¹⁴¹

1. Likely Volume of Subject Imports

a. The Original Determinations

The Commission found the volume of cumulated subject imports increased by 70.2 percent over the period of investigation, while apparent U.S. consumption of magnesium fell by *** percent. The market share of subject imports ***, rising from *** percent of apparent U.S. consumption in 2000, to *** percent in 2003, at the same time as the domestic industry's market share declined (although not to the same degree). The ratio of subject imports to production increased *** during the period of investigation, rising from *** percent in 2000 to *** percent in 2003. The Commission found that the volume of cumulated subject imports of magnesium, and the increase in that volume, both in absolute terms and relative to production and consumption in the United States, were significant.¹⁴²

b. The Current Reviews

The record indicates that the antidumping duty order has led to the reduced presence of subject imports in the U.S. market. Since the imposition of the antidumping duty order in 2005, subject imports from China have been largely absent from the U.S. market. Only 36 metric tons of alloy magnesium from China subject to the antidumping duty order entered the United States in 2005, and no more than 287 metric tons entered the United States in any year since then.¹⁴³

The record indicates that Chinese producers have the capability to significantly increase shipments of subject magnesium to the United States within the reasonably foreseeable future. As noted above, the four Chinese producers that provided information in these reviews reported rapidly expanding capacity, production, and shipments. Collectively, these firms had *** metric tons of excess capacity in 2009.¹⁴⁴ Because these four firms account for only an estimated *** percent of total production of alloy magnesium in China in 2009, the actual capability of the Chinese alloy magnesium industry to increase its shipments to the United States is likely much larger. Overall, based on published data, the Chinese magnesium industry (encompassing pure and alloy magnesium) has developed rapidly to become the world's largest manufacturer and exporter, with the capacity to produce 953,000 metric tons and

¹⁴¹ Commissioner Lane cumulates the subject imports from China and Russia. She finds that revocation of the orders on China and Russia would lead to a continuation or recurrence of material injury within a reasonably foreseeable time. She joins in the remainder of these views, except where noted. She points out that for the purpose of the following discussion she considers cumulated subject imports from both countries rather than separately considering subject imports from each country. The data she relies upon include the subject imports from both China and Russia.

¹⁴² Confidential Views in Original Injury Determinations at 23-24.

¹⁴³ CR/PR at Table C-1.

¹⁴⁴ These four producers' capacity grew from *** metric tons in 2004 to *** metric tons in 2009, and their production grew from *** metric tons to *** metric tons in the same period. CR/PR at Table IV-12.

accounting for *** percent of global magnesium capacity in 2008.¹⁴⁵ A recent report indicates that the Chinese magnesium industry is continuing plans to quadruple its capacity within the next five years.¹⁴⁶

If the antidumping duty order were revoked, it is likely that significant volumes of Chinese alloy magnesium would be targeted toward the U.S. market. Based on the information obtained in these reviews, subject Chinese producers have come to rely to a significant degree on export markets, as they increased their capacity, and the relative importance of the home market has declined over the period of review.¹⁴⁷ The elimination of a value added tax rebate on magnesium exports in 2006 and the imposition of a 10 percent export tax in 2008 appear to have done little to dampen Chinese magnesium exports.¹⁴⁸

Furthermore, Chinese producers can easily switch production from pure magnesium to alloy magnesium, which is exactly what happened during the original period of investigation after pure magnesium from China became subject to antidumping duties.¹⁴⁹ Given the existing U.S. antidumping duty orders now in place against Chinese pure magnesium, and the incentive of magnesium producers to operate at full capacity (to avoid the deterioration of electrolytic cells),¹⁵⁰ Chinese magnesium producers would again have a powerful incentive to switch production to export large volumes of alloy magnesium to the United States if this order were revoked.¹⁵¹

In light of the foregoing considerations, we conclude that, upon revocation of the order, the likely volume of subject imports from China would be significant, both in absolute terms and as a share of the U.S. market.

2. Likely Price Effects of Subject Imports

a. The Original Determinations

The Commission found that subject imports of magnesium from China and Russia were generally substitutable for the domestic like product. The quarterly price comparison data showed substantial underselling by subject imports during most of the period of investigation. Overall, subject imports undersold the domestic product in 54 of 74 possible quarterly price comparisons. The price comparison data also indicate that subject imports depressed domestic prices to a significant degree during the part of the period of investigation preceding the filing of the petition. The Commission observed that the instances of overselling by subject imports occurred largely in the first three quarters of 2004, and may have been attributed at least in part to the filing of the petition leading to the investigations. The Commission explained that because subject imports were more likely than the domestic product to be sold on the spot market, and because spot prices were quicker to change in response to market conditions than contract prices, it would expect the prices of subject imports to increase more quickly than domestic prices during a period of rising prices. The Commission also noted that purchasers confirmed a number

¹⁴⁵ CR/PR at Table IV-20. The Chinese total magnesium industry's capacity expanded to 1.3 million metric tons in 2009. *Id.* Because data on world magnesium capacity are not available for 2009, China's share of global production in that year is not known.

¹⁴⁶ CR at IV-32, PR at IV-16.

¹⁴⁷ For the four responding firms, shipments to the home market declined from *** percent of total shipments in 2004 to *** percent in 2009, while exports grew from *** percent of total shipments in 2004 to *** percent in 2009. CR/PR at Table IV-12.

¹⁴⁸ CR at IV-38, PR at IV-19.

¹⁴⁹ Original Injury Determinations at 17.

¹⁵⁰ CR at I-34 n.47, PR at I-23 n.47.

¹⁵¹ Brazil's imposition of antidumping duties on alloy magnesium from China in 2005 further suggests that Chinese producers will look to the U.S. market if the order is lifted. CR at IV-37, PR at IV-19.

of the lost sales and lost revenue allegations made by petitioners, and that these instances of lost sales and lost revenues involved substantial tonnage. Based on this evidence, the Commission found that cumulated imports of magnesium from China and Russia undersold the domestic like product and depressed domestic prices to a significant degree.¹⁵²

b. The Current Reviews

In these reviews, the Commission sought pricing data for subject imports and domestically produced alloy magnesium for sales to aluminum producers and to die casters. Subject imports from China were reported in only one quarter (the first quarter of 2004), and in this quarter those subject imports undersold the domestic product at a margin of *** percent.¹⁵³

As explained above, revocation of the order would be likely to lead to a significant increase in the volume of subject imports. In light of the continued importance of price in purchasing decisions and the substitutability of the domestic like product and subject imports from China, the demonstrated willingness of Chinese producers to undersell the domestic like product to gain market share during the original investigations, and the higher magnesium prices in the United States than in other markets,¹⁵⁴ we conclude that, if the order were revoked, large volumes of subject imports from China would likely undersell the domestic like product in order to gain market share, forcing U.S. producers either to lower prices or risk losing market share. We therefore conclude that, were the order to be revoked, subject imports from China would likely significantly undersell the domestic like product and those imports would have a significant depressing or suppressing effect on prices for the domestic like product within a reasonably foreseeable time.

3. Likely Impact of Subject Imports¹⁵⁵

a. The Original Determinations

The Commission found that cumulated subject imports were having a significant adverse impact on the domestic magnesium industry. Most of the domestic industry's trade and financial indicators were unfavorable and worsened during the period of investigation, until interim 2004, when the petition in these investigations was filed. The Commission recognized that the domestic industry's performance improved at the end of the period of investigation, especially in interim 2004, but it attributed this improvement, at least in part, to the pendency of the investigations.

¹⁵² Original Injury Determinations at 18-20.

¹⁵³ CR at V-20, PR at V-7.

¹⁵⁴ See, e.g., CR/PR at Figure V-5.

¹⁵⁵ 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, 19 U.S.C. § 1675a(a)(4). Section 752(a)(6) of the Tariff Act states that "the Commission may consider the magnitude of the margin of dumping or the magnitude of the net countervailable subsidy" in making its determination in a five-year review. 19 U.S.C. § 1675a(a)(6). The statute defines the "magnitude of the margin of dumping" to be used by the Commission in five-year reviews as "the dumping margin or margins determined by the administering authority under section 1675a(c)(3) of this title." 19 U.S.C. § 1677(35)(C)(iv). See also SAA at 887.

Commerce expedited its review of alloy magnesium from China and found that revocation of the antidumping duty order would be likely to lead to continuation or recurrence of dumping at the following margins: 49.66 percent for Tianjin Magnesium International Co., Ltd. and Beijing Guangling Jinghua Science & Technology Co., Ltd., and 141.49 percent for all other companies in China. 75 Fed. Reg. 38983 (July 7, 2010).

The Commission considered, and rejected, respondents' arguments that any injury to the domestic industry was caused by factors other than the subject imports. These other factors identified by respondents included: costs incurred by Magcorp and US Magnesium in connection with Magcorp's bankruptcy and modernization efforts; alleged corporate mismanagement of Magcorp and US Magnesium and alleged financial looting of Magcorp by its corporate parent; lawsuits against Magcorp and US Magnesium by the U.S. Environmental Protection Agency; a lawsuit against US Magnesium by Magcorp's bankruptcy trustee; rising energy costs; and over-supply by nonsubject imports, particularly imports from Noranda's Magnola plant in Canada.¹⁵⁶

b. The Current Reviews

The domestic industry's performance was mixed over the period of review. Broadly speaking, most indicators fluctuated or improved over the period, before falling sharply in 2009, when demand for magnesium collapsed, and then recovering somewhat in interim 2010 as compared with interim 2009. The most notable exception to this trend was in the financial performance of the domestic industry, which was *** in the last two years of the period of review, especially in 2009.

The domestic industry's market share increased irregularly over the period of review, rising from *** percent in 2004 to *** percent in 2009. The industry's production declined from 2004 to 2005, and then increased irregularly until 2009, when it fell ***.¹⁵⁷ Production was *** higher in interim 2010 than in interim 2009.¹⁵⁸ After declining from 2004 to 2005, the industry's capacity generally rose over the period of review.¹⁵⁹ Capacity utilization fluctuated over the period, before falling *** in 2009, and then showing some improvement in interim 2010 as compared with interim 2009.¹⁶⁰ Domestic producers' U.S. shipments showed a similar pattern.¹⁶¹ Inventories fluctuated over the period of review, with a *** increase in 2008.¹⁶²

¹⁵⁶ Original Injury Determinations at 18-20.

¹⁵⁷ The domestic industry's production was *** metric tons in 2004, *** metric tons in 2005, *** metric tons in 2006, *** metric tons in 2007, *** metric tons in 2008, and *** metric tons in 2009. CR/PR at Table C-1.

¹⁵⁸ The domestic industry's production was *** metric tons in interim 2010, as compared with *** metric tons in interim 2009. CR/PR at Table C-1.

¹⁵⁹ The domestic industry's capacity was *** metric tons in 2004, *** metric tons in 2005, *** metric tons in 2006, *** metric tons in 2007, *** metric tons in 2008, and *** metric tons in 2009. CR/PR at Table C-1. The domestic industry's capacity was *** metric tons in interim 2010, as compared with *** metric tons in interim 2009. CR/PR at Table C-1. The decline in the industry's capacity from 2004 to 2005 was *** attributable to a fire at Amacor's plant in 2005, which temporarily forced that firm to curtail its production. CR at III-3 and Table III-3, PR at III-2 and Table III-3.

¹⁶⁰ The domestic industry's capacity utilization was *** percent in 2004, *** percent in 2005, *** percent in 2006, *** percent in 2007, *** percent in 2008, and *** percent in 2009. The domestic industry's capacity utilization was *** percent in interim 2010, as compared with *** percent in interim 2009. CR/PR at Table C-1.

¹⁶¹ The domestic industry's U.S. shipments were *** metric tons in 2004, *** metric tons in 2005, *** metric tons in 2006, *** metric tons in 2007, *** metric tons in 2008, and *** metric tons in 2009. CR/PR at Table C-1. The domestic industry's U.S. shipments were *** metric tons in interim 2010, as compared with *** metric tons in interim 2009. CR/PR at Table C-1.

¹⁶² The domestic industry's year-end inventories were *** metric tons in 2004, *** metric tons in 2005, *** metric tons in 2006, *** metric tons in 2007, *** metric tons in 2008, and *** metric tons in 2009. CR/PR at Table C-1. The domestic industry's end-of-period inventories were *** metric tons in interim 2010, as compared with *** metric tons in interim 2009. CR/PR at Table C-1.

Employment indicators in the domestic industry generally fluctuated over the period of review.¹⁶³ Productivity fluctuated over the period, before falling *** in 2009, and then showing some improvement in interim 2010 as compared with interim 2009.¹⁶⁴

The industry's financial performance showed a different trend, with mixed and generally weak results in the 2004-2007 period, followed by increasingly *** results in 2008 and 2009, which also carried over into interim 2010, as compared with interim 2009. After registering mainly *** in the first four years of the period of review, the industry's operating margin *** percent in 2008 and *** percent in 2009.¹⁶⁵ A comparison of the interim periods shows further improvement.^{166 167} In addition, the unit values of the industry's U.S. shipments and net sales generally rose over the period reviewed, even as costs and selling, general and administrative expenses increased.¹⁶⁸ The industry's *** financial performance allowed it to ***.¹⁶⁹

In light of the domestic industry's *** financial performance at the end of the period of review, even at a time of *** depressed demand in 2009, we do not find that the industry is currently vulnerable to material injury. In this connection, we also note that many magnesium market participants anticipate some improvement in domestic demand in the reasonably foreseeable future.¹⁷⁰

Notwithstanding this finding that the domestic industry is not currently vulnerable to material injury, given the generally substitutable nature of subject imports from China and the domestic like product, and the huge amount of Chinese production capacity, we find that the significant likely volume of low-priced subject alloy magnesium, when combined with the likely adverse price effects of those imports, would likely have a significant adverse impact on the production, shipments, sales, and revenue levels of the domestic industry. This reduction in the industry's production, shipments, sales, and revenue levels would have a direct adverse impact on the industry's profitability and employment levels, as well as its ability to raise capital and make and maintain necessary capital investments. We also note that the segment of the domestic industry that would be most directly affected by a resumption of significant volumes of low-priced imports of alloy magnesium from China – namely the producers of alloy magnesium in the United States – has ***.¹⁷¹

¹⁶³ The number of production and related workers in the industry was *** in 2004, *** in 2005, *** in 2006, *** in 2007, *** in 2008, *** in 2009, *** in interim 2009, and *** in interim 2010. CR/PR at Table C-1. Hours worked were *** in 2004, *** in 2005, *** in 2006, *** in 2007, *** in 2008, *** in 2009, *** in interim 2009, and *** in interim 2010. Id.

¹⁶⁴ Productivity, measured in tons/1,000 hours was *** in 2004, *** in 2005, *** in 2006, *** in 2007, *** in 2008, *** in 2009, *** in interim 2009, and *** in interim 2010. CR/PR at Table C-1.

¹⁶⁵ The industry recorded *** in 2004, *** in 2005, *** in 2006, *** in 2007, and *** in 2008 and *** in 2009. CR/PR at Table C-1. The industry's operating income/(loss) ratios were *** percent in 2004, *** percent in 2005, *** percent in 2006, *** percent in 2007, *** percent in 2008, and *** percent in 2009. Id.

¹⁶⁶ The industry had operating *** in interim 2010, as compared with *** in interim 2009. CR/PR at Table C-1. Its operating *** ratio was *** percent in interim 2010, as compared with *** percent in 2009. Id.

¹⁶⁷ Capital expenditures fluctuated over the period, and were *** in 2008 and 2009. CR/PR at Table C-1. The industry's research and development expenses were ***. CR/PR at Table III-18 n.1.

¹⁶⁸ CR/PR at Table C-1.

¹⁶⁹ *** of the domestic industry's capital expenditures were *** on capacity expansions during the period of review. CR/PR at Table III-18 and US Magnesium Prehearing Brief at 42 and Exh. 12.

¹⁷⁰ CR at II-26 and Table II-4, PR at II-14 and Table II-4.

¹⁷¹ Compare CR/PR at Table C-1 with Table C-3. For example, the operating income ratio of the alloy magnesium producing segment was *** percent in 2008 and *** percent in 2009, as compared with *** percent and *** percent for the industry as a whole. We recognize that imports of alloy magnesium from China are likely to compete not only with the alloy magnesium segment of the industry, but also with the pure magnesium segment, as
(continued...)

In conducting our analysis of likely impact, we have also considered the likely effect of such other factors as nonsubject imports and imports from Russia on the domestic industry. Nonsubject imports were present in the U.S. market in substantial quantities throughout the period of review.¹⁷² The most significant suppliers of nonsubject imports were Canada, China (pure magnesium), and Israel.¹⁷³ The average unit values (“AUVs”) of U.S. shipments of nonsubject imports were significantly higher than those of the domestic industry in every year of the period of review.¹⁷⁴ Given that the presence of nonsubject imports in substantial quantities throughout the period of review did not prevent the domestic industry from achieving *** financial results at the end of the period, and that nonsubject imports appear to have been sold at much higher prices than the domestic like product, the likely presence of nonsubject imports does not detract from our finding that subject imports from China will likely have a material adverse impact on the domestic industry if the order is revoked. We have also considered the role of imports from Russia, which we have not cumulated with imports from China. As discussed below, we find that revocation of the order on magnesium from Russia is not likely to lead to continuation or recurrence of material injury to the domestic industry within a reasonably foreseeable time, and thus any imports from Russia also do not detract from our finding that subject imports from China will likely have a material adverse impact on the domestic industry if the order is revoked.

Accordingly, we conclude that, if the antidumping duty order on alloy magnesium from China were revoked, subject imports would be likely to have a significant adverse impact on the domestic industry within a reasonably foreseeable time.¹⁷⁵

¹⁷¹ (...continued)

they did in the original investigations. Original Injury Determinations at 9 and 14.

¹⁷² The market share of nonsubject imports fluctuated during the period, from *** percent of apparent U.S. consumption in 2004 to *** percent in 2005. It was *** percent in 2009. CR/PR at Table C-1.

¹⁷³ CR/PR at Table C-1. Because of the shutdown of the magnesium industry in Canada towards the end of the period of review, there are not likely to be significant nonsubject imports from Canada in the reasonably foreseeable future.

¹⁷⁴ See CR/PR at Table C-1. For example, in 2009, the AUV per metric ton of U.S. shipments of nonsubject imports was *** as compared with the domestic industry’s AUV of ***.

¹⁷⁵ Spartan and NADCA argue that the alloy magnesium industry would benefit from the revocation of the orders. They contend that high alloy magnesium prices in the United States, relative to the rest of the world, have caused domestic demand for alloy magnesium to fall, as die casting has moved offshore and some end users of die castings (such as the automotive industry) have been reluctant to design magnesium parts into their products. Spartan/NADCA argue that the dumping law permits the Commission to take into account the effects of the orders on consumers of the subject merchandise. They point to 19 U.S.C. § 1675a(a)(4), which instructs the Commission, in evaluating the likely impact of subject imports on the domestic industry, to “consider all relevant economic factors, which are likely to have a bearing on the state of the industry in the United States.” Spartan/NADCA Posthearing Brief at 8-11. It has long been recognized, however, that “the antidumping law is not to be concerned with effects on U.S. purchasers . . .”, Mitsubishi Electric Corp. v. United States, 700 F. Supp. 538, 559 (Ct. Int’l Trade 1988), aff’d, 898 F.2d 1577 (Fed. Cir. 1990). See also, USX Corp. v. United States, 682 F. Supp. 60, 67 (Ct. Int’l Trade 1988) (“Congress has made a judgment that causally related injury to the domestic industry may be severe enough to justify relief from less than fair value imports even if from another viewpoint the economy could be said to be better served by providing no relief.”) (noting the statute’s focus on “injury to industry” not injury to “competition”). Moreover, Spartan and NADCA’s contention that the antidumping duty orders weakened demand for magnesium die castings is not borne out by the evidence in the record. NADCA data show that, during the period of review, demand for aluminum die castings declined at a rate comparable to that for magnesium die castings. US Magnesium Posthearing Brief at 10 and Exh. 2.

4. Conclusion

For the foregoing reasons, we determine that revocation of the antidumping duty order on alloy magnesium from China would be likely to lead to continuation or recurrence of material injury to the domestic industry within a reasonably foreseeable time.¹⁷⁶

D. Revocation Of the Antidumping Duty Order On Alloy and Pure Magnesium From Russia Would Not Be Likely To Lead To Continuation or Recurrence of Material Injury Within a Reasonably Foreseeable Time¹⁷⁷

1. Likely Volume of Subject Imports

A summary of the original determinations is presented above in subsection V.C.1.

Following imposition of the antidumping duty order in 2005, subject imports from Russia declined from their pre-order levels, but remained at significant levels for several years before declining to insignificant levels at the end of the period of investigation.¹⁷⁸ Russia ceased exporting alloy magnesium to the United States after 2005; in other words, all subject imports after that were pure magnesium.¹⁷⁹

As explained above, the capacity, production, and shipments of the Russian magnesium industry have declined *** since the original investigations.¹⁸⁰ These declines were *** for alloy magnesium than

¹⁷⁶ We disagree with Spartan and NADCA's position that the "reasonably foreseeable future" should, in these reviews, be interpreted as one year because, according to Spartan and NADCA, "this is consistent with the typical length of contracts for U.S. purchasers of magnesium." Spartan/NADCA Posthearing Brief, Appendix at 52. According to the URAA Statements of Administrative Action, the appropriate time frame for consideration of the effects of revocation contemplated by the phrase "reasonably foreseeable time" will vary from case to case, but normally will concern a longer period of time than the "imminent" time frame applicable in threat analysis in original determinations. H.R. Rep. No. 316, 103d Cong., 2d Sess., vol. 1, at 887 (1994). Our assessment of the appropriate time frame in a review is generally informed by the conditions of competition relevant to that review. See Low Enriched Uranium from France, Inv. No. 731-TA-909 (Review), USITC Pub. 3967 (December 2007) at 16 & n. 103 (noting that factors unique to the uranium industry, including the use of long-term contracts, supported use of a somewhat longer period of time into the future than is ordinarily the case), and at 17-18 & n. 117 (but rejecting projections extending to "the next decade" as beyond a reasonably foreseeable time); Fresh and Chilled Atlantic Salmon from Norway, Inv. Nos. 701-TA-302 and 731-TA-454 (Second Review), USITC Pub. 3835 (January 2006) at 9-10 & n. 52 (three-year growth cycle for salmon). In these reviews, the record shows that at least some producers had contracts for longer periods than one year. For example, ***. Thus, Spartan and NADCA's rationale for limiting the "reasonably foreseeable future" to one year is not supported by the conditions of competition in the magnesium industry.

¹⁷⁷ Commissioner Lane does not join this section.

¹⁷⁸ Subject imports from Russia were 23,439 metric tons in 2004, 12,573 metric tons in 2005, 13,038 metric tons in 2006, 6,105 metric tons in 2007, 2,210 metric tons in 2008, and 315 metric tons in 2009; they were 298 metric tons in interim 2010, as compared with 20 metric tons in interim 2009. CR/PR at Table C-1. The U.S. market share of subject imports from Russia declined from *** percent in 2004 to *** percent in 2009. Id.

¹⁷⁹ CR/PR at Table IV-2.

¹⁸⁰ CR/PR at Table IV-17. We explain above why we do not rely on the USGS data on Russian capacity. US Magnesium also argues that a new Russian magnesium plant with significant capacity, the Asbest plant, is expected to come online in 2011 or 2013. US Magnesium Prehearing Brief at 28-30 and Posthearing Brief, Responses to Questions, p. 17. We find, however, that the weight of the evidence on the record indicates that this plant, if it is even built, is not likely to produce significant quantities of magnesium within a reasonably foreseeable time. See US (continued...)

for pure magnesium.¹⁸¹ Moreover, one of the Russian producers, AVISMA, has been hampered by a shortage of carnallite, the raw material that it uses in magnesium production,¹⁸² and an increasing proportion of the Russian industry's production has been directed towards its home market¹⁸³ and internal consumption in the production of titanium sponge¹⁸⁴ and is thus unavailable for export. We find that these factors are likely to constrain Russian exports of the subject merchandise for the reasonably foreseeable future. We also note that the two Russian magnesium producers currently sell a significant proportion of their commercial production of magnesium to customers in Russia and in third countries pursuant to long-term contracts. While these contracts typically have a one-year duration, the list of large Russian customers supplied by the Russian producers has remained fairly consistent over time, indicating longstanding supplier-customer relationships.¹⁸⁵ The evidence does not suggest that the Russian producers would abandon their existing customers and redirect their commercial magnesium production to the United States upon revocation of the order.

We recognize that the revocation of the order may lead to some increase in subject imports from Russia, but, in light of reduced Russian production capacity, the constraints on expanding that capacity, and Russian producers' committed supply relationships with existing customers, we do not find that subject imports from Russia are likely to enter the United States in significant volumes within a reasonably foreseeable time if the order is revoked.

2. Likely Price Effects of Subject Imports

A summary of the original determinations is presented above in subsection V.C.2.

¹⁸⁰ (...continued)

Magnesium Posthearing Brief, Exhibit 12 and SMW Posthearing Submission, Exhibit 4. US Magnesium also contends that at least some of the capacity that the Russian industry shut down could be brought back online. US Magnesium Prehearing Brief at 63-64. We note in this connection that even US Magnesium admits that "electrolytic cells used to make primary magnesium must be kept in constant operation to avoid their deterioration and significant rebuilding costs." *Id.* at 43 and Hearing Transcript at 30 (Legge, US Magnesium). Thus it would be impractical and expensive for AVISMA and SMW to bring back online electrolytic cells that were shuttered in ***, respectively. AVISMA *** and CR/PR at Table IV-18.

¹⁸¹ See CR/PR at Table IV-16.

¹⁸² Hearing Transcript at 194-195 (Gurley) and CR IV-51, PR at IV-16. AVISMA's carnallite supplier, Uralkaly, suffered a massive mine collapse in 2006, from which it has not recovered. Thereafter, AVISMA obtained enriched carnallite from two suppliers: from *** and from Uralkaly (which, after its mine collapse, obtained raw carnallite for enrichment from ***). As of the beginning of 2011, one of these suppliers, Uralkaly, shut down its carnallite enrichment facilities after no longer being able to obtain raw carnallite from ***. Hearing Transcript at 194 (Gurley) and AVISMA Prehearing Brief at 16-17 and Exhibit 7 and Posthearing Brief at Exhibit 1, p. 6 and Attachments C and E.

¹⁸³ For example, in 2004, the Russian industry's internal consumption and home market shipments accounted for *** percent of total shipments and exports accounted for *** percent of shipments. In 2009, internal consumption and home market shipments accounted for *** percent of total shipments and exports accounted for *** percent of shipments. CR/PR at Table IV-17. The Russian industry's exports of subject magnesium declined from *** metric tons in 2004 to *** metric tons in 2009. *Id.*

¹⁸⁴ Hearing Transcript at 27-28 and 194-195 (Gurley), and CR/PR at Tables IV-18 and IV-19. As discussed earlier, AVISMA is now part of VSMPO, which is primarily a titanium producer, and ***.

¹⁸⁵ See AVISMA Posthearing Brief, Exhibit 1 at 28 (AVISMA expects that such long-term sales contracts will account for almost *** percent of its total magnesium sales in 2011), and SMW Posthearing Submission at Exhibit 1 (listing SMW's contracts).

In these reviews, the Commission collected quarterly pricing data for four magnesium products.¹⁸⁶ These data accounted for 77.7 percent of the quantity of U.S. producers' U.S. shipments of magnesium during the period of review and for 83.9 percent of total U.S. imports from Russia during that period.¹⁸⁷ Prices for the U.S.-produced magnesium products increased *** over the period of review.¹⁸⁸ In the quarterly comparisons, subject imports from Russia oversold the domestic product in 19 out of 23 comparisons, with an average margin of 13.7 percent. Russian imports undersold the domestic product in four comparisons, with an average margin of 11.2 percent.¹⁸⁹

As discussed above, in light of the diminished capacity and production of the magnesium industry in Russia, as well as constraints on expanding that capacity, and the Russian industry's relationships with existing home market and third-country customers, we do not find that subject imports from Russia are likely to enter the United States in significant quantities if the order is revoked. Thus, we also do not find that Russian magnesium producers are likely to significantly undersell the domestic like product to gain market share if the orders are revoked. Subject import volume and market share would be too small in absolute and relative terms to have any significant adverse effects on domestic magnesium prices. Moreover, domestic magnesium prices rose *** towards the end of the period of review, even at a time of collapsing demand, making it unlikely that the modest volume of subject imports from Russia would suppress or depress domestic magnesium prices to a significant degree. Accordingly, we conclude that there is not likely to be significant underselling by the subject imports if the order is revoked, and correspondingly, those imports would not be likely to have a significant depressing or suppressing effect on prices for the domestic like product.

We are not persuaded by US Magnesium's argument that higher prices in the United States than in other markets will draw Russian imports to the United States in significant quantities.¹⁹⁰ We note that the AUVs of Russian producers' sales in the United States were *** than the AUVs of their sales in Russia, Europe, and Asia for most years of the period of review, except 2008, when there was a large increase in U.S. prices,¹⁹¹ suggesting that the United States will not necessarily be a more attractive market for Russian producers than their home or third-country markets. We also note that, in 2008, despite higher U.S. values, subject imports from Russia declined.¹⁹² Moreover, even if the U.S. market were to be relatively attractive, Russian magnesium producers are still subject to the constraints discussed above. For these reasons, we find that revocation of the antidumping duty order likely would not lead to significant underselling by the subject imports of the domestic like product, or to significant price depression or suppression, within a reasonably foreseeable time.

3. Likely Impact of Subject Imports

A summary of the original determinations is presented above in subsection V.C.3.

As discussed above, we do not find that the domestic industry is currently vulnerable to material injury. The domestic industry enjoyed *** financial results towards the end of the period of review, even at a time of severely depressed demand. Moreover, any increase in imports of magnesium from Russia would most likely consist of pure magnesium, given that the Russian industry's capacity to produce alloy

¹⁸⁶ CR at V-9, PR at V-4.

¹⁸⁷ CR at V-10, PR at V-5.

¹⁸⁸ CR at V-19, PR at V-7.

¹⁸⁹ CR at V-20-21, PR at V-7.

¹⁹⁰ US Magnesium Prehearing Brief at 30.

¹⁹¹ CR/PR at Table IV-17 and CR at V-19, PR at V-7.

¹⁹² CR/PR at Table C-1.

magnesium declined *** percent from 2003 to 2009,¹⁹³ and that Russia stopped exporting alloy magnesium to the United States after 2005. The segment of the domestic industry that would be most directly affected by any increase in imports of pure magnesium from Russia – namely the producers of pure magnesium in the United States, principally US Magnesium – had *** than the domestic industry as a whole.¹⁹⁴

The segment of the domestic industry producing pure magnesium also is somewhat insulated from potential competition from Russian imports by the existence of long-term contracts between US Magnesium and ***. For example, US Magnesium has contracts for *** quantities of pure magnesium with *** and Allegheny Technologies Inc. (“ATI”).¹⁹⁵ The ATI contract is particularly significant, not only because of its duration and the amounts of magnesium involved, but also because it would be difficult for ATI to switch magnesium suppliers to another source.¹⁹⁶

As discussed above, in light of the reduced capacity and production of the magnesium industry in Russia, as well as constraints on expanding that capacity, and the Russian industry’s relationships with existing home market and third-country customers, subject imports from Russia are not likely to enter the United States in significant quantities if the order is revoked. Any increase in imports from Russia would be too small in absolute and relative terms to have any adverse effects on domestic magnesium prices. Because revocation will likely result in neither an increase in subject import volume to a significant level nor significant price effects, we find that significant declines in the domestic industry’s output, market share, profits, productivity, return on investment, and capacity utilization are not likely, particularly in light of the industry’s currently strong financial condition. We also find that revocation will not likely result in significant effects on the domestic industry’s cash flow, inventories, employment, wages, growth, ability to raise capital, investment, or development or production efforts. We consequently conclude that revocation of the order is not likely to have a significant impact on the domestic industry.

CONCLUSION

For the foregoing reasons, we determine that revocation of the antidumping duty order on magnesium from Russia would not be likely to lead to continuation or recurrence of material injury to the domestic industry within a reasonably foreseeable time.

¹⁹³ The Russian industry’s capacity to produce alloy magnesium ingot declined from *** metric tons in 2003 to *** metric tons in 2009. CR/PR at Table IV-16.

¹⁹⁴ Compare CR/PR at Table C-1 with Table C-2. For example, the operating income ratio of the pure magnesium producing segment was *** percent in 2008 and *** percent in 2009, as compared with *** percent and *** percent for the industry as a whole.

¹⁹⁵ The ***. Letter from King & Spalding to George Deyman, dated February 7, 2011. The ATI contract stipulates that US Magnesium will supply ATI with ***. US Magnesium estimates that it will sell *** metric tons to ATI in 2011. ***. CR at V-5 n.9, PR at V-3 n.9 and US Magnesium Posthearing Brief at Exhibit 6, US Magnesium Memorandum. US Magnesium also has a long-term contract with ***. CR at V-4-5 and n.9, PR at V-3 and n.9.

¹⁹⁶ ATI’s plant is located adjacent to US Magnesium’s plant. ATI ***. As ***. US Magnesium Posthearing Brief at Exhibit 6, *** at para. 3.

PART I: INTRODUCTION AND OVERVIEW

BACKGROUND

On March 1, 2010, the U.S. International Trade Commission (“Commission”) gave notice,¹ pursuant to section 751(c) of the Tariff Act of 1930 (“the Act”),² that it had instituted reviews to determine whether revocation of the antidumping duty order on alloy magnesium from China³ and the antidumping duty order on pure and alloy magnesium from Russia⁴ would likely lead to the continuation or recurrence of material injury to a domestic industry.^{5 6} Effective June 4, 2010, the Commission determined that it would conduct full reviews pursuant to section 751(c)(5) of the Act.⁷ Information relating to the background and schedule of the reviews is provided in the following tabulation.⁸

¹ Commissioner Dean A. Pinkert is not participating in these reviews. Memorandum CO82-HH-021, April 6, 2010.

² 19 U.S.C. § 1675 (c).

³ The imported merchandise from China that is the subject of these reviews consists of alloy magnesium metal products made from primary and/or secondary magnesium that contain 50 percent or greater, but less than 99.8 percent, magnesium by weight, that conform to an “American Society of Testing and Materials (“ASTM”) Specification for Magnesium Alloy.” In addition to the antidumping duty order concerning alloy magnesium from China that is the subject of these reviews, there is currently an antidumping duty order on pure magnesium ingot from China (60 FR 25691, May 12, 1995) that was continued after affirmative first and second five-year reviews (65 FR 55047, September 12, 2000, and 71 FR 38860, July 10, 2006), and an antidumping duty order on pure magnesium in granular form from China (66 FR 57936, November 19, 2001) that was continued after an affirmative first five-year review (72 FR 14076, March 26, 2007). The pure magnesium orders also include “off-specification” pure magnesium (alloy magnesium that contains 50 percent or greater but less than 99.8 percent magnesium by weight, that does not conform to an ASTM specification for alloy magnesium). For purposes of the current five-year reviews on alloy magnesium, “off-specification pure” magnesium from China is classified as nonsubject alloy magnesium since, by definition, it contains less than 99.8 percent magnesium by weight. For a more detailed description of the scope of the subject imports from China, see the section entitled *The Subject Merchandise* in Part I of this report.

⁴ The subject merchandise from Russia consists of pure and alloy magnesium metal products made from primary and/or secondary magnesium that contain 50 percent or greater magnesium by weight, whether or not conforming to an “ASTM Specification for Magnesium Alloy.” For a more detailed description of the scope of the subject imports from Russia, see the section entitled *The Subject Merchandise* in Part I of this report.

⁵ All interested parties were requested to respond to this notice by submitting the information requested by the Commission. *Magnesium from China and Russia*, 75 FR 9252, March 1, 2010.

⁶ In accordance with section 751(c) of the Act, the U.S. Department of Commerce (“Commerce”) published a notice of initiation of five-year reviews of the subject antidumping duty orders concurrently with the Commission’s notice of institution. *Initiation of Five-year (“Sunset”) Review*, 75 FR 9160, March 1, 2010.

⁷ The Commission determined that the domestic and respondent interested party group responses were adequate. *Magnesium from China and Russia*, 75 FR 35086, June 21, 2010.

⁸ The Commission’s notice of institution, notice to conduct full reviews, scheduling notice, and statement on adequacy appear in app. A and may also be found at the Commission’s web site (internet address www.usitc.gov). Commissioners’ votes on whether to conduct expedited or full reviews may also be found at the web site.

Effective date	Action
April 15, 2005	Commerce's antidumping duty orders (70 FR 19928-19931)
March 1, 2010	Commission's institution (75 FR 9252) and Commerce's initiation (75 FR 9160) of first five-year review
June 4, 2010	Commission's decision to conduct full reviews (75 FR 35086, June 21, 2010)
July 7, 2010	Commerce's final results of expedited reviews (75 FR 38983)
July 28, 2010	Commission's scheduling of the reviews (75 FR 48360, August 10, 2010)
December 7, 2010	Commission's hearing ¹
February 10, 2011	Commission's vote
February 24, 2011	Commission's determinations transmitted to Commerce
¹ The list of hearing witnesses is provided in app. B.	

THE ORIGINAL INVESTIGATIONS

On February 27, 2004, a petition was filed with Commerce and the Commission alleging that an industry in the United States was materially injured, or threatened with material injury, by reason of dumped imports of alloy magnesium from China and pure and alloy magnesium from Russia.⁹ On February 24, 2005, Commerce published its final determinations in the *Federal Register*.¹⁰ Commerce's final weighted-average dumping margins for alloy magnesium from China and for pure and alloy magnesium from Russia, as amended in the antidumping duty orders,¹¹ are presented in the tabulation on the following page:

⁹ The petition was filed by primary magnesium producer US Magnesium Corp. ("US Magnesium") (successor company to Magnesium Corp. of America ("Magcorp"), Salt Lake City, UT; the United Steelworkers of America, Local 8319 ("Local 8319"), Salt Lake City, UT; and the Glass, Molders, Pottery, Plastics & Allied Workers International, Local 374 ("Local 374"), Long Beach, CA. Local 8319 represented workers at US Magnesium's production facility in Rowley, UT. Local 374 represented workers at secondary magnesium producer Halaco Engineering Co. ("Halaco") in Oxnard, CA. Halaco ceased production of magnesium in 2004.

¹⁰ *Final Determination of Sales at Less Than Fair Value and Affirmative Critical Circumstances: Magnesium Metal From the People's Republic of China*, 70 FR 9037, February 24, 2005; and *Magnesium Metal from the Russian Federation: Notice of Final Determination of Sales at Less Than Fair Value*, 70 FR 9041, February 24, 2005.

¹¹ *Notice of Antidumping Duty Order: Magnesium Metal From the People's Republic of China*, 70 FR 19928, April 15, 2005; and *Notice of Antidumping Duty Order: Magnesium Metal From the Russian Federation*, 70 FR 19930, April 15, 2005.

Country/exporter	Weighted-average dumping margins (percent ad valorem)
China	
Tianjin Magnesium International Co., Ltd.	49.66
Beijing Guangling Jinghua Science & Technology Co., Ltd.	49.66
All others	141.49
Russia	
JSC AVISMA Titanium-Magnesium Works	21.71
Solikamsk Magnesium Works	18.65
All others	21.01

The Commission made its final affirmative injury determinations on April 4, 2005,¹² and Commerce issued the antidumping duty orders on U.S. imports of alloy magnesium from China and pure and alloy magnesium from Russia on April 15, 2005.¹³

SUMMARY DATA

Table I-1 presents a summary of data from the original investigations and from these reviews; figure I-1 shows subject U.S. imports of alloy magnesium from China and pure and alloy magnesium from Russia since 2000. A summary of data collected in the reviews is presented in appendix C, table C-1 (all magnesium), table C-2 (pure magnesium), table C-3 (alloy magnesium), and table C-4 (data for U.S. grinders of magnesium). Reproductions of the summary tables from the Commission's staff report from the original final investigations that present summary data for annual periods 2000-03 are also provided in appendix C.¹⁴

¹² *Magnesium from China and Russia: Determinations*, 70 FR 19969, April 15, 2005.

¹³ *Notice of Antidumping Duty Order: Magnesium Metal From the People's Republic of China*, 70 FR 19928, April 15, 2005; and *Notice of Antidumping Duty Order: Magnesium Metal From the Russian Federation*, 70 FR 19930, April 15, 2005.

¹⁴ These reproductions retain their original final staff report table and page numbers and are identified in appendix C as follows: (1) pure magnesium: table C-4 (reproduced from original final staff report), (2) alloy magnesium: table C-5 (reproduced from original final staff report), and (3) all magnesium (pure and alloy): table C-6 (reproduced from original final staff report).

Table I-1

Magnesium: Summary data from the original investigations and the current reviews, 2000-09

* * * * *

Table I-1--Continued

Magnesium: Summary data from the original investigations and the current reviews, 2000-09

(Quantity=metric tons; value=1,000 dollars; unit values, unit labor costs, and unit financial data are per metric ton)

Item	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
U.S. imports from— Subject sources: China:										
Quantity	6,671	9,321	11,964	12,906	13,262	36	34	46	287	142
Value ¹	13,497	18,744	20,613	24,020	35,765	89	101	129	1,697	723
Unit value ¹	\$2,023	\$2,011	\$1,723	\$1,861	\$2,697	\$2,452	\$2,918	\$2,781	\$5,907	\$5,091
Russia:										
Quantity	13,685	11,902	16,668	21,745	23,439	12,573	13,038	6,105	2,210	315
Value ¹	36,087	23,758	32,896	41,517	50,843	32,162	29,616	14,198	8,475	1,421
Unit value ¹	\$2,637	\$1,996	\$1,974	\$1,909	\$2,169	\$2,558	\$2,272	\$2,326	\$3,835	\$4,505
Subtotal, subject:										
Quantity	20,356	21,223	28,632	34,651	36,701	12,610	13,072	6,152	2,498	458
Value ¹	49,584	42,502	53,508	65,537	86,609	32,251	29,717	14,327	10,172	2,144
Unit value ¹	\$2,436	\$2,003	\$1,869	\$1,891	\$2,360	\$2,558	\$2,273	\$2,329	\$4,073	\$4,687

Table continued on following page.

Table I-1--Continued**Magnesium: Summary data from the original investigations and the current reviews, 2000-09****(Quantity=metric tons; value=1,000 dollars; unit values, unit labor costs, and unit financial data are per metric ton)**

Item	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
U.S. imports from-- Nonsubject sources: Canada:										
Quantity	30,364	16,685	34,075	24,956	26,265	31,003	29,108	15,261	3,228	733
Value ¹	94,194	50,094	92,632	69,223	77,352	99,703	87,626	53,304	17,921	3,543
Unit value ¹	\$3,102	\$3,002	\$2,718	\$2,774	\$2,945	\$3,216	\$3,010	\$3,493	\$5,552	\$4,833
China:										
Quantity	15,506	3,151	173	101	6,812	1,503	335	3,476	19,113	4,968
Value ¹	33,872	6,726	304	257	16,255	4,246	809	11,386	106,024	25,196
Unit value ¹	\$2,184	\$2,135	\$1,761	\$2,535	\$2,386	\$2,826	\$2,415	\$3,276	\$5,547	\$5,071
Israel:										
Quantity	8,623	7,890	8,419	5,747	13,320	15,074	10,757	17,188	26,148	16,491
Value ¹	31,432	24,336	22,013	14,267	41,228	54,172	31,316	50,915	101,055	65,320
Unit value ¹	\$3,645	\$3,085	\$2,615	\$2,483	\$3,095	\$3,594	\$2,911	\$2,962	\$3,865	\$3,961
All other countries:										
Quantity	7,857	9,236	4,104	3,902	7,256	12,453	5,919	8,906	7,612	4,011
Value ¹	27,917	29,964	13,673	12,850	24,131	40,524	21,631	31,752	47,519	27,062
Unit value ¹	\$3,553	\$3,244	\$3,331	\$3,293	\$3,326	\$3,254	\$3,655	\$3,565	\$6,243	\$6,748

Table continued on following page.

Table I-1--Continued**Magnesium: Summary data from the original investigations and the current reviews, 2000-09****(Quantity=metric tons; value=1,000 dollars; unit values, unit labor costs, and unit financial data are per metric ton)**

Item	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
U.S. imports from— Nonsubject sources: Subtotal, nonsubject: Quantity	62,351	36,962	46,771	34,706	53,653	60,033	46,119	44,831	56,101	26,203
Value ¹	187,415	111,119	128,622	96,597	158,966	198,645	141,382	147,358	272,520	121,121
Unit value ¹	3,006	3,006	2,750	2,783	\$2,963	\$3,309	\$3,066	\$3,287	\$4,858	\$4,622
All countries: Quantity	82,706	58,185	75,403	69,356	90,355	72,642	59,191	50,982	58,599	26,661
Value ¹	236,999	153,622	182,130	162,134	245,575	230,895	171,099	161,685	282,692	123,265
Unit value ¹	\$2,866	\$2,640	\$2,415	\$2,338	\$2,718	\$3,179	\$2,891	\$3,171	\$4,824	\$4,623

Table I-1--Continued**Magnesium: Summary data from the original investigations and the current reviews, 2000-09**

* * * * *

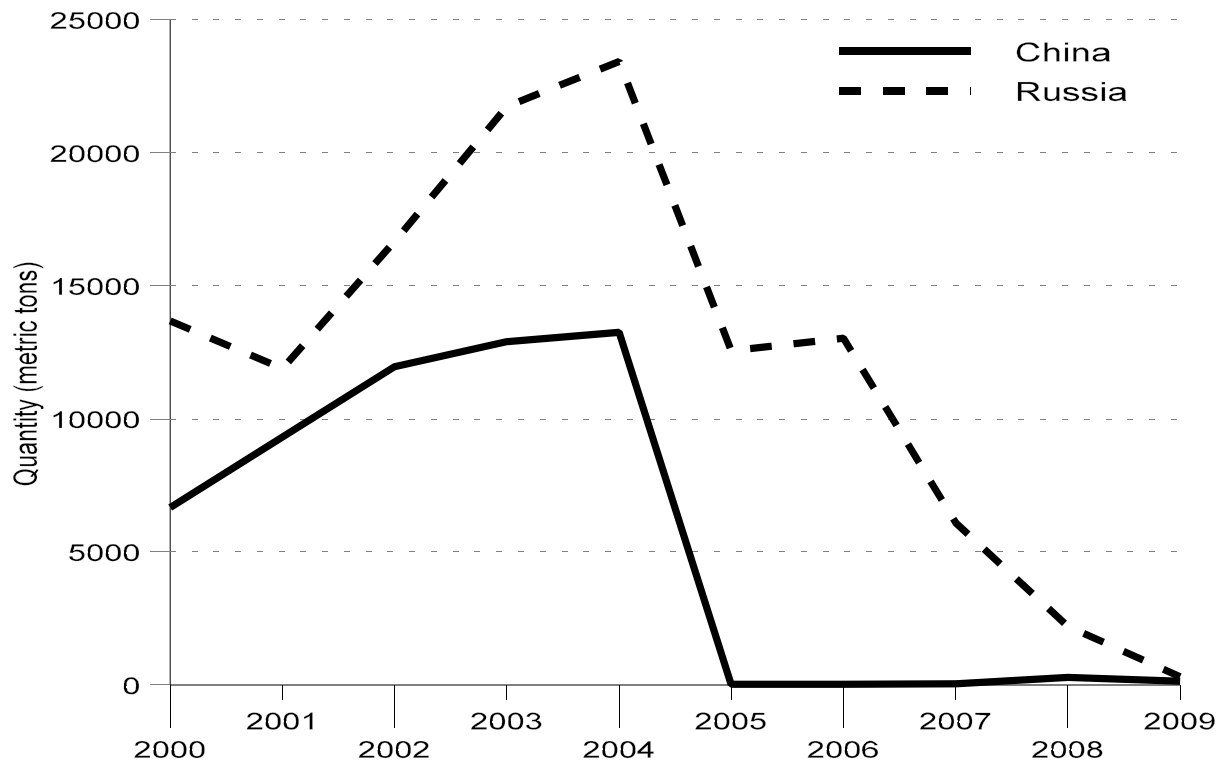
¹ Values presented for U.S. imports are landed, duty-paid values and unit values of U.S. imports were calculated based on landed, duty-paid values.

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

Note.—Data for 2000 were collected during the preliminary phase of the original investigations. Data for 2001-03 were collected during the final phase of the original investigations. Data for 2004-09 were collected during these first five-year reviews of the orders. Comparisons of the data between these three periods should be made with caution because the basis on which they were calculated is not necessarily consistent.

Source: Data presented for 2000-03 were compiled from data presented in *Magnesium from China and Russia: Inv. Nos. 731-TA-1071-1072 (Final)—Corrections to the Staff Report*, INV-CC-034, March 16, 2005, table C-6; data presented for 2004-09 were compiled from data submitted in response to Commission questionnaires in these five-year reviews and from official Commerce statistics.

Figure I-1
Magnesium: Subject U.S. imports of alloy magnesium from China and pure and alloy magnesium from Russia, 2000-09



Source: *Magnesium from China and Russia: Inv. Nos. 731-TA-1071-1072 (Final)*—Staff Report, INV-CC-031, March 11, 2005, table C-6 (for 2000-03 data, which were from official Commerce statistics), and official Commerce statistics for 2004-09 data.

RELATED INVESTIGATIONS

Title VII Investigations and Reviews

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. Table I-2 presents actions taken by the Commission and Commerce with respect to these proceedings.

Table I-2
Magnesium: Actions taken by the Commission and Commerce

Action	Date	Federal Register citation
Canada: ¹		
Commission's affirmative determinations in 701-TA-309 and 731-TA-528 (Final)	08/26/1992	57 FR 38696
Countervailing duty ("CVD") orders issued (C-122-814) (<i>pure and alloy ingot</i>)	08/31/1992	57 FR 39390
Antidumping duty ("AD") order issued (A-122-814) (<i>pure ingot</i>)	08/31/1992	57 FR 39392
Institution of first five-year reviews of AD and CVD orders (full)	08/02/1999	64 FR 41961
Commission's affirmative determinations in first five-year reviews	08/02/2000	65 FR 47517
Continuation of AD and CVD orders	08/16/2000	65 FR 49964
Revocation of AD order	12/07/2004	69 FR 70649
Institution of second five-year reviews of CVD orders (full)	07/01/2005	70 FR 38199
Commission's negative CVD determinations in second five-year reviews	06/26/2006	71 FR 36359
Revocation of CVD orders	07/06/2006	71 FR 38382
China (Inv. No. 731-TA-696): ²		
Commission's affirmative determination in 731-TA-696 (Final)	05/17/1995	60 FR 26456
AD order issued (A-570-832) (<i>pure ingot</i>)	05/12/1995	60 FR 25691
Institution of first five-year review (expedited)	04/03/2000	65 FR 17531
Commission's affirmative determination in first five-year review	09/12/2000	65 FR 55047
Continuation of AD order	10/27/2000	65 FR 64422
Institution of second five-year review (full)	07/01/2005	70 FR 38101
Commission's affirmative determination in second five-year review	06/26/2006	71 FR 36359
Continuation of AD order	07/10/2006	71 FR 38860
China (Inv. No. 731-TA-895): ³		
Commission's affirmative determination in 731-TA-895 (Final)	11/20/2001	66 FR 58162
AD order issued (A-570-864) (<i>pure granular</i>)	11/19/2001	66 FR 57936
Institution of first five-year review (expedited)	10/02/2006	71 FR 58001
Commission's affirmative determination in first five-year review	03/07/2007	72 FR 10258
Continuation of AD order	03/26/2007	72 FR 14076
China (Inv. No. 731-TA-1071): ⁴		
Commission's affirmative determination in 731-TA-1071 (Final)	04/15/2005	70 FR 19969
AD order issued (A-570-896) (<i>alloy</i>)	04/15/2005	70 FR 19928
Institution of first five-year review (full)	03/01/2010	75 FR 9252
Israel:		
Commission's institution of 701-TA-403 and 731-TA-896 (Preliminary)	10/25/2000	65 FR 63888
Commission's negative determinations in 701-TA-403 and 731-TA-896 (Final)	11/20/2001	66 FR 58162
Norway:		
Commission's institution of 701-TA-310 and 731-TA-529 (Preliminary)	09/12/1991	56 FR 46443
Commerce's dismissal of CVD petition and termination of CVD proceeding	10/01/1991	56 FR 49748
Commission's termination of CVD investigation (701-TA-310 (Preliminary))	10/23/1991	56 FR 54887
Commerce's final negative AD determination (A-403-803) (<i>pure</i>) and rescission of investigation and partial dismissal of petition (<i>alloy</i>)	07/13/1992	57 FR 30942
Commission terminates AD investigation 731-TA-529 (Final)	08/04/1992	57 FR 34303

Table continued on following page.

Table I-2--Continued
Magnesium: Actions taken by the Commission and Commerce

Action	Date	Federal Register citation
Russia (731-TA-697): ⁵		
Commission's affirmative determination in AD investigation 731-TA-697 (Final)	05/17/1995	60 FR 26456
AD order issued (A-821-805) (<i>pure ingot</i>)	05/12/1995	60 FR 25691
Institution of five-year review (expedited)	04/03/2000	65 FR 17531
Revocation of AD order	07/07/2000	65 FR 41944
Termination of five-year review	07/17/2000	65 FR 44076
Russia (731-TA-897):		
Institution of 731-TA-897 (Preliminary)	10/25/2000	65 FR 63888
Commerce's negative final AD determination (A-821-813) (<i>pure ingot and granules</i>)	09/27/2001	66 FR 49347
Commission terminates AD investigation 731-TA-897 (Final)	10/04/2001	66 FR 50680
Russia (731-TA-1072): ⁶		
Commission's affirmative determination in 731-TA-1072 (Final)	04/15/2005	70 FR 19969
AD order issued (A-821-819) (<i>pure and alloy</i>)	04/15/2005	70 FR 19930
Institution of first five-year review (full)	03/01/2010	75 FR 9252
Ukraine: ⁷		
Commission's affirmative determination in 731-TA-698 (Final)	05/17/1995	60 FR 26456
AD order issued (A-823-806) (<i>pure ingot</i>)	05/12/1995	60 FR 25691
Commission's negative determination on remand	June 1998	(⁸)
Revocation of AD order	08/24/1999	64 FR 46182
¹ Based on its first five-year reviews, Commerce found the following weighted-average CVD margins: Norsk Hydro, 1.84 percent <i>ad valorem</i>; and all others, 4.48 percent <i>ad valorem</i> (65 FR 41444, July 5, 2000). Based on its second five-year reviews, Commerce found the following weighted-average CVD margins: all others, 6.34 percent <i>ad valorem</i> (pure magnesium); Magnola, 1.84 percent <i>ad valorem</i> (alloy magnesium); and all others, 8.18 percent <i>ad valorem</i> (alloy magnesium) (70 FR 67140, November 4, 2005). Based on its first five-year reviews, Commerce found the following weighted-average AD margins: Norsk Hydro Canada, 21.00 percent <i>ad valorem</i>; and all others, 21.00 percent <i>ad valorem</i> (65 FR 41436, July 5, 2000). Excluded from the AD and CVD orders was Timminco Canada. On October 7, 2004, an Extraordinary Challenge Committee issued a determination which affirmed the final remand opinion of the Binational panel concerning alloy magnesium from Canada (69 FR 67703, November 19, 2004). 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. In its first and second five-year reviews of the orders, Commerce found the weighted-average AD margin to be 108.26 percent <i>ad valorem</i> (65 FR 47713, August 3, 2000; and 71 FR 580, January 5, 2006). ³ In its original determination and its first five-year review of the order, Commerce found the weighted-average AD margin for Minmetals to be 24.67 percent <i>ad valorem</i> and 305.56 percent <i>ad valorem</i> for all other manufacturers and exporters in China (66 FR 57936, November 19, 2001; and 72 FR 5417, February 6, 2007). ⁴ In its original determination and its expedited first five-year review determination, Commerce found the weighted-average AD margin for Tianjin Magnesium International Co., Ltd. and Beijing Guangling Jinghua Science & Technology Co., Ltd. to be 49.66 percent <i>ad valorem</i> and 141.49 percent <i>ad valorem</i> for all other manufacturers and exporters in China (70 FR 19928, April 15, 2005; and 75 FR 38983, July 7, 2010). ⁵ 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). ⁶ Commerce found a weighted-average AD margin of 21.71 percent <i>ad valorem</i> for JSC AVISMA Titanium-Magnesium Works, 18.65 percent <i>ad valorem</i> for Solikamsk Magnesium Works, and 21.01 percent <i>ad valorem</i> for all others. ⁷ The Commission made a negative determination with respect to alloy magnesium. ⁸ No corresponding <i>Federal Register</i> citation.		
Source: Various <i>Federal Register</i> notices.		

Other Investigations

On December 17, 1999, the Commission received a request from the United States Trade Representative (“USTR”) for an investigation under section 332(g) of the Tariff Act of 1930 for the purpose of providing advice concerning possible modifications to the U.S. Generalized System of Preferences (“GSP”) for several products including alloy and granular magnesium. Subsequently, on December 23, 1999, the Commission instituted investigation No. 332-410.¹⁵ After a public hearing was held on February 2, 2000, the Commission presented its advice to the USTR on March 16, 2000.¹⁶ In a Presidential Proclamation of June 29, 2000, the President added granular magnesium to the list of GSP-eligible articles.¹⁷

STATUTORY CRITERIA AND ORGANIZATION OF THE REPORT

Statutory Criteria

Section 751(c) of the Act requires Commerce and the Commission to conduct a review no later than five years after the issuance of an antidumping or countervailing duty order or the suspension of an investigation to determine whether revocation of the order or termination of the suspended investigation “would be likely to lead to continuation or recurrence of dumping or a countervailable subsidy (as the case may be) and of material injury.”

Section 752(a) of the Act provides that in making its determination of likelihood of continuation or recurrence of material injury--

(1) IN GENERAL.-- . . . the Commission shall determine whether revocation of an order, or termination of a suspended investigation, would be likely to lead to continuation or recurrence of material injury within a reasonably foreseeable time. The Commission shall consider the likely volume, price effect, and impact of imports of the subject merchandise on the industry if the order is revoked or the suspended investigation is terminated. The Commission shall take into account--

(A) its prior injury determinations, including the volume, price effect, and impact of imports of the subject merchandise on the industry before the order was issued or the suspension agreement was accepted,

(B) whether any improvement in the state of the industry is related to the order or the suspension agreement,

(C) whether the industry is vulnerable to material injury if the order is revoked or the suspension agreement is terminated, and

(D) in an antidumping proceeding . . . , (Commerce’s findings) regarding duty absorption . . .

(2) VOLUME.--In evaluating the likely volume of imports of the subject merchandise if the order is revoked or the suspended investigation is terminated, the Commission shall consider whether the likely volume of imports of the subject

¹⁵ *Advice Concerning Possible Modifications to the U.S. Generalized System of Preferences*, 64 FR 73574, December 30, 1999.

¹⁶ *See Advice Concerning Possible Modifications to the U.S. Generalized System of Preferences*, Inv. No. 332-410, USITC Publication 3288 (March 2000).

¹⁷ *Proclamation 7325 of June 29, 2000 to Modify Duty-Free Treatment Under the Generalized System of Preferences and for Other Purposes*, 65 FR 41313, July 3, 2000.

merchandise would be significant if the order is revoked or the suspended investigation is terminated, either in absolute terms or relative to production or consumption in the United States. In so doing, the Commission shall consider all relevant economic factors, including--

(A) any likely increase in production capacity or existing unused production capacity in the exporting country,

(B) existing inventories of the subject merchandise, or likely increases in inventories,

(C) the existence of barriers to the importation of such merchandise into countries other than the United States, and

(D) 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.

(3) PRICE.--In evaluating the likely price effects of imports of the subject merchandise if the order is revoked or the suspended investigation is terminated, the Commission shall consider whether--

(A) there is likely to be significant price underselling by imports of the subject merchandise as compared to domestic like products, and

(B) imports of the subject merchandise are likely to enter the United States at prices that otherwise would have a significant depressing or suppressing effect on the price of domestic like products.

(4) IMPACT ON THE INDUSTRY.--In evaluating the likely impact of imports of the subject merchandise on the industry if the order is revoked or the suspended investigation is terminated, the Commission shall consider all relevant economic factors which are likely to have a bearing on the state of the industry in the United States, including, but not limited to--

(A) likely declines in output, sales, market share, profits, productivity, return on investments, and utilization of capacity,

(B) likely negative effects on cash flow, inventories, employment, wages, growth, ability to raise capital, and investment, and

(C) 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.

The Commission shall evaluate all such relevant economic factors . . . within the context of the business cycle and the conditions of competition that are distinctive to the affected industry.

Section 752(a)(6) of the Act states further that in making its determination, “the Commission may consider the magnitude of the margin of dumping or the magnitude of the net countervailable subsidy. If a countervailable subsidy is involved, the Commission shall consider information regarding the nature of the countervailable subsidy and whether the subsidy is a subsidy described in Article 3 or 6.1 of the Subsidies Agreement.”

Organization of the Report

Information obtained during the course of these reviews that relates to the above factors is presented throughout this report. A summary of data collected in the reviews is presented in appendix C.

U.S. industry data presented in this report are based on the questionnaire responses of the only U.S. producers of primary magnesium (US Magnesium and MagPro) and on the questionnaire responses of the only known current U.S. producers of secondary magnesium.¹⁸ U.S. import data presented throughout this report are based on official import statistics of Commerce.¹⁹ U.S. purchaser data presented are based on the responses of 41 firms to the Commission's U.S. purchasers' questionnaire. Information presented in Part IV of this report for the subject magnesium industries in China and Russia is based on the information submitted in the questionnaire responses of four alloy magnesium producers in China that are believed to have accounted for *** percent of production of subject merchandise in China during 2009²⁰ and three magnesium producers in Russia that are believed to be the only producers of the subject merchandise in Russia. Responses to a series of questions concerning the significance of the existing antidumping duty orders and the likely effects of revocation by U.S. producers, importers, and purchasers of magnesium and producers of the subject imports in China and Russia are presented in appendix D. Appendix E presents pricing data collected on U.S. imports of magnesium from nonsubject sources.

COMMERCE'S DETERMINATIONS

Information concerning Commerce's actions in connection with the antidumping duty orders that are the subject of these reviews is presented in table I-3.

¹⁸ The U.S. producers of secondary magnesium that responded to the Commission's questionnaire in these reviews are the following five firms: Advanced Magnesium Alloys Corp. ("Amacor"); KB Alloys LLC ("KB Alloys"); Mag Pro LLC ("Mag Pro"); MagReTech, Inc. ("MagReTech"); and Spartan Light Metal Products ("Spartan"). The only U.S. secondary producers that provided a questionnaire response in the original final investigations that did not provide a response in these reviews are Garfield Alloys, Inc. ("Garfield") and Halaco Engineering, Inc. ("Halaco"). Garfield ceased production of magnesium in 2003 and Halaco ceased production of magnesium in 2004. In addition, the following three U.S. grinders also responded to the Commission's U.S. producers' questionnaire in the current reviews: ESM Group Inc. ("ESM"); Hart Metals, Inc. ("Hart"); and Reade Mfg. Co. ("Reade"). In order to avoid double-counting, data submitted by the U.S. grinders are not included in the aggregated U.S. producer data presented throughout this report. The aggregate data provided by the U.S. grinders are presented separately in appendix C, table C-4. For additional information on responding U.S. producers and U.S. producer coverage, see *Part III* of this report.

¹⁹ Questionnaire responses from U.S. importers accounted for all subject imports of alloy magnesium from China and pure and alloy magnesium from Russia during 2009; however, because coverage was low for imports from nonsubject sources, importers' questionnaire responses from the 13 responding U.S. importers accounted for only about one-quarter of imports of magnesium from all sources in 2009. For additional information on responding U.S. importers and U.S. importer coverage, see *Part IV* of this report.

²⁰ The coverage figure for alloy magnesium produced in China is based on alloy magnesium production statistics provided by the China Magnesium Association ("CMA"). *Magnesium From China and Russia - Chinese Respondents' Response to the Commission's Notice of Institution*, March 31, 2010, p. 5.

Table I-3

Magnesium: Commerce's actions in connection with the subject antidumping duty orders

Action	Date	Federal Register citation	Period of investigation/review	Margins	
				Firm-specific	Country-wide ¹
				Percent ad valorem	
China (alloy magnesium):					
Final determination	02/24/2005	70 FR 9037	07/01/2003 - 12/31/2003	91.31 ²	141.49
Amended final determination ³	03/29/2005	70 FR 15838	07/01/2003 - 12/31/2003	49.66 ²	141.49
Antidumping duty order	04/15/2005	70 FR 19928	--	49.66 ²	141.49
Administrative review	07/14/2008	73 FR 40293	04/01/2006 - 03/31/2007	0.00 ⁴	141.49
Administrative review	11/28/2008	73 FR 72448	04/01/2007 - 03/31/2008	(⁵)	(⁵)
Final results of expedited first five-year review	07/07/2010	75 FR 38983	04/01/2009 - 03/31/2010	49.66 ²	141.49
Administrative review	10/25/2010	75 FR 65450	04/01/2008 - 03/31/2009	0.00 ⁴	141.49
Russia (pure and alloy magnesium):					
Final determination	02/24/2005	70 FR 9041	01/01/2003 - 12/31/2003	22.28 ⁶ 18.65 ⁷	21.45
Amended final determination ³	03/29/2005	70 FR 15837	01/01/2003 - 12/31/2003	21.71 ⁶ 18.65 ⁷	21.01
Antidumping duty order	04/15/2005	70 FR 19930	--	21.71 18.65 ⁷	21.01
Administrative review	09/11/2007	72 FR 51791	10/04/2004 - 03/31/2006	0.41 (<i>de minimis</i>) ⁶ 3.77 ⁷	21.01
Administrative review	09/10/2008	73 FR 52642	04/01/2006 - 03/31/2007	15.77 ⁶ 21.71 ⁷	21.01
Administrative review	08/10/2009	74 FR 39919	04/01/2007 - 03/31/2008	43.58 ⁶ (⁸)	21.01
Final results of expedited first five-year review	07/07/2010	75 FR 38983	04/01/2009 - 03/31/2010	21.71 ⁶ 18.65 ⁷	21.01
Administrative review	09/17/2010	75 FR 56989	04/01/2008 - 03/31/2009	0.00 ⁶	21.01
¹ The country-wide rate applies to all companies that otherwise have not received a firm-specific rate. ² Tianjin Magnesium International Co., Ltd. and Beijing Guangling Jinghua Science & Technology Co., Ltd. ³ Commerce revised the final weighted-average dumping margins following the correction of ministerial errors. ⁴ Tianjin Magnesium International Co., Ltd. ⁵ This administrative review was rescinded because the request for review was withdrawn. ⁶ PSC VSMPO-AVISMA Corp. (successor firm to JSC AVISMA Titanium-Magnesium Works). ⁷ Solikamsk Magnesium Works. ⁸ Because Solikamsk Magnesium Works had no shipments of subject merchandise during the period of review, Commerce rescinded the administrative review with respect to that producer.					
Source: Cited <i>Federal Register</i> notices.					

Administrative Reviews²¹

Since the issuance of the antidumping duty order concerning alloy magnesium imports from China, Commerce has completed two administrative reviews of the antidumping duty order. In the administrative reviews of the order concerning U.S. imports of alloy magnesium from China covering April 1, 2006 to March 31, 2007 and April 1, 2008 to March 31, 2009, Commerce published one company-specific weighted-average dumping margin of zero percent for Tianjin Magnesium International Co., Ltd. Commerce rescinded the subsequent administrative review, covering April 1, 2007 to March 31, 2008, because the only party to request a review timely withdrew its request.

Commerce has conducted four administrative reviews of the antidumping duty orders on pure and alloy magnesium from Russia since the original order was issued. In the administrative review published in 2007, Commerce found much lower company-specific margins (0.41 percent (*de minimis*) for PSC VSMPO-AVISMA Corporation (“PSC-AVISMA”) and 3.77 percent for Solikamsk Magnesium Works (“SMW”)) than in the original orders. However, in the administrative review published in 2008, the margins were much higher (15.77 percent for PSC-AVISMA and 21.71 percent for SMW) than found in the previous administrative review. In the third administrative review concerning the Russian order, published in 2009, Commerce published a company-specific, weighted-average dumping margin of 43.58 percent for PSC-AVISMA and rescinded the review with respect to SMW because the firm made no shipments of subject merchandise to the United States during the period of that administrative review. In its most recent administrative review, published in 2010, Commerce found one company-specific weighted-average dumping margin of zero percent for PSC-AVISMA²² and noted that SMW had no shipments that were subject to the review.

Commerce’s Results of Initial Five-Year Reviews

On July 7, 2010, Commerce found that revocation of the antidumping duty order on alloy magnesium from China would likely lead to continuation or recurrence of dumping as follows: 49.66 percent for Tianjin Magnesium International Co., Ltd. and Beijing Guangling Jinghua Science & Technology Co., Ltd. and 141.49 percent for all other companies in China. With respect to pure and alloy magnesium from Russia, Commerce found on July 7, 2010, that revocation of that antidumping duty order would likely lead to continuation or recurrence of dumping as follows: 21.71 percent for PSC VSMPO-AVISMA Corp. (successor firm to JSC AVISMA Titanium-Magnesium Works), 18.65 percent for SMW, and 21.01 percent for all other companies in Russia.²³ The antidumping duty orders that are the subject of these five-year reviews remain in effect for all exporters and exporters/producers of the subject merchandise from China and Russia. Commerce has not issued any duty absorption findings in these cases.

Changed-Circumstances Reviews

There have been no changed-circumstances reviews conducted by Commerce concerning the antidumping duty orders on alloy magnesium from China and pure and alloy magnesium from Russia.

²¹ For previously reviewed or investigated companies not included in a particular administrative review, the cash deposit rate continues to be the company-specific rate published for the most recent period.

²² US Magnesium indicated that it has appealed this determination to the Court of International Trade because it believes that Commerce based its decision on an incorrect assessment of the data submitted. US Magnesium’s prehearing brief, p. 6, fn. 14.

²³ Commerce’s notice is presented in app. A.

Scope Inquiry Reviews

There have been several scope inquiry reviews requested concerning the antidumping duty orders that are the subject of these reviews (table I-4). Two of the reviews involved requests made by US Magnesium concerning alloy extrusion billets produced by Timminco in Canada from pure magnesium of Chinese and Russian origin. Commerce's review of these requests resulted in the exclusion of such merchandise from the scope of the antidumping duty orders concerning U.S. imports of alloy magnesium from China and Russia.

Table I-4
Magnesium: Commerce's scope rulings

Requestor	Scope ruling	Date of completion	Federal Register citation
China:			
US Magnesium	Scope inquiry terminated. Exclusion request made regarding whether alloy magnesium produced in France using pure magnesium from China is within the scope of the antidumping duty order.	08/31/2006	71 FR 66167 (November 13, 2006)
US Magnesium	Exclusion request granted. Alloy extrusion billets produced in Canada by Timminco Ltd. from pure magnesium of Chinese origin are not within the scope of the antidumping duty order.	11/09/2006	72 FR 5677 (February 7, 2007)
Russia:			
Leeds Specialty Alloys	Exclusion request denied. Mg-15Zr magnesium master alloy, made in Russia by Solikamsk, is within the scope of the antidumping duty order.	05/31/2005	70 FR 55110 (September 20, 2005)
US Magnesium	Exclusion request granted. Alloy extrusion billets produced in Canada by Timminco Ltd. from pure magnesium of Russian origin are not within the scope of the antidumping duty order.	11/09/2006	72 FR 5677 (February 7, 2007)
Source: Cited <i>Federal Register</i> notices.			

DISTRIBUTION OF CONTINUED DUMPING AND SUBSIDY OFFSET ACT FUNDS

The Continued Dumping and Subsidy Offset Act of 2000 ("CDSOA") (also known as the Byrd Amendment) provides that assessed duties received pursuant to antidumping or countervailing duty orders must be distributed to affected domestic producers for certain qualifying expenditures that these producers incur after the issuance of such orders.²⁴ During the review period, qualified U.S. producers of magnesium were eligible to receive disbursements from the U.S. Customs and Border Protection ("Customs") under CDSOA relating to the two antidumping duty orders on the subject product.²⁵ Table I-5 presents CDSOA disbursements and claims for Federal fiscal years (October 1-September 30) 2006-09 by source and by firm, respectively. There were no CDSOA claims for Federal fiscal years prior to 2006. According to Customs' annual CDSOA annual reports, although there have been claims for funds from at least one U.S. producer in every annual period since fiscal year 2006 in connection with the antidumping

²⁴ Section 754 of the Tariff Act of 1930, as amended (19 U.S.C. § 1675(c)).

²⁵ 19 CFR 159.64 (g).

duty orders that are the subject of these reviews, there have been no disbursements of funds in connection with the antidumping duty order on pure and alloy magnesium from Russia and disbursements of funds were made to US Magnesium in only two annual periods (2008 and 2009) in connection with the antidumping duty order on alloy magnesium from China. Undisbursed amounts of CDSOA funds (clearing account balances) as of October 1, 2009 (latest data available) amounted to \$15,766.23 for alloy magnesium from China and \$462,842.40 for magnesium from Russia.

Table I-5

Magnesium: CDSOA disbursements and claims, by source and firm, Federal fiscal years 2006-09¹

Item	Federal fiscal year			
	2006	2007	2008	2009
Disbursements (dollars)				
China:				
Garfield Alloys	0.00	--	--	--
MagReTech	0.00	--	--	--
US Magnesium	0.00	0.00	15,029.60	12,639.30
Total, China	0.00	0.00	15,029.60	12,639.30
Russia:				
Garfield Alloys	0.00	--	--	--
MagReTech	0.00	--	--	--
US Magnesium	0.00	0.00	0.00	0.00
Total, Russia	0.00	0.00	0.00	0.00
Claims (dollars)				
China:				
Garfield Alloys	735,914.54	--	--	--
MagReTech	19,632,977.73	--	--	--
US Magnesium	8,942,339.28	49,549,106.28	49,549,106.28	49,534,076.68
Total, China	29,311,231.55	49,549,106.28	49,549,106.28	49,534,076.68
Russia:				
Garfield Alloys	735,914.54	--	--	--
MagReTech	19,632,977.73	--	--	--
US Magnesium	46,474,968.77	189,453,441.88	189,445,719.33	189,389,504.43
Total, Russia	66,843,861.04	189,453,441.88	189,445,719.33	189,389,504.43
¹ There were no CDSOA claims for Federal fiscal years prior to 2006.				
Source: U.S. Customs and Border Protection's CDSOA <i>Annual Reports</i> . Retrieved from http://www.cbp.gov/xp/cgov/trade/priority_trade/add_cvd/cont_dump/ , October 22, 2010.				

THE SUBJECT PRODUCT

Commerce's Scope

Commerce defined the scope of the imported product subject to the antidumping duty order on alloy magnesium from China as follows:

The merchandise covered by the order is magnesium metal, which includes primary and secondary alloy magnesium metal, regardless of chemistry, raw material source, form, shape, or size. Magnesium is a metal or alloy containing by weight primarily the element magnesium. Primary magnesium is produced by decomposing raw materials into magnesium metal. Secondary magnesium is produced by recycling magnesium-based scrap into magnesium metal. The magnesium covered by the order includes blends of primary and secondary magnesium.

The subject merchandise includes the following alloy magnesium metal products made from primary and/or secondary magnesium including, without limitation, magnesium cast into ingots, slabs, rounds, billets, and other shapes, magnesium ground, chipped, crushed, or machined into raspings, granules, turnings, chips, powder, briquettes, and other shapes: Products that contain 50 percent or greater, but less than 99.8 percent, magnesium, by weight, and that have been entered into the United States as conforming to an "ASTM Specification for Magnesium Alloy"²⁶ and thus are outside the scope of the existing antidumping orders on magnesium from the PRC (generally referred to as "alloy" magnesium).

The scope of the order excludes the following merchandise: (1) All forms of pure magnesium, including chemical combinations of magnesium and other material(s) in which the pure magnesium content is 50 percent or greater, but less than 99.8 percent, by weight, that do not conform to an "ASTM Specification for Magnesium Alloy;"²⁷ (2) magnesium that is in liquid or molten form; and (3) mixtures containing 90 percent or less magnesium in granular or powder form, by weight, and one or more of certain non-magnesium granular materials to make magnesium-based reagent mixtures, including lime, calcium metal, calcium silicon, calcium carbide, calcium carbonate, carbon, slag coagulants, fluorspar, nepheline syenite, feldspar, alumina (Al₂O₃), calcium aluminate, soda ash, hydrocarbons, graphite, coke, silicon, rare earth metals/mischmetal, cryolite, silica/fly ash, magnesium oxide, periclase, ferroalloys, dolomite lime, and colemanite.²⁸

²⁶ The meaning of this term is the same as that used by the American Society for Testing and Materials in its Annual Book of ASTM Standards: Volume 01.02 Aluminum and Magnesium Alloys.

²⁷ This material is already covered by existing antidumping duty orders. See *Notice of Antidumping Duty Orders: Pure Magnesium From the People's Republic of China, the Russian Federation and Ukraine*; *Notice of Amended Final Determination of Sales at Less Than Fair Value: Antidumping Duty Investigation of Pure Magnesium From the Russian Federation*, 60 FR 25691, May 12, 1995; and *Antidumping Duty Order: Pure Magnesium in Granular Form From the People's Republic of China*, 66 FR 57936, November 19, 2001.

²⁸ This exclusion for magnesium-based reagent mixtures is based on the exclusion for reagent mixtures in the 2000-01 investigations of magnesium from China, Israel, and Russia. See *Notice of Final Determination of Sales at Less Than Fair Value: Pure Magnesium in Granular Form From the People's Republic of China*, 66 FR 49345, September 27, 2001; *Notice of Final Determination of Sales at Less Than Fair Value: Pure Magnesium From*

(continued...)

The merchandise subject to the order is currently classifiable under items 8104.19.00 and 8104.30.00 of the Harmonized Tariff Schedule of the United States (“HTSUS”). Although the HTSUS items are provided for convenience and customs purposes, the written description of the subject merchandise is dispositive.²⁹

Commerce defined the scope of the imported products subject to the antidumping duty order on pure and alloy magnesium from Russia as follows:

The merchandise covered by the order are primary and secondary pure and alloy magnesium metal, regardless of chemistry, raw material source, form, shape, or size. Magnesium is a metal or alloy containing by weight primarily the element magnesium. Primary magnesium is produced by decomposing raw materials into magnesium metal. Secondary magnesium is produced by recycling magnesium-based scrap into magnesium metal. The magnesium covered by the order includes blends of primary and secondary magnesium.

The subject merchandise includes the following pure and alloy magnesium metal products made from primary and/or secondary magnesium, including, without limitation, magnesium cast into ingots, slabs, rounds, billets, and other shapes, and magnesium ground, chipped, crushed, or machined into raspings, granules, turnings, chips, powder, briquettes, and other shapes: (1) Products that contain at least 99.95 percent 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 magnesium, by weight (generally referred to as “pure” magnesium); and (3) chemical combinations of magnesium and other material(s) in which the magnesium content is 50 percent or greater, but less than 99.8 percent, by weight, whether or not conforming to an “ASTM Specification for Magnesium Alloy.”³⁰

The scope of the order excludes: (1) magnesium that is in liquid or molten form; and (2) mixtures containing 90 percent or less magnesium in granular or powder form by weight and one or more of certain non-magnesium granular materials to make magnesium-based reagent mixtures, including lime, calcium metal, calcium silicon, calcium carbide, calcium carbonate, carbon, slag coagulants, fluorspar, nepheline syenite, feldspar, alumina (Al₂O₃), calcium aluminate, soda ash, hydrocarbons, graphite, coke, silicon, rare

²⁸ (...continued)

Israel, 66 FR 49349, September 27, 2001; *Notice of Final Determination of Sales at Not Less Than Fair Value: Pure Magnesium From the Russian Federation*, 66 FR 49347, September 27, 2001. These mixtures are not magnesium alloys because they are not chemically combined in liquid form and cast into the same ingot.

²⁹ *Magnesium Metal From the People’s Republic of China and the Russian Federation: Final Results of the Expedited Sunset Reviews of the Antidumping Duty Orders*, 75 FR 38983, July 7, 2010.

³⁰ The meaning of this term is the same as that used by the American Society for Testing and Materials in its *Annual Book of ASTM Standards: Volume 01.02 Aluminum and Magnesium Alloys*.

earth metals/mischmetal, cryolite, silica/fly ash, magnesium oxide, periclase, ferroalloys, dolomite lime, and colemanite.³¹

The merchandise subject to this investigation is classifiable under items 8104.11.00, 8104.19.00, and 8104.30.00 of the Harmonized Tariff Schedule of the United States (“HTSUS”). Although the HTSUS items are provided for convenience and customs purposes, the written description of the merchandise under investigation is dispositive.³²

Tariff Treatment

Table I-6 presents current tariff rates for U.S. imports of magnesium. Subject import data for China presented throughout this report are based on HTS subheading 8104.19.00 (alloy magnesium ingots)³³ and subject import data for Russia are based on HTS subheadings 8104.11.00 (pure magnesium ingots), 8104.19.00 (alloy magnesium ingots), and 8104.30.00 (magnesium granules). Imports of products of China are dutiable at the column 1-general rate, while imports of products of Russia receive the general rate under subheadings 8104.11.00 and 8104.30.00 but are eligible for duty-free entry under subheading 8104.30.00 under the Generalized System of Preferences (“GSP”), when GSP is in effect.³⁴ Products of Russia are excluded from GSP eligibility under HTS subheading 8104.11.00 (see HTS general note 4(d)), and Russia is not among the group of countries eligible for GSP benefits under subheading 8104.19.00.

³¹ This exclusion for magnesium-based reagent mixtures is based on the exclusion for reagent mixtures in the 2000-01 investigations of magnesium from China, Israel, and Russia. See *Notice of Final Determination of Sales at Less Than Fair Value: Pure Magnesium in Granular Form From the People’s Republic of China*, 66 FR 49345, September 27, 2001; *Notice of Final Determination of Sales at Less Than Fair Value: Pure Magnesium From Israel*, 66 FR 49349, September 27, 2001; *Notice of Final Determination of Sales at Not Less Than Fair Value: Pure Magnesium From the Russian Federation*, 66 FR 49347, September 27, 2001. These mixtures are not magnesium alloy because they are not chemically combined in liquid form and cast into the same ingot.

³² *Magnesium Metal From the People’s Republic of China and the Russian Federation: Final Results of the Expedited Sunset Reviews of the Antidumping Duty Orders*, 75 FR 38983, July 7, 2010.

³³ Based on information presented in the staff report from the original investigations, granular magnesium is typically pure magnesium or “off-specification” pure magnesium (alloy magnesium not meeting ASTM specifications for alloy magnesium). Because such imports are currently under antidumping duty orders and excluded from the scope of the current reviews, imports of granular magnesium (HTS subheading 8104.30.00) are not included in the subject import data for China presented throughout this report.

³⁴ The GSP program lapsed as of December 31, 2010, and has not yet been renewed by Congress.

Table I-6
Magnesium: Tariff treatment, 2011

HTS provision	Article description	Column 1		Column 2 ³
		General ¹	Special ²	
		Rates (<i>ad valorem</i>)		
Pure magnesium ingots				
8104 8104.11.00	Magnesium and articles thereof, including waste and scrap: Unwrought magnesium: Containing at least 99.8 percent by weight of magnesium	8%	Free	100%
Alloy magnesium ingots				
8104 8104.19.00	Magnesium and articles thereof, including waste and scrap: Unwrought magnesium: Other	6.5%	Free	60.5%
Magnesium granules				
8104 8104.30.00	Magnesium and articles thereof, including waste and scrap: Raspings, turnings and granules, graded according to size; powders	4.4%	Free	60.5%
¹ Normal trade relations rate, formerly known as the most-favored-nation duty rate. Imports from China and Russia enter under the general rate, but Russian products are eligible for Generalized System of Preferences duty-free entry under 8104.30.00. ² For eligible goods under the Generalized System of Preferences, United States-Australia Free Trade Agreement, United States-Bahrain Free Trade Agreement Implementation Act, North American Free Trade Agreement, United States-Chile Free Trade Agreement, African Growth and Opportunity Act, Caribbean Basin Economic Recovery Act, United States-Israel Free Trade Area, Andean Trade Preference Act, United States-Jordan Free Trade Area Implementation Act, Dominican Republic-Central America-United States Free Trade Agreement Implementation Act, United States-Morocco Free Trade Agreement Implementation Act, United States-Singapore Free Trade Agreement, United States-Oman Free Trade Agreement Implementation Act, and/or United States-Peru Trade Promotion Agreement Implementation Act. ³ Applies to imports from a small number of countries that do not enjoy normal trade relations duty status.				
Source: Harmonized Tariff Schedule of the United States (2011).				

THE PRODUCT

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 of that of aluminum, the principal metal with which it competes in the U.S. market. Magnesium's light weight and high vibrational-dampening properties have encouraged research to develop magnesium-based alloys with improved physical and mechanical properties for use as a structural metal in applications where minimizing weight is an important design consideration. Magnesium is available in two principal forms, pure³⁵ and alloy.

Pure magnesium in unwrought form³⁶ contains at least 99.8 percent magnesium by weight.³⁷ Pure magnesium is widely used in commercial and industrial applications because it is easily machined and lightweight, has a high strength-to-weight ratio, and has special chemical and electrical properties. Pure magnesium also has special metallurgical and chemical properties that allow it to alloy well with metals such as aluminum. Pure magnesium is typically used in the production of aluminum alloys for use in beverage cans, in die cast automotive parts, in iron and steel desulfurization, as a reducing agent for various nonferrous metals (titanium, zirconium, hafnium, uranium, and beryllium), and in magnesium anodes for the protection of iron and steel in underground pipe and water tanks and various marine applications. Pure magnesium is used in the production of titanium sponge, which is a precursor metal product in the production of titanium metal products for use in aerospace, medical, and industrial applications.³⁸ Although delays in aircraft construction and the global economic slowdown resulted in a drop in worldwide titanium sponge metal production and delayed production capacity expansions in 2009, demand for titanium mill products is expected to significantly increase in the next several years, with ***.³⁹

Alloy magnesium (or magnesium alloy) consists of magnesium and other metals, typically aluminum and zinc, containing less than 99.8 percent magnesium by weight but more than 50 percent magnesium by weight, with magnesium the largest metallic element in the alloy by weight. Alloy magnesium is typically produced to meet various industry-recognized American Society for Testing and

³⁵ Unless otherwise noted, the term "pure magnesium" consists of pure magnesium ingot and pure granular magnesium.

³⁶ "Unwrought" magnesium is pure magnesium that has not been worked in any way. "Wrought" magnesium is magnesium that has been worked into a desired shape, for example the working of the magnesium to produce extrusions, rolled product, forgings, etc. Wrought magnesium is not within the scope of these reviews.

³⁷ Ultra-high purity ("UHP") magnesium is unwrought magnesium containing at least 99.95 percent magnesium by weight and is used as a reagent in the pharmaceutical and chemical industries. Commodity-grade magnesium is unwrought magnesium containing at least 99.8 percent magnesium but less than 99.95 percent magnesium by weight and is most commonly used in the aluminum alloying industry.

³⁸ Hearing transcript, p. 49 (Hassey).

³⁹ In late 2009, Allegheny Technologies Inc. ("ATI") began ramping up the operations of its newly-built titanium sponge facility in Rowley, UT, which was built adjacent to the magnesium production facility of US Magnesium, currently the only domestic producer of primary magnesium. At full capacity, the titanium sponge plant is designed to produce 12,000 metric tons of premium grade titanium sponge per year; however, the plant is not yet producing anywhere near full capacity. US Magnesium reported ***. "ATI ramp-up of titanium sponge plant may lift magnesium price," Metal Bulletin, September 8, 2010; "Titanium and Titanium Dioxide," U.S. Geological Survey, Mineral Commodity Summaries, January 2010, p. 175; hearing transcript, pp. 48-52 (Hassey); US Magnesium's posthearing brief, exh. 6; AVISMA's posthearing brief, exh. 2; and US Magnesium's ***.

Materials (“ASTM”) specifications for alloy magnesium such as AM50A, AM60B, and AZ91D.⁴⁰ It is principally used in structural applications, primarily in castings (die, permanent mold, and sand) and extrusions for the automotive industry. Alloy magnesium has certain properties that improve its strength, ductility, workability, corrosion resistance, density, or castability compared to pure magnesium. Pure magnesium is not used in structural applications because its tensile and yield strengths are low.

Primary magnesium is magnesium produced by decomposing raw materials into magnesium metal.

Secondary magnesium is pure or alloy magnesium that is produced by recycling magnesium-based scrap. Magnesium scrap is typically separated into two categories.

Old scrap becomes available to producers of secondary magnesium when durable and nondurable consumer products are discarded from end-use categories such as packaging, building and construction, consumer durables (such as automobiles), electrical, machinery and equipment, and other.

New scrap is metal that never reaches the consumer. The scrap is generated from wrought and cast products as they are processed by fabricators into consumer or industrial products. Home scrap is new scrap that is recycled within the company that generated the scrap and consequently seldom enters the commercial secondary magnesium market. Prompt industrial scrap is new scrap from a fabricator that does not choose to or is not equipped to recycle the scrap. This scrap then enters the secondary magnesium market. New scrap may include solids, clippings, stampings, and cuttings; borings and turnings that are generated during machining operations; and melt residues, such as skimmings, drosses, spillings, and sweepings.

Granular magnesium consists of all physical forms of unwrought magnesium other than ingots, such as raspings, turnings, granules, and powders.⁴¹ Granular magnesium is typically used in the production of magnesium-based desulfurizing reagent mixtures that are used in the steelmaking process to reduce the sulfur content of steel.⁴² Lesser amounts of granular magnesium are used in defense applications, such as military ordnance and flares.

Production Process

Primary Magnesium

Worldwide, most magnesium is derived from magnesium-bearing ores (dolomite, magnesite, brucite, and olivine) or seawater and well and lake brines.⁴³ Large deposits of dolomite are widely distributed throughout the world, and dolomite is the principal magnesium-bearing ore found in the

⁴⁰ The ASTM specifications designate the chemical composition of the alloy. The first two letters designate the two alloying elements most prevalent in the alloy (e.g., “A” for aluminum, “M” for manganese, or “Z” for zinc), while the numbers represent the percent of other elements contained in the alloy, by weight. For example, AZ91D contains 9 percent aluminum, 1 percent zinc, and 90 percent magnesium.

⁴¹ Granular magnesium may be either pure or alloy magnesium. However, based on information obtained in the previous investigation on granular magnesium from China, granular magnesium is typically pure magnesium or “off-specification pure” magnesium (alloy magnesium not meeting ASTM specifications for alloy magnesium).

⁴² U.S. grinders typically sell three different steel desulfurization blends: (1) containing 90 percent pure magnesium powder and 10 percent lime; (2) containing 25 percent magnesium and 75 percent lime; and (3) containing 8-10 percent magnesium with the remainder lime and calcium carbonate. Fluorspar and a fluidizer are also incorporated in these products.

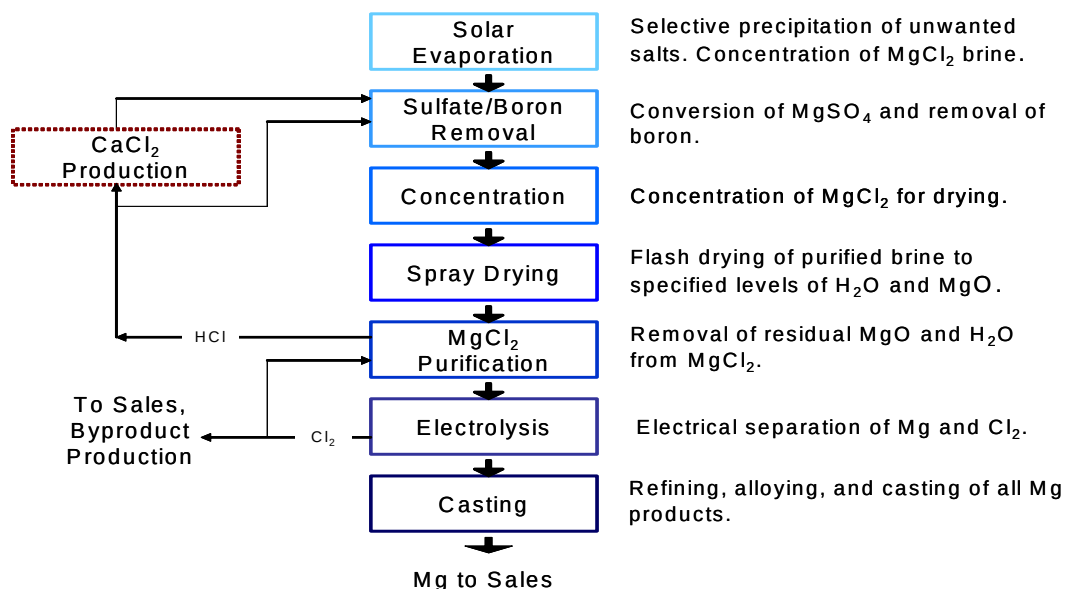
⁴³ The magnesium content of magnesium-bearing ores typically ranges from nearly 22 percent for dolomite to 69 percent for brucite. The magnesium content of seawater is 0.13 percent, which is much lower than that of the lowest grade of magnesium ore deposits; however, seawater has the advantage of being abundant, accessible, and extremely uniform in its magnesium content, allowing for easier standardization of the refining process.

United States. Magnesium-bearing ores are mined by the open-pit method. In the United States, the production of *** primary magnesium is currently 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.⁴⁴

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.⁴⁵

US Magnesium uses the electrolytic method to produce magnesium.⁴⁶ A schematic diagram of US Magnesium's production process is presented in figure I-2. 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 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.⁴⁷ The metal rises to the surface where it is guided into storage wells and cast into ingots.

Figure I-2
Schematic diagram of US Magnesium's production process flow chart



Source: US Magnesium.

⁴⁴ Northwest Alloys ceased production of magnesium in October 2001. MagPro began primary production of pure magnesium ingot in 2009.

⁴⁵ The raw material source for silicothermic production in China is dolomite (MgCO₃•CaCO₃). Deborah Kramer, *Magnesium, Its Alloys and Compounds*, U.S. Geological Survey Open-File Report 01-341, pp. 11-12, 2001.

⁴⁶ US Magnesium noted that Russian producers AVISMA and SMW also produce magnesium using an electrolytic process. US Magnesium's prehearing brief, p. 44.

⁴⁷ The electrolytic cells must be kept in constant operation. If they are shut down, a "refractory lining" requires rebuilding which is costly and time consuming.

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 the U.S. facility that produces both pure magnesium and alloy magnesium (US Magnesium's facility), the same production workers work on both lines.⁴⁸

Both primary pure magnesium and primary alloy magnesium begin with the production of liquid pure magnesium. The liquid pure magnesium is either cast directly into pure magnesium ingots or is alloyed by the addition of alloying elements (typically aluminum and zinc) and scrap magnesium and then cast to produce alloy magnesium ingots.⁴⁹

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 powder⁵⁰ and used internally to produce magnesium-based reagent mixtures or, to a lesser extent, pyrotechnic products. Die casters can purchase ingots and granular primary alloy magnesium for use in magnesium alloy castings, and/or recycle scrap magnesium generated in their die casting operations into secondary alloy magnesium.

Magnesium, in a molten or ingot form, is also used in the production of titanium sponge, which is a precursor metal product in the production of titanium metal products. In the Kroll reduction process, titanium sponge results from the reduction of titanium tetrachloride (TiCl₄) with magnesium. The titanium tetrachloride is reacted in a molten pool of magnesium metal in which the temperature and composition of the mixture are carefully controlled. Along with pure titanium metal sponge, molten magnesium chloride (the result of magnesium reacting with the titanium tetrachloride liquid) is a product of the reaction. The magnesium chloride can be further refined back to pure magnesium in an electrolytic cell. The electrolytic cell separates the magnesium metal from the chlorine which is also collected for sale. All titanium tetrachloride producers use chlorine gas in the production of titanium tetrachloride.

Secondary Magnesium⁵¹

Secondary magnesium is produced from recycling magnesium-based "scrap."⁵² 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 degrees 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 alloy magnesium contained in used

⁴⁸ US Magnesium's prehearing brief, pp. 21-22.

⁴⁹ Ibid.

⁵⁰ Magnesium chips are ground into powder using a particle reduction process. Magnesium powder can also be produced by atomization of molten pure magnesium; however, this technique is less frequently used than grinding.

⁵¹ Information from this section is drawn from Deborah A. Kramer, *Magnesium Recycling in the United States in 1998*, Flow Studies for Recycling Metal Commodities in the United States, pp. E5-E6, 2004.

⁵² Magnesium-based scrap is typically divided into one of two categories. Old magnesium-based scrap consists of postconsumer scrap such as automotive parts, helicopter parts, lawnmower decks, and used tools. Old magnesium-base scrap is sold to scrap processors. New magnesium-based scrap typically falls into one of four types. Type I is high-grade scrap recovered from die casting operations and uncontaminated with oils. Types II, III, and IV are lower-grade scraps, typically either oil-contaminated scrap; dross from magnesium-processing operations; and chips and fines. Type I scrap is either reprocessed at the die casting facility or sold to a scrap processor. The other types of scrap are either used directly in steel desulfurization applications (chips and fines) or sold to scrap processors.

aluminum beverage cans typically remains 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.⁵³

“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.⁵⁴

DOMESTIC LIKE PRODUCT AND DOMESTIC INDUSTRY ISSUES

In making determinations under section 751(c) of the Act, the Commission defines the “domestic like product” and the “industry.”⁵⁵ The Act defines the “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.”⁵⁶ The Commission’s practice in five-year reviews is to look to the domestic like product definition from the original determinations and any previous reviews and consider whether the record indicates any reason to revisit that definition. Both before and since the time of the original investigations that are the subject of these reviews, there have been several other investigations and reviews involving various types of magnesium products. The domestic like products and domestic industries, as defined by the Commission (or Commission majority), and the corresponding scopes of the investigations and reviews, as defined by Commerce, have varied over the years. The Commission’s determinations concerning domestic like product and domestic industry in these other investigations and reviews have also been incorporated in the discussion throughout this section of the report, as appropriate.

The Commission’s Original Determinations

In its original determinations in connection with these reviews on alloy magnesium from China and pure and alloy magnesium from Russia, the Commission found one domestic like product to include pure and alloy magnesium, primary and secondary magnesium, and ingot (cast) and granular

⁵³ Aluminum beverage can manufacturers are sensitive to the presence of beryllium in melted scrap. Therefore, these firms generally do not purchase recycled alloy magnesium produced from scrap.

⁵⁴ Typically, producers do not set out to produce “off-specification pure” magnesium. Rather, its production results from starting or re-starting the primary magnesium production process, or is the result of some malfunction in the production process.

⁵⁵ 19 U.S.C. § 1677(4)(A).

⁵⁶ 19 U.S.C. § 1677(10). The Commission’s decision regarding the appropriate domestic products that are “like” the subject imported products is based on a number of factors including (1) physical characteristics and uses; (2) common manufacturing facilities and production employees; (3) interchangeability; (4) customer and producer perceptions; (5) channels of distribution; and, where appropriate, (6) price. No single factor is dispositive, and the Commission may consider other factors relevant to a particular investigation. The Commission looks for clear dividing lines among possible like products, and disregards minor variations.

magnesium.⁵⁷ The Commission also found in its original determinations one domestic industry consisting of all producers of the domestic like product, including grinders that produce granular magnesium.⁵⁸

Two Commissioners⁵⁹ making determinations in the original investigations, however, defined the domestic like product and domestic industry differently. They found cast and granular magnesium to be separate domestic like products and found grinders to be a separate industry.⁶⁰

Positions of Parties in These Reviews

In response to a question soliciting comments regarding the appropriate domestic like product in the Commission's notice of institution of these reviews,⁶¹ U.S. producer US Magnesium⁶² indicated that it agreed with the Commission's definitions of the domestic like product and domestic industry, as found in the original investigations in connection with these reviews.⁶³ In fact, the firm indicated in its prehearing brief that the facts that led to the Commission's domestic like product decision in the original final investigations more strongly support the same determination in these reviews and that the Commission need not revisit and change the like product definition from one domestic like product.⁶⁴ US Magnesium stated that "{p}ure, alloy, granular, cast, primary, and secondary magnesium constitute a continuum of unwrought magnesium products within which there are no "bright line" distinctions."⁶⁵ US Magnesium also indicated that although the Commission found in the original investigations that magnesium die casters that recycle their own scrap generated in their die casting operations were domestic producers of magnesium, the Commission should not consider them to be domestic producers of magnesium in these reviews if the die casters simply recycle "run-around scrap" and are not producing a saleable product.⁶⁶

Although U.S. importer Alcoa, Inc. ("Alcoa") also indicated in its response to the notice of institution that it agreed with the Commission's previous domestic like product and domestic industry definitions,⁶⁷ the firm subsequently changed its position. In its November 17, 2010, submission, Alcoa indicated that it "considers pure and alloy magnesium to be two separate domestic like products given that alloy magnesium, as it is normally manufactured for use by customers that require alloy magnesium for their commercial applications, is generally not interchangeable with pure magnesium."⁶⁸

Russian producer PSC VSMPO-AVISMA Corp. ("AVISMA") argued in its response to the Commission's notice of institution during the adequacy phase of these reviews and in briefs submitted

⁵⁷ *Magnesium from China and Russia*, Investigation No. 731-TA-1071-1072 (Final), USITC Publication 3763, April 2005, p. 11.

⁵⁸ *Ibid.*, pp. 11-12.

⁵⁹ Commissioner Marcia E. Miller and Commissioner Jennifer A. Hillman.

⁶⁰ *Magnesium from China and Russia*, Investigation No. 731-TA-1071-1072 (Final), USITC Publication 3763, April 2005, pp. 6-7, n. 17, and p. 12, n. 64.

⁶¹ *Magnesium from China and Russia*, 75 FR 9252, March 1, 2010.

⁶² Local 8319, a labor union that represents workers producing magnesium metal in US Magnesium's plant in Rowley, UT, joined the response of US Magnesium.

⁶³ *Response of US Magnesium to the Commission's Notice of Institution*, March 31, 2010, p. 18.

⁶⁴ US Magnesium's prehearing brief, pp. 8 and 23.

⁶⁵ US Magnesium's prehearing brief, p. 23.

⁶⁶ *Response of US Magnesium to the Commission's Notice of Institution*, March 31, 2010, p. 18.

⁶⁷ *Response of Alcoa to the Commission's Notice of Institution*, March 31, 2010, p. 7.

⁶⁸ *Memorandum to the Public Record, Investigation Nos. 731-TA-1071-1072 (Review): Magnesium from China and Russia—"Clarification" of Alcoa's position concerning domestic like product and domestic industry*, December 2, 2010.

during these full reviews that pure and alloy magnesium should be found by the Commission to be two separate domestic like products.⁶⁹ Spartan, a domestic alloy magnesium recycler and die caster, and the Magnesium Group of the North American Die Casting Association (“NADCA”) similarly argued before the Commission in these reviews that pure and alloy magnesium should be found to be two separate domestic like products.⁷⁰

In the joint response submitted by Solikamsk Magnesium Works, OAO (“SMW”) and Solikamsk Desulphurizer Works Ltd. (“SZD”) during the adequacy phase of these reviews, these Russian producers urged the Commission to find (1) pure magnesium and alloy magnesium to be separately domestic like products and (2) granular magnesium and magnesium in ingot form to be separate domestic like products.⁷¹ The Chinese respondents participating in the adequacy phase of these reviews did not provide any comments concerning the appropriate domestic like product and domestic industry.

Pure vs. Alloy Magnesium⁷²

In past investigations and reviews concerning imports of pure and alloy magnesium, the Commission has addressed the issue of whether pure magnesium and alloy magnesium represent a single domestic like product or separate domestic like products.

The first magnesium investigations brought before the Commission were completed in 1992. The scope of those investigations was “primary magnesium” (i.e., both pure and alloy magnesium) from Canada, and in its final determinations with regard to those investigations, the Commission majority defined a single domestic like product consisting of both pure and alloy magnesium. The respondents to those investigations, however, subsequently challenged the Commission’s final determinations before a United States-Canada Binational Panel. That Panel found that the Commission’s single domestic like production determination was not supported by substantial evidence and the Commission, on remand, found that pure and alloy magnesium were separate domestic like products, corresponding respectively to the two classes or kinds of subject imports found by Commerce.⁷³

After its 1993 remand determinations, the Commission consistently found pure and alloy magnesium to be separate domestic like products in investigations and reviews that involved both pure and alloy magnesium until 2005. In its domestic like product determinations in these earlier proceedings, the Commission found that although the companies that produced both pure and alloy magnesium did so with the same machinery and employees,⁷⁴ and pure and alloy magnesium shared certain (but not all) physical characteristics, the two products had different principal end uses, were targeted for distinct markets, were generally not interchangeable, were perceived differently by customers due to their

⁶⁹ *Response of AVISMA to the Commission’s Notice of Institution*, March 31, 2010, p. 11, and AVISMA’s prehearing brief, p. 2.

⁷⁰ Spartan/NADCA’s prehearing brief, p. 2.

⁷¹ *Supplemental Response of SMW and SZD to the Commission’s Notice of Institution*, May 6, 2010, att. 1, p. 7.

⁷² Unless otherwise indicated, the information presented in this section of the report is based on responses to industry questionnaires received in these five-year reviews and on the following publications concerning magnesium: *Magnesium From China and Russia, Investigations Nos. 731-TA-1071 and 1072 (Final)*, USITC Publication 3763, April 2005; *Pure and Alloy Magnesium From Canada and Pure Magnesium From China, Inv. Nos. 701-TA-309-A-B and 731-TA-696 (Review)*, USITC Publication 3859, July 2006; and *Pure Magnesium From China, Inv. No. 731-TA-895 (Review)*, USITC Publication 3908, March 2007.

⁷³ *Magnesium from Canada, Inv. Nos. 701-TA-309 and 731-TA-528 (Final)*, USITC Publication 2550, August 1992, pp. 5-11; and *Magnesium from Canada, Inv. Nos. 701-TA-309 and 731-TA-528 (Final)*, USITC Publication 2696, October 1993, pp. 3-4.

⁷⁴ This was the case because these earlier investigations did not involve secondary alloy magnesium, which is not produced with the same machinery and employees as primary (pure and alloy) magnesium.

different end uses, and had different price trends as a result of their different markets. In these earlier cases, the Commission's separate domestic like product determinations for pure and alloy magnesium corresponded with Commerce's findings of two separate classes or kinds of merchandise.

However, in the 2005 original investigations concerning U.S. imports of alloy magnesium from China and pure and alloy magnesium from Russia that are the subject of these five-year reviews, Commerce defined the scope of the subject merchandise as a single class or kind of merchandise encompassing both pure and alloy magnesium. Based on the record in those original investigations, the Commission concluded that circumstances had changed sufficiently so as to blur the dividing line between pure and alloy magnesium, and to warrant treating pure and alloy magnesium as a single domestic like product. The Commission has conducted the following two five-year reviews since its original 2005 investigations on alloy magnesium from China and pure and alloy magnesium from Russia: (1) Pure and Alloy Magnesium from Canada and Pure Magnesium from China (July 2006) and (2) Pure Magnesium from China (March 2007). In the 2006 review, the Commission was evenly divided: (1) then-Chairman Pearson and Commissioners Okun and Lane defined a single domestic like product including both pure and alloy magnesium; and (2) then-Vice Chairman Aranoff and Commissioners Hillman and Koplan defined pure and alloy magnesium as separate domestic like products. In the 2007 review, the Commission (then-Vice Chairman Aranoff dissenting) defined a single domestic like product to include both pure and alloy magnesium. In making its determination in the 2007 review, the Commission majority found that primary production of pure and alloy magnesium generally occurred in the same facilities and by the same employees (i.e., at US Magnesium's facility), except that additional equipment and labor was involved for the additional step of adding alloying elements.⁷⁵ The Commission majority also relied on the shared essential physical characteristics; the overlap in the end uses of pure and alloy magnesium in aluminum production (the single largest use for magnesium); the recognition by some industry participants of increased competition between pure and alloy magnesium; the similarities in channels of distribution for pure and alloy magnesium (i.e., to end users); and the convergence in prices for the two types of magnesium.

Further discussion of the six factors on which the Commission typically bases its domestic like product determinations as they pertain to the issue of pure vs. alloy magnesium follows.

Physical Characteristics and Uses

Pure magnesium contains not less than 99.8 percent magnesium by weight. It is typically sold to end users who then combine it with other elements, typically aluminum, for use in a final product. A magnesium ingot in its pure state generally has little direct commercial application except when alloyed.

Alloy magnesium consists of chemical combinations of magnesium and other materials in which the magnesium content is 50 percent or greater but less than 99.8 percent by weight, whether or not conforming to an ASTM specification for magnesium alloy. Alloy magnesium has a high strength-to-weight ratio and is easily machined, making it ideal for use in a number of structural components; for example, the alloying elements contained in alloy magnesium are critical in imparting to the product the structural characteristics necessary for use in die casting applications.

Common Manufacturing Facilities and Production Employees

For US Magnesium, the major U.S. producer of pure magnesium ***, the production process for pure and alloy magnesium is identical to the point when alloys are added to the pure magnesium to make alloy magnesium. US Magnesium makes both pure and alloy magnesium using the same machinery,

⁷⁵ The Commission also recognized that the alloy magnesium produced by secondary producers (recyclers) involved different manufacturing facilities and employees than those for pure magnesium.

equipment, and workers. For both primary pure magnesium and primary alloy magnesium, the production of liquid pure magnesium is either cast directly into the form of pure magnesium ingots or alloyed by the addition of alloying elements and scrap magnesium prior to casting to produce alloy magnesium ingots. The firm indicated that the amount of value added to the magnesium in the alloying phase is small.⁷⁶ Producers of secondary magnesium (recyclers) produce only alloy magnesium, and thus their production facilities are only for alloy magnesium.

Interchangeability

Pure magnesium is generally used in aluminum alloys and in certain other applications because of its special metallurgical and chemical properties. At the same time, pure magnesium's lack of structural integrity excludes it from structural applications served by alloy magnesium, which is primarily used in die casting of various structural parts for automobiles. Because of the need for structural integrity, automotive manufacturers must certify that suppliers possess both the physical equipment and the technical ability to produce automotive-grade alloy magnesium.

To an extent, however, the record shows that there is some overlap in the end uses for which pure magnesium and alloy magnesium are employed. US Magnesium indicated that pure and alloy magnesium are often interchangeable because some end users may be able to obtain the appropriate amount of magnesium units necessary for their particular use from the either pure or alloy magnesium. The company argued that both pure and alloy magnesium are used in the production of aluminum alloys, reagents used in iron and steel desulfurization, ferroalloys, nodular iron, and in sand casting.⁷⁷ In fact, ***.

On the other hand, respondents argued that pure and alloy magnesium are rarely interchangeable in the die casting, powder, and chemical markets. They added that die casters use alloy magnesium exclusively and that the aluminum manufacturers have ***.⁷⁸ In fact, die caster Spartan stated in its prehearing brief “. . . aluminum producers require a unique form of alloy magnesium that is composed of aluminum and magnesium. This specialized alloy cannot be used by die casters, which are significant consumers of alloy magnesium.”⁷⁹ Spartan explained that this “unique” form of alloy magnesium cannot be used by die casters because

“{m}agnesium die casters require specific alloying elements, within designated percentage ranges. Their alloys are designated, standardized, and certified. A typical die casting magnesium alloy will have specific levels of aluminum, manganese, and zinc (in the case of AZ alloys). These alloys also will have specified limits on the maximum amounts of other elements such as silicon, iron, copper, and nickel. If the range of aluminum, zinc or manganese is not met or exceeded, the properties of the casting will be compromised. If the limits of the other elements are exceeded, the die casting properties can be adversely affected. These certified specifications guarantee that certain properties are realized in the parts that are made from the die cast materials . . . The pure magnesium and aluminum-magnesium alloys used in the aluminum alloying process are not suitable for the structural design needs of Spartan's end use products and are not interchangeable with its die cast alloys. This is because of the specific product needs and the very different physical and mechanical property characteristics required by Spartan's customers. Using non-specification materials can lead to product failures, safety concerns (even vehicle recalls), and warranty claims. As a result, even in a product as simple as a beverage can,

⁷⁶ US Magnesium's prehearing brief, pp. 21-22.

⁷⁷ US Magnesium's prehearing brief, p. 13.

⁷⁸ Spartan/NADCA's prehearing brief, pp. 4-6, and AVISMA's prehearing brief, p. 2.

⁷⁹ Spartan/NADCA's prehearing brief, p. 5.

pure magnesium, aluminum-magnesium alloys, and alloy magnesium for die cast applications are not interchangeable. Only when the end product specifications call for a specific set of physical and mechanical properties can secondary material (recycled) be used and only then can any type of substitution take place.”⁸⁰

Furthermore, although aluminum alloyer Alcoa initially indicated ***.⁸¹

Customer and Producer Perceptions

Historically, customers of domestically produced pure magnesium have been largely distinct from customers of domestically produced alloy magnesium, and that is still generally true. However, aluminum alloyers, which historically purchased solely pure magnesium for its metallurgical properties as it alloys well with aluminum, have also purchased alloy magnesium.⁸² Other firms, such as pharmaceutical manufacturers and nuclear fuel producers, purchase pure magnesium for its chemical properties. On the other hand, customers, principally automotive die casters, purchase alloy magnesium because of its structural and mechanical properties.⁸³ Although it is respondents’ position that most market participants do not consider pure and alloy magnesium to be interchangeable,⁸⁴ US Magnesium has posited that “a substantial majority of the market does not perceive pure and alloy magnesium as distinct products.”⁸⁵

Channels of Distribution

The vast majority of pure and alloy magnesium is transported directly from a magnesium production facility (in the case of U.S. producers)⁸⁶ and from a distribution or warehouse center (in the case of the imported product) to end users in full truckload lots by either contract or common carriers, with lesser amounts transported by rail. Most pure magnesium ingots are shipped in standard 12-, 25-, 50-, 250-, and 500-pound bar sizes; most alloy magnesium ingots are shipped in standard 12-, 25-, and 50-pound bar sizes. Alloy ingots may vary somewhat in dimension as some die casters require bar of a certain dimension to fit the specific configuration of their furnace. In 2009, domestically produced pure magnesium was *** sold to aluminum producers, whereas *** of U.S. producers’ alloy magnesium was sold to die casters (see table III-6 in Part III of this report).

⁸⁰ Email from ***, counsel for Spartan, to Mary Messer, January 25, 2011 (permission granted for public disclosure).

⁸¹ Alcoa’s supplemental questionnaire response, November 17, 2010.

⁸² For further information concerning purchasing practices and perceptions of aluminum alloyers, see *Part II* of this report.

⁸³ US Magnesium pointed out, however, that die casters that recycle their own scrap may use purchased pure magnesium to adjust the chemical composition of the alloy magnesium. US Magnesium’s prehearing brief, p. 22. The Commission received only one producer questionnaire from a die caster in these reviews. Die caster Spartan reported ***.

⁸⁴ Spartan/NADCA’s prehearing brief, pp. 7-8.

⁸⁵ US Magnesium’s prehearing brief, p. 22.

⁸⁶ US Magnesium noted that its sales representatives sell both pure and alloy magnesium with “no differentiation between pure and alloy within the sales department.” US Magnesium’s prehearing brief, p. 20. On the other hand, respondents noted that “the *** volumes of sales of pure magnesium and alloy magnesium thus were made to entirely separate industries.” Spartan/NADCA’s prehearing brief, p. 8.

Price

Price data were requested in Commission questionnaires sent to U.S. producers and U.S. importers of magnesium for the following four pricing items: (1) pure magnesium ingots containing at least 99.8 percent magnesium but less than 99.95 percent magnesium; (2) alloy magnesium ingots containing less than 99.8 percent magnesium sold to aluminum alloyers and meeting ASTM specifications for alloy magnesium; (3) alloy magnesium ingots containing less than 99.8 percent magnesium sold to aluminum alloyers and not meeting ASTM specifications for alloy magnesium; and (4) alloy magnesium ingots containing less than 99.8 percent magnesium sold to die casters and meeting ASTM specifications for alloy magnesium. U.S. producers and importers were asked to provide quarterly price data by product for the period from January-March 2004 to April-June 2010. The price data collected in these reviews show that, although there was a price difference between pure and alloy magnesium, the prices of pure and alloy magnesium were closely correlated until ***. At that point, prices of pure and alloy magnesium diverged, with quarterly prices of pure magnesium ranging from *** percent to *** percent *** alloy magnesium. Further information concerning price data obtained from questionnaire responses and from public sources for pure magnesium and alloy magnesium are presented in Parts II and V of this report.

Primary vs. Secondary Magnesium^{87 88}

The first magnesium investigations in which secondary magnesium was included in the scope were the original investigations underlying these reviews. In its most recent prior magnesium investigations and five-year reviews (including the original underlying investigations concerning these current five-year reviews), the Commission addressed the domestic like product issue concerning primary vs. secondary alloy magnesium. The Commission noted that “virtually all secondary production is of alloy magnesium . . . if secondary magnesium is compared with primary alloy magnesium, it is clear that the products are similar in terms of physical characteristics and uses, interchangeability, customer and producer perceptions, channels of distribution, and price.” The Commission further noted, however, that “the products are not like each other in terms of manufacturing facilities and employees, because primary magnesium is made by US Magnesium through the primary production process (i.e., by decomposing raw materials into magnesium metal) where secondary magnesium is made, largely by firms other than US Magnesium, through a recycling process.” The Commission also noted that “if secondary magnesium is compared with all primary magnesium (i.e., pure and alloy magnesium) the similarities between primary and secondary products become more attenuated because of the differences between pure and alloy magnesium.” The Commission ultimately found that primary and secondary magnesium were part of the same domestic like product. The following discussion of the six domestic like product factors on which the Commission may rely in making its determinations focuses on the issue of primary magnesium vs. secondary magnesium.

⁸⁷ Parties have not raised this particular domestic like product issue in these current five-year reviews. However, in light of the issue having been raised in prior magnesium proceedings, a discussion is included here.

⁸⁸ Unless otherwise indicated, the information presented in this section of the report is based on responses to industry questionnaires received in these five-year reviews and on the following publications concerning magnesium: *Magnesium From China and Russia, Invs. Nos. 731-TA-1071 and 1072 (Final)*, USITC Publication 3763, April 2005; *Pure and Alloy Magnesium From Canada and Pure Magnesium From China, Inv. Nos. 701-TA-309-A-B and 731-TA-696 (Review)*, USITC Publication 3859, July 2006; and *Pure Magnesium From China, Inv. No. 731-TA-895 (Review)*, USITC Publication 3908, March 2007.

Physical Characteristics and Uses

Most primary and secondary alloy magnesium is similar physically and chemically. However, primary pure magnesium is not used in automotive die castings. Only higher purity secondary alloy magnesium, typically produced from scrap recovered from used automotive parts, is acceptable for use in automotive die casting applications.

Common Manufacturing Facilities and Production Employees

Primary and secondary alloy magnesium is produced in separate facilities using separate production processes and employees. US Magnesium is *** primary magnesium in the United States, using magnesium-bearing brine from the Great Salt Lake in Utah as the raw material. A second primary magnesium producer (MagPro) began producing pure magnesium ingot in 2009. Secondary alloy magnesium is produced by recyclers from delivered scrap which is melted in a steel crucible.

Interchangeability and Channels of Distribution

Primary and secondary alloy magnesium can be used interchangeably in automotive die casting applications if appropriate methods are utilized to assure the purity of the secondary magnesium by removing impurities such as copper. Primary and secondary alloy magnesium are generally sold directly to end users through common channels of distribution.

Customer and Producer Perceptions

Because primary and higher purity secondary alloy magnesium are largely identical products and are interchangeable for the same purposes, principally automotive die castings, neither consumers nor producers perceive them to be significantly different products. Lower-purity secondary alloy magnesium, which does not meet ASTM specifications, is not interchangeable with primary magnesium for use in automotive (structural) applications because of potential contamination problems. However, for many non-structural magnesium applications, low-purity secondary alloy magnesium is interchangeable with primary magnesium. Aluminum beverage can manufacturers can elect not to purchase secondary alloy magnesium because of the presence of beryllium in the scrap used to produce the secondary alloy magnesium.

Cast vs. Granular Magnesium⁸⁹

The Commission also addressed the domestic like product issue concerning cast versus granular magnesium in its most recent prior magnesium investigations and five-year reviews (including the original underlying investigations concerning these current five-year reviews). The Commission majority noted that in prior investigations on magnesium it had found that granular and ingot (cast) magnesium were produced in a continuum of forms and sizes, without any clear dividing line, that they shared the same chemical properties, were sold through similar channels of distribution, were interchangeable at

⁸⁹ Unless otherwise indicated, the information presented in this section of the report is based on responses to industry questionnaires received in these five-year reviews and on the following publications concerning magnesium: *Magnesium From China and Russia*, Invs. Nos. 731-TA-1071 and 1072 (Final), USITC Publication 3763, April 2005; *Pure and Alloy Magnesium From Canada and Pure Magnesium From China*, Inv. Nos. 701-TA-309-A-B and 731-TA-696 (Review), USITC Publication 3859, July 2006; and *Pure Magnesium From China*, Inv. No. 731-TA-895 (Review), USITC Publication 3908, March 2007.

least for significant end uses (particularly in desulfurization), and used the same manufacturing facilities and employees up to the grinding stage. Citing a lack of evidence that the domestic like product analysis had changed in any way since the prior magnesium determinations, the Commission found in its most recent proceedings that cast and granular magnesium were part of the same domestic like product. Although the Commission majority in the original underlying investigations concerning alloy magnesium from China and pure and alloy magnesium from Russia found cast and granular magnesium to be part of the same domestic like product, two Commissioners⁹⁰ determined that cast and granular magnesium were separate domestic like products and found grinders to be a separate industry based on their domestic like product finding that granular magnesium was a separate domestic like product. These two Commissioners determined that while ingot (cast) and granular magnesium shared some basic properties, they differed in size, dimensions, shape, and other physical characteristics, such as volatility. They also noted that granular magnesium had a different end use than cast magnesium, namely steel desulfurization, and the two forms of magnesium were therefore not interchangeable since magnesium ingot could not be used for steel desulfurization without first being converted to granular form. In their determination, they reasoned that there was no meaningful overlap between cast and granular magnesium in manufacturing facilities and employees, with commercial granular magnesium being produced exclusively by grinders, which did not produce magnesium in ingot form. They further noted that producer and customer perceptions differed between the two forms of magnesium, as did channels of distribution, and granular magnesium commanded a price premium over magnesium ingot.

The following discussion of domestic like product factors focuses on the issue of cast magnesium versus granular magnesium.

Physical Characteristics and Uses

Magnesium castings (ingots) are solid, cooled forms of molten magnesium metal. Most pure and alloy magnesium ingots are sold in standard bar sizes ranging in weight from 12 to 500 pounds per bar. Ingots may vary somewhat in dimension as some die casters require bar of a certain dimension to fit the specific configuration of their furnace. Granular magnesium is cast magnesium that has been ground, chipped, crushed, machined, or atomized into raspings, granules, turnings, chips, powder, or briquettes and is different from cast magnesium in size, dimensions, and shape. Granular magnesium includes all non-liquid physical forms of magnesium other than castings. Although the chemical compositions of cast magnesium and granular magnesium are identical since granular magnesium is typically ground from cast magnesium, granular magnesium is much more volatile than cast magnesium. Granular magnesium may be either pure or alloy magnesium. However, based on information obtained in the previous investigation on granular magnesium from China, granular magnesium is typically pure magnesium or “off specification” pure magnesium (alloy magnesium not meeting ASTM specifications for alloy magnesium).

According to the International Magnesium Association (“IMA”), the four principal industrial uses of magnesium worldwide are aluminum alloying; structural uses (including die casting, thixomolding, sand casting, and magnesium wrought products); iron and steel desulfurization; and electrochemical. Primary magnesium is generally cast into ingots or slabs. Most aluminum producers purchase larger pure cast shapes such as rounds, billets, peg-lock ingots, or T-shapes and die casters sometimes require magnesium in the form of ingot as an input of their furnace. Other die casters can purchase ingots and granular primary alloy magnesium for use in magnesium alloy castings, and/or recycle scrap magnesium generated in their die casting operations into secondary alloy magnesium. Granular magnesium, on the other hand, is often used in the production of magnesium-based desulfurizing reagent mixtures that are

⁹⁰ Commissioner Marcia E. Miller and Commissioner Jennifer A. Hillman.

used in the steelmaking process to reduce the sulfur content of steel. Lesser amounts of granular magnesium are used in defense applications, such as military ordnance and flares.

Common Manufacturing Facilities and Production Employees

The production facilities, processes, and employees of cast and granular magnesium do not overlap. Producers of cast magnesium in ingot form extract magnesium from raw materials and cast it into primary pure magnesium ingots. Granular production facilities (firms known as “grinders”) purchase cast ingot pure magnesium, transform the physical shape by grinding it, and then sell powdered/granule magnesium to end users.

Interchangeability

Cast and granular magnesium are not considered to be interchangeable as inputs for ultimate use in the iron and steel desulfurization market. The magnesium must first be shipped to grinders, ground into powder per customer specifications, and then sold to the iron and steel industry. Iron and steel desulfurization customers do not have the capability to grind cast magnesium.

Customer and Producer Perceptions

Producers of reagents, also known as grinders for iron and steel desulfurization customers, perceive both granular and cast magnesium as potentially usable in the production of these reagents because they are able to grind cast magnesium to the appropriate size requirements. Iron and steel desulfurization customers do not perceive cast and granular magnesium to be the same product.

U.S. MARKET PARTICIPANTS

U.S. Producers

Presented in table I-7 is a list of primary and secondary producers of magnesium (including die casters, independent alloyers, and grinders),⁹¹ each company's position on the antidumping duty orders, production location(s), related and/or affiliated firm(s), and share of 2009 magnesium production, where applicable. As indicated in table I-8, not all firms responding to the Commission's questionnaire in these five-year reviews support the continuation of the orders subject to these reviews. *** oppose the continuation of the orders, whereas *** takes no position on the continuation of the orders.

Other than the largest domestic primary producer of magnesium, the responding firms' production facilities handling magnesium are located in the Midwest, Northeast, and Southeast geographic market areas of the United States. The largest primary producer of magnesium is located near the Great Salt Lake near Rowley, UT, and uses brine from the Great Salt Lake as the prime raw material in its production process. A *** smaller firm that opened secondary magnesium facilities in 2004 and *** is located in Tennessee. Responding secondary producers of magnesium (including independent alloyers and die casters) are located in the Midwest (Illinois, Indiana, Missouri, and Ohio) and the Southeast (Kentucky and Tennessee) and responding grinders are located in the Midwest (Indiana) and the Northeast (New Jersey and Pennsylvania).

*** has been identified as a related party is U.S. grinder ESM. ESM, which is wholly owned by SKW Stahl-Metallurgie Holding AG in Germany, is related to ESM Tianjin Co., Ltd., a producer of magnesium in China, through its common parent company.⁹² ESM ***.

⁹¹ Domestic die casters were found by the Commission to be part of the domestic industry in its original 2005 determinations underlying these reviews; however, in the second five-year reviews on pure and alloy magnesium from Canada and pure magnesium from China completed in 2006, the Commission concluded that domestic die casters did not engage in sufficient production-related activities in their scrap recycling operations to be included in the domestic industry (ies). *Magnesium from China and Russia*, Investigation No. 731-TA-1071-1072 (Final), USITC Publication 3763, April 2005, p. 12, fn. 62; and *Pure and Alloy Magnesium from Canada and Pure Magnesium from China*, Investigation Nos. 701-TA-309-A-B and 731-TA-696 (Second Review), USITC Publication 3859, July 2006, pp. 14-5. Domestic grinders were also found by the Commission majority to be part of a single domestic industry in its original 2005 determinations underlying these reviews, although two Commissioners making determinations in the original investigations found cast and granular magnesium to be separate domestic like products and found grinders to be a separate industry. *Magnesium from China and Russia*, Investigation No. 731-TA-1071-1072 (Final), USITC Publication 3763, April 2005, p. 12. In the second five-year reviews on pure and alloy magnesium from Canada and pure magnesium from China completed in 2006, the Commission included grinders in the domestic industry producing magnesium, but noted the lack of information with respect to such producers. *Pure and Alloy Magnesium from Canada and Pure Magnesium from China*, Investigation Nos. 701-TA-309-A-B and 731-TA-696 (Second Review), USITC Publication 3859, July 2006, p. 14. Likewise, in its 2007 review determination concerning pure magnesium from China, the Commission majority included grinders in the domestic industry producing magnesium, although one Commissioner did not include grinders in the domestic industry based on the finding that such firms did not engage in sufficient production-related activities. *Pure Magnesium from China*, Investigation No. 731-TA-895 (Review), USITC Publication 3908, March 2007, pp. 14-15.

⁹² ESM Company Website, <http://www.esmii.com>, retrieved on January 6, 2011; "ESM Constructs New Magnesium Powder Atomizing Plant in North America," *The A to Z of Materials*, <http://www.azom.com/news.asp?newsID=24208>, retrieved on January 6, 2011; SKW Metallurgie Annual Report 2007, http://www.skw-steel.com/downloads/en/skw_ar_07.pdf, retrieved on January 6, 2011; and ***.

Table I-7

Magnesium: U.S. producers, positions on the orders, U.S. production locations, related and/or affiliated firms, and shares of 2009 U.S. production of pure and alloy magnesium combined

Firm	Position on orders	U.S. production location(s)	Related and/or affiliated firms	Share of production (percent)
Pure magnesium:				
US Magnesium	***	Rowley, UT	***	***
MagPro ¹	***	Camden, TN	***	*** ²
Alloy magnesium:³				
Amacor	***	Anderson, IN	***	***
KB Alloys	***	Robards, KY	***	***
MagPro ¹	***	Camden, TN	***	***
MagReTech	***	Bellevue, OH	***	***
Spartan	***	Sparta, IL Mexico, MO	***	***
US Magnesium	***	Rowley, UT	***	***
Total				100.0
Granular magnesium:				
ESM	***	Kingsbury, IN Saxonburg, PA	***	***
Hart	***	Tamaqua, PA	***	***
Reade	***	Manchester, NJ	***	***
Total				100.0
¹ MagPro, primarily a secondary producer of magnesium, ***. MagPro produced *** metric tons of primary commodity-grade pure magnesium ingot in 2009 and *** metric tons during the first half of 2010. ² ***. ³ Includes recyclers, alloyers, and die casters.				
Source: Compiled from data submitted in response to Commission questionnaires.				

Table I-8

Magnesium: U.S. producers and explanations of positions on the continuation of the orders

Firm	Position on orders	Explanation of position
Amacor	***	***
ESM	***	***
Hart	***	***
KB Alloys	***	***
MagPro	***	***
MagReTech	***	***
Reade	***	***
Spartan	***	***
US Magnesium	***	***
Source: Compiled from data submitted in response to Commission questionnaires.		

Primary Producers

During a portion of the 2000-03 period examined in the investigations underlying these reviews, there were two U.S. producers of primary magnesium, US Magnesium and Northwest Alloys.⁹³ In 2001, Northwest Alloys ceased producing magnesium, leaving US Magnesium as the sole remaining U.S. producer of primary magnesium at that time. The Commission received a complete questionnaire response from domestic primary magnesium producer US Magnesium in these five-year reviews. The Commission also received a partially complete questionnaire response from MagPro, primarily a secondary magnesium producer that began to add a *** primary magnesium capacity to its facility in 2008 and currently produces ***.⁹⁴

Secondary Producers

There were four known U.S. producers of secondary alloy magnesium⁹⁵ during the 2000-03 period examined in the Commission's original investigations ***, namely Advanced Magnesium Alloys

⁹³ Northwest Alloys, a subsidiary of Alcoa Inc., Pittsburgh, PA, produced ***. Northwest Alloys' parent company (Alcoa) *** in the production of aluminum sheet for beverage cans at that time.

⁹⁴ Employment data were not provided by MagPro in its questionnaire response. Limited (but mostly unusable) financial data were provided. Questionnaire response of MagPro and *Response of US Magnesium to the Commission's Notice of Institution*, March 31, 2010, p. 9.

⁹⁵ Secondary producers are firms that produce magnesium by recycling aluminum alloys or magnesium-based scrap.

Corp. (“Amacor”);⁹⁶ Garfield Alloys, Inc. (“Garfield”); Halaco Engineering, Inc. (“Halaco”); and MagReTech, Inc. (“MagReTech”). Of these firms, only Amacor and MagReTech produced secondary magnesium during the 2004-09 time period for which the Commission requested information in these current five-year reviews.⁹⁷ Both secondary producers provided a response to the Commission’s questionnaire in these reviews. In their responses, they indicated that they also ***.⁹⁸ In addition, a third secondary producer of alloy magnesium (MagPro LLC (“MagPro”)) opened its U.S. secondary magnesium production facility in 2004 and provided a partially complete response to the Commission’s questionnaire.⁹⁹

Die Casters

In addition to firms such as Amacor, MagPro, and MagReTech that sell secondary alloy magnesium commercially, some die casters produce secondary alloy magnesium from scrap for use in their own die casting operations. In the original underlying investigations on alloy magnesium from China and pure and alloy magnesium from Russia, the Commission considered these die casters to be domestic producers of magnesium.¹⁰⁰ Spartan Light Metal Products, Inc. (“Spartan”) is a domestic die caster that produces secondary alloy magnesium for internal use in the production of die cast parts. Spartan was the only die caster that provided a response to the Commission’s questionnaire in these current five-year reviews.

Independent Alloyers

Some firms produce magnesium alloys by melting purchased magnesium ingot with other elements (e.g., aluminum) in induction furnaces and making castings from the cooled alloys. KB Alloys, a producer of magnesium/aluminum alloys from purchased ingots, provided the Commission with a response to the producers’ questionnaire in these reviews. The firm commercially sells 50%Al-50%Mag alloys and 32%Al-68%Mag alloys to the U.S. and export markets in the form of castings that range from 5-ounce buttons to 30-pound slabs.

Grinders

In its original final determinations, the Commission majority considered grinders to be domestic producers of magnesium based on the relatively high amount of value added by grinders and the fact that

⁹⁶ Amacor, which began operations in 2001, purchased Xstrata Magnesium Corp. (“XMC”) on April 3, 2003. The XMC plant was originally commissioned in 2000 to recycle scrap to produce magnesium alloy for the U.S. auto industry. A January 2005 fire at its production facility temporarily halted magnesium production. *Magnesium from China and Russia, Investigations Nos. 731-TA-1071-1072 (Final)–Staff Report*, INV-CC-031, March 11, 2005, p. I-4; and *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 Publication 3859, July 2006, p. I-33.

⁹⁷ Garfield was ***. Garfield Alloys’ production facility was destroyed in a fire on December 29, 2003. Halaco filed for chapter 11 bankruptcy protection on July 24, 2002 and ceased production of magnesium on September 23, 2004. *Magnesium from China and Russia, Investigations Nos. 731-TA-1071-1072 (Final)–Staff Report*, INV-CC-031, March 11, 2005, p. I-4; and *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 Publication 3859, July 2006, p. I-33.

⁹⁸ ***.

⁹⁹ MagPro also *** began production of primary commodity-grade pure magnesium *** in 2009.

¹⁰⁰ See *Magnesium from China and Russia, Investigation Nos. 731-TA-1071-1072 (Final)*, USITC Publication 3763 (April 2005), p. 12, fn. 62.

grinders were included in the domestic industry in a recent prior investigation involving magnesium (after fully analyzing the overall nature of grinders’ production-related activities in the United States), despite the limited information received from the domestic grinders in the original final investigations.¹⁰¹ There are currently several magnesium grinders in the United States that purchase magnesium ingot, slab, or granules (typically pure magnesium), and grind magnesium for use in the production of reagents or other magnesium-containing products. Three grinders (ESM Group, Inc. (“ESM”); Hart Metals, Inc. (“Hart”); and Reade Manufacturing, Inc. (“Reade”)) provided *** data and other information in response to the Commission’s questionnaire.

U.S. Importers

During the Commission’s original investigations, 18 U.S. importers of magnesium provided usable responses to the U.S. importer questionnaire. Major reporting U.S. importers of magnesium from China were ***. U.S. importers of magnesium from Russia included ***.¹⁰²

In these current five-year reviews, the Commission sent importers’ questionnaires to hundreds of firms who may have imported magnesium from any country into the United States during 2004-09.¹⁰³ Sixteen firms provided a response to the Commission’s importer questionnaire in these five-year reviews, indicating that they had imported magnesium during this time period. Table I-9 lists all responding U.S. importers of magnesium, their locations, and their shares of U.S. imports, by source, during 2004-09.

Table I-9
Magnesium: U.S. importers, U.S. locations, source(s) of imports, and shares of subject imports during 2009

* * * * * * *

As the table illustrates, the following five firms reported importing subject alloy magnesium from China during 2004-09: ***. The following four firms reported importing subject pure magnesium from Russia during 2004-09: ***. No responding firms reported imports of subject alloy magnesium from Russia during the period examined in these reviews and no responding importer reported imports of nonsubject pure magnesium from China. According to official import statistics, by 2009 there were no imports of alloy magnesium from Russia and imports of pure magnesium from Russia and alloy magnesium from China had fallen to 315 and 142 metric tons, respectively.

¹⁰¹ See *Magnesium from China and Russia*, Inv. Nos. 731-TA-1071 and 1072 (Final), USITC Publication 3763 (April 2005), pp. 11-12. Commissioners Jennifer A. Hillman and Marcia E. Miller found that although grinders engage in sufficient production-related activity to be considered domestic producers, grinders were a separate industry from the industry producing pure and alloy magnesium because granular magnesium was found to be a separate domestic like product by those two Commissioners. See *Magnesium from China and Russia*, investigation Nos. 731-TA-1071-1072 (Final), USITC Publication 3763 (April 2005), pp. 11-12 and fn. 58.

¹⁰² *Magnesium from China and Russia, Investigations Nos. 731-TA-1071-1072 (Final)–Staff Report*, INV-CC-031, March 11, 2005, pp. I-4 and IV-1.

¹⁰³ The mailing list was developed from the original investigations, from responses to the Commission’s notice of institution in these reviews, and from U.S. Customs and Border Protection (“Customs”). Importers’ questionnaires were also sent to all firms that may have produced magnesium (primary and secondary producers, as well as grinders) in the United States during the period examined in these five-year reviews.

U.S. Purchasers

The Commission sent purchasers' questionnaires to approximately 60 firms believed to have purchased pure or alloy magnesium during the period 2004-09. Responses were received from 41 firms that purchased pure or alloy magnesium during this period. Based on questionnaire responses, the three largest reporting U.S. purchasers of pure magnesium in 2009 were ***. The three largest reporting U.S. purchasers of alloy magnesium in 2009 were ***.

Forty-one purchasers, accounting for *** percent of U.S. apparent consumption of magnesium in 2009, provided purchaser questionnaire responses. ***, the largest purchaser of pure magnesium, reported pure magnesium purchases of \$*** (*** percent of the quantity of apparent U.S. consumption of pure magnesium) in 2009. *** characterized itself in its questionnaire response as an aluminum alloyer. The next largest responding purchasers of pure magnesium were ***. *** characterized itself as ***; *** characterized itself as ***; and *** characterized itself as ***. ***, the largest purchaser of alloy magnesium, reported alloy magnesium purchases of \$*** (*** percent of the value of apparent U.S. consumption of alloy magnesium) in 2009. *** which purchased magnesium ingot for resale to die casters. The next largest responding purchasers of alloy magnesium were ***. Both *** characterized themselves as die casters, and *** characterized itself as ***.

The Commission received questionnaire responses from 41 purchasers.¹⁰⁴ Eleven purchasers described themselves as die casters, 8 as aluminum alloyers, 2 as distributors, 2 as desulfurizers, and 17 firms described their firm type as something other.¹⁰⁵

APPARENT U.S. CONSUMPTION AND MARKET SHARES

Information on apparent U.S. consumption and market shares for magnesium is presented in table I-10.¹⁰⁶ Apparent U.S. consumption of magnesium, as shown at table I-10, is based on U.S. producers' U.S. shipments of magnesium and subject imports as compiled from official U.S. import statistics of Commerce.

The demand for magnesium in the United States is derived primarily from the final product demand in its major end-use segments: aluminum alloying for aluminum packaging, die casting for use in the automotive/transportation industry, iron and steel desulfurization for use in the construction industry, and various uses in the aerospace and chemical intermediates industries. Demand for these end uses in the United States generally tracks overall economic activity, which had increased for several years prior to the recession in 2008, but fell in 2009.¹⁰⁷

¹⁰⁴ Not every purchaser responded to every question in the questionnaire.

¹⁰⁵ "Other" includes purchasers who described themselves in a variety of ways, including sand casters (2 purchasers), casters (2), trading company to die casters (1), reseller to auto die caster (1), gravity caster (1), aluminum die caster (1), forged ring manufacturer (1), titanium and zirconium sponge manufacturer (1), thixomolder (1), manufacturer of magnesium iron alloys (1), manufacturer of magnesium powder, sheet, and plate (1), chemical production synthesis (1), aluminum rolling mill (1), and two firms reported "other."

¹⁰⁶ Summary data for pure and alloy magnesium are presented in appendix C, tables C-2 and C-3.

¹⁰⁷ *Response of US Magnesium to the Commission's Notice of Institution*, March 31, 2010, pp. 5, 10, 14, 17, and 18; *Response of SMW and SZD to the Commission's Notice of Institution*, March 31, 2010, pp. 12-13; and various questionnaire responses.

Table I-10

Magnesium:¹ U.S. shipments of domestic product, U.S. imports, apparent U.S. consumption, and market shares, by sources, 2004-09, January-June 2009, and January-June 2010

Item	2004	2005	2006	2007	2008	2009	Jan.-June	
							2009	2010
Quantity (metric tons)								
U.S. producers' U.S. shipments ²	***	***	***	***	***	***	***	***
U.S. imports from:								
Subject sources:								
China (alloy)	13,262	36	34	46	287	142	111	21
Russia (pure and alloy)	23,439	12,573	13,038	6,105	2,210	315	20	298
Subtotal, subject	36,701	12,610	13,072	6,152	2,498	458	132	319
Nonsubject sources:								
Canada	26,265	31,003	29,108	15,261	3,228	733	396	472
China (pure)	6,812	1,503	335	3,476	19,113	4,968	4,269	439
Israel	13,320	15,074	10,757	17,188	26,148	16,491	8,043	8,875
All other sources	7,256	12,453	5,919	8,906	7,612	4,011	2,140	4,008
Subtotal, nonsubject	53,653	60,033	46,119	44,831	56,101	26,203	14,848	13,794
Total U.S. imports	90,355	72,642	59,191	50,982	58,599	26,661	14,980	14,113
Apparent U.S. consumption	***	***	***	***	***	***	***	***
Value (\$1,000)								
U.S. producers' U.S. shipments ²	***	***	***	***	***	***	***	***
U.S. imports from:								
Subject sources:								
China (alloy)	35,765	89	101	129	1,697	723	616	78
Russia (pure and alloy)	50,843	32,162	29,616	14,198	8,475	1,421	136	951
Subtotal, subject	86,609	32,251	29,717	14,327	10,172	2,144	751	1,029
Nonsubject sources:								
Canada	77,352	99,703	87,626	53,304	17,921	3,543	1,615	1,986
China (pure)	16,255	4,246	809	11,386	106,024	25,196	21,553	1,325
Israel	41,228	54,172	31,316	50,915	101,055	65,320	32,018	40,677
All other sources	24,131	40,524	21,631	31,752	47,519	27,062	15,487	20,201
Subtotal, nonsubject	158,966	198,645	141,382	147,358	272,520	121,121	70,672	64,189
Total U.S. imports	245,575	230,895	171,099	161,685	282,692	123,265	71,424	65,218
Apparent U.S. consumption	***	***	***	***	***	***	***	***

Table continued on the following page.

Table I-10--Continued

Magnesium:¹ U.S. shipments of domestic product, U.S. imports, apparent U.S. consumption, and market shares, by sources, 2004-09, January-June 2009, and January-June 2010

Item	2004	2005	2006	2007	2008	2009	Jan.-June	
							2009	2010
Share of quantity (percent)								
U.S. producers' U.S. shipments ²	***	***	***	***	***	***	***	***
U.S. imports from:								
Subject sources:								
China (alloy)	***	***	***	***	***	***	***	***
Russia (pure and alloy)	***	***	***	***	***	***	***	***
Subtotal, subject	***	***	***	***	***	***	***	***
Nonsubject sources:								
Canada	***	***	***	***	***	***	***	***
China (pure)	***	***	***	***	***	***	***	***
Israel	***	***	***	***	***	***	***	***
All other sources	***	***	***	***	***	***	***	***
Subtotal, nonsubject	***	***	***	***	***	***	***	***
Total U.S. imports	***	***	***	***	***	***	***	***
Apparent U.S. consumption	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	Share of value (percent)							
U.S. producers' U.S. shipments ²	***	***	***	***	***	***	***	***
U.S. imports from:								
Subject sources:								
China (alloy)	***	***	***	***	***	***	***	***
Russia (pure and alloy)	***	***	***	***	***	***	***	***
Subtotal, subject	***	***	***	***	***	***	***	***
Nonsubject sources:								
Canada	***	***	***	***	***	***	***	***
China (pure)	***	***	***	***	***	***	***	***
Israel	***	***	***	***	***	***	***	***
All other sources	***	***	***	***	***	***	***	***
Subtotal, nonsubject	***	***	***	***	***	***	***	***
Total U.S. imports	***	***	***	***	***	***	***	***
Apparent U.S. consumption	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

¹ No U.S. producers or U.S. importers reported shipments or imports of "off-specification pure" magnesium.

² Alloy magnesium *** are included in the shipment data presented. To avoid the understatement of the value data presented, the shipment values of the alloy magnesium *** were estimated based on the average unit value of total U.S. producers' U.S. commercial shipments.

Source: Compiled from data submitted in response to Commission questionnaires and official Commerce statistics. Subject import data for China are based on HTS subheading 8104.19.00 (alloy magnesium ingots). Nonsubject import data and subject import data for Russia are based on HTS subheadings 8104.11.00 (pure magnesium ingots), 8104.19.00 (alloy magnesium ingots), and 8104.30.00 (magnesium granules). Import values are landed, duty-paid.

As indicated, the apparent U.S. consumption of magnesium, in terms of quantity, followed general U.S. economic trends. In terms of quantity, apparent U.S. consumption of magnesium fell from 2004 to 2006, increased from 2006 to 2008, but fell in 2009 to a level that was *** percent lower than was reported for 2004. However, apparent U.S. consumption was *** percent higher on the basis of quantity during the first half of 2010 than in the corresponding period of 2009. A similar trend was observed for the value of apparent U.S. consumption.

The annual share of apparent U.S. consumption (on the basis of quantity) accounted for by domestic magnesium producers increased overall throughout the period examined in these five-year reviews, from a low of *** percent in 2004 to a high of *** percent in 2009; the share was *** percent in January-June 2010 compared with *** percent in the comparable period of 2009. Conversely, the annual combined share of apparent U.S. consumption (on the basis of quantity) accounted for by U.S. imports of subject magnesium from China and Russia fell overall from *** percent in 2004 to *** percent in 2009. The aggregate share held by the subject merchandise from China and Russia was marginally higher at *** percent during the first half of 2010. The annual share of the quantity of apparent U.S. consumption of magnesium held by nonsubject sources (dominated by Canada during 2004-06 and Israel thereafter) fluctuated from a low of *** percent in 2004 to a high of *** percent in 2005; the share was *** percent in January-June 2010 compared with *** percent in the corresponding period of 2009.

PART II: CONDITIONS OF COMPETITION IN THE U.S. MARKET

U.S. MARKET CHARACTERISTICS

The four principal uses of magnesium in the U.S. market are aluminum alloying (used for packaging, transportation, and other applications), structural uses (used in castings, thixomolding,¹ and wrought products), desulfurization of iron and steel, and other uses (including electrochemical uses).² Aluminum alloying is the leading use of magnesium, accounting for 43 percent of apparent U.S. consumption in 2004, decreasing to 41 percent in 2009. Structural uses of magnesium accounted for 38 percent of apparent U.S. consumption in 2004, decreasing to 32 percent in 2009. Desulfurization of iron and steel accounted for 16 percent of U.S. apparent consumption in 2004, falling to 13 percent in 2009. U.S. consumption for other uses increased from 3 percent in 2004 to 14 percent in 2009.^{3 4} Traditionally, these magnesium markets are supplied by magnesium in three general product divisions: primary vs. secondary magnesium, pure vs. alloy magnesium, and cast vs. granulated magnesium. Pure primary magnesium is used in cast form for aluminum alloying and in cast or granular form for iron and steel desulfurization, while primary alloy magnesium is used in diecasting, which requires alloy magnesium and cannot use pure magnesium.⁵

Pure vs. Alloy Magnesium

Petitioners allege that the bulk of the magnesium market can use pure and alloy magnesium interchangeably. US Magnesium contends that in both aluminum alloying and iron and steel desulfurization applications, purchasers buy magnesium based on the pounds of magnesium. It reports that for these users, the purchasing decision is based on price for the amount of magnesium, regardless of the specific chemistry and alloying element.⁶ According to ***, ***, has had multiple requests for quotes for both pure and alloy magnesium, with price being the determining factor. *** further states that aluminum producers have utilized a wide range of alloy compositions varying from 90 to 99 percent magnesium and 10 to less than 1 percent aluminum.^{7 8}

Respondents contend that pure magnesium and alloy magnesium are used by different end users, with limited interchangeability. They have reported that the diecasting process is incapable of casting pure magnesium due to its lack of structural integrity. Additionally, they state that aluminum alloyers

¹ Thixomolding is a method of processing alloy magnesium based on material flow in a semi-solid state to achieve thin wall, high density, and complex shaped components; the material is heated in a controlled environment before injection into a mold. International Magnesium Association (IMA), <http://www.intlmag.org/faq.html>, retrieved October 26, 2010.

² The principal industrial uses of magnesium are presented in Part I of this report.

³ U.S. Geological Survey, *Magnesium*, Annual Publication 2005 and Annual Publication 2010.

⁴ US Magnesium estimated that titanium accounted for *** percent of total U.S. consumption of magnesium in 2007-08, *** percent in 2009. US Magnesium's posthearing brief, responses to questions from Commissioner Williamson, p. 7. Based on ATI's purchasing data, staff calculates that titanium accounted for *** percent of total U.S. consumption of magnesium in 2007, *** percent in 2008, and *** percent in 2009. ***. US Magnesium's posthearing brief, exhibit 6.

⁵ IMA, <http://www.intlmag.org/faq.html>, retrieved October 26, 2010.

⁶ Hearing transcript, pp. 35-36 (Tissington).

⁷ ***.

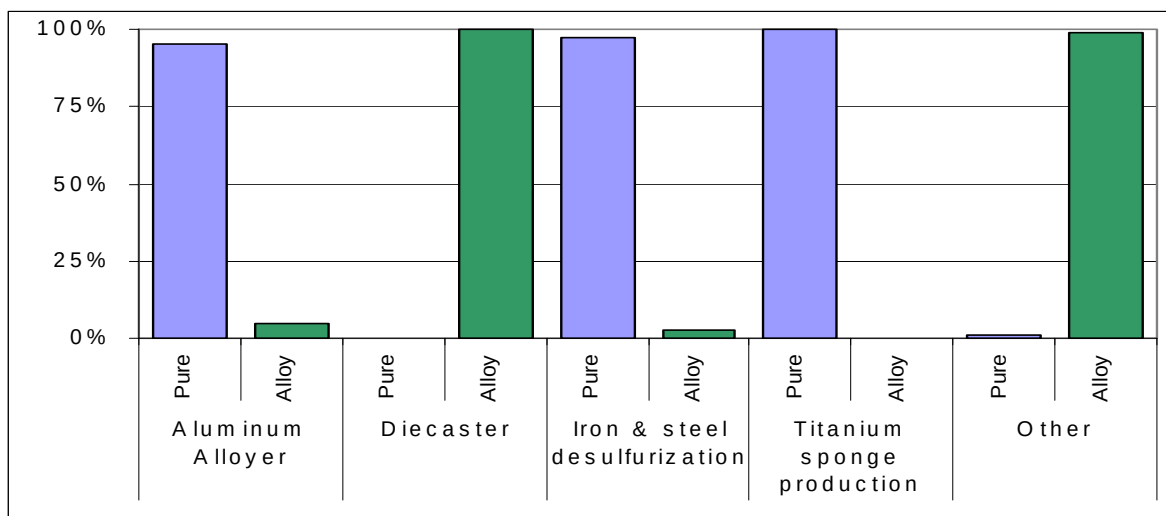
⁸ According to *** it has entered into a one-year contract in 2011 in which it has agreed to purchase from ***. Email from ***, December 15, 2010.

overwhelmingly use pure magnesium because they also require magnesium that lack impurities. Respondents contend that aluminum manufacturers infrequently use off-specification secondary alloy magnesium, but that the substitution creates technical obstacles and requires changes to the manufacturing process.⁹ ATI, a large U.S. producer of titanium sponge, stated that it can only use pure magnesium because it requires magnesium that is free of contaminants.¹⁰

U.S. purchasers were asked to identify the shares of pure and alloy magnesium that they purchased in 2009 for various end uses. The overwhelming majority of purchasers bought magnesium for only one end use. Fourteen purchasers used 100 percent of their purchased pure magnesium for aluminum alloying, one firm used 67 percent of its purchased pure magnesium for desulfurization, one firm used 4 percent of its purchased pure magnesium for desulfurization, and five used all of their purchased pure magnesium for other uses including sand castings, titanium and zirconium sponge production, exothermic heat sources, and R&D.¹¹ Six purchasers used 100 percent of their purchased alloy magnesium for aluminum alloying, eight used all of their purchased alloy magnesium for diecasting, and eight used all of their purchased alloy magnesium for other uses including sand castings, thixo-forming alloy, and forging.

As shown in figure II-1, customers of pure magnesium were largely distinct from customers of alloy magnesium in 2009. Aluminum alloyers, desulfurizers, and titanium sponge producers overwhelmingly purchased pure magnesium, while diecasters and other end users predominantly purchased alloy magnesium.

Figure II-1
Magnesium: Shares of purchased quantities of pure magnesium and alloy magnesium by firm type, 2009



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

⁹ Respondent Spartan/NADCA's posthearing brief, responses to questions from Commissioner Aranoff, appendix p. 7.

¹⁰ Hearing transcript, p. 79 (Hassey).

¹¹ One purchaser reported purchasing *** percent of its pure magnesium for specialty products, magnesium butts, and remelt, and one purchaser reported purchasing *** percent of its pure magnesium for manufacturing magnesium sheet and plate.

Furthermore, aluminum manufacturers were asked if they purchased both primary pure magnesium and primary or secondary alloy meeting ASTM standards.¹² Two aluminum alloyers reported purchasing both types of magnesium. *** reported purchasing trial quantities of alloy magnesium which were used for the same application as pure magnesium in the last six years. During the period of review, *** percent of *** total magnesium purchases was alloy magnesium. *** reported purchasing both interchangeably since 2000. During the period of review, *** percent of *** total magnesium purchases was alloy magnesium. ***, an aerospace sand caster, reported purchasing both primary pure magnesium and primary or secondary alloy meeting ASTM standards for years. During the period of review, *** percent of its total magnesium purchases was pure magnesium.

U.S. producers and importers were asked to what extent alloy magnesium competes with pure magnesium and in what end-use markets. Four of nine responding producers and ten of 14 responding importers reported that alloy magnesium does not compete with pure magnesium. Several firms provided additional comments. U.S. producer *** added that pure magnesium does not possess the necessary mechanical properties required by end users of the die cast product. U.S. producer *** stated that pure magnesium does not compete with alloy magnesium in the powder markets. Importer *** stated that the two products are not interchangeable in the chemical market. Importer *** indicated that alloy magnesium is generally sold at a premium over pure magnesium and, therefore, does not compete with pure magnesium.

Five producers and four importers reported, however, that alloy magnesium and pure magnesium do compete in certain end-use markets.¹³ U.S. producers ***, ***, and *** and three importers stated that alloy magnesium competes with pure magnesium in the aluminum alloying market segment. In addition to aluminum alloying, three importers listed diecasting and desulfurization as end-use markets in which alloy magnesium competes with pure magnesium.

As shown in figure II-2, the domestic producers' prices of pure magnesium and alloy magnesium were closely correlated until ***. At that point, the prices of the two types of magnesium diverged, with quarterly prices of pure magnesium ranging from *** percent to *** percent *** alloy magnesium.^{14 15} The weighted-average prices for pure and alloy magnesium in 2004 were \$*** and \$*** respectively, but by 2009 the weighted-average prices were \$*** for pure magnesium and \$*** for alloy magnesium. By ***, the gap between the price of pure and alloy magnesium grew wider, with the weighted-average price for pure magnesium increasing to \$*** and the weighted-average price of alloy magnesium falling to \$***.

¹² In addition, ***, an aluminum die caster, reported using secondary aluminum alloys in which it adds pure magnesium as needed to the furnaces in order to maintain the metal bath in specification. *** did not report any purchases of alloy magnesium in its U.S. purchaser questionnaire response.

¹³ U.S. producer *** stated "competition is in all areas. Imported pure magnesium can be easily alloyed locally." U.S. producer questionnaire response, section IV-18.

¹⁴ US Magnesium sold *** percent of all domestically-produced pure magnesium and approximately *** percent of all domestically-produced alloy magnesium during the period of review. In 2008, the weighted-average price of US Magnesium's pure magnesium was ***. In 2009, the weighted-average price of US Magnesium's pure magnesium was ***.

¹⁵ ***, the second-largest supplier of alloy magnesium during the period of review, *** its prices of alloy magnesium by a \$*** from 2007 to 2008. During the first 2 quarters of 2008, *** weighted-average price of alloy magnesium was approximately *** percent *** than all domestic alloy producers. *** reduced its sale volumes of alloy magnesium by *** percent in 2009 from the previous year.

Figure II-2
Magnesium: U.S. weighted-average quarterly prices of domestic pure and alloy magnesium, January 2004-June 2010

* * * * *

Identified instances of a supply arrangement in which alloy magnesium was substituted in the place of pure magnesium were limited. When asked if their firms had been involved in a supply arrangement whereby alloy magnesium could be supplied in the place of pure magnesium, or vice versa, only three of the nine responding U.S. producers, one of eleven importers, and four of 35 purchasers reported “yes.” *** of the responding foreign producers reported “no.” U.S. producers *** reported that the aluminum industry is the segment which most often uses alloy magnesium as a substitute for pure magnesium. U.S. producer *** further noted that aluminum producers that allow this type of arrangement will adjust alloy magnesium pricing in order to reflect the lower magnesium content as compared to pure magnesium. Importer *** and purchaser *** noted that a small percentage of alloy magnesium may be substituted for pure magnesium in desulfurization. Purchaser ***, an aluminum alloyer, reported that alloy magnesium could be supplied in the place of pure magnesium with a financial adjustment. Purchaser ***, an aerospace sand caster, noted that it has the capability to customize its melt practice to match what it purchases and what is available. Six U.S. producers, 10 importers, 31 purchasers, and all 6 responding foreign producers reported that their firms had not supplied or purchased alloy magnesium in place of pure magnesium, or vice versa.

Purchasers were asked how difficult it would be to interchangeably use pure and alloy magnesium in their firms’ applications. The nine responding aluminum alloyers had mixed responses. Four of the aluminum alloyers said that pure and alloy magnesium are not interchangeable. *** added that the current qualified manufacturing process does not allow for substitution between pure magnesium and alloy magnesium, and if chemically possible, would require a total re-qualification by the firm and its customers. However, five aluminum alloyers reported that pure and alloy magnesium are interchangeable.^{16 17} *** added that certain elements such as beryllium, zinc, or other rare earth metals make interchanging alloy with pure magnesium more difficult and occasionally impossible.

The six responding diecasters were unanimous that interchanging pure and alloy magnesium would be at best extremely difficult and most likely impossible, citing customers’ specifications. *** added that pure magnesium cannot be die cast, nor would the end die cast product meet the customer performance specifications.

Among desulfurizers, *** noted that it would not be difficult to interchange pure and alloy for desulfurization except in specialty products.

Among other end users, *** said that both pure and alloy magnesium are used when making adjustments to the chemistry in sand casting, but the remaining other 11 end users described interchangeability as difficult to impossible.

¹⁶ *** stated that “although there are limited circumstances in which *** can substitute a limited form of alloy magnesium for pure magnesium, *** does not consider alloy magnesium as defined in the Commission’s original investigation readily interchangeable with pure magnesium.” ***.

¹⁷ Four of nine aluminum alloyers reported purchases of both pure magnesium and alloy magnesium during the period of review. Alloy magnesium as a percentage of aluminum alloyers’ total annual magnesium purchases ranged from 4.6 percent to 10.6 percent.

Primary vs. Secondary Magnesium

Purchasers were also asked how difficult it would be to interchangeably use primary and secondary magnesium. Aluminum alloyers were again divided in their opinions. Two of the seven responding aluminum alloyers reported difficulty in interchanging primary and secondary magnesium. *** stated that secondary magnesium would be more difficult to use due to the increased levels of oxides in the metal, which would cause production problems in the alloying process. *** reported that interchanging primary with secondary magnesium would not be difficult as long as the secondary product did not contain beryllium or rare earth metals. *** and *** reported that secondary magnesium would be acceptable as long as it met the firm's specifications and primary standards; and *** stated that it used them interchangeably.

Among diecasters, though, six firms said that primary and secondary magnesium could be used interchangeably as long as other specifications and qualifications were met. Only *** described interchangeability as extremely difficult. *** said that primary and secondary magnesium were interchangeable for its desulfurization uses, but could not be interchanged for its specialty products. Among other end users, two said that they could use primary and secondary magnesium interchangeably and eight said that they could not.

Primary Pure vs. Secondary Alloy Magnesium

Purchasers who identified themselves as aluminum alloyers were asked if they had purchased both primary pure magnesium and secondary alloy magnesium. Three of the six responding aluminum alloyers said that they did not purchase both secondary alloy and primary pure magnesium. The remaining three aluminum alloyers indicated that they purchased both and provided comments. *** stated that it has been purchasing both secondary alloy and primary pure magnesium for eight years, and used secondary alloy magnesium in specific applications that may also use primary magnesium; it currently is not using secondary alloy magnesium for any applications. *** said that it purchased both secondary alloy and pure magnesium, starting sometime before 2004. *** reported that it has been purchasing pure magnesium since 1993 and recycled magnesium since 2000, which are both used for the same purposes.

U.S. producers and importers were asked if their customers for secondary alloy magnesium that meets ASTM specifications were different than their customers for such magnesium that does not meet ASTM specifications. Of the four responding U.S. producers, ***, ***, and *** responded "yes," and *** responded "sometimes." *** stated that customers purchasing alloy magnesium meeting ASTM specifications are diecasters, whereas aluminum and titanium producers do not want beryllium in their product. *** reported that while diecasters always request secondary alloy that meets ASTM specifications, secondary magnesium that does not meet ASTM specifications can only be sold to aluminum alloyers. Among the two responding importers, one reported "no," and *** reported that it always supplies secondary alloy that meets ASTM specifications to both aluminum and diecasting industries.

CHANNELS OF DISTRIBUTION

The predominant channel of distribution is to end users. As seen in table II-1, *** of the U.S. producers' U.S. shipments of pure magnesium were to end users. *** of the importers' U.S. shipments of pure magnesium from China went to end users. *** U.S. shipments of pure magnesium from Russia was

to end users in ***.¹⁸ The vast majority of U.S. producers' U.S. shipments of alloy magnesium was to end users. *** of the importers' U.S. shipments of alloy magnesium from China as well as from nonsubject countries went to end users.

Table II-1

Magnesium: U.S. producers' and U.S. importers' shares of reported U.S. shipments of pure magnesium and alloy magnesium, by sources and channels of distribution, 2004-09, January-June 2009, and January-June 2010

* * * * *

The Commission received questionnaire responses from 41 purchasers.¹⁹ Eleven purchasers described themselves as diecasters, 8 as aluminum alloyers, 2 as distributors, 2 as desulfurizers, and 17 firms described their firm type as something other.²⁰ Table II-2 summarizes the purchases of pure and alloy magnesium as a share of total annual purchases by firm type for the 38 responding firms for 2004-09. Excluding "other," pure magnesium purchased by aluminum alloyers and alloy magnesium purchased by diecasters represent most of the annual reported purchases.²¹

Geographic Markets

Four of the eight responding U.S. producers and four of 12 responding importers reported selling magnesium nationwide; only one of these importers imported subject magnesium from China, and another imported subject magnesium from Russia. The remaining three U.S. producers reported selling to two or more regions, mainly to the Southeast. Of the remaining eight importers, one importer only sells to the Mountains region; one importer only sells to the Midwest; and six importers supply to two or more regions, including to the Midwest (all 6), the Southeast (4), and the Pacific Coast (3). Details regarding the geographic presence of U.S. producers and importers of magnesium appear in table II-3.

¹⁸ *** importer of pure magnesium from Russia, *** decreased its U.S. shipments to end users beginning in 2007. *** has not imported pure magnesium from Russia since 2008, and its last U.S. shipments of pure magnesium went to distributors in the 2009 interim period. *** has no plans on importing pure magnesium in the future.

¹⁹ Not every purchaser responded to every question in the questionnaire.

²⁰ "Other" includes purchasers who described themselves in a variety of ways, including sand casters (2 purchasers), casters (2), trading company to diecasters (1), reseller to auto die caster (1), gravity caster (1), aluminum die caster (1), forged ring manufacturer (1), titanium and zirconium sponge manufacturer (1), thixomolder (1), manufacturer of magnesium iron alloys (1), manufacturer of magnesium powder, sheet, and plate (1), chemical production synthesis (1), aluminum rolling mill (1), and two firms reported "other."

²¹ Under "other" purchaser type, resellers to automobile die casters accounted for the largest share of alloy magnesium. If purchases by resellers to automobile die casters is included under "die caster," the share of alloy magnesium used by die casters would increase to 42.5 percent in 2004, falling to 34.9 percent in 2009.

Table II-2

Magnesium: Shares of purchased pure magnesium and alloy magnesium from all sources, by firm type, 2004-09

Type of purchaser	Magnesium type	Share of pure and alloy magnesium purchases (percentage)					
		2004	2005	2006	2007	2008	2009
Aluminum alloyer	Pure	42.2	45.0	45.6	39.0	40.4	45.4
	Alloy	2.9	2.2	2.2	3.4	4.8	2.3
Die caster	Pure	0.0	0.0	0.0	0.0	0.0	0.0
	Alloy	20.6	18.7	15.7	14.7	15.0	11.7
Distributor	Pure	1.9	3.0	0.4	2.0	1.1	0.3
	Alloy	0.4	0.5	0.2	1.0	0.2	0.0
Desulfurizer	Pure	5.5	4.9	7.6	9.7	8.8	5.0
	Alloy	0.0	0.0	0.0	0.0	0.0	0.1
Titanium sponge production	Pure	***	***	***	***	***	***
	Alloy	0.0	0.0	0.0	0.0	0.0	0.0
Other	Pure	***	***	***	***	***	***
	Alloy	24.7	23.6	23.6	21.3	14.5	24.1
Totals		100.0	100.0	100.0	100.0	100.0	100.0
Note.—Because of rounding, figures may not add to the totals shown.							
Source: Compiled from data submitted in response to Commission questionnaires.							

Table II-3

Magnesium: Geographic markets by destination, as reported by U.S. producers and importers

	U.S. producers	Importers
Nationwide	4	4
Northeast ¹	1	2
Midwest ²	3	6
Southeast ³	4	4
Central Southwest ⁴	3	1
Mountains ⁵	2	2
Pacific Coast ⁶	2	3
¹ Includes CT, ME, MA, NH, NJ, NY, PA, RI, and VT. ² Includes IL, IN, IA, KS, MI, MN, MO, NE, ND, OH, SD, and WI. ³ Includes AL, DE, DC, FL, GA, KY, MD, MS, NC, SC, TN, VA, and WV. ⁴ Includes AR, LA, OK, and TX. ⁵ Includes AZ, CO, ID, MT, NV, NM, UT, and WY. ⁶ Includes CA, OR, and WA.		
Source: Compiled from data submitted in response to Commission questionnaires.		

SUPPLY AND DEMAND CONSIDERATIONS

Supply

Domestic Production

Based on available information, U.S. pure magnesium producers have the ability to respond to changes in demand with small changes in the quantity of shipments of U.S.-produced pure magnesium to the U.S. market. U.S. alloy magnesium producers are likely to respond to changes in demand with moderate changes in the quantity of shipments of U.S.-produced alloy magnesium to the U.S. market. The main contributing factors to the small degree of responsiveness of supply are discussed below.

Industry capacity

Pure magnesium—Capacity for U.S. producers of pure magnesium increased from *** metric tons in 2004 to *** metric tons in 2008, but then fell to *** metric tons in 2009. Capacity utilization for U.S. producers of pure magnesium decreased irregularly from *** percent in 2004 to *** percent in 2009, and was *** percent in January-June 2010 compared with *** percent in January-June 2009. These levels of capacity utilization indicate that the U.S. producers of pure magnesium have *** unused capacity with which they could increase production of pure magnesium in the event of a price change.

Alloy magnesium—Capacity for U.S. producers of alloy magnesium increased from *** metric tons in 2004 to *** metric tons in 2009. Capacity utilization for U.S. producers of alloy magnesium decreased irregularly from *** percent in 2004 to *** percent in 2009, and was *** percent in January-September 2010 compared with *** percent in January-September 2009. These levels of capacity utilization indicate that the U.S. producers of alloy magnesium have *** unused capacity with which they could increase production of magnesium in response to price changes.

Alternative markets

Pure magnesium—Exports of pure magnesium fluctuated from *** percent of U.S. producers' total shipments in 2004, *** percent in 2005, *** percent in 2006, *** percent in 2007, *** percent in 2008, and *** percent in 2009. Exports accounted for *** percent of U.S. producers' total shipments in January-June 2009 and *** percent in January-June 2010. These data indicate that the U.S. producers of pure magnesium have *** capability to divert shipments to or from alternative markets in response to changes in the price of magnesium.

Alloy magnesium—Exports of alloy magnesium increased irregularly from *** percent of U.S. producers' total shipments in 2004 to *** percent in 2009. Exports as a share of U.S. producer's total shipments increased from *** percent in January-June 2009 to *** percent in January-June 2010. These data indicate that U.S. producers have a *** capability to divert shipments to or from alternative markets in response to changes in the price of magnesium.

Inventory levels

Pure magnesium—U.S. producers' pure magnesium inventories as a ratio to their total pure magnesium shipments decreased irregularly from *** percent in 2004 to *** percent in 2009. Their inventories were equivalent to *** percent of total annualized shipments in January-June 2010 compared with *** percent in January-June 2009. Reported inventory data suggest that U.S. producers of pure magnesium may *** ability to use inventories as a means of increasing shipments of pure magnesium to the U.S. market..

Alloy magnesium—U.S. producers' alloy magnesium inventories as a ratio to their total alloy magnesium shipments increased irregularly from *** percent in 2004 to *** percent in 2009. Inventories

were equivalent to *** percent of total annualized shipments in January-June 2010 compared to *** percent in January-June 2009. Reported inventory data suggest that U.S. producers of alloy magnesium may *** ability to use inventories as a means of increasing shipments of alloy magnesium to the U.S. market.

Production alternatives

One of the eight responding U.S. producers reported that they are able to produce other products using the same equipment and machinery used to produce magnesium. *** reported that *** are all by-products of its magnesium production.

Foreign Supply

China and Russia were not the largest foreign suppliers of magnesium over the entire period for which data were collected; however, Russia was the largest import source of pure magnesium from 2004 to 2006. The share of total imports of pure magnesium from all sources that was accounted for by pure magnesium from Russia by quantity decreased irregularly from 48.9 percent in 2004 to 1.4 percent in 2009, and the share of total imports accounted for by alloy magnesium from Russia by quantity also declined, falling from 5.5 percent in 2004 to 0.0 percent in 2009. The share of total imports of alloy magnesium accounted for by alloy magnesium from China by quantity has steadily decreased from 27.7 percent in 2004 to 3.2 percent in 2009.

Subject Imports from China

The responsiveness of the supply of imports from China to price changes in the U.S. market is affected largely by such factors as capacity utilization rates and the availability of home markets and other export markets. Based on available information, Chinese producers may have the capability to respond to changes in demand with moderate changes in the quantity of shipments of magnesium to the U.S. market.²² The main contributing factors are discussed below.

Industry capacity

Alloy magnesium—According to the four foreign producer questionnaire responses received by the Commission, reported capacity of alloy magnesium in China increased from *** metric tons to *** metric tons between 2004 and 2009. Capacity utilization for Chinese producers of alloy magnesium increased from *** percent in 2004 to *** percent in 2009.

Alternative markets

Available data indicate that Chinese producers have some ability to divert shipments to or from alternative markets in response to changes in the price of magnesium. As shown in figure II-3, the share of shipments of alloy magnesium by producers in China that went to export markets other than the United States increased over the period, while internal consumption and shipments to the home market have decreased.

²² The Commission received questionnaire responses from four Chinese producers accounting for *** percent of Chinese production of alloy magnesium in 2009.

Figure II-3

Alloy magnesium: Shares of total shipments of alloy magnesium by producers in China, by destination, 2004-09, January-June 2009, and January-June 2010

* * * * *

Inventory levels

Alloy magnesium—Inventories, as a share of total shipments, of the responding Chinese producers decreased from *** percent in 2004 to *** percent in 2009.

Production alternatives

*** Chinese producers reported that they are unable to produce other products using the same equipment and machinery used to produce magnesium.

Subject Imports from Russia

The responsiveness of the supply of imports from Russia to price changes in the U.S. market is affected largely by such factors as capacity utilization rates and the availability of home markets and other export markets. Based on available information, Russian producers may have a moderate capability to respond to changes in demand with changes in the quantity of shipments of magnesium to the U.S. market.²³ The main contributing factors are discussed below.

Industry capacity

Pure magnesium—According to the two Russian primary magnesium producer questionnaire responses received by the Commission, reported capacity of pure magnesium in Russia decreased from *** metric tons to *** metric tons between 2004 and 2009. Russian producers' capacity utilization for pure magnesium decreased from *** percent in 2004 to *** percent in 2009.

Alloy magnesium—According to the two Russian primary magnesium producer questionnaire responses received by the Commission, reported capacity of alloy magnesium in Russia decreased from *** metric tons to *** metric tons between 2004 and 2009. Russian producers' capacity utilization for alloy magnesium decreased from *** percent in 2004 to *** percent in 2009.

Alternative markets

Available data indicate that Russian producers have some ability to divert shipments to or from alternative markets in response to changes in the price of magnesium. As shown in figure II-4a, the share of shipments of pure magnesium by producers in Russia exported to the United States fell to *** by 2009, while the share of shipments that went to export markets other than the United States increased, as did the shares of home market internal consumption. Likewise, as shown in figure II-4b, the share of shipments of alloy magnesium by producers in Russia exported to markets other than the United States decreased (as did exports to the U.S. market, falling to zero by 2006), while the share of home-market shipments increased during the period.

²³ The Commission received questionnaire responses from two Russian producers of magnesium accounting for *** percent of exports of pure magnesium from Russia to the United States and approximately *** percent of exports of alloy magnesium from Russia to the United States in 2004. Official Commerce statistics show no U.S. imports of alloy magnesium from Russia after November 2005.

Figure II-4a

Pure magnesium: Shares of total shipments of pure magnesium by producers in Russia, by destination, 2004-09, January-June 2009, and January-June 2010

* * * * *

Figure II-4b

Alloy magnesium: Shares of total shipments of alloy magnesium by producers in Russia, by destination, 2004-09, January-June 2009, and January-June 2010

* * * * *

Inventory levels

Pure magnesium—Inventories of pure magnesium, as a share of total shipments, of the responding Russian producers increased from *** percent in 2004 to *** percent in 2009.

Alloy magnesium—Inventories of alloy magnesium, as a share of total shipments, of the responding Russian producers increased irregularly from *** percent in 2004 to *** percent in 2009.

Production alternatives

Only two Russian producers provided responses regarding production alternatives. One Russian producer (***) *** using the same equipment, ***. Russian producer *** stated that *** using the same equipment.

Nonsubject Imports

According to official Commerce statistics, nonsubject imports accounted for 51.1 percent of all imports of pure magnesium in 2004, which rapidly increased to 98.6 percent by 2009. In the first half of 2009, nonsubject imports accounted for 99.8 percent of all imports of pure magnesium, compared to 97.0 percent in the first half of 2010. In virtually every year since 2004, Israel has been the largest nonsubject source of pure magnesium; Canada was the largest nonsubject source in 2006.

Nonsubject imports of alloy magnesium accounted for 66.8 percent of all imports in 2004, and increased to 96.8 percent in 2009. In the first half of 2009, nonsubject imports accounted for 95.0 percent of all imports of alloy magnesium, compared to 99.5 percent in the first half of 2010. With respect to alloy magnesium, Canada was the largest nonsubject source of alloy magnesium from 2004 to 2007, Israel was the largest nonsubject source in 2008, and the United Kingdom was the largest nonsubject source in 2009.

General Supply Conditions

From information supplied in purchaser questionnaires, magnesium supplies appear to be becoming tighter in the U.S. market. When U.S. purchasers were asked if they had any problems being able to secure their firms' supplies of magnesium from current or past suppliers, 10 of the 38 responding purchasers responded "yes." *** reported that its previous supplier, ***, was very unreliable. *** reported that when the demand for its end product increased in 2008, its sudden increased demand for pure magnesium ***, which caused *** to purchase from a foreign supplier. *** reported that it has difficulty in obtaining thin sheet metal. *** reported that Russian magnesium producers have halted shipments to the United States as a result of the antidumping duties, and that it has been unable to secure large commercial supplies of magnesium. *** reported that *** was unable to supply it during the 2008 Summer Olympics.

U.S. producers, importers, and purchasers were asked if any changes that have affected the availability of U.S.-produced magnesium have occurred in the U.S. market since 2004. The majority of U.S. producers and importers reported no changes in factors affecting supply. *** reported that because of its own expansion of capacity as well as the addition of a new primary producer (***), the availability of U.S. supply has increased since 2004. *** reported that the shrinking U.S. die caster industry as well as the relocation or liquidation of magnesium die cast plants in the U.S. has reduced the availability and supply of clean die cast scrap since 2004. Importer *** reported that increased titanium demand has affected supply, and importer *** reported that increasing energy costs overseas have affected supply since 2004.

A plurality of purchasers (15 of 37) reported changes in factors that have affected the supply of U.S.-produced magnesium since 2004. Six purchasers reported a reduced availability of magnesium due to plant closures in North America and Europe, which has resulted in higher prices and missed shipments to customers. *** reported that the economic downturn reduced the availability of magnesium scrap, devastating the U.S. secondary magnesium industry. Two purchasers indicated an increase in domestic capacity, with US Magnesium expanding its capacity in 2008 and *** offering secondary magnesium alloy to pure alloy consumers in 2007. *** reported that the startup of the titanium sponge plant in Salt Lake City is consuming a sizeable percentage of US Magnesium's capacity. *** reported that from 2006 into 2008, aerospace grades of magnesium were in short supply, with only two viable sources available in the U.S. market.

The majority of purchasers generally contact more than one supplier before making a purchase. Among 36 responding purchasers, 10 reported that they contact one supplier; 1 purchaser reported that it contacts one to two suppliers; 7 purchasers reported that they contact two suppliers; 8 purchasers reported that they contact up to three suppliers; 5 reported that they contact up to four suppliers; and 5 reported that they contact five or more suppliers.

When asked if they had changed suppliers since 2004, 19 of 37 responding purchasers reported "yes." Six purchasers indicated that the reason for the change was due to *** going out of business. Six purchasers indicated that price, availability, and relationship were the reasons for the supplier change. Nine of 39 responding purchasers were aware of new suppliers, and identified ***.

Purchasers were asked if they anticipated new magnesium suppliers entering the U.S. market. The overwhelming majority (30 of 34 responding purchasers) reported that they did not expect new suppliers to enter the U.S. market. Six purchasers indicated that the antidumping duty orders discourage new foreign suppliers from entering the U.S. market. Of the four purchasers that anticipate new suppliers, *** stated that several domestic recyclers hope to enter the primary magnesium business by 2020.

U.S. Demand

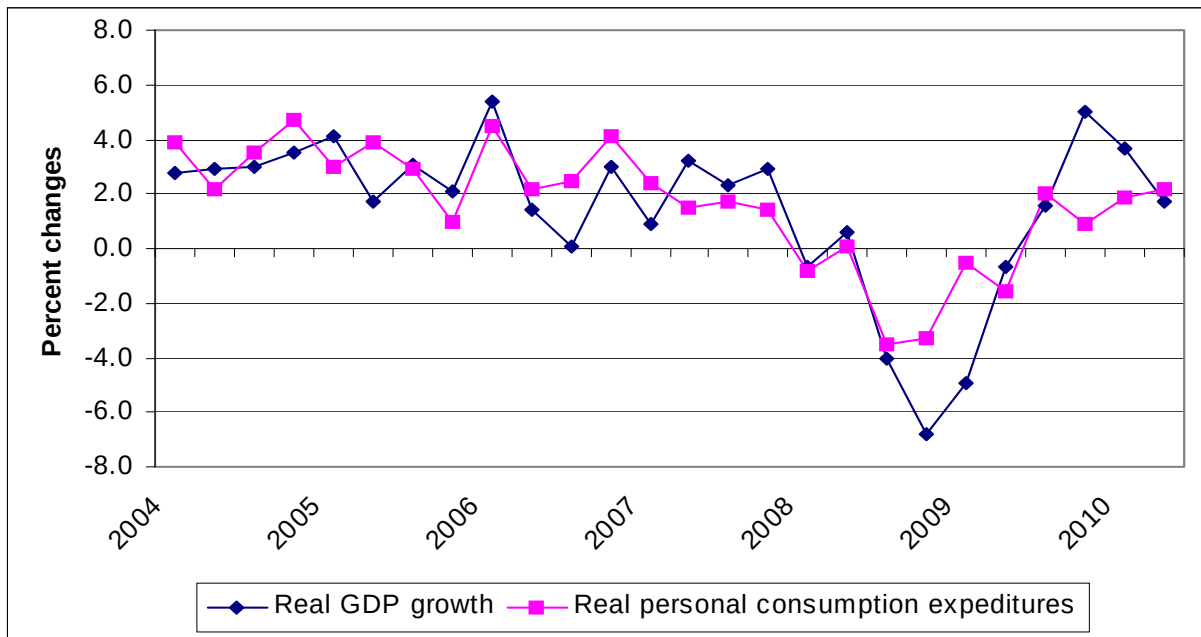
Demand Characteristics

Magnesium demand consists primarily of three major segments--aluminum alloying, diecasting, and iron and steel desulfurization--plus miscellaneous other uses. Demand for all of these end uses generally tracks overall economic activity. As seen in figure II-5, real quarterly U.S. GDP growth at seasonally adjusted annual rates and the percent change in quarterly real personal consumption expenditures have generally decreased irregularly between 2004-09, but have shown positive growth rates since late 2009.

U.S. Demand Trends

U.S. producers, importers, purchasers, and foreign producers were asked how demand has changed within the United States for both pure and alloy magnesium since 2004, as well as anticipated demand changes. Their responses are summarized in table II-4 and are discussed below.

Figure II-5
Real quarterly GDP growth and personal consumption expenditures, January 2004-June 2010



Source: Bureau of Economic Analysis, *Gross Domestic Product*, and *Personal Income and Outlays*. Retrieved October 20, 2010.

Table II-4
Magnesium: U.S. producer, importer, purchaser, and foreign producer perceptions regarding the demand for pure and alloy magnesium in the United States

Item		Pure magnesium				Alloy magnesium			
		I	NC	D	F	I	NC	D	F
Demand since 2004	U.S. producers	1	1	3	2	0	1	4	2
	Importers	1	3	5	3	0	3	7	2
	Purchasers	2	7	8	6	2	6	16	6
	Foreign producers	1	2	1	1	1	1	1	1
Anticipated demand changes	U.S. producers	3	1	3	0	2	2	2	0
	Importers	4	2	2	2	3	2	5	1
	Purchasers	8	5	4	6	5	5	11	6
	Foreign producers	3	1	0	1	2	1	0	1

Note.—I = Increase, NC = No Change, D = Decrease, F = Fluctuate.

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

Pure magnesium

A plurality of firms reported that demand for pure magnesium has decreased since 2004. Three U.S. producers and three importers attributed the decline in demand to the economic recession. U.S. producer *** and purchaser *** reported that U.S. demand for pure magnesium had fluctuated since 2004, stating that demand had increased steadily from 2004, peaked in the third quarter of 2008, and fell substantially though mid-2009 due to the recession. Three importers and four purchasers reported increasing magnesium prices and a decline in automobile production as principal factors that have decreased demand for pure magnesium.

A plurality of U.S. producers, foreign producers, and purchasers anticipated future increases in U.S. demand for pure magnesium. Three U.S. producers anticipated that the future increase in demand for pure magnesium will be spurred by a greater need for lighter and more fuel-efficient automobiles, as well as by an increase in construction and titanium sponge production. *** stated that the growing production of aluminum and titanium producers will increase demand for pure magnesium. Two foreign producers attributed the increase in future demand to the development of new applications for pure and alloy magnesium, including in the auto industry, because magnesium is more environmentally friendly than other materials. Four of ten U.S. importers anticipated that demand for pure magnesium within the United States would decrease; three importers anticipated that demand would fluctuate; two importers anticipated that demand would increase; and one importer anticipated that demand would remain constant. Of the four importers that anticipated a decrease in demand, three indicated that a reduction in military and aerospace spending were the principal factors.

Alloy magnesium

Overall, the majority of firms reported that demand for alloy magnesium had declined since 2004. U.S. producers *** and *** reported that U.S. demand for alloy magnesium had decreased due to magnesium diecasting migrating to markets outside of the United States. *** noted that magnesium diecasting, as a percentage of its total business, has shrunk from *** percent in 2004 to *** percent in 2010.²⁴ *** stated that its demand for magnesium in the United States has decreased since 2004 due to the artificially high price of domestically produced magnesium, which has also prompted *** to relocate the production of goods that utilize magnesium as a raw material overseas.²⁵ Other identified factors for explaining the fall in U.S. demand for alloy magnesium were the global recession and a decrease in automobile production.

A plurality of U.S. producers and foreign producers anticipated that future U.S. demand for alloy magnesium would increase. U.S. producers and foreign producers attributed the anticipated rise in demand for alloy magnesium to the development of new products and an increased demand for lighter and more fuel efficient vehicles. On the other hand, a plurality of importers and purchasers anticipated a future decline in the U.S. demand for alloy magnesium. Three importers and two purchasers stated that the antidumping duties were the principal factor in the future decline in demand for alloy magnesium. One importer and nine purchasers reported that the lack of competition and uncompetitive domestic pricing would lead to a further decrease in magnesium-based die cast parts in the United States.

²⁴ U.S. producer questionnaire response, section II-3.

²⁵ U.S. importer questionnaire response, section III-28 and U.S. purchaser questionnaire response, section III-11.

Consumption

All Magnesium

Demand, as measured by apparent U.S. consumption, decreased steadily from *** metric tons in 2004 to *** metric tons in 2009. However, U.S. consumption was *** metric tons in the first half of 2010 compared to *** metric tons in the first half of 2009.

Pure Magnesium

Demand, as measured by apparent U.S. consumption, decreased irregularly from *** metric tons in 2004 to *** metric tons in 2009. The decrease was not linear, and there was a spike in apparent U.S. consumption in 2008 (***). U.S. consumption was *** metric tons in the first half of 2010 compared to *** metric tons in the first half of 2009.

Alloy Magnesium

Demand, as measured by apparent U.S. consumption, decreased steadily from *** metric tons in 2004 to *** metric tons in 2009. U.S. consumption was *** metric tons in the first half of 2010 compared to *** metric tons in the first half of 2009.

Business Cycles

The majority of U.S. producers, importers, and purchasers reported that magnesium was not subject to business cycles or distinctive conditions of competition. However, several firms did report that there were business cycles distinctive to the magnesium market. U.S. producer *** reported that the demand for magnesium tracks demand for downstream products and that price remains a key criterion for purchasers when choosing between domestic and subject imports of magnesium. U.S. producer *** described the business cycle before the antidumping duty orders as similar to that of other raw materials, but stated that since the antidumping duty orders, the magnesium market faces a monopolistic pricing practice domestically and predatory pricing from nonsubject sources. Importer *** and purchaser *** reported that the magnesium market is tied to demand in the automobile, aluminum can, and titanium markets. Of the eleven purchasers that responded “yes,” seven purchasers reported limited competition, chronically high costs, and a limited supply base attributed to the antidumping duties.

End-Use Demand

U.S. overall magnesium demand principally depends on the demand for several end-use applications. Purchasers that are end users of pure or alloy magnesium were asked to describe how demand for their final products incorporating pure or alloy magnesium has changed since 2004. Responses from aluminum alloyers were mixed; three reported that demand for their final product incorporating pure magnesium had decreased, two said that it had remained unchanged, two reported that it had increased, and one said that it had fluctuated. In addition, two aluminum alloyers reported that demand for their end product incorporating alloy magnesium had decreased, two reported that it had remained unchanged, and one said that it had fluctuated. The overwhelming majority of aluminum alloyers reported that the change in demand for final products has decreased their firm’s demand for magnesium.

The overwhelming majority of die casters reported that demand for their final product incorporating alloy magnesium had either fluctuated or decreased since 2004. Four die casters reported that demand for their end product had decreased, four said that it had fluctuated, and two said that it had remained unchanged. None of the die casters reported demand changes for products incorporating pure magnesium.

Five of the nine responding die casters reported that the change in demand for final products has decreased their firm's demand for magnesium.

Among other purchasers of magnesium, the majority reported that demand for their end products incorporating pure magnesium had fluctuated. On the other hand, the reported change in demand for their final product incorporating alloy magnesium was mixed among these other purchasers. Three purchasers reported that demand for their end product incorporating alloy magnesium had fluctuated, three said it had increased, and two reported that it had decreased. Nine of 14 responding purchasers reported that the change in demand for final products has had an effect on their firm's demand for magnesium.

The majority of U.S. producers, importers, purchasers, and foreign producers reported no changes in the end uses of magnesium since 2004. Two of nine U.S. producers reported that there have been changes in end uses. *** reported observing an increase in material substitution (such as aluminum and plastics) in place of magnesium due to the instability of supply and magnesium's price volatility.²⁶ *** reported an increase in end uses of magnesium including new automotive applications for ***, as well as a new domestic titanium plant. All of the 16 responding importers reported that there have been no changes in end uses. Two of 24 purchasers reported changes in the end uses of pure magnesium and six of 27 responding purchasers reported changes in the end uses of alloy magnesium. Of the responding purchasers, five stated that firms are more likely to select substitute materials for magnesium due to cost, and one reported an increased casting demand, which has increased its purchases of pure and alloy magnesium. Six of seven responding foreign producers reported that there have been no changes in end uses of magnesium. Russian producer *** reported that there have been changes in end uses.²⁷

The majority of firms do not anticipate changes in the end uses of magnesium. Only two of the eight responding producers and one of 14 responding importers reported that they anticipate future changes in end uses. *** reported that the new Corporate Average Fuel Economy (CAFE) requirements have increased the mileage efficiency standards, which *** anticipates will result in new applications and increased die casting demand in the United States. Respondents reported that worldwide automobile production is expected to grow from 61 million to 132 million automobiles a year between now and 2020, and they indicated that this could create a significant opportunity for magnesium die casting in the United States.²⁸ *** also anticipated an increase in magnesium die cast parts in order to reduce the weight of automobiles once a few engineering problems have been corrected. On the other hand, *** anticipated a decrease in magnesium die cast parts for automobiles, reporting that *** will be redesigned in 2012, switching from magnesium to thermoplastics due to the cost of magnesium.²⁹ Three of 23 responding purchasers anticipated changes in the end uses of pure magnesium, and seven of 28 responding purchasers anticipated changes in the end uses for alloy magnesium. All of the purchasers that anticipated changes in the end uses expect a future decrease in magnesium applications. Five of these purchasers attribute the future decrease in end uses to the high costs of magnesium, one purchaser expects a decline in demand for military-grade powders, and three purchasers expect aluminum or plastic to be substituted for magnesium in the future. All seven responding foreign producers did not anticipate any changes to end uses of magnesium.

Cost Share

Magnesium is used in many different applications with wide-ranging cost shares, as shown in table II-5. Three U.S. producers, three importers, and 15 purchasers reported cost shares of pure magnesium in

²⁶ U.S. producer *** reported “***.” U.S. producer questionnaire response, section IV-13-14.

²⁷ ***.

²⁸ Hearing transcript, p. 289 (Twarog). Respondent Spartan/NADCA's posthearing brief, responses to questions from Commissioner Lane, appendix p. 3.

²⁹ U.S. producer *** stated “***.” U.S. producer questionnaire response, section IV-14.

their end uses; three U.S. producers, six importers, and 16 purchasers reported cost shares of alloy magnesium in their end uses. Reported cost shares of magnesium in aluminum alloying applications ranged from 0.25 to 10 percent; reported cost shares of magnesium in die casting applications ranged from 30 to 50 percent.

Table II-5

Magnesium: Products for which magnesium is used and share of the cost of these end products, as reported by U.S. producers, importers, and purchasers

* * * * *

Purchasing Patterns

Purchasers were asked how frequently they purchased magnesium. Of the 36 responding purchasers, 14 purchased magnesium monthly, ten purchased annually, two purchased quarterly, two purchased magnesium daily, four purchased on an as-needed basis, one purchased bimonthly, one purchased weekly, one purchased every 3 to 6 months on the spot market in addition to a two-year contract, and one purchaser had stopped buying magnesium completely. When asked if purchasers expected their purchasing pattern to change in the next two years, 34 of 38 purchasers responded “no.” Two purchasers anticipated a decline in purchasing frequency due to lower demand and high prices.

Purchasers were asked if they had purchased magnesium from either China or Russia before 2004. Nine of 40 responding purchasers reported purchasing magnesium from China before 2004. Of those nine, three firms reported discontinuing their purchases from China because of the antidumping duty order, three reported reducing purchases from China because of the order, two firms reported changing their pattern of purchases from China for reasons other than the order,³⁰ and one firm’s purchasing pattern essentially remained unchanged after the order. Twelve of 40 responding purchasers reported purchasing magnesium from Russia before 2004. Of those 12, four firms reported discontinuing their purchases from Russia because of the order, three firms reported that Russia curtailed shipments and withdrew from the U.S. market, three firms reported reducing purchases from Russia because of the order, and two firms reported changing their purchasing patterns for other reasons.³¹ Regarding purchases from nonsubject countries, the majority reported that their pattern of purchasing remained unchanged.

Purchasers were asked how the relative shares of their total purchases of magnesium from different sources had changed since 2004. Their responses varied substantially and are summarized in table II-6.³²

³⁰ *** reported shifting its purchases to nonsubject foreign sources because it was difficult to remain competitive with purchases from China or Russia, and *** reported purchasing small quality spot purchases from China before 2004.

³¹ *** reported changing its purchasing pattern from Russia due to AVISMA’s reduction in production after the carnallite mine collapse.

³² Aluminum alloyers and resellers to automobile diecasters reported the largest shifts in purchasing sources. While the share of total annual purchases by aluminum alloyers for pure magnesium from all sources remained consistent (42.2 percent in 2004 to 45.4 percent in 2009), their share of total annual purchases for pure magnesium from U.S. producers decreased from a high of *** percent in 2005 to *** percent in 2009. In 2008-09, 5 of the 8 aluminum alloyers increased their pure magnesium purchases from nonsubject sources. *** purchaser of pure magnesium purchased *** of its pure magnesium from China during 2008-09. Likewise, the share of total annual purchases by resellers to automobile diecasters from all sources remained consistent (21.8 percent in 2004 to 23.2 percent in 2009), and their share of total annual purchases for alloy magnesium from U.S. producers increased from *** percent during 2004-07 to *** percent in 2009. This shift is due to ***. Compiled from data submitted in response to Commission questionnaires, sections II-1 and II-2.

Table II-6**Magnesium: Purchasing patterns of magnesium by source, as reported by U.S. purchasers**

	Increased	No Change	Decreased	Fluctuated
United States	9	6	10	8
China	5	3	8	2
Russia	0	2	11	1
Nonsubject countries	7	3	5	8
Source: Compiled from data submitted in response to Commission questionnaires.				

Substitute Products

When asked if there are any products that may be substituted for magnesium, five of nine responding producers, four of 15 responding importers, eleven of 38 responding purchasers, and two of seven responding foreign producers reported substitute products for magnesium.³³ Firms identified aluminum as a substitute for magnesium in various castings, tools and automobile, medical, and electronic parts. Calcium carbide was identified as a substitute in a desulfurizer application. Plastic was identified as a substitute in die casting. Zinc alloys were identified as a substitute for packaging and for the manufacturing of electronics, aerospace, and industrial parts. Steel was identified as a substitute for magnesium in die casting and instrument panels. The majority of firms did not report any changes in the number or types of substitutes for magnesium since 2004, nor do they anticipate any future changes in terms of substitutes.

Foreign Demand

U.S. producers, importers, purchasers, and foreign producers were asked how demand for pure and alloy magnesium had changed outside the United States since 2004, as well as anticipated demand changes. Their responses are summarized in table II-7 and are discussed below.

Pure magnesium

Two of four responding U.S. producers reported that foreign demand for pure magnesium had fluctuated, and two reported that demand had decreased since 2004. Three of the U.S. producers identified the general economic conditions as the contributing factor that has affected the demand for pure magnesium. *** reported that the increased consumption in China has increased Chinese demand for both pure and alloy magnesium. A plurality of importers and purchasers reported that foreign demand for pure magnesium had increased. Importer *** stated that the increase in foreign demand for pure magnesium is attributed to the increased production of lightweight automobiles and titanium sponge applications. Importer *** stated that the high domestic prices for pure magnesium is the contributing factor to an

³³ Specifically in automotive die casting applications, respondents stated that aluminum, steel stampings, and thermoplastics are substitutable lightweight materials which compete with alloy magnesium. Aluminum is the most common substitute material for alloy magnesium, but it is one-third heavier than magnesium. Given the heavier weight of aluminum, it only becomes cost effective to use it when the price of magnesium is more than 1.5 times that of aluminum. Respondent Spartan/NADCA's posthearing brief, responses to questions from Commissioner Aranoff, appendix pp. 12-13.

Table II-7

Magnesium: U.S. producer, importer, purchaser, and foreign producer perceptions regarding the demand for pure and alloy magnesium outside the United States

Item		Pure magnesium				Alloy magnesium			
		I	NC	D	F	I	NC	D	F
Demand since 2004	U.S. producers	1	1	2	2	3	1	0	2
	Importers	2	4	2	1	3	4	2	1
	Purchasers	5	5	4	3	11	4	3	2
	Chinese producers (home market)	***	***	***	***	***	***	***	***
	Russian producers (home market)	***	***	***	***	***	***	***	***
	Foreign producers (other markets)	2	2	0	3	1	2	1	2
Anticipated demand changes	U.S. producers	5	1	0	1	5	0	0	1
	Importers	4	2	0	3	5	3	0	3
	Chinese producers (home market)	***	***	***	***	***	***	***	***
	Russian producers (home market)	***	***	***	***	***	***	***	***
	Foreign producers (other markets)	3	1	0	3	2	1	0	3
Note.—I = Increase, NC = No Change, D = Decrease, F = Fluctuate.									
Source: Compiled from data submitted in response to Commission questionnaires.									

increased demand of foreign product. The majority of purchasers listed general economic conditions as the leading factor affecting demand.

*** responding Chinese producers reported that demand in China for pure magnesium has increased. *** reported that the increase in demand is due to the development of a high-purity magnesium. *** Russian producers reported that demand for pure magnesium in Russia has also increased since 2004. *** reported that the domestic market for pure magnesium granules has expanded due to the increased demand from the steel industry. Three of the seven foreign producers reported that demand in markets other than their home market and the United States had fluctuated; two foreign producers reported that demand had increased in other markets, and two reported that demand had remained the same. One Chinese producer (***) reported that the increase in demand for pure magnesium was attributed to the growing use of magnesium in the automobiles and the 3C (computer, communication, and consumer electronics) industries.

U.S. producers, importers, and foreign producers were asked if they anticipate any change in demand for pure and alloy magnesium outside the United States. A plurality of U.S. producers and importers anticipated an increase in foreign demand for pure magnesium. U.S. producers *** and *** attributed the anticipated increased demand to general economic recovery. U.S. producer and importer ***

anticipates an increase in demand spurred by the need for lighter and more fuel-efficient vehicles in the future.³⁴

*** Chinese producers anticipated that demand for pure magnesium will increase in China. Chinese producer *** reported that there is an increasing demand for pure magnesium in the marketplace because magnesium is more environmentally-friendly than some other materials used in the auto industry. *** Russian producers also anticipated increased demand in their home markets, stating that the increased demand for pure magnesium granules is needed for *** steel industry, which uses low quality raw materials that require more magnesium for the desulfurization process. Three of seven responding foreign producers anticipated that demand for pure magnesium in markets other than their own and the United States will increase in the future; three anticipated that demand will fluctuate, and one foreign producer anticipated that demand for pure magnesium would remain the same.

Alloy magnesium

A plurality of U.S. producers, importers, and purchasers reported that demand for alloy magnesium outside of the United States has increased since 2004. U.S. producer *** reported that the increased foreign demand of alloy magnesium is attributed to the lower raw material costs outside of the United States. U.S. purchaser *** reported that demand for magnesium in China has increased due to its growing economy, but that demand for magnesium in Canada and Europe has decreased. U.S. purchaser *** stated that it believes demand has increased outside the United States as it has lost several projects to European and Asian competitors due to magnesium pricing in the United States.³⁵

*** responding Chinese producers reported that the demand for alloy magnesium in China has increased since 2004. *** responding Russian producers reported that demand for alloy magnesium had fluctuated in Russia. *** attributed the fluctuating demand to the global financial and economic crisis. With regard to other markets, two of six foreign producers reported that demand for alloy magnesium has fluctuated, two reported that demand has remained unchanged, one reported that demand has increased, and one foreign producer reported that demand has decreased since 2004. *** stated that the foreign market for alloy granules has decreased due to the competition from Chinese producers.

When asked about future demand for alloy magnesium in foreign markets, a plurality of U.S. producers and importers anticipate an increase in foreign demand. Importer *** stated that foreign demand for both pure and alloy magnesium will continue to increase in the future as other countries continue to pick up lost business seen in the United States due to the artificially high cost of domestic magnesium.³⁶

*** responding Chinese producers anticipate that demand for alloy magnesium will increase in China in the future. Chinese producer *** stated that new future applications of pure magnesium and alloy magnesium will enlarge the number of application fields. Russian producer *** anticipates that demand for alloy magnesium will remain unchanged in Russia, *** anticipates fluctuating demand in the future, and *** anticipates that demand for alloy magnesium will increase in Russia. Three of six responding foreign producers anticipate that demand for alloy magnesium in other markets will fluctuate, two anticipate increasing demand, and one anticipates that demand will remain unchanged.

SUBSTITUTABILITY ISSUES

The degree of substitution between domestically produced and imported magnesium depends upon such factors as relative prices, quality (e.g., grade standards, reliability of supply, etc.), and conditions of sale (e.g., price discounts/rebates, lead times between order and delivery dates, payment terms, product services, etc.). Based on the available information, staff believes that on the whole, there is likely to be a moderately high degree of substitution between magnesium produced in the United States and that

³⁴ U.S. producer questionnaire response, section IV-29; U.S. importer questionnaire response, section III-29.

³⁵ U.S. purchaser questionnaire response, section III-11.

³⁶ U.S. importer questionnaire response, section III-29.

produced in China or Russia. Nonetheless, there are some distinctions between U.S. and subject pure and alloy magnesium based on issues of quality, availability, and product range.

Factors Affecting Purchasing Decisions

Available information indicates that a variety of factors are considered important in the purchasing decision for magnesium. While quality and price were mentioned as being important factors in the sale of the product, other factors such as availability are also important considerations. Purchasers were asked to list the top three factors that they consider when choosing a supplier of magnesium. Table II-8 summarizes the responses.

Table II-8
Magnesium: Ranking factors used in purchasing decisions by U.S. purchasers

Factor	Number of firms reporting		
	Number one factor	Number two factor	Number three factor
Price	13	11	9
Quality	11	10	3
Availability	6	9	7
Prearranged Contract	4	0	0
Prearranged Supplier	2	0	0
Extension of credit	0	3	1
Reliability	0	2	4
Other ¹	2	2	9
¹ Other factors include material quality and suppliers' product line for the first factor; technical specifications and quantity for the second factor; and packaging, service, freight costs, lead time, long-term relationship, consistency, delivery terms, and technical service for the third factor.			
Source: Compiled from data submitted in response to Commission questionnaires.			

Price was most often identified as the number one, number two, and number three leading factor in purchasing decisions. As indicated in table II-9, 34 of 41 purchasers indicated that price was a “very important” factor in their purchasing decisions. When asked how often their firms purchased magnesium that is offered at the lowest price, 22 of 37 responding purchasers reported that they either “always” or “usually” purchase at the lowest price, 7 purchasers reported that they “sometimes” purchase at the lowest price, and 8 purchasers reported “never.”

Quality was named by 11 purchasers as the number one factor generally considered in deciding from whom to purchase magnesium, while 10 purchasers indicated that it was the number two factor, and 3 reported that it was the number three factor. As indicated in table II-9, a large majority of responding purchasers indicated that product consistency and quality meeting industry standards were “very important” factors in their purchasing decisions.

Availability was named by 6 purchasers as the number one factor generally considered in deciding from whom to purchase magnesium, while 9 purchasers indicated that it was the number two factor, and 7 reported that it was the number three factor. As indicated in table II-9, 37 responding purchasers indicated that availability was a “very important” factor in their purchasing decisions, and 34 of 41 responding purchasers indicated that reliability of supply was a “very important” factor.

Table II-9**Magnesium: Importance of purchase factors, reported by U.S. purchasers**

Factor	Very important	Somewhat	Not important
	<i>Number of firms responding</i>		
Availability	37	4	0
Delivery terms	18	21	2
Delivery time	31	8	2
Discounts offered	11	16	13
Extension of credit	13	18	10
Minimum quantity requirements	8	19	14
Packaging	10	17	13
Price	34	7	0
Product consistency	36	5	0
Product range	5	22	14
Quality exceeds industry standards	13	14	14
Quality meets industry standards	35	4	2
Reliability of supply	34	7	0
Technical support/service	7	26	7
U.S. transportation costs	6	22	12
Other ¹	2	0	0
¹ One purchaser reported magnesium purity as a very important factor, and one purchaser reported consignment as a very important factor.			
Source: Compiled from data submitted in response to Commission questionnaires.			

U.S. purchasers were asked whether or not they required their magnesium suppliers to become certified or pre-qualified. Twenty-eight of 39 responding purchasers reported that they require suppliers to become certified for all or some of their purchases.³⁷ Six purchasers reported that suppliers must meet ASTM specifications or be ISO certified. Thirteen purchasers reported conducting quality audits, trial delivery periods, and financial qualification analysis when qualifying a new supplier. *** stated that it costs about \$25,000 to qualify a new supplier because material must be tested and approved by its technical center.³⁸ When asked specifically if purchasers bought magnesium that met ASTM specifications, 29 of 38 purchasers reported that their magnesium “always” met ASTM specifications, and seven reported that it “usually” or “sometimes” met ASTM specifications.

Twenty-two purchasers provided information on the time necessary to qualify a supplier, which ranged from two days to one year. When asked if any domestic or foreign suppliers had failed to obtain certification, four of 37 purchasers reported “yes.” *** and *** reported that *** could not meet ASTM standards and was unreliable. *** reported that *** shipped recycled product that failed to meet its specifications, and thereby removed it from its approved supplier list. *** reported that *** failed to

³⁷ Twenty-six of these purchasers reported that they require suppliers to be certified for all of their purchases.

³⁸ U.S. purchaser questionnaire response, section III-23.

become certified after multiple attempts in 2009 due to insufficient quality in both physical form and chemical quality.³⁹

The majority of U.S. purchasers (31 of 39) reported that their firm “never” makes purchasing decisions involving magnesium based on the producer of the magnesium. Of the eight purchasers that “usually” or “sometimes” make purchasing decisions based on the producer of the magnesium, three purchasers reported that the selection was determined by quality, availability, service, and price. Two purchasers reported that their purchasing decisions were based on producers that could meet the Buy American Act. One purchaser reported a producer’s attainment of technical specifications, one purchaser reported awarding business to new alloy development and technical support, and another purchaser cited the lengthy verification process to approve a new source as a reason why purchases were determined by the producer of the magnesium. Thirty of 34 responding purchasers indicated that their customers “never” made purchasing decisions based on the producer of the magnesium.

Comparisons of Domestic Product and Subject Imports

In order to determine whether U.S.-produced magnesium can generally be used in the same applications as imports from China and Russia, U.S. producers, importers, and purchasers were asked whether magnesium can “always,” “frequently,” “sometimes,” or “never” be used interchangeably. All reporting U.S. producers reported that magnesium from the United States and either China or Russia are always interchangeable. The majority of importers and purchasers reported that magnesium from the United States and either China or Russia is always or frequently interchangeable, as shown in table II-10.

Table II-10
Magnesium: Perceived interchangeability of products produced in the United States and in other countries by country pairs

Country pair	U.S. producers				U.S. importers				U.S. purchasers			
	A	F	S	N	A	F	S	N	A	F	S	N
U.S. vs. subject countries:												
U.S. vs. China	***	***	***	***	7	0	3	2	15	7	2	0
U.S. vs. Russia	***	***	***	***	6	2	2	0	13	7	2	0
U.S. vs. nonsubject countries:												
U.S. vs. nonsubject	***	***	***	***	6	0	4	0	16	8	0	0
Subject country comparisons												
China vs. Russia	***	***	***	***	6	0	2	0	11	7	1	0
China vs. nonsubject	***	***	***	***	6	0	2	0	13	5	1	0
Russia vs. nonsubject	***	***	***	***	6	0	2	0	14	4	2	0
Note.--A = Always, F = Frequently, S = Sometimes, N = Never.												
Source: Compiled from data submitted in response to Commission questionnaires.												

³⁹ U.S. purchaser *** reported that *** is no longer on its current supplier list because its price is the same as that of the importers, but its terms are more onerous. U.S. purchaser questionnaire response, section III-25.

One importer, ***, reported that chemistry can be an issue, stating that Chinese product is typically high in silicon, lead, and nickel and that magnesium produced by an electrolytic process (such as in the United States and in Russia) is typically higher in iron.⁴⁰ As indicated in table II-11, three of six responding U.S. producers reported that differences other than price are never a significant factor in their sales of magnesium. Responses from importers were mixed, with slightly more than half of responding importers reporting that differences other than price between U.S.-produced magnesium and subject imports are always or frequently a significant factor. Responses from purchasers were also mixed, with substantially more than half of the responding purchasers reporting that differences other than price between U.S.-produced magnesium and subject imports are sometimes or never a significant factor. U.S. purchaser *** stated that although tested material is interchangeable, there is a concern among some firms regarding lot traceability.

Table II-11

Magnesium: Perceived significance of differences other than price between products produced in the United States and in other countries, by country pairs

Country pair	U.S. producers				U.S. importers				U.S. purchasers			
	A	F	S	N	A	F	S	N	A	F	S	N
U.S. vs. subject countries:												
U.S. vs. China	***	***	***	***	3	3	3	1	5	4	13	3
U.S. vs. Russia	***	***	***	***	1	4	3	1	3	2	14	4
U.S. vs. nonsubject countries:												
U.S. vs. nonsubject	***	***	***	***	1	3	4	1	3	4	13	4
Subject country comparisons												
China vs. Russia	***	***	***	***	1	2	2	1	3	2	10	4
China vs. nonsubject	***	***	***	***	1	2	2	1	3	2	10	4
Russia vs. nonsubject	***	***	***	***	1	2	2	1	3	1	11	5
Note.--A = Always, F = Frequently, S = Sometimes, N = Never.												
Source: Compiled from data submitted in response to Commission questionnaires.												

When asked if they made purchasing decisions involving magnesium based on the country of origin, 29 of 39 purchasers reported “never.” Of the ten purchasers that “usually” or “sometimes” make purchasing decisions based on the country of origin of the magnesium, two indicated that the antidumping duties determined their sources, one purchaser stated that the Buy American Act affected its purchasing decision, one firm mentioned a military application requiring country source-specific magnesium, one firm stated that risk of dependence on foreign sources is always considered, and one purchaser stated that having a local supplier is important and plays a role in its purchasing decisions.

Purchasers were asked to provide an explanation if they had purchased magnesium from one source although a comparable product was available from another source at a lower price. *** stated that for operational security of having more than one source of pure magnesium, in addition to its domestic purchases from ***, it also purchased pure magnesium from *** at a slightly higher price. *** purchased only from *** because of the availability of product and the delivery performance. *** only purchased

⁴⁰ U.S. importer questionnaire, section III-34.

domestically despite higher prices because of the reliability of supply and consistency of the product that meets all of its specifications. *** purchased domestically to reduce lead time and exchange rate risks from purchasing magnesium overseas. *** purchased only domestically because of the convenience and the positive relationship it has with its current vendor. *** and *** reported purchasing from the United Kingdom at higher prices because of the reliability and the availability of high quality specialty alloys needed in the aerospace industry. *** reported purchasing only from *** due to its long-term agreement. *** stated that it was directed by *** to purchase alloy magnesium in the United States from its resale program. *** stated that it paid a 2.5 percent premium to a western producer because the producer provided technical support and a flexible contract that did not have a fixed purchase volume commitment. Seven firms did not specify the source but indicated that lead time and reliability of supply were reasons for choosing a product not based on price.

Purchasers were asked how often domestically produced or imported magnesium meets minimum quality specifications for their own or their customers' uses. All but two of the 36 responding purchasers reported that domestically produced magnesium "always" or "usually" meets minimum quality specifications. All 20 responding purchasers reported that magnesium produced in China "always" or "usually" meets quality specifications. Fifteen of 16 responding purchasers reported that magnesium produced in Russia "always" or "usually" meets quality specifications.

As indicated in table II-12, for the factors that nearly all purchasers reported were "very important" factors in purchasing decisions, most purchasers reported that the U.S. product is comparable to the product from China and Russia (i.e., quality meeting or exceeding industry standards, product consistency, discounts offered, extension of credit, product range, minimum quantity requirements, packaging, technical support/services, and U.S. transportation costs). Eleven of 39 responding purchasers indicated that the U.S. product is inferior to the product from China with respect to price (i.e., the U.S. product is generally higher in price), with three reporting that the U.S. product is comparable. However, 6 of 11 purchasers indicated that the U.S. product is superior to the product from Russia with respect to price (i.e., the U.S. product is generally lower in price), with two reporting that the U.S. product is comparable and four reporting that the U.S. product is inferior.

Other Country Comparisons

In addition to comparisons between the U.S. product and imports from the subject countries, U.S. producer and importer comparisons between the U.S. product and imports from nonsubject countries and between subject imports and nonsubject imports are also shown in tables II-10 through II-12. The majority of U.S. producers, importers, and purchasers reported that U.S.-produced magnesium and subject imports are always interchangeable with imports from nonsubject countries. When asked if nonsubject-country imports meet purchasers' minimum quality specifications for their own or their customers' uses, 13 purchasers reported that Israeli-produced magnesium "always" meets minimum quality specifications, 4 reported that Canadian-produced magnesium "always" or "usually" meet specifications, and 3 purchasers reported that magnesium produced in the United Kingdom and the Czech Republic "always" meets minimum quality specifications. Most purchasers reported that the U.S. product is comparable to the product from Israel in all purchasing factors. Most purchasers reported that Chinese magnesium is comparable to the product from Israel in most purchasing factors, but that magnesium produced in China is superior in terms of price and inferior in terms of packaging and technical support and service. Most purchasers reported that magnesium produced in Russia is comparable to the product from Israel, but is superior in terms of price and inferior in terms of technical support and service.

Table II-12**Magnesium: Importance of factors used in purchasing decisions, as reported by U.S. purchasers**

Factor	U.S. vs China			U.S. vs Russia			China vs. Russia		
	S	C	I	S	C	I	S	C	I
Availability	8	4	3	7	5	0	2	7	0
Delivery terms	6	6	3	3	9	0	1	7	1
Delivery time	9	5	1	7	5	0	0	9	0
Discounts offered	1	10	3	0	12	0	0	8	1
Extension of credit	2	13	0	1	11	0	0	8	1
Minimum quantity requirements	1	14	0	0	12	0	0	9	0
Packaging	6	8	1	2	9	1	0	6	3
Price ¹	1	3	11	6	2	4	5	4	0
Product consistency	3	12	0	2	10	0	0	8	1
Product range	3	11	1	3	9	0	2	6	1
Quality exceeds industry standards	1	14	0	0	12	0	0	9	0
Quality meets industry standards	1	13	1	0	12	0	1	8	0
Reliability of supply	7	8	0	6	6	0	0	8	1
Technical support/service	7	8	0	5	7	0	0	7	2
U.S. transportation costs ¹	3	9	3	1	10	1	1	7	1

¹ A rating of superior means that price/U.S. transportation cost is generally lower. For example, if a firm reported "U.S. superior," it means that the price of the U.S. product was generally lower than the price of the imported product.

Note.--S=first listed country's product is superior; C=both countries' products are comparable; I=first listed country's product is inferior.

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

Table II-12**Magnesium: Importance of factors used in purchasing decisions, as reported by U.S. purchasers**

Factor	U.S. vs Israel			China vs Israel			Russia vs Israel		
	S	C	I	S	C	I	S	C	I
Availability	3	6	1	3	4	0	0	6	0
Delivery terms	1	9	0	2	3	2	0	5	1
Delivery time	3	7	0	0	7	0	0	6	0
Discounts offered	0	10	0	0	6	0	0	6	0
Extension of credit	0	10	0	0	5	2	0	6	0
Minimum quantity requirements	0	9	1	0	7	0	0	6	0
Packaging	0	10	0	0	3	4	0	6	0
Price ¹	2	7	1	6	1	0	3	2	1
Product consistency	1	8	1	0	6	1	0	6	0
Product range	1	9	0	1	3	3	0	5	1
Quality exceeds industry standards	0	10	0	0	7	0	0	6	0
Quality meets industry standards	0	10	0	1	6	0	0	5	1
Reliability of supply	2	8	0	0	5	2	0	5	1
Technical support/service	3	7	0	0	3	4	0	2	4
U.S. transportation costs ¹	1	8	0	1	5	1	1	5	0
¹ A rating of superior means that price/U.S. transportation cost is generally lower. For example, if a firm reported "U.S. superior," it means that the price of the U.S. product was generally lower than the price of the imported product. Note.--S=first listed country's product is superior; C=both countries' products are comparable; I=first listed country's product is inferior. Source: Compiled from data submitted in response to Commission questionnaires.									

ELASTICITY ESTIMATES⁴¹**U.S. Supply Elasticity**

The domestic supply elasticity for pure and alloy magnesium measures the sensitivity of the quantity supplied by U.S. producers to changes in the U.S. market price for magnesium. The elasticity of domestic supply depends on several factors, including the level of excess capacity, the existence of inventories, and the availability of alternate markets for U.S.-produced magnesium. Analysis of these factors above indicates that U.S. producers of pure magnesium have *** ability to alter domestic shipments in response to a change in the relative price of pure magnesium. An estimate in the range of 1.5 to 3 is suggested. For alloy magnesium, analysis of these factors indicates that the domestic producers of alloy

⁴¹ The elasticity responses in this section refer to changes that could occur within 12 months, unless otherwise indicated.

magnesium have some ability to alter domestic shipments in response to a change in the relative price of alloy magnesium. An estimate in the range of 3 to 5 is suggested.

U.S. Demand Elasticity

The US. demand elasticity for pure and alloy magnesium depends on the availability of substitute products as well as the share of pure and alloy magnesium in the production cost of downstream products. There are few exact substitutes for pure and alloy magnesium. While the cost share of pure magnesium in downstream products is much lower than that of alloy magnesium, purchasers of both pure and alloy are highly price sensitive. Based on the available information, the aggregate demand elasticity for pure and alloy magnesium is estimated to be in the range of -0.5 to -1.5.

Substitution Elasticity

The elasticity of substitution depends upon the extent of product differentiation between the domestic and imported magnesium. Product differentiation, in turn, depends upon such factors as quality and conditions of sale (availability, delivery, etc.). U.S. imports of magnesium from China and Russia have been very limited since 2004. Based on available information, subject pure and alloy magnesium are substitutable for domestic pure and alloy magnesium in many end uses; nonetheless, there are some distinctions between U.S. and subject pure and alloy magnesium based on issues of quality, availability, and product range. Based on these factors, staff estimates the substitution elasticity between domestic pure and alloy magnesium and that imported from subject countries to be in the range of 3 to 5.

PART III: CONDITION OF THE U.S. INDUSTRY

OVERVIEW

During the period examined in the Commission's original underlying investigations concerning imports of pure magnesium from China and pure and alloy magnesium from Russia, the U.S. magnesium industry experienced several plant closures and openings.¹ However, since the antidumping duty orders went into effect in 2005, no closures have been identified by industry participants. In fact, one secondary magnesium producer reported that it began adding *** primary production capacity to produce pure magnesium at its existing Tennessee facility during 2008.

U.S. Producers

There were two known primary producers of alloy and pure magnesium in the United States that were in operation during at least part of the period examined by the Commission in the original investigations: US Magnesium and Northwest Alloys.² In 2001, Northwest Alloys ceased production of magnesium, leaving US Magnesium as the sole remaining U.S. producer of primary magnesium at that time.³ There were four known secondary producers of alloy magnesium in the United States at the time of the Commission's original investigations: Amacor,⁴ Garfield,⁵ Halaco,⁶ and MagReTech. Of these

¹ From 2000 to 2004, the following firms opened secondary magnesium production facilities in the United States: Amacor (2001), Xstrata Magnesium Corp. (2003), and MagPro (2004). During the same time period, the following firms closed domestic magnesium production facilities: primary magnesium producer Northwest Alloys (2001) and secondary magnesium producers Garfield Alloys (2003), Halaco (2004), and Amacor (2005 temporary closure). *Magnesium from China and Russia, Investigation Nos. 731-TA-1071-1072*, INV-CC-031, March 11, 2005, p. I-4 and table III-1.

² Northwest Alloys, a subsidiary of Alcoa Inc., Pittsburgh, PA, produced *** for its aluminum operations, while captively consuming *** of its annual production.

³ A potential restart of the shuttered Northwest Alloys/Alcoa magnesium plant in Addy, WA, to produce metallurgical silicon rather than magnesium was reportedly being considered in 2008 when magnesium prices were at their peak. Refurbishing the plant to produce metallurgical silicon, where Alcoa smelted magnesium until 2001, would cost about \$60 million; however, the plans for such a restart may not be realized because of the high electricity costs that would be needed to run such a facility. There have been no recent reports of the facility being restarted as a magnesium producing plant. Bert Caldwell, "Alcoa Site Could Open for Silicon Plant: Company Says Restart Hinges on Power Costs," *The Spokesman-Review*, October 22, 2010.

⁴ Amacor, which began operations in 2001, purchased Xstrata Magnesium Corp. ("XMC") on April 3, 2003. The XMC plant was originally commissioned in 2000 to recycle scrap to produce magnesium alloy for the U.S. auto industry. A January 2005 fire at its production facility temporarily halted magnesium production. *Magnesium from China and Russia, Investigations Nos. 731-TA-1071-1072 (Final)*, INV-CC-031, March 11, 2005, p. I-4 and table III-1; and *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 Publication 3859, July 2006, p. I-33.

⁵ Garfield was ***. Garfield Alloys' production facility was destroyed in a fire on December 29, 2003. *Magnesium from China and Russia, Investigations Nos. 731-TA-1071-1072 (Final)*, INV-CC-031, March 11, 2005, p. I-4 and table III-1; and *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 Publication 3859, July 2006, p. I-33.

⁶ Halaco filed for chapter 11 bankruptcy protection on July 24, 2002 and ceased production of magnesium on September 23, 2004. *Magnesium from China and Russia, Inv. Nos. 731-TA-1071-1072 (Final)*, INV-CC-031, March 11, 2005, p. I-4 and table III-1; and *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 Publication 3859, July 2006, p. I-33.

four domestic secondary magnesium producers, only Amacor and MagReTech have remained in operation.

The domestic interested parties that participated in the adequacy phase of these five-year reviews identified the following current domestic primary producers of magnesium in its response to the Commission's notice of institution: US Magnesium and MagPro. They also identified the following current domestic secondary producers of magnesium: MagPro, Amacor, MagReTech, Rossborough (an Opta Minerals Company), ESM, Hart, Reade, Meridian Technologies, and Spartan.⁷ All firms identified by parties as possible magnesium producers were sent Commission questionnaires in these five-year reviews. Responses to the Commission's questionnaire in these current reviews were received from both domestic producers of primary magnesium (MagPro and US Magnesium) and from five producers of secondary magnesium (including die casters and alloyers) (Amacor, KB Alloys, MagPro, MagReTech, and Spartan). The Commission also received questionnaire responses from the following three grinders of pure magnesium (ESM, Hart, and Reade). The producers that provided a response to the Commission's questionnaires were presented in table I-7.⁸ A brief description of each firm's activities is presented below.

Amacor

Amacor is a secondary producer of magnesium located in Anderson, IN, that *** the continuation of the antidumping duty orders. The firm's production accounted for *** percent of total production of magnesium in the United States during 2009.

Amacor opened in 2001 and expanded its magnesium operations through the purchase of the Xstrata Magnesium facility in 2003.⁹ However, the firm was forced to temporarily cease production of secondary alloy magnesium in 2005 due to a fire at its production facility.¹⁰ The firm currently operates *** as a toll producer of secondary alloy magnesium ingot for multiple die casters and *** the firm also produces and sells to the U.S. commercial market wholly owned alloy product from purchased raw materials. Amacor recycles magnesium scrap (either purchased or provided by the tollee) and produces alloy magnesium in ingot form. The firm also ***. Amacor's alloy magnesium is produced for the

⁷ *Response of US Magnesium to the Commission's Notice of Institution*, March 31, 2010, attachment 5.

⁸ Rossborough and Meridian Technologies did not respond to the Commission's producer questionnaire in these reviews. Meridian, a secondary producer of alloy magnesium, accounted for *** percent of total U.S. production of pure and alloy magnesium during 2005. *Pure and Alloy Magnesium from Canada and Pure Magnesium from China: Inv. Nos. 701-TA-309-A-B and 731-TA-696 (Second Review)*, INV-DD-069, May 19, 2006, p. III-3. Rossborough (an Opta Minerals, Inc., company) is a domestic producer of pure magnesium powder for the steel desulfurization market. During 2000, Rossborough produced *** metric tons of granular magnesium, which accounted for *** percent of total U.S. production of granular magnesium. *Pure Magnesium from China: Inv. No. 731-TA-895 (Review)*, INV-EE-009, February 1, 2007, pp. I-24 and I-27. Although *** and did not provide a response to the U.S. producer questionnaire in these reviews, it ***. ***.

⁹ The Xstrata Magnesium plant was originally commissioned in 2000 to recycle scrap to produce magnesium alloy for the U.S. automotive industry. *Magnesium from China and Russia, Investigations Nos. 731-TA-1071-1072 (Final)*, INV-CC-031, March 11, 2005, p. I-4 and table III-1; and *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 Publication 3859, July 2006, p. I-33.

¹⁰ *Magnesium from China and Russia, Investigations Nos. 731-TA-1071-1072 (Final)*, INV-CC-031, March 11, 2005, p. I-4 and table III-1; and *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 Publication 3859, July 2006, p. I-33.

magnesium die cast market for use in manufacturing die cast parts and for the aluminum market as an alloying agent.¹¹

ESM

ESM is a grinder of pure magnesium with facilities located in Kingsbury, IN, and Saxonburg, PA. The firm *** the continuation of the subject antidumping duty orders. The firm was one of three domestic grinders that responded to the Commission's questionnaire and accounted for *** percent of the ground product produced by the responding domestic grinders during 2009.

ESM *** produces a pure magnesium powder for use in decoy flares, self-heating meals, and pyrotechnics. *** of the firm's production is consumed *** as desulfurization feedstock, ***. The firm is wholly owned by SKW Stahl-Metallurgie Holding AG in Germany and is related to ESM Tianjin Co., Ltd., a producer of magnesium in China. ESM reported ***. ***.¹²

Hart

Hart is a producer of pure granular magnesium located in Tamaqua, PA, that *** the continuation of the subject antidumping duty orders. The firm was one of three domestic grinders that responded to the Commission's questionnaire and accounted for *** percent of the granular product produced by the responding domestic grinders during 2009. The company provided *** data and other information in response to the Commission's questionnaire.

Hart is owned by Magnesium Elektron, an alloy magnesium producer in the United Kingdom, and is related through a common parent to Magnesium Electron CZ, a producer of alloy magnesium in the Czech Republic, and to Reade, a U.S. grinder of pure granular magnesium. Hart *** transforms the raw material into *** pure magnesium fine powder, coarse chips, and granules. The company indicated that *** magnesium *** is *** processed through gas atomization into fine powders or the ingots are chipped mechanically into coarse chips and granules. The *** end uses of Hart's pure granular magnesium is in military powders, grignard (chemical reagent), and iron and steel desulfurization. Most of the firm's shipments during the period examined in these reviews were to ***.¹³

KB Alloys

KB Alloys is a magnesium/aluminum alloyer located in Robards, KY, that *** the continuation of the antidumping duty orders. The firm's production of magnesium alloys accounted for *** percent of total production of magnesium in the United States during 2009.

¹¹ *Advanced Magnesium Alloys Corp. Company Website*, <http://www.amacor.us>, retrieved January 6, 2011; "Anderson Magnesium Fire Prompts Evacuation of About 5,000," *Indiana News*, January 14, 2005, <http://www.theindychannel.com/news/4084731/detail.html>, retrieved January 6, 2011; *Amacor Company Profile*, International Magnesium Association, <http://www.intlmag.org/membersDetail.cfm?ID=3352>, retrieved January 6, 2011; and Amacor producer questionnaire response.

¹² *ESM Company Website*, <http://www.esmii.com>, retrieved on January 6, 2011; "ESM Constructs New Magnesium Powder Atomizing Plant in North America," *The A to Z of Materials*, <http://www.azom.com/news.asp?newsID=24208>, retrieved on January 6, 2011; *SKW Metallurgie Annual Report 2007*, http://www.skw-steel.com/downloads/en/skw_ar_07.pdf, retrieved on January 6, 2011; and ESM producer questionnaire response.

¹³ *Magnesium Elektron company website*, <http://www.magnesium-elektron.com>, retrieved January 6, 2011; and Hart producer questionnaire response.

KB Alloys produces magnesium/aluminum alloys ***. The firm commercially sells 50%Al-50%Mag alloys and 32%Al-68%Mag alloys *** in the form of castings that range from 5-ounce buttons to 30-pound slabs ***.

MagPro

MagPro is a *** producer of magnesium located in Camden, TN, that *** the continuation of the antidumping duty orders. The firm's production accounted for *** percent of total production of magnesium in the United States during 2009. The Commission received a partially complete questionnaire response from MagPro in that employment data were not provided and limited (but mostly unusable) financial data were provided.

MagPro opened its U.S. secondary magnesium production facility in the United States in 2004. In its secondary magnesium operations, MagPro recycles purchased magnesium scrap and produces alloy magnesium in ingot form for use as an alloying agent in the aluminum industry and for use in die cast parts for the automotive industry. The firm, *** a secondary producer of magnesium, ***. It reported ***.¹⁴ MagPro reported that during the period for which data were collected in these five-year reviews it ***.¹⁵

MagReTech

MagReTech is a secondary producer of magnesium located in Bellevue, OH, that *** the continuation of the antidumping duty orders. The firm's production accounted for *** percent of total production of magnesium in the United States during 2009.

MagReTech, one of the two original secondary alloy magnesium producers that provided the Commission with a questionnaire response in the original investigations,¹⁶ currently produces alloy magnesium ingot by recycling purchased aluminum alloys or magnesium-based scrap for use in the magnesium die casting/sand casting and aluminum alloying industries. *** of the firm's production during the period examined in these reviews was sold on the U.S. commercial market. The firm also acts as a toll producer for a number of firms, including ***.¹⁷ ***.¹⁸

Reade

Reade is a producer of pure granular magnesium located in Manchester, NJ, that *** the continuation of the subject antidumping duty orders. The firm was one of three domestic grinders that responded to the Commission's questionnaire and accounted for *** percent of the granular product

¹⁴ *** MagPro reported that it produced *** metric tons of primary commodity-grade pure magnesium ingot. During the first half of 2010, the firm produced *** metric tons of product. Questionnaire response of MagPro and *Response of US Magnesium to the Commission's Notice of Institution*, March 31, 2010, p. 9.

¹⁵ *MagPro Company Website*, <http://magprollc.com/>, retrieved January 6, 2011; and MagPro producer questionnaire response.

¹⁶ ***. *Magnesium from China and Russia, Investigations Nos. 731-TA-1071-1072 (Final)*, INV-CC-031, March 11, 2005, p. I-4 and table III-1; *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 Publication 3859, July 2006, p. I-33; .

¹⁷ Tollees for MagReTech's toll-produced magnesium include ***.

¹⁸ *MagReTech Company Website*, <http://www.magretechinc.com/about.htm>, retrieved January 6, 2011; and MagReTech producer questionnaire response.

produced by the responding domestic grinders during 2009. The company provided *** data and other information in response to the Commission's questionnaire.

Reade is owned by Magnesium Elektron, an alloy magnesium producer in the United Kingdom, and is related through a common parent to Magnesium Electron CZ, a producer of alloy magnesium in the Czech Republic, and to Hart, a U.S. grinder of pure granular magnesium. Reade *** transforms the raw material into ultra-pure and commodity-grade pure granular magnesium by mechanically crushing and grinding the ingots into granules. The firm reported that during the period examined in these reviews it ***. The *** end uses of Reade's pure granular magnesium is in military powders, grignard, and steel desulfurization.¹⁹

Spartan

Spartan is a die caster that recycles secondary alloy magnesium scrap produced in its production of die cast parts. The firm's alloy magnesium production facility is in Sparta, IL. Spartan is in opposition to the continuation of the antidumping duty orders. The firm's production accounted for *** percent of total production of magnesium in the United States during 2009. Spartan was the only die caster that provided a response to the Commission's questionnaire in these current five-year reviews.

Spartan *** alloy magnesium ingots for use in its die casting operations. The magnesium scrap remaining from its die casting operations is then recycled and the company produces a secondary alloy magnesium product from the scrap for internal use in its die casting operations. The company also purchases magnesium scrap to supplement its raw material for use in its alloy magnesium production. Spartan does not sell any of the recycled alloy magnesium on the commercial market but uses all of its production internally in the production of die cast parts. The firm reported that *** of its production of secondary alloy magnesium is from "run-around scrap" from its die cast operations and about *** percent is from purchased magnesium scrap.²⁰

US Magnesium

US Magnesium is a primary producer of pure and alloy magnesium located in Rowley, UT, that is in support of the continuation of the antidumping duty orders. The firm's production accounted for *** percent of total production of magnesium in the United States during 2009.

Located near the Great Salt Lake outside of Salt Lake City, UT, US Magnesium produces primary pure and alloy magnesium ingots from brines of the surface waters of the Great Salt Lake using the electrolytic process. US Magnesium explained that its production of primary pure and alloy magnesium ingot begins with the production of liquid pure magnesium, which is either cast directly into the form of pure magnesium ingots or alloyed by the addition of alloying elements (such as aluminum and zinc) and scrap magnesium prior to casting. US Magnesium also indicated that its caster produces *** ingots, which are then ***. The firm explained ***.²¹ The firm reported that during 2009, *** of its production of pure magnesium and *** of its production of alloy magnesium was ***.²²

¹⁹ Reade Advanced Materials Company Website, <http://www.reade.com>, retrieved January 6, 2011; and Reade producer questionnaire response.

²⁰ Hearing transcript, pp. 25 (Leibowitz), 177-181 (Stoel and Sparks) and 296 (Sparks); *Spartan Company Website*, <http://spartanlmp.com>, retrieved January 6, 2011; and Spartan producer questionnaire response.

²¹ US Magnesium indicated that it ***.

²² US Magnesium's prehearing brief, p. 21; and US Magnesium's producer questionnaire.

Existing Operations

Domestic producers were asked to indicate whether their firm had experienced any plant openings, relocations, expansions, acquisitions, consolidations, closures, prolonged shutdowns, production curtailments, revised labor agreements, or any other change in the character of their operations or organization relating to the production of magnesium since January 1, 2004. Six firms indicated in their questionnaire responses that they had experienced such changes since 2004 and provided further information concerning these changes. Their responses are presented in table III-1.

Table III-1
Magnesium: Changes in the character of U.S. operations

* * * * *

Anticipated Changes in Existing Operations

The Commission requested that domestic producers provide a copy of their company business plans or other internal documents that describe, discuss, or analyze expected future market conditions for magnesium. Two of the domestic producers (***) reported that they had such a plan or other internal documents concerning magnesium.

* * * * *

Counsel for US Magnesium also stated in its prehearing brief that, ***, ***,²⁴ Counsel further stated that ***, ***,²⁵

Respondents argued in their prehearing brief that a significant development concerning US Magnesium is the recent agreement between the domestic primary magnesium producer and Allegheny Technologies Inc. (“ATI”) for the supply of magnesium. ATI’s newly built titanium sponge production facility, which is located within a few hundred feet of US Magnesium’s Rowley plant, began initial production of titanium in late 2009. The firm produces titanium through a reduction process involving titanium tetrachloride and magnesium metal obtained from US Magnesium. It is reported that at full production levels, ATI will be a substantial purchaser of magnesium from US Magnesium.²⁶ ***,²⁷

* * * * *

The Commission also asked domestic producers to report anticipated changes in the character of their operations relating to the production of magnesium. *** reported that they do not anticipate any operational changes, while *** provided responses detailing such anticipated changes. The responses provided by *** are presented in table III-2.

²³ ***.

²⁴ ***, *Email correspondence from *** to Mary Messer*, January 10, 2011.

²⁵ US Magnesium’s prehearing brief, pp. 4 and 42.

²⁶ AVISMA’s prehearing brief, pp. 4-6 and exhibit 2.

²⁷ ***.

Table III-2
Magnesium: Anticipated changes in the character of U.S. operations

* * * * *

U.S. PRODUCERS' CAPACITY, PRODUCTION, AND CAPACITY UTILIZATION

U.S. producers' capacity, production, and capacity utilization data for magnesium are presented in table III-3.²⁸ These data show an overall ***-percent increase in capacity during 2004-09, although capacity fluctuated throughout the time period examined. The U.S. producers' capacity to produce magnesium was less than apparent U.S. consumption of magnesium in each year during 2004-08, but was equivalent to *** percent of total apparent U.S. consumption in 2009 because of the substantial decrease in consumption in that year. Domestic capacity and production of magnesium fell from 2004 to 2005, the year in which the antidumping duty orders were placed into effect. From 2005 to 2007, capacity and production of magnesium in the United States increased, before falling in 2008 and 2009, reflecting the effect of the global recession. Production of magnesium during the first half of 2010 was ***-percent higher than in the comparable period of 2009. Capacity utilization fluctuated between *** and *** percent during 2004-08 before falling to *** percent in 2009. Although U.S. producers' aggregate capacity to produce magnesium was higher during the first half of 2010 than in the comparable period in 2009, their aggregate production and capacity utilization were *** lower.

Table III-3
Magnesium: U.S. capacity, production, and capacity utilization, 2004-09, January-June 2009, and January-June 2010

* * * * *

All U.S. producers, with the exception of Spartan and MagReTech, reported fluctuations in capacity during the review period. Amacor *** during 2005, a fire at its production facility temporarily halted magnesium production for approximately ***. MagPro *** it first opened its secondary production facilities ***. US Magnesium's nameplate capacity for all magnesium, which was calculated based on the number and type of electrolytic cells in operation during the period, also fluctuated throughout the period of review. US Magnesium explained that it ***. ***. US Magnesium ***.²⁹ *** producers of primary magnesium reported the production of both pure and alloy magnesium using the same equipment and machinery and the same production and related workers. In addition, *** reported that it is able to switch production between pure and alloy magnesium in response to a relative change in the price of pure and alloy magnesium using the same equipment and labor. The firm explained

* * * * *

²⁸ The aggregate data presented for capacity, production, and capacity utilization are for primary and secondary magnesium producers (including die casters and independent alloyers). The data provided by grinders are presented separately in appendix C (table C-4) in order to avoid double-counting.

²⁹ US Magnesium's posthearing brief, pp. 1 and 6.

Constraints on Capacity

The domestic magnesium producers were asked in Commission questionnaires to describe the constraints that set the limit on their production capacity for magnesium. US Magnesium responded that it was its *** capacity that set the limit on its production capacity for magnesium, *** three of the other producers reported that it was their *** capacity. Other constraints listed by the domestic producers include the availability of acceptable quality raw material supply and the availability of labor.

Alternative Products

*** reported the production of other products on the same equipment and machinery and using the same production and related workers employed in the production of magnesium. *** reported that the following products are byproducts resulting from its magnesium production process: ***.

U.S. PRODUCERS' DOMESTIC SHIPMENTS, COMPANY TRANSFERS, AND EXPORT SHIPMENTS

Data on U.S. producers' shipments, by types, are presented in table III-4. Table III-5 presents data on U.S. producers' commercial shipments by type of magnesium. Data on U.S. producers' commercial shipments by end users and by types are presented in table III-6.³⁰

Table III-4

Magnesium: U.S. producers' shipments, by types, 2004-09, January-June 2009, and January-June 2010

* * * * *

Table III-5

Magnesium: U.S. producers' U.S. commercial shipments, by types, 2009 and January-June 2010

* * * * *

Table III-6

Magnesium: U.S. producers' U.S. commercial shipments, by end users and by types, 2009 and January-June 2010

* * * * *

The domestic commercial market accounted for 85 percent or more of the U.S. producers' total shipments of all magnesium during the entire period for which data were collected in these investigations. Export shipments, which accounted for between *** percent of the U.S. producers' total shipments of all magnesium during the period examined, were made by ***. Although *** did not identify in its questionnaire response its export markets for the magnesium/aluminum alloys it produces, *** identified its export markets as ***.³¹ Domestic producers' U.S. shipments of all magnesium, in terms of quantity,

³⁰ The aggregate data presented for U.S. producers' shipments are for primary and secondary magnesium producers. Data provided by domestic grinders are presented separately in appendix C, table C-4.

³¹ During the original investigations, U.S. exports of pure magnesium were *** higher, accounting for *** of U.S. production. Since 2003, U.S. exports of pure magnesium fell ***. US Magnesium explained that during the (continued...)

fluctuated during the period examined, falling from 2004 to 2005, increasing from 2005 to 2007, and falling again from 2007 to 2009. The quantity of the domestic producers' U.S. shipments was higher during the first six months of 2010 compared with the same time period of 2009. The quantity of export shipments followed a similar trend until 2009 when exports were higher than reported in 2008.

The unit value of U.S. producers' U.S. shipments of all magnesium fluctuated upward from a low of \$*** per metric ton in 2004 to a high of \$*** per metric ton in 2009. The average unit value of U.S. shipments was lower at \$*** per metric ton during the first half of 2010 than in the comparable period of 2009. The unit value of exports also fluctuated throughout the annual periods examined, ranging from a low of \$*** to a high of \$***. The average unit value of exports was higher at \$*** per metric ton during the first half of 2010 than reported in the comparable period of 2009.

Shipments of pure magnesium accounted for *** percent of U.S. producers' total shipments in 2009. Alloy magnesium accounted for *** percent of U.S. producers' total shipments. In 2009, commodity-grade pure magnesium ingots accounted for *** percent of U.S. commercial shipments of primary magnesium and alloy magnesium ingots (meeting ASTM specifications) accounted for *** of the remainder. During the same period, *** percent of U.S. commercial shipments of secondary magnesium consisted of alloy magnesium which meet ASTM specifications and the remainder, *** percent, consisted of alloy magnesium which did not meet ASTM specifications. Over *** of the U.S. producers' commercial U.S. shipments of pure magnesium in 2009 went to aluminum manufacturers, whereas almost *** of U.S. producers' commercial U.S. shipments of alloy magnesium in 2009 went to die casters. Of U.S. producers' commercial shipments of all magnesium in 2009, *** percent went to aluminum manufacturers, *** percent went to die casters, *** percent to granule producers, and *** percent to other users.

U.S. PRODUCERS' PURCHASES AND DIRECT IMPORTS

U.S. producers' imports and purchases of magnesium are presented in table III-7. *** of the U.S. producers providing a response to the Commission's questionnaire reported directly importing the magnesium that is the subject of these five-year reviews since January 1, 2004. Only two U.S. producers (***) reported that they purchased subject merchandise during the period examined in these five-year reviews. *** indicated in its questionnaire response that it purchased subject pure magnesium produced in Russia during 2004 and 2005, but made no other such purchases thereafter. The firm also purchased pure magnesium produced in the United States and from sources other than the United States, China, and Russia during the period examined in these reviews. All purchases of pure magnesium were made by *** for use in adjusting the chemistry, as necessary, in its secondary alloy magnesium production operations. *** purchased subject alloy magnesium produced in Russia during 2004 and 2005, but made no other purchases of the subject merchandise thereafter. *** also made purchases of alloy magnesium produced in the United States and Israel throughout the period examined in these reviews. All purchases of alloy magnesium by *** were for use in its die casting operations. Neither *** nor *** directly imported magnesium from any source during the period examined in these reviews.

Table III-7

Magnesium: U.S. producers' imports and purchases, 2004-09, January-June 2009, and January-June 2010

*	*	*	*	*	*	*
---	---	---	---	---	---	---

³¹ (...continued)

original final investigations, it ***. The firm added that it ***. US Magnesium also indicated that one of the major benefits resulting from the orders was that after the orders on magnesium from China and Russia were imposed, it ***.

Pure and alloy magnesium purchases that are not the subject of these reviews were also made by the following U.S. magnesium producers: ***. *** indicated that it purchased magnesium on the domestic market only on the following three occasions during 2009-10: ***. ***, on the other hand, purchased magnesium throughout the period examined in these reviews. The firm reported purchases of pure magnesium produced in countries other than the United States, China, and Russia for use in its ***. In addition, domestic grinders *** reported purchases of pure magnesium. ***. *** reported that they did not directly import magnesium from any source during the period examined in these reviews.

U.S. PRODUCERS' INVENTORIES

Data on U.S. producers' inventories of domestically produced magnesium are presented in table III-8. Because of difficulties in the reporting of inventories as a result of toll shipments and various reporting anomalies, the inventory data for alloy magnesium are questionable and should be used with caution.

Table III-8
Magnesium: U.S. producers' end-of-period inventories, 2004-09, January-June 2009, and January-June 2010

* * * * * * *

U.S. producers' inventories, which were equivalent to between *** and *** percent of U.S. producers' total shipments during 2004-09, fluctuated during the period examined in these reviews. U.S. producers' inventories were *** percent lower at the end of 2009 than they were at the end of 2004 and were *** percent lower in June 2010 than in June 2009. End-of-period inventories as a ratio to total shipments were also lower at the end of the first half of 2010, equivalent to *** percent of U.S. producers' total annualized shipments. *** accounted for *** of the pure magnesium inventories held at the end of the first half of 2010 and for *** of the alloy magnesium inventories held. *** of the remaining alloy magnesium inventories held at the end of the first half of 2010.

U.S. PRODUCERS' EMPLOYMENT, WAGES, AND PRODUCTIVITY

The U.S. producers' employment data for magnesium are presented in table III-9.³² In the aggregate, U.S. magnesium producers reported fluctuating trends in all employment indicators during the period examined in these reviews. The number of production and related workers employed during the annual periods examined ranged from a low of *** workers employed in 2005 to a high of *** workers employed in 2007. There were *** workers employed in the production of pure and alloy magnesium during the first six months of 2010. All employment indicators, with the exception of unit labor costs and hourly wages, were higher during the first half of 2010 than in the comparable period of 2009. Unit labor costs were *** percent lower during January-June 2010 than in January-June 2009.

³² The data presented for U.S. producers' employment-related indicators for pure magnesium are from US Magnesium and the data presented for alloy magnesium are from Amacor, KB Alloys, Spartan, MagReTech, and US Magnesium. MagPro did not provide employment data in its questionnaire response. The employment data provided by the three grinders (ESM, Hart, and Reade) are presented separately in appendix C, table C-4.

Table III-9

Magnesium: U.S. producers' employment-related data, 2004-09, January-June 2009, and January-June 2010

* * * * *

U.S. TOLLING OPERATIONS

***, reported magnesium tolling operations for other firms. ***, ***,³³ The trade data associated with these tolling operations are included in the data presented in this report, as appropriate. The available tolling operation trade data provided by these firms are also presented separately, by firm, in table III-10.

Table III-10

Magnesium: U.S. producers' tolling operations, by firm, 2004-09, January-June 2009, and January-June 2010

* * * * *

FINANCIAL EXPERIENCE OF U.S. FIRMS

BACKGROUND

The following firms provided usable financial information: US Magnesium³³ on its operations on pure magnesium;³⁴ Amacor, KB Alloys, MagReTech, Spartan, and US Magnesium on their commercial *** on alloy magnesium; and ESM Group, Hart, and Reade on their grinding operations.³⁵ These reported data are believed to represent the vast majority of U.S. production of pure and alloy magnesium in the period examined.³⁶

OPERATIONS ON PURE AND ALLOY MAGNESIUM

The Commission requested financial data from producers of pure magnesium as well as from producers of alloy magnesium (by combining pure magnesium and alloying ingredients or by remelting and processing magnesium-containing scrap). Several of these scrap processors are toll producers in that they obtain their input raw material magnesium scrap at no cost and provide a fee-based processing service whereby alloy magnesium in usable form is returned to the company that provides the scrap (tolling is discussed later in this section of the report). Table III-11 presents financial data for operations on pure and alloy magnesium combined (i.e., the sum of data contained in tables III-12 and III-13), while

³³ ***.

³³ US Magnesium resulted from the asset sale from bankruptcy of Magcorp on June 24, 2002. It is the successor to that firm and its direct parent is the Renco Group, a holding company that is, in turn, owned by Mr. Ira Rennert and certain family trusts. US Magnesium reported on a fiscal year basis that ends on *** and ***.

³⁴ ***. EDIS document 441475, January 6, 2011.

³⁵ Grinding operations are not included in either pure or alloy operations because of ***. The operations of ESM consist of grinding pure magnesium ingots ***. Likewise, the operations of Hart Metals (PA) and Reade Mfg. (NJ) are based on chipping and grinding ***. Additionally, *** reported that it ***. ***. The combined operating results of *** are presented at the end of this section of the report.

³⁶ Differences from the prehearing report are due to corrections to financial data filed by US Magnesium on November 23, 2010 (EDIS document 439282, December 2, 2010) and the combining of data of ***.

tables III-12 and III-13 present data separately on pure magnesium and alloy magnesium, respectively. Table III-14 depicts salient data by firm on alloy magnesium.

Table III-11

Pure and alloy magnesium combined: Aggregated results of operations of U.S. firms, fiscal years 2004-09, January-June 2009, and January-June 2010

* * * * *

Table III-12

Pure magnesium: Results of operations of US Magnesium, fiscal years 2004-09, January-June 2009, and January-June 2010

* * * * *

Table III-13

Alloy magnesium: Results of operations of U.S. firms, fiscal years 2004-09, January-June 2009, and January-June 2010

* * * * *

Table III-14

Alloy magnesium: Results of operations of U.S. firms, by firm, fiscal years 2004-09, January-June 2009, and January-June 2010

* * * * *

The primary raw material that is directly consumed in US Magnesium's production process is brine, which is obtained at low cost from the Great Salt Lake; the cost of brine comprises a *** part of the firm's overall production costs. *** are energy costs (natural gas and electricity) because the production process of converting brine to metal is energy-intensive. These costs are classified in ***, and comprise a ***.

As indicated by the data presented in table III-12, unit sales values increased *** in 2008 and 2009, which led to increased sales values in those years compared with earlier years. The values and average unit value of costs and expenses (COGS and SG&A expenses) increased in 2008 from 2007; the values were lower in 2009 compared with 2008 but the average unit values were higher except for other factory costs (a component of COGS). The values and average unit values of costs and expenses did not increase to the same extent as did sales. Hence, operating income and the operating income margin were higher while the ratio of COGS to sales was lower in 2008 and 2009 compared to earlier years. One factor leading to an increase in labor costs and SG&A expenses was the ***.³⁷ US Magnesium stated that a factor that ameliorated the effect of ***, in 2008-09.³⁸

³⁷ ***. US Magnesium's posthearing brief, answers to questions from the Commission, pp. 55-56 and exh. 5.

³⁸ US Magnesium's posthearing brief, answers to questions from the Commission, p. 55.

US Magnesium provided ***.³⁹ ***. ***. ***. US Magnesium projected ***.⁴⁰ It realized ***.⁴¹ The 2009 forecasted ***.⁴² ***.⁴³ US Magnesium noted that ***.⁴⁴ As noted earlier, these are estimates and forecasts are subject to change.

With the exception of US Magnesium, reporting U.S. producers of alloy magnesium mainly use magnesium-containing scrap as their primary raw material. US Magnesium uses the pure magnesium that it has produced and adds alloying elements (aluminum and zinc, for example) ***. Alloy producers typically purchase scrap which, in comparison to the cost ***, comprises a *** part of the firm's overall production costs. Of *** are energy costs (natural gas and electricity). These costs are classified in other factory costs and comprise a *** of such costs and of total COGS.

Many of the same factors that affected the profitability of operations on pure magnesium also affected alloy magnesium, including ***, discussed earlier. However, other factory costs of producers of alloy magnesium *** of pure magnesium, and the average unit value of other factory costs for alloy magnesium increased whereas the average unit value of other factory costs for pure magnesium decreased. This largely accounts for the apparent divergence of costs between pure and alloy magnesium between 2007 and 2009.

Tolling of Alloy Magnesium

In tolling (or toll conversion) operations, one firm, the tollee, typically arranges for another firm, the toller, to produce usable magnesium metal alloy by recycling magnesium-containing scrap that is provided by the tollee. The tollee typically purchases the magnesium scrap raw materials and other materials and arranges delivery of the scrap to the toller. The tollee also retains title to the magnesium contained and the risk of commercial loss on sale of the tolled magnesium. The toller processes the materials and charges a conversion charge, or tolling fee for the service; no title to the magnesium nor risk of loss on resale is assumed by the toller. *** reported data on tolling. *** and the primary focus of the tolling reported in the Commission's questionnaire was performed on behalf of firms making downstream products, primarily fabricated diecast parts for the automotive industry. Data on tolling operations are depicted in table III-15 while table III-16 presents salient data on ***.

Table III-15

Alloy magnesium: Results of tolling operations of U.S. firms, fiscal years 2004-09, January-June 2009, and January-June 2010

* * * * *

Table III-16

Alloy magnesium: Results of operations of * on sales of magnesium tolled on its behalf, fiscal years 2004-09, January-June 2009, and January-June 2010**

* * * * *

³⁹ ***.

⁴⁰ ***.

⁴¹ ***.

⁴² ***.

⁴³ ***. US Magnesium's submission of January 14, 2011.

⁴⁴ Ibid., p. 4. ***.

Value-added ratios for the tolling operations were high during the periods examined. The ratios of conversion costs (direct labor plus other factory costs) to total COTS ranged from *** percent to *** percent during the full-year periods and were *** percent and *** percent in the 2009 and 2010 interim periods, respectively. The ratio of conversion costs plus SG&A expenses to total COTS plus SG&A expenses ranged from *** percent to *** percent during the full-year periods and were *** percent and *** in the 2009 and 2010 interim periods, respectively. As may be seen from the data, tollers have little or no raw material costs of their own (what is shown in the table represents raw materials not supplied by the tollee), hence the conversion costs are high relative to the production cost of providing tolling services.

Value-added ratios for *** (from table III-16) were lower than those calculated based on the data presented in table III-15 because the ***. Conversion costs to total COGS ranged from *** percent to *** percent during the full-year periods and were *** percent and *** percent in the 2009 and 2010 interim periods, respectively. Conversion costs plus SG&A expenses divided by COGS plus SG&A expenses ranged from *** percent to *** percent during the full-year periods and were *** percent and *** percent in the 2009 and 2010 the interim periods, respectively.

Variance Analysis

A variance analysis based upon the results of the U.S. firms on their operations producing pure and alloy magnesium is presented here (table III-17) in summary form derived from the data in tables III-11 (total of pure and alloy combined), III-12 (pure), and III-13 (alloy), respectively.⁴⁵ A variance analysis provides an assessment of changes in profitability as a result of changes in volume, sales prices, and costs, and is effective when the product under examination is homogeneous through the periods examined, with little or no variation in product mix.⁴⁶ The analysis for the combined pure and alloy magnesium shows that the increase in operating income from 2004 to 2009 was attributable to the favorable price variance (unit sales values increased) that was more than the unfavorable net cost/expense variance (unit costs increased) and volume variances combined. Operating income was higher in interim 2010 compared to interim 2009 because an unfavorable price variance (unit prices fell) was less than the favorable variances on net cost/expense (unit costs and expenses decreased) and volume. Changes in the variances and the operating income for pure magnesium affected the total more than did such changes for alloy magnesium.

⁴⁵ A variance analysis is calculated in three parts: sales variance, cost of sales variance, and SG&A expense variance. Each part consists of a price variance (in the case of the sales variance) or a cost or expense (cost/expense) variance (in the case of the cost of sales and SG&A expense variance), and a volume variance. The sales or cost/expense variance is calculated as the change in unit price or per-unit cost/expense times the new volume, while the volume variance is calculated as the change in volume times the old unit price or per-unit cost/expense. Summarized at the bottom of the table, the price variance is from sales; the cost/expense variance is the sum of those items from COGS and SG&A variances, respectively, and the volume variance is the sum of the volume components of the net sales, COGS, and SG&A expense variances. The overall volume component of the variance analysis is generally small.

⁴⁶ No variance analysis was presented in the original investigations because of certain events which decreased the value of a variance analysis. These included a major producer exiting the industry, the entry of another producer with high start-up costs, *** one-time asset impairment costs, and the increasing amounts of product toll-processed throughout the periods for which data were collected. Instead, staff prepared variance analyses based upon the results of the U.S. firms on their operations producing pure magnesium and non-toll alloy magnesium, which are presented here.

Table III-17

Combined, pure, and alloy magnesium: Summary of variance analysis on the operations of U.S. firms, 2004-09, and January-June 2009 to January-June 2010

* * * * *

CAPITAL EXPENDITURES AND RESEARCH AND DEVELOPMENT EXPENSES

The responding firms' data on capital expenditures and their research and development ("R&D") expenses for the production of pure and total alloy magnesium are shown in table III-18. These data are shown for the combined total of pure and alloy magnesium, for pure magnesium (***), and for alloy magnesium.

Table III-18

Magnesium: Value of capital expenditures of U.S. firms, fiscal years 2004-09, January-June 2009, and January-June 2010

* * * * *

ASSETS AND RETURN ON INVESTMENT

The Commission's questionnaire requested data on assets used in the production, warehousing, and sale of magnesium to compute return on investment ("ROI") for 2004 to 2009. The data for total net sales and operating *** are from tables for combined pure and alloy magnesium (table III-11), and pure (table III-12) and alloy magnesium (table III-13) separately. Operating income was divided by total assets, resulting in ROI. U.S. producers' total assets and their ROI are presented in table III-19. The total assets utilized in the production, warehousing, and sales of magnesium increased from 2004 to 2009, ***.

Table III-19

Pure and alloy magnesium: Value of assets used in the production, warehousing, and sale, and return on investment, fiscal years 2004-09

* * * * *

Grinders

Grinders⁴⁷ ESM, Hart, and Reade responded to the Commission's questionnaire with respect to their operations on the grinding of magnesium. Each of the three firms reported that it ***⁴⁸ pure magnesium. Grinders change the shape of pure magnesium from one form, such as an ingot, into another form such as granules or powder. The combined total of operating data of ESM, Hart, and Reade are shown in table III-20.

⁴⁷ Data of operations on the grinding of magnesium are not combined with those of either pure or alloy magnesium ***.

⁴⁸ ***.

Table III-20

Pure magnesium: Combined results of grinding operations of ESM, Hart, and Reade, value added, total assets, ROI, capital expenditures and R&D expenses, fiscal years 2004-09, January-June 2009, and January-June 2010

* * * * * *

ESM's reported ***. ***,⁴⁹

Hart and Reade ***. After repeated efforts to obtain data on operating costs for Hart and Reade, staff received ***. **. The combined total shipments of Hart and Reade accounted for *** between 2004 and 2009; together, Hart and Reade's shipment data accounted for *** in interim 2009 and interim 2010, respectively. Although Magnesium-Elektron's data are ***. Staff have *** of Magnesium Elektron.⁵⁰

⁴⁹ EDIS document 438623, November 24, 2010.

⁵⁰ EDIS document 438657, November 24, 2010.

PART IV: U.S. IMPORTS AND THE FOREIGN INDUSTRIES

U.S. IMPORTS

The Commission sent questionnaires to all firms that were believed to have possibly imported magnesium into the United States since 2004 and received usable data in response to those questionnaires from 16 companies. A complete listing of all responding firms that imported magnesium from any country into the United States since January 1, 2004 is presented in *Part I* of this report (table I-9). All U.S. importers of subject alloy magnesium from China,¹ subject pure magnesium from Russia,² and nonsubject magnesium are presented, by firm, in table IV-1, along with their U.S. import data concerning these imports for the period in which data were collected in these reviews.

Table IV-1

Magnesium: U.S. imports, by sources and firms, 2004-09, January-June 2009, and January-June 2010

* * * * *

Based on official Commerce statistics for imports of magnesium under HTS subheadings 8104.11.00 (pure magnesium ingots), 8104.19.00 (alloy magnesium ingots), and 8104.30.00 (magnesium granules), importers' questionnaire data accounted for the following shares of U.S. magnesium imports during 2004-09:

Item	2004	2005	2006	2007	2008	2009
Questionnaire coverage (<i>in percent</i>)						
Subject imports from:						
China (alloy)	8.9	0.0	85.3	139.1	177.7	266.2
Russia (pure and alloy)	75.8	112.3	85.5	97.1	110.6	127.9
Nonsubject imports	4.8	4.1	7.5	13.4	13.1	20.4
Total imports	23.8	22.8	24.8	23.5	17.6	23.0
Note.—***.						

Due to less-than-complete questionnaire coverage during portions of the period for which data were collected in these reviews, official import statistics are presented in this report. The subject import data for China presented throughout this report are based on HTS subheading 8104.19.00 (alloy

¹ Pure magnesium imported from China is not subject to these reviews.

² There were no reported U.S. imports of alloy magnesium from Russia during the period for which data were collected in these reviews.

magnesium ingots)³ and subject import data for Russia are based on HTS subheadings 8104.11.00 (pure magnesium ingots), 8104.19.00 (alloy magnesium ingots), and 8104.30.00 (magnesium granules).

Six U.S. importers reported entering or withdrawing magnesium from bonded warehouses,⁴ one U.S. importer reported entering or withdrawing magnesium from a foreign trade zone,⁵ and one U.S. importer reported imports of magnesium under the temporary importation under bond program.⁶

Imports of subject alloy magnesium from China and subject pure and alloy magnesium from Russia and imports of nonsubject magnesium for 2004-09, January-June 2009, and January-June 2010 appear in table IV-2. Imports of pure magnesium from Russia decreased to low levels during the period examined in these reviews and official import statistics indicate that subject imports of alloy magnesium from Russia totally ceased after the imposition of the antidumping duty order in 2005. The combined quantity of subject imports of alloy magnesium from China and pure and alloy magnesium from Russia fell from 36,701 metric tons in 2004 to 458 metric tons in 2009. Subject imports were higher during the first six months of 2010 at 319 metric tons than during the comparable period in 2009 at 132 metric tons because of a higher level of subject U.S. imports of pure magnesium from Russia. The ratio of subject U.S. imports of magnesium from China and Russia to U.S. production of magnesium was *** percent during 2004 (prior to the imposition of the subject orders). This ratio fell to *** percent during 2005-06, to *** percent in 2007, and further to *** percent in 2008. Subject U.S. imports of magnesium from China and Russia did not exceed *** percent of U.S. magnesium production during the remainder of the periods examined.⁷

Between 2004 and 2009, the share of the quantity of total U.S. imports held by subject imports fell from a high of 40.6 percent in 2004 to a low of 1.7 percent in 2009. The share held by subject imports during the first half of 2010 was 2.3 percent. Imports of magnesium from nonsubject sources (since 2007, largely Dead Sea Magnesium product produced in Israel) grew initially from 59.4 percent of total imports in 2004 to 98.3 percent in 2009. The nonsubject sources held a 97.7-percent share of total U.S. imports during the first half of 2010.

³ Based on information presented in the staff report from the original investigations, granular magnesium is typically pure magnesium or “off-specification” pure magnesium (alloy magnesium not meeting ASTM specifications for alloy magnesium). Since such imports from China are currently under antidumping duty orders and excluded from the scope of the current reviews, imports of granular magnesium (HTS subheading 8104.30.00) are not included in the subject import data for China presented throughout this report. Regardless, US Magnesium indicated that the data presented may still include non-ASTM alloy magnesium products that are covered under the order on pure magnesium as “off-specification pure.” US Magnesium’s prehearing brief, p. 6, fn. 12. None of the responses to the Commission’s U.S. importer questionnaire indicated that such products from China entered the United States under the HTS subheading for alloy magnesium.

⁴ The six U.S. importers and the countries from which they imported were ***.

⁵ The U.S. importer and the country from which it imported was ***.

⁶ The U.S. importer and the country from which it imported was ***.

⁷ On December 28, 2004, petitioners filed an amendment to the original petition in the underlying investigations which contained an allegation of critical circumstances necessitated by what they described as a dramatic surge in imports from China just prior to the filing of the petition. On February 24, 2005, Commerce made an affirmative final determination of critical circumstances for two Chinese exporters: Tianjin Magnesium International Co., Ltd. (“Tianjin”) and Guangling Jinghua Science and Technology Co., Ltd. (“Guangling”). Commerce found that critical circumstances did not exist for “all other” Chinese exporters. 70 FR 9037, February 24, 2005. However, in its original determinations with regard to U.S. imports from China, the Commission made a negative finding with regard to critical circumstances. 70 FR 19969, April 15, 2005.

Table IV-2
Magnesium: U.S. imports, by sources, 2004-09, January-June 2009, and January-June 2010

Source	Calendar year						January-June	
	2004	2005	2006	2007	2008	2009	2009	2010
Quantity (metric tons)								
Pure magnesium:								
Russia (subject)	20,798	11,756	13,038	6,105	2,210	315	20	298
Nonsubject:								
Canada	2,680	5,564	9,753	1,942	1,029	583	246	472
China	6,812	1,503	335	3,476	19,113	4,968	4,269	439
Israel	8,794	9,041	7,917	14,539	21,846	15,361	7,674	7,790
All other	3,409	3,359	2,343	2,101	1,227	947	565	793
Subtotal, nonsubject	21,694	19,466	20,348	22,057	43,216	21,859	12,755	9,494
Total, pure magnesium	42,492	31,222	33,386	28,162	45,426	22,174	12,776	9,792
Alloy magnesium:								
Subject:								
China	13,262	36	34	46	287	142	111	21
Russia	2,641	817	0	0	0	0	0	0
Subtotal, subject	15,903	853	34	46	287	142	111	21
Nonsubject:								
Canada	23,586	25,439	19,355	13,319	2,199	150	150	(¹)
Israel	4,526	6,033	2,840	2,649	4,302	1,130	369	1,085
All other	3,848	9,095	3,576	6,805	6,385	3,063	1,574	3,215
Subtotal, nonsubject	31,959	40,567	25,770	22,774	12,885	4,344	2,093	4,301
Total, alloy magnesium	47,863	41,420	25,805	22,820	13,172	4,486	2,204	4,322
All magnesium:								
Subject:								
China	13,262	36	34	46	287	142	111	21
Russia	23,439	12,573	13,038	6,105	2,210	315	20	298
Subtotal, subject	36,701	12,610	13,072	6,152	2,498	458	132	319
Nonsubject:								
Canada	26,265	31,003	29,108	15,261	3,228	733	396	472
China	6,812	1,503	335	3,476	19,113	4,968	4,269	439
Israel	13,320	15,074	10,757	17,188	26,148	16,491	8,043	8,875
All other	7,256	12,453	5,919	8,906	7,612	4,011	2,140	4,008
Subtotal, nonsubject	53,653	60,033	46,119	44,831	56,101	26,203	14,848	13,794
Total, all magnesium	90,355	72,642	59,191	50,982	58,599	26,661	14,980	14,113

Table continued on following page.

Table IV-2--Continued

Magnesium: U.S. imports, by sources, 2004-09, January-June 2009, and January-June 2010

Source	Calendar year						January-June	
	2004	2005	2006	2007	2008	2009	2009	2010
Value (1,000 dollars) ²								
Pure magnesium:								
Russia (subject)	45,202	30,257	29,616	14,198	8,475	1,421	136	951
Nonsubject:								
Canada	8,923	17,681	24,219	7,195	3,417	2,810	925	1,978
China	16,255	4,246	809	11,386	106,024	25,196	21,553	1,325
Israel	25,099	30,391	22,638	43,076	83,436	60,410	30,492	35,194
All other	9,120	10,866	6,683	7,290	7,496	5,971	4,221	4,230
Subtotal, nonsubject	59,397	63,185	54,349	68,948	200,373	94,387	57,191	42,726
Total, pure magnesium	104,599	93,442	83,966	83,146	208,848	95,808	57,327	43,678
Alloy magnesium:								
Subject:								
China	35,765	89	101	129	1,697	723	616	78
Russia	5,642	1,905	0	0	0	0	0	0
Subtotal, subject	41,407	1,994	101	129	1,697	723	616	78
Nonsubject:								
Canada	68,429	82,021	63,407	46,109	14,504	733	690	9
Israel	16,129	23,780	8,678	7,839	17,619	4,910	1,526	5,483
All other	15,011	29,658	14,948	24,462	40,024	21,091	11,266	15,971
Subtotal, nonsubject	99,569	135,459	87,032	78,410	72,147	26,734	13,481	21,463
Total, alloy magnesium	140,976	137,453	87,133	78,539	73,844	27,457	14,097	21,541
All magnesium:								
Subject:								
China	35,765	89	101	129	1,697	723	616	78
Russia	50,843	32,162	29,616	14,198	8,475	1,421	136	951
Subtotal, subject	86,609	32,251	29,717	14,327	10,172	2,144	751	1,029
Nonsubject:								
Canada	77,352	99,703	87,626	53,304	17,921	3,543	1,615	1,986
China	16,255	4,246	809	11,386	106,024	25,196	21,553	1,325
Israel	41,228	54,172	31,316	50,915	101,055	65,320	32,018	40,677
All other	24,131	40,524	21,631	31,752	47,519	27,062	15,487	20,201
Subtotal, nonsubject	158,966	198,645	141,382	147,358	272,520	121,121	70,672	64,189
Total, all magnesium	245,575	230,895	171,099	161,685	282,692	123,265	71,424	65,218

Table continued on following page.

Table IV-2--Continued
Magnesium: U.S. imports, by sources, 2004-09, January-June 2009, and January-June 2010

Source	Calendar year						January-June	
	2004	2005	2006	2007	2008	2009	2009	2010
Unit value (per metric ton) ²								
Pure magnesium:								
Russia (subject)	\$2,173	\$2,574	\$2,272	\$2,326	\$3,835	\$4,505	\$6,660	\$3,193
Nonsubject:								
Canada	3,330	3,178	2,483	3,705	3,321	4,823	3,756	4,189
China	2,386	2,826	2,415	3,276	5,547	5,071	5,048	3,019
Israel	2,854	3,362	2,859	2,963	3,819	3,933	3,973	4,518
All other	2,676	3,235	2,852	3,470	6,107	6,303	7,470	5,335
Subtotal, nonsubject	2,738	3,246	2,671	3,126	4,637	4,318	4,484	4,501
Total, pure magnesium	2,462	2,993	2,515	2,952	4,598	4,321	4,487	4,461
Alloy magnesium:								
Subject:								
China	2,697	2,452	2,918	2,781	5,907	5,091	5,534	3,663
Russia	2,136	2,332	(³)	(³)	(³)	(³)	(³)	(³)
Subtotal, subject	2,604	2,337	2,918	2,781	5,907	5,091	5,534	3,663
Nonsubject:								
Canada	2,901	3,224	3,276	3,462	6,597	4,872	4,605	(³)
Israel	3,564	3,941	3,056	2,959	4,096	4,343	4,140	5,051
All other	3,901	3,261	4,181	3,595	6,269	6,885	7,155	4,967
Subtotal, nonsubject	3,115	3,339	3,377	3,443	5,599	6,154	6,442	4,991
Total, alloy magnesium	2,945	3,319	3,377	3,442	5,606	6,120	6,396	4,984
All magnesium:								
Subject:								
China	2,697	2,452	2,918	2,781	5,907	5,091	5,534	3,663
Russia	2,169	2,558	2,272	2,326	3,835	4,505	6,660	3,193
Subtotal, subject	2,360	2,558	2,273	2,329	4,073	4,687	5,708	3,224
Nonsubject:								
Canada	2,945	3,216	3,010	3,493	5,552	4,833	4,077	4,207
China	2,386	2,826	2,415	3,276	5,547	5,071	5,048	3,019
Israel	3,095	3,594	2,911	2,962	3,865	3,961	3,981	4,583
All other	3,326	3,254	3,655	3,565	6,243	6,748	7,238	5,040
Subtotal, nonsubject	2,963	3,309	3,066	3,287	4,858	4,622	4,760	4,653
Total, all magnesium	2,718	3,179	2,891	3,171	4,824	4,623	4,768	4,621

Table continued on following page.

Table IV-2--Continued

Magnesium: U.S. imports, by sources, 2004-09, January-June 2009, and January-June 2010

Source	Calendar year						January-June	
	2004	2005	2006	2007	2008	2009	2009	2010
Share of quantity (percent)								
Pure magnesium:								
Russia (subject)	48.9	37.7	39.1	21.7	4.9	1.4	0.2	3.0
Nonsubject:								
Canada	6.3	17.8	29.2	6.9	2.3	2.6	1.9	4.8
China	16.0	4.8	1.0	12.3	42.1	22.4	33.4	4.5
Israel	20.7	29.0	23.7	51.6	48.1	69.3	60.1	79.6
All other	8.0	10.8	7.0	7.5	2.7	4.3	4.4	8.1
Subtotal, nonsubject	51.1	62.3	60.9	78.3	95.1	98.6	99.8	97.0
Total, pure	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Alloy magnesium:								
Subject:								
China	27.7	0.1	0.1	0.2	2.2	3.2	5.0	0.5
Russia	5.5	2.0	0.0	0.0	0.0	0.0	0.0	0.0
Subtotal, subject	33.2	2.1	0.1	0.2	2.2	3.2	5.0	0.5
Nonsubject:								
Canada	49.3	61.4	75.0	58.4	16.7	3.4	6.8	0.0
Israel	9.5	14.6	11.0	11.6	32.7	25.2	16.7	25.1
All other	8.0	22.0	13.9	29.8	48.5	68.3	71.4	74.4
Subtotal, nonsubject	66.8	97.9	99.9	99.8	97.8	96.8	95.0	99.5
Total, alloy	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
All magnesium:								
Subject:								
China	14.7	0.0	0.1	0.1	0.5	0.5	0.7	0.2
Russia	25.9	17.3	22.0	12.0	3.8	1.2	0.1	2.1
Subtotal, subject	40.6	17.4	22.1	12.1	4.3	1.7	0.9	2.3
Nonsubject:								
Canada	29.1	42.7	49.2	29.9	5.5	2.7	2.6	3.3
China	7.5	2.1	0.6	6.8	32.6	18.6	28.5	3.1
Israel	14.7	20.8	18.2	33.7	44.6	61.9	53.7	62.9
All other	8.0	17.1	10.0	17.5	13.0	15.0	14.3	28.4
Subtotal, nonsubject	59.4	82.6	77.9	87.9	95.7	98.3	99.1	97.7
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Table continued on following page.

Table IV-2--Continued
Magnesium: U.S. imports, by sources, 2004-09, January-June 2009, and January-June 2010

Source	Calendar year						January-June	
	2004	2005	2006	2007	2008	2009	2009	2010
Ratio of import quantity to U.S. production (percent)								
Pure magnesium:								
Russia (subject)	***	***	***	***	***	***	***	***
Nonsubject:								
Canada	***	***	***	***	***	***	***	***
China	***	***	***	***	***	***	***	***
Israel	***	***	***	***	***	***	***	***
All other	***	***	***	***	***	***	***	***
Subtotal, nonsubject	***	***	***	***	***	***	***	***
Total, pure magnesium	***	***	***	***	***	***	***	***
Alloy magnesium:								
Subject:								
China	***	***	***	***	***	***	***	***
Russia	***	***	***	***	***	***	***	***
Subtotal, subject	***	***	***	***	***	***	***	***
Nonsubject:								
Canada	***	***	***	***	***	***	***	***
Israel	***	***	***	***	***	***	***	***
All other	***	***	***	***	***	***	***	***
Subtotal, nonsubject	***	***	***	***	***	***	***	***
Total, alloy magnesium	***	***	***	***	***	***	***	***
All magnesium:								
Subject:								
China	***	***	***	***	***	***	***	***
Russia	***	***	***	***	***	***	***	***
Subtotal, subject	***	***	***	***	***	***	***	***
Nonsubject:								
Canada	***	***	***	***	***	***	***	***
China	***	***	***	***	***	***	***	***
Israel	***	***	***	***	***	***	***	***
All other	***	***	***	***	***	***	***	***
Subtotal, nonsubject	***	***	***	***	***	***	***	***
Total, all magnesium	***	***	***	***	***	***	***	***
¹ Less than 0.5 metric tons. ² Landed, duty-paid. ³ Not applicable.								
Source: Import data presented are from official Commerce statistics under HTS statistical reporting numbers 8104.11.00 (pure magnesium ingot), 8104.19.00 (alloy magnesium ingot), and 8104.30.00 (granular magnesium); U.S. production data used in the ratio calculation presented are compiled from data submitted in response to Commission questionnaires.								

The unit values of total imports of magnesium increased overall during the period examined in these reviews from \$2,718 per metric ton in 2004 to \$4,623 per metric ton in 2009. The unit values of subject imports followed a similar trend as that of nonsubject U.S. imports but were lower than the average unit values for nonsubject imports in most periods examined. The exceptions are that the unit value of subject imports of alloy magnesium from China was higher than that of nonsubject imports of alloy magnesium in 2008 and the unit value of pure magnesium from Russia was higher than that of nonsubject imports of pure magnesium in 2009.

U.S. IMPORTERS' CURRENT ORDERS

*** of the U.S. importers responding to the Commission's questionnaire in these reviews reported arrangements for the importation of alloy magnesium from China or Russia for delivery after June 30, 2010 and *** of the U.S. importers reported arrangements for the importation of pure magnesium from Russia. Importer *** reported that from June 30, 2010 to September 2010 it had made arrangements to import *** metric tons of ***. Importer *** reported that it had made plans to import *** metric tons of *** during the third quarter of 2010.

U.S. IMPORTERS' SHIPMENTS

Data on U.S. importers' shipments by sources and types are presented in table IV-3. With regard to reported U.S. commercial shipments of imports of alloy magnesium from China in 2009, *** were of primary magnesium (*** percent of which ***). With regard to U.S. commercial shipments of subject imports of magnesium from Russia in 2009, *** were of primary commodity-grade pure magnesium ingot.

Table IV-3

Magnesium: U.S. importers' reported U.S. commercial shipments, by types and by sources, 2009 and January-June 2010

* * * * *

Table IV-4 presents U.S. importers' shipments by end users, sources, and types. With respect to U.S. commercial shipments of imports of subject alloy magnesium from China in 2009, such shipments were minimal and were not reported by customer category.⁸ With respect to subject imports from Russia, in 2009, *** percent went to aluminum manufacturers and the remainder to other end users.⁹

Table IV-4

Magnesium: U.S. importers' U.S. commercial shipments, by end users, by sources, and by types, 2009 and January-June 2010

* * * * *

⁸ End uses listed by the U.S. importers of the subject alloy magnesium from China include ***.

⁹ The only end use listed by the U.S. importers of the subject pure magnesium imported from Russia is its use as ***.

U.S. IMPORTERS' INVENTORIES

Table IV-5 presents data on importers' U.S. inventories of magnesium. U.S. importers responding to the Commission's questionnaire reported *** inventories of magnesium produced in China and Russia during the period examined in these reviews. Total subject import inventories fluctuated from a low of *** metric tons reported at yearend 2007 to a high of *** metric tons at yearend 2005. U.S. inventories of subject imports held in June 2010 were even lower at *** metric tons. Yearend inventories of nonsubject imports were higher than subject import inventories during most periods examined, fluctuating within a narrower range from a low of *** metric tons in 2004 to a high of *** metric tons during 2007. Nonsubject inventories increased to *** metric tons as of June 30, 2010.

Table IV-5

Magnesium: U.S. importers' end-of-period inventories of imports, by source, 2004-09, January-June 2009, and January-June 2010

* * * * *

CUMULATION CONSIDERATIONS

In assessing whether subject imports are likely to compete with each other and with the domestic like product with respect to cumulation, the Commission generally has considered the following four factors: (1) the degree of fungibility, including specific customer requirements and other quality-related questions; (2) presence of sales or offers to sell in the same geographic markets; (3) common channels of distribution; and (4) simultaneous presence in the market. Channels of distribution and fungibility (interchangeability) are discussed in *Part II* of this report. Additional information concerning fungibility, geographical markets, and simultaneous presence in the market is presented below.

Fungibility

U.S. producers, importers, and foreign producers were asked to provide data concerning their U.S. shipments of magnesium, by application. As indicated previously in *Part III* of this report (table III-6), over *** of the U.S. producers' commercial U.S. shipments of pure magnesium in 2009 went to aluminum manufacturers, whereas almost *** of U.S. producers' commercial U.S. shipments of alloy magnesium in 2009 went to die casters. Of U.S. producers' commercial shipments of all magnesium in 2009, *** percent went to aluminum manufacturers, *** percent went to die casters, *** percent to granule producers, and *** percent to other users.¹⁰ Since the original investigations, however, *** that there has been somewhat of a shift away from sales to aluminum manufacturers (pure magnesium) in favor of sales to die casters (alloy magnesium).¹¹ U.S. importers of magnesium also provided information concerning their U.S. commercial shipments of magnesium, by type of magnesium and by end users. Information provided by these U.S. importers indicate that the main use for imports of alloy magnesium from China is *** and the main use of imports of pure magnesium from Russia is as

¹⁰ During the original investigations, the Commission found that over *** percent of the U.S. producers' commercial U.S. shipments of pure magnesium in 2003 went to aluminum manufacturers, whereas U.S. producers' commercial U.S. shipments of alloy magnesium in 2003 were ***. *** of U.S. producers' commercial shipments of all magnesium in 2003 (*** percent) went to aluminum manufacturers, while *** percent went to die casters, *** percent to granule reagent producers, and *** percent to other users. *Magnesium from China and Russia, Investigations Nos. 731-TA-1071-1072 (Final)*, INV-CC-031, March 11, 2005, p. III-8.

¹¹ Note that this shift ***.

***. With respect to U.S. commercial shipments of imports of alloy magnesium from China in 2009, *** were to other end users (table IV-4).¹² With respect to subject imports from Russia, in 2009, *** percent went to aluminum manufacturers and the remainder to other end users.¹³

Geographic Markets

Magnesium produced in the United States is shipped nationwide. Additional information on geographic markets may be found in *Part II* of this report. Tables IV-6 and IV-7 present U.S. imports of pure and alloy magnesium, respectively, by U.S. customs district. Based on official U.S. import statistics, the principal U.S. customs districts for subject imports from China during 2004-05 were Detroit, MI; Baltimore, MD; St. Louis, MO; Los Angeles, CA; Chicago, IL; Cleveland, OH; and Seattle, WA.¹⁴ Imports of alloy magnesium from China were sporadic after 2005. The principal U.S. customs districts of entry for pure magnesium from Russia during the period examined in these reviews were Baltimore, MD and Philadelphia, PA, and the principal U.S. customs district of entry for alloy magnesium from Russia during the first annual period examined in these reviews was Baltimore, MD.¹⁵ According to the official import statistics, U.S. imports of alloy magnesium from Russia were nonexistent after 2006.

Presence in the Market

During the original investigations, alloy magnesium from China and pure magnesium from Russia were imported into the United States in each month during the period examined, and alloy magnesium from Russia was imported in each month except for April through October 2001 and July of 2002.¹⁶ Table IV-8 presents data on the monthly entries of subject U.S. imports of magnesium, by type and by source, during the period examined in these current five-year review of the orders (January 2004-June 2010). As these data show, alloy magnesium produced in China and Russia was imported into the United States in all months during calendar year 2004, except that alloy magnesium was not imported into the United States from China during December. Monthly declines in subject U.S. imports of alloy magnesium, especially for imports from China, were most evident beginning in the fourth quarter of 2004, after Commerce made its October 4, 2004, preliminary determinations in the original investigations. From 2005 to June 2010, after the imposition of the orders, the presence of subject alloy magnesium imports in the market appeared more sporadic, with no monthly entries for imports of alloy magnesium from China in two-thirds of the months in that time period and no monthly entries for U.S. imports of alloy magnesium from Russia after November 2005. Imports of pure magnesium from Russia were present in the U.S. market in every month from January 2004 to March 2008, after which they dropped to zero in many of the remaining months.

¹² "Other" end uses listed by the U.S. importers of the subject alloy magnesium from China include the use in ***.

¹³ The only end use listed by the U.S. importers of the subject pure magnesium imported from Russia includes its use as ***.

¹⁴ The principal U.S. customs districts for subject imports from China during the period examined in the original investigations were Detroit, MI; Baltimore, MD; Chicago, IL; St. Louis, MO; and Los Angeles, CA. *Magnesium from China and Russia, Investigation Nos. 731-TA-1071-1072 (Final)*, INV-CC-031, March 11, 2005, p. IV-13.

¹⁵ The principal U.S. customs districts for subject imports from Russia were the same during the period examined in the original investigations. *Magnesium from China and Russia, Investigation Nos. 731-TA-1071-1072 (Final)*, INV-CC-031, March 11, 2005, p. IV-13.

¹⁶ *Magnesium from China and Russia, Investigation Nos. 731-TA-1071-1072 (Final)*, INV-CC-031, March 11, 2005, p. IV-13.

Table IV-6

Pure magnesium: U.S. imports from Russia, by customs district, 2004-09, January-June 2009, and January-June 2010

Source/customs district	Calendar year						Jan.-June	
	2004	2005	2006	2007	2008	2009	2009	2010
Quantity (metric tons)								
Russia:								
Baltimore, MD	5,236	3,178	58	0	0	121	0	297
Boston, MA	566	0	0	0	0	0	0	0
Detroit, MI	46	0	0	0	193	0	0	0
Laredo, TX	0	0	0	0	0	9	0	0
Los Angeles, CA	0	0	0	0	0	65	0	0
New Orleans, LA	0	0	0	0	0	20	0	0
New York, NY	597	0	0	0	0	0	0	0
Ogdensburg, NY	64	0	0	0	0	0	0	0
Philadelphia, PA	14,290	8,578	12,979	6,105	2,017	101	20	1
Total	20,798	11,756	13,038	6,105	2,210	315	20	298
Source: Compiled from official Commerce statistics (HTS 8104.11.00 (pure magnesium ingots) and 8104.30.00 (magnesium granules)).								

Table IV-7

Alloy magnesium: U.S. imports from China and Russia, by customs district, 2004-09, January-June 2009, and January-June 2010

Source/customs district	Calendar year						Jan.-June	
	2004	2005	2006	2007	2008	2009	2009	2010
Quantity (metric tons)								
China:								
Baltimore, MD	3,050	0	0	0	39	0	0	0
Charlotte, NC	0	0	0	0	0	0	0	0
Chicago, IL	1,462	0	0	5	0	0	0	0
Cleveland, OH	1,410	0	0	0	21	62	41	21
Detroit, MI	1,885	22	34	0	0	0	0	0
Great Fall, MT	374	0	0	0	0	50	50	0
Houston-Galveston, TX	20	0	0	2	197	0	0	0
Laredo, TX	159	0	0	0	11	0	0	0
Los Angeles, CA	1,583	13	0	40	1	10	0	0
Minneapolis, MN	32	0	0	0	0	0	0	0
New Orleans, LA	569	0	0	0	0	20	20	0
Pembina, ND	20	0	0	0	0	0	0	0
Philadelphia, PA	101	0	0	0	0	0	0	0
San Francisco, CA	179	0	0	0	0	0	0	0
Savannah, GA	118	0	0	0	0	0	0	0
Seattle, WA	1,259	0	0	0	0	0	0	0
St. Louis, MO	1,040	1	0	0	19	0	0	0
Total	13,262	36	34	46	287	142	111	21
Russia:								
Baltimore, MD	2,325	256	0	0	0	0	0	0
Buffalo, NY	4	0	0	0	0	0	0	0
Detroit, MI	20	0	0	0	0	0	0	0
Houston-Galveston, TX	0	561	0	0	0	0	0	0
Philadelphia, PA	293	0	0	0	0	0	0	0
Total	2,641	817	0	0	0	0	0	0
Source: Compiled from official Commerce statistics (HTS 8104.19.00 (alloy magnesium ingots)).								

Table IV-8

Magnesium: Subject U.S. imports, monthly entries into the United States, by types and sources, January 2004-June 2010

Type/source	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Quantity (metric tons)													
2004:													
Pure magnesium (Russia)	1,809	1,279	1,477	1,897	1,316	2,908	2,510	1,070	2,418	1,090	1,717	1,309	20,798
Alloy magnesium:													
China	1,626	1,366	2,245	1,046	1,054	1,381	1,671	965	1,817	7	84	0	13,262
Russia	176	241	396	256	227	310	161	238	321	236	19	60	2,641
Total, alloy	1,802	1,607	2,641	1,302	1,281	1,692	1,832	1,202	2,138	244	103	60	15,903
2005:													
Pure magnesium (Russia)	742	2,858	1,379	787	591	870	518	782	868	518	965	879	11,756
Alloy magnesium:													
China	8	4	0	0	0	0	4	0	0	0	19	0	36
Russia	20	0	0	0	20	140	159	199	79	61	139	0	817
Total, alloy	28	4	0	0	20	140	163	199	79	61	159	0	853
2006:													
Pure magnesium (Russia)	1,133	1,285	819	1,207	1,388	868	874	1,446	1,078	828	1,143	968	13,038
Alloy magnesium:													
China	0	0	0	34	0	0	0	0	0	0	0	0	34
Russia	0	0	0	0	0	0	0	0	0	0	0	0	0
Total, alloy	0	0	0	34	0	0	0	0	0	0	0	0	34

Table continued on following page.

GENERAL INFORMATION ON THE SUBJECT FOREIGN INDUSTRIES

Capacity

China has the world's largest capacity to produce primary magnesium, by far,¹⁷ followed by ***.¹⁸ Available data concerning the capacity to produce magnesium in China and Russia for 2004-09 are presented in table IV-9.¹⁹

Table IV-9

Magnesium: Comparison of annual magnesium capacity data for China and Russia, 2004-09

Item	2004	2005	2006	2007	2008	2009
Quantity (metric tons)						
China:						
Questionnaire data (primary and secondary subject alloy) ¹	***	***	***	***	***	***
USGS data (primary pure and alloy) ²	447,000	528,000	602,000	873,000	953,000	1,300,000
Russia:						
Questionnaire data (primary and secondary pure and alloy)	***	***	***	***	***	***
USGS data (primary pure and alloy) ³	40,000	46,000	46,000	80,000	80,000	(⁴)
¹ Data presented for subject alloy magnesium capacity in China are from questionnaire responses and are believed to have represented *** of total alloy magnesium capacity in China during 2009. ² Data presented are for total primary magnesium capacity and, therefore, include the capacity to produce nonsubject pure magnesium in China, as well as subject alloy magnesium. Includes capacity at operating plants as well as at plants on standby basis, as of December 31. The capacity figure presented for 2009 is not USGS data, but is from an article published in the <i>American Metal Market</i> . ³ Includes capacity at operating plants as well as at plants on a standby basis, as of December 31. ⁴ Not available.						
Source: Compiled from data submitted in response to Commission questionnaires; Lin, Linda, "China Mg Conf: Capacity Set to Quadruple in 5 Years, says CNIA," <i>AMM.com</i> , October 14, 2010, http://www.amm.com/2010-10-14_02-13-00.html , retrieved November 3, 2010; and Kramer, Deborah A., "Magnesium," <i>Minerals Yearbooks 2004-08</i> , U.S. Department of the Interior, U.S. Geological Survey.						

¹⁷ *China Magnesium Industry Report, 2009-2010*, March 2010, <http://www.bharatbook.com/detail.asp?id=133043&rt=China-Magnesium-Industry-Report-2009-2010.html>, retrieved November 3, 2010; and Kramer, Deborah A., "Magnesium," *Minerals Yearbooks 2004-08*, U.S. Department of the Interior, U.S. Geological Survey.

¹⁸ Kramer, Deborah A., "Magnesium," *Minerals Yearbooks 2004-08*, U.S. Department of the Interior, U.S. Geological Survey; and questionnaire responses.

¹⁹ Chinese capacity data available from secondary sources are for primary magnesium, including both subject alloy magnesium and nonsubject pure magnesium. Although the publicly available capacity data presented in this section of the report include a substantial amount of nonsubject pure magnesium, counsel for US Magnesium noted in these reviews that "because capacity to produce pure magnesium can be used to produce alloy magnesium, the Commission should also collect these data for pure magnesium." *US Magnesium's Comments On The Draft Questionnaires*, August 11, 2010, p. 6.

Reports indicate that there are at least 66 magnesium smelters located in China with a total annual production capacity of 1.3 million metric tons. Ningxia, in the northwest area of China, and the provinces of Shanxi and Shaanxi are currently the three largest production areas in China for magnesium. According to published sources, the capacity to produce primary magnesium in China (including both subject alloy and nonsubject pure) increased in every annual period from 447,000 metric tons in 2004 to 1.3 million metric tons in 2009. In fact, during 2008 alone, more than 50 projects were announced in China that resulted in significant increases in the capacity to produce magnesium metal, alloy, and/or die cast parts. A recent report indicated that even though China's magnesium industry is currently "oversupplied," it is nevertheless continuing plans to quadruple its magnesium capacity within the next five years through the addition of another three million metric tons of annual capacity. This additional magnesium capacity has been approved, is currently under construction, and is due to be completed by 2015.²⁰ Beyond the approved three million metric tons of annual capacity that is expected to be completed in China in the next five years, additional magnesium capacity is expected to be influenced by proposed new rules for the country's magnesium industry. Under newly proposed rules of China's Ministry of Technology and Industry (pending implementation), all new primary magnesium plants would require a minimum annual capacity of 15,000 metric tons, expansion projects would require a minimum annual capacity of 20,000 metric tons, and new alloy magnesium projects would require a minimum annual capacity of 50,000 metric tons for government approval.²¹ Reports of *** capacity increases for primary magnesium in China since 2004 ***. Their aggregate data show that their capacity to produce the subject alloy magnesium in China was *** larger (i.e., *** larger) in 2009 than reported in 2004.

As was the case with China, data published by the U.S. Geological Survey ("USGS") for Russia also indicate an increase in the capacity to produce primary magnesium during the period examined in these reviews, but only from 2006 to 2007. These USGS data, however, include the magnesium capacity at operating plants as well as on a "standby basis." The USGS reported Russian capacity to produce magnesium as 80,000 metric tons in 2008. However, the questionnaire responses received from the only two Russian producers of pure and alloy magnesium indicated a capacity of *** metric tons in 2008, *** below the figure reported by the USGS. In order to better understand the reason for the discrepancy in the two figures and the basis for the data reported by the Russian producers, staff contacted the Russian producers for an explanation and received the following excerpted information.

AVISMA responded as follows:

* * * * *

Solikamsk Magnesium Works ("SMW") responded as follows:

* * * * *

The USGS also reported that in addition to established Russian producers SMW and AVISMA, construction began at a third magnesium facility (Asbest Magnesium Plant) during 2007. The new 60,000-70,000-metric ton per year plant in Russia was reportedly being built to recover magnesium from serpentine tailings supplied by asbestos producer Uralasbest. The facility, which had been under consideration since 2000, was originally set up as a joint venture between Uralasbest and Minmet of

²⁰ Lin, Linda, "China Mg Conf: Capacity Set to Quadruple in 5 Years, says CNIA," *AMM.com*, October 14, 2010, http://www.amm.com/2010-10-14_02-13-00.html, retrieved November 3, 2010; and Kramer, Deborah A., "Magnesium," *Minerals Yearbook 2008*, U.S. Department of the Interior, U.S. Geological Survey.

²¹ "Magnesium in the First Quarter 2010," *Mineral Industry Surveys*, U.S. Department of the Interior, U.S. Geological Survey, June 2010.

Switzerland.²² However, the plant's construction has been plagued by financial difficulties. Work on the plant resumed in 2010 and then was put on hold again. Preliminary plans are to commission the plant within 2.5 years.²³

Although the published USGS data presented show an increase in the capacity to produce magnesium in Russia from 2006 to 2007, the questionnaire data compiled from the two known magnesium producers in Russia indicate that the capacity to produce magnesium in Russia actually fell by *** percent from 2006 to 2007. Russian producers SMW and AVISMA cited *** for the decline in magnesium capacity during this time period.

As the capacity data from questionnaire responses show, the 2009 aggregate estimated capacity to produce alloy magnesium in China and pure and alloy magnesium in Russia (*** metric tons), which is *** understated for China, is *** percent greater than the 2009 apparent U.S. consumption of magnesium (*** metric tons). For comparison purposes, the total 2008 capacity to produce primary magnesium (pure and alloy) in all nonsubject primary magnesium-producing countries outside the United States combined is believed to be approximately 85,000 metric tons.²⁴

Net Trade Balance

Available *Global Trade Atlas* data concerning the net trade balance reported for magnesium for China and Russia is presented in table IV-10. These data show that the two countries subject to the antidumping duty orders under review were relatively large net exporters of subject magnesium during 2004-09.

²² Kramer, Deborah A., "Magnesium," *Minerals Yearbooks 2004-08*, U.S. Department of the Interior, U.S. Geological Survey.

²³ "Russian Magnesium looks for \$1.8bn financing to become global leader," www.marchmontnew.com, presented in US Magnesium's posthearing brief, exh. 12.

²⁴ Kramer, Deborah A., "Magnesium," *Minerals Yearbook 2008*, U.S. Department of the Interior, U.S. Geological Survey.

Tariff or Non-Tariff Barriers to Trade

The Commission asked producers of magnesium in China and Russia to identify tariff or non-tariff barriers to trade (for example, antidumping or countervailing duty findings or remedies, tariffs, quotas, or regulatory barriers) concerning their exports of magnesium to countries other than the United States. The Commission also asked the subject foreign producers to identify ongoing investigations in countries other than the United States that could result in tariff or non-tariff barriers to trade for their exports of magnesium. The foreign producers indicated in their responses that they are not aware of such tariff or non-tariff barriers to trade concerning their exports of magnesium to countries other than the United States nor are they aware of any ongoing investigations in countries other than the United States that could result in tariff or non-tariff barriers to trade for their exports of magnesium.²⁵

Antidumping Measures

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, that expired in 2003. In April 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. In October 2005, Brazil expanded duties to include alloy magnesium from China.²⁶ In addition, Brazil made public on October 7, 2010, its decision to continue the application of antidumping duties for 5 more years on the imports of magnesium from China.²⁷

China's Export Restrictions

Prior to 2006, there was a tax rebate of 13 percent on magnesium metal exports produced in China. The Chinese Government announced in January 2006 that it would reduce the export tax rebate on magnesium to five percent in an attempt to control exports. By September 2006, the Chinese Government decided to entirely remove the tax rebate on exports of magnesium.²⁸

On June 1, 2007, the Chinese Government imposed a 10 percent export tax on magnesium scrap and, on January 1, 2008, the Chinese Government imposed a 10 percent export tax on pure and alloy magnesium.²⁹ China's export taxes on magnesium and several other key raw materials were the subject of a complaint filed at the World Trade Organization ("WTO") on June 23, 2009, by the United States and the European Union ("EU") seeking a formal WTO dispute settlement panel. Mexico joined the initial complaint on August 21, 2009. The complaint alleged that China has improperly restricted exports of

²⁵ Although none of the responding Chinese producers indicated that they were aware of antidumping duties in place on imports of pure and alloy magnesium into Brazil, *** following the imposition of such orders against China.

²⁶ *Pure and Alloy Magnesium From Canada and Pure Magnesium from China, Investigation Nos. 701-TA-309-A-B and 731-TA-696 (Second Review)*, USITC Publication 3859, July 2006, p. IV-9.

²⁷ "Brazil: Antidumping Investigation on Magnesium Powder Imports from China," *Global Trade Alert*, October 22, 2010, <http://www.globaltradealert.org/taxonomy/sector/sitc-16>, retrieved November 4, 2010.

²⁸ Kramer, Deborah A., "Magnesium," *Minerals Yearbooks 2005-06*, U.S. Department of the Interior, U.S. Geological Survey.

²⁹ Kramer, Deborah A., "Magnesium," *Minerals Yearbook 2007*, U.S. Department of the Interior, U.S. Geological Survey, November 2008.

nine key raw materials by imposing quotas and/or duties on the export of those materials, including magnesium, and that such actions have given its own manufacturers an unfair advantage through price manipulation.³⁰ Canada joined the panel set up by the WTO Dispute Settlement body months later, noting that it was “concerned that China’s export restraints, such as export duties and quotas, were leading to trade distortions in the world market.”³¹ Other nations that have since joined the panel include Argentina, Brazil, Chile, Colombia, Ecuador, India, Japan, Norway, the Republic of Korea, Taiwan, and Turkey.³² The panel was originally scheduled to complete its report of findings and recommendations within nine months of being established.³³

Several months following the establishment of the dispute settlement panel, the WTO Secretariat commented that the Chinese Government’s response to the original complaint was that the “export taxes are not used to raise tax revenues but are levied to preserve exhaustible natural resources and to protect the environment.”³⁴ The WTO noted, however, that

whether intended or not, export restraints for whatever reason tend to reduce export volumes of the targeted products and divert supplies to the domestic market, leading to a downward pressure on the domestic prices of these products. The resulting gap between domestic prices and world prices constitutes implicit assistance to domestic downstream processors of the targeted products and thus provides them a competitive advantage. Insofar as China is a major supplier of such a product, export restraints may also shift the terms of trade in China’s favour. Also, some export restrictions might be imposed to pre-empt imposition of import restrictions by governments in export markets. More generally, export restraints may not be the best way to achieve some of the objectives/rationales mentioned above. In particular, restricting the export of some highly polluting or high-energy consuming products is not the most economically efficient way to protect the environment or reduce energy consumption. Nor are export restraints the best way to conserve natural resources.³⁵

China’s state-run media dismissed the comments made in the unrelated WTO Trade Policy Review report. It insisted that its export policy strictly adheres to regulations of the WTO and that its “efforts to restrict energy-intensive and environmentally destructive products are designed to protect the environment and address China’s trade imbalance.”³⁶

³⁰ “Magnesium in the Third Quarter 2009,” *Mineral Industry Surveys*, U.S. Department of the Interior, U.S. Geological Survey, December 2009.

³¹ “Canada Joining WTO Case vs. China,” *AMM.com*, January 7, 2010, http://www.amm.com/2010-01-07_14-57-36.html, retrieved November 3, 2010.

³² *Ibid.*

³³ “WTO Panel to Probe China Raw Material Export Curbs,” *AMM.com*, December 23, 2009, http://www.amm.com/2009-12-23_15-42-57.html, retrieved November 3, 2010; and “Magnesium in the Fourth Quarter 2009,” *Mineral Industry Surveys*, U.S. Department of the Interior, U.S. Geological Survey, March 2010.

³⁴ “TRADE POLICY REVIEW, Report by the Secretariat, CHINA,” *World Trade Organization*, April 26, 2010, http://www.wto.org/english/tratop_e/tpr_e/tp330_e.htm, http://www.wto.org/english/tratop_e/tpr_e/s230-00_e.doc, and http://www.wto.org/english/tratop_e/tpr_e/s230-03_e.doc, retrieved November 4, 2010, p. 44.

³⁵ *Ibid.*

³⁶ “China Dismisses WTO Remarks on Export Curbs,” *AMM.com*, June 2, 2010, http://www.amm.com/2010-06-02_18-53-03.html, retrieved November 3, 2010.

INFORMATION RECEIVED FROM PRODUCERS IN CHINA

Although the Commission received foreign producer questionnaire responses from three producers of magnesium in China during the preliminary phase of the original investigations, no producer of magnesium from China submitted a questionnaire response to the Commission in the final phase. The Chinese producers that provided responses to the Commission's questionnaires during the preliminary phase of the original investigations were: ***,³⁷ ***. These three Chinese firms were believed to have accounted for approximately *** percent of Chinese exports of subject alloy magnesium to the United States in 2003.³⁸

The four magnesium producers in China that participated in the adequacy phase of these reviews by providing the Commission with responses to information requested in its notice of institution and their estimated shares of total alloy magnesium production in China during 2009 are as follows: Nanjin Yunhai Magnesium Co., Ltd./Nanjing Welbow Metals Co., Ltd. (**% percent); Taiyuan Tongxiang Magnesium Co., Ltd./Taiyuan Yuejin Magnesium Co., Ltd. (**% percent); Wenxi Regal Magnesium Industry Co., Ltd. (**% percent); and Winca (Hebi) Magnesium Co., Ltd. (**% percent).³⁹ Of the four Chinese firms that participated in the adequacy phase of these reviews, only the two **% (Winca (Hebi) and Wenxi Regal) provided responses to the Commission's questionnaire in the full phase of these reviews.

In their responses to the Commission's notice of institution in these current reviews, the interested parties identified 30 current and/or former producers of the subject magnesium in China.⁴⁰ Questionnaires were sent to all firms identified in the responses to the Commission's notice of institution during the adequacy phase of these reviews, as well as to all firms in China identified as magnesium producers in the Commission's original investigations, in Commerce's investigations and reviews, by Customs, and in secondary directory and other public sources. Questionnaire responses in the full phase of these reviews were provided by four firms that were estimated to have represented approximately **% percent of total production of alloy magnesium in China during 2009. These four firms and their estimated shares of total alloy magnesium production in China during 2009 are as follows: Ningxia Huayuan Magnesium Inc. (**% percent); Shanxi United Magnesium Industry Co., Ltd. (**% percent); Winca

³⁷ Nanjing Yunhai Special Metals Co. also participated in the adequacy phase of these reviews by providing a complete response to the Commission's notice of institution; however, the Chinese producer did not provide a response to the Commission's questionnaire during the full phase of these reviews.

³⁸ *Magnesium from China and Russia, Investigations Nos. 731-TA-1071-1072 (Final)*, INV-CC-031, March 11, 2005, p. VII-1.

³⁹ The coverage figures presented were calculated as the quantity of reported production divided by the quantity of total production of alloy magnesium in China reported for 2009 by the China Magnesium Association (**% metric tons). *Response of Chinese Respondents to the Commission's Notice of Institution*, March 31, 2010, p. 5.

⁴⁰ Chinese producers identified include the following: Tianjin Magnesium International Co., Ltd.; Guangling Jinghua Magnesium Co., Ltd.; Taiyuan Tongxiang Magnesium Co., Ltd.; Winca Hebi Magnesium Co., Ltd.; Nanjin Yunhai Magnesium Co., Ltd.; Wenxi Regal Magnesium Industry Co., Ltd.; Nanjing Welbow Metals Co., Ltd.; Shanxi Sino Manufacturing Magontec Xi' An Co., Ltd.; Shanxi Wenxi Yinguang Magnesium Group Co., Ltd.; Shanxi Regal Magnesium Co., Ltd.; Shanxi Jingmei Alloy Co., Ltd.; Shanxi Weimei; Nanjing Huahong Magnesium Co., Ltd.; Ningxia Huayuan Metallurgical Industry Corp.; Xiamen International Trading Group; Jinduicheng Molybdenum Group Co. Ltd.; Shanxi International Import/Export Co., Ltd.; GMA German Metal Automotive Accessories (Tianjin) Co., Ltd.; Nanjing Quay Magnesium Co., Ltd.; Ningxia Huiye Magnesium Marketing Co., Ltd.; Shaanxi Fugu Tongyuan Magnesium Co., Ltd.; Shaanxi Fugu Wanyuan Magnesium (Group) Co., Ltd.; Shanxi Meijin Magnesium Alloy Technology Co., Ltd.; Shanxi Yinguang Huasheng Magnesium Group Co., Ltd.; Taiyuan Yiwei Magnesium Industry (Group) Co., Ltd.; Wenxi BaDa Magnesium Co., Ltd.; Yulin Tianlong Magnesium Industry Co., Ltd.; Nanjing Ube Magnesium Co., Ltd.; and Shanxi Nissen Yiwei Magnesium Co., Ltd. *Response of US Magnesium to the Commission's Notice of Institution*, March 31, 2010, Attachment 7.

(Hebi) Magnesium Co., Ltd. (***) percent); and Wenxi Regal Magnesium Industry Co., Ltd. (***) percent).

One magnesium producer in China, Tianjin Magnesium International Co., Ltd. (“TMI”), received a zero percent margin in the last two administrative reviews completed by Commerce.⁴¹ According to ***, TMI exported the following amounts of alloy magnesium to the United States during the period examined in these reviews: ***. TMI’s alloy magnesium exports to the United States accounted for approximately *** of total 2009 U.S. imports of alloy magnesium as reported in official Commerce import statistics. TMI did not provide a questionnaire response to the Commission in these current five-year reviews.

Table IV-11 presents select information available from the original investigations for 2003 and these first reviews for 2009.

Table IV-11

Magnesium: Select alloy magnesium industry data for China, 2003 and 2009

* * * * *

Data concerning subject alloy magnesium from the questionnaire responses submitted by Chinese producers in these five-year reviews of the antidumping duty orders for 2004-09, January-June 2009, and January-June 2010 are presented in table IV-12.⁴²

Table IV-12

Alloy magnesium: Reported Chinese capacity, production, shipments, and inventories, 2004-09, January-June 2009, and January-June 2010

* * * * *

Alloy Magnesium Capacity and Production in China

The four responding Chinese producers’ aggregate reported capacity to produce alloy magnesium in China increased from *** metric tons in 2004 to *** metric tons in 2009; however, reported capacity during the first six months of 2010 was the same as in the comparable period during 2009. The increases in the reported aggregate capacity data presented are largely explained by the start-up of two of the four reporting alloy magnesium production facilities in China during the period examined in these five-year reviews. Shanxi United Magnesium, currently *** reporting Chinese producer, began commercial production of alloy magnesium in *** and Ningxia Huayi began commercial production in ***. In addition, Winca (Hebi) *** its capacity to produce alloy magnesium during *** and Regal Magnesium increased its capacity produce alloy magnesium in ***.

Production and capacity utilization also generally increased throughout the period for which data were collected in these reviews. Reported aggregate production of alloy magnesium in China increased

⁴¹ The periods of review for the two most recently completed administrative reviews were: April 1, 2006 to March 31, 2007, and April 1, 2008 to March 31, 2009.

⁴² At the request of counsel for US Magnesium, data concerning nonsubject pure magnesium from Chinese producers were also requested in the Commission’s questionnaires submitted in these reviews. Counsel for US Magnesium noted that “{b}ecause capacity to produce pure magnesium can be used to produce alloy magnesium, the Commission should also collect these data for pure magnesium.” *US Magnesium’s Comments On The Draft Questionnaires*, August 11, 2010, p. 6. The four responding producers of alloy magnesium in China ***. During 2009, these firms reported an aggregate annual capacity to produce *** metric tons of pure magnesium in China, with an average capacity utilization rate of *** percent.

from *** metric tons in 2004 to *** metric tons in 2009. Reported production of alloy magnesium in China during the first half of 2010 was *** percent higher than the comparable period in 2009. Capacity utilization also generally increased from *** percent during 2004 to *** percent during 2009. Ningxia Huayi reported its capacity to produce alloy magnesium in China based on operating *** hours per week, *** weeks per year. Winka (Hebi) reported its capacity to produce alloy magnesium in China based on operating *** hours per week, *** weeks per year. The other two producers in China did not report the basis on which they made their capacity calculations.

Actual and Anticipated Changes in Capacity in China

Chinese producers were asked to indicate whether their firm had experienced any plant openings, relocations, expansions, acquisitions, consolidations, closures, prolonged shutdowns, production curtailments, revised labor agreements, or any other change in the character of their operations or organization relating to the production of magnesium since January 1, 2004. Four responding magnesium producers from China indicated in their questionnaire responses that they had experienced such changes since 2004 and provided details concerning these changes. Their responses are presented in table IV-13. The foreign producers were also asked to indicate whether their firm anticipated any changes in the character of their operations or organization relating to the production of magnesium in the future. One responding magnesium producer in China indicated that it anticipated such changes. Its response is presented in table IV-14.

Table IV-13

Magnesium: Changes in the character of Chinese operations

* * * * * *

Table IV-14

Magnesium: Anticipated changes in the character of Chinese operations

* * * * * *

Shipments of Magnesium Produced in China

Total aggregate shipments of magnesium produced by the four responding alloy magnesium producers in China increased by *** the level reported in 2004 by 2009. Total shipments were also *** percent higher during the first half of 2010 than reported in the comparable period of 2009. The responding Chinese producers' home market shipments of alloy magnesium and exports to other Asian markets accounted for the *** of their total shipments during 2009 at *** and *** percent, respectively, with exports to European Union markets accounting for *** percent. *** of the responding Chinese firms reported exports of alloy magnesium to the United States during the period examined in these reviews. Principal export markets reported for the period examined in these reviews include the following countries: ***.

INFORMATION RECEIVED FROM PRODUCERS IN RUSSIA

The Commission reported during its original investigations that AVISMA and SMW were the largest magnesium producers in Russia at that time.⁴³ Both producers provided questionnaire responses in the final phase of the original investigations. The interested parties participating in these five-year reviews indicated that Russian producers AVISMA, SMW, and SZD currently account for all production of the subject merchandise in Russia.⁴⁴ All three producers provided questionnaire responses in these five-year reviews of the antidumping duty orders.

Commerce has conducted four administrative reviews of the antidumping duty order on U.S. imports of pure and alloy magnesium from Russia. One magnesium producer in Russia, AVISMA, received a 0.41 percent *de minimis* margin in the first administrative review completed by Commerce and a 0.00 percent margin in the most recent administrative review completed by Commerce.⁴⁵

Data concerning capacity, production, capacity utilization, and exports to the United States, by primary Russian magnesium producers, are presented in table IV-15. In years prior to 2007, AVISMA was *** of primary magnesium in Russia, accounting for between *** percent and *** percent of total production of primary magnesium in Russia during 2004-06. Beginning in 2007, however, AVISMA *** of magnesium in Russia. During 2009, AVISMA accounted for *** percent of total primary magnesium production in Russia. According to the questionnaire response provided by AVISMA, the Russian producer exported the following amounts of pure magnesium to the United States during the period examined in these reviews: ***. AVISMA ***.

Table IV-15

Magnesium: Russian capacity, production, capacity utilization, and exports to the United States, by producer, 2004-09, January-June 2009, and January-June 2010

* * * * *

Table IV-16 presents available information concerning the magnesium producers in Russia from the original investigations (2003) and these first five-year reviews (2009). Data from the questionnaire responses submitted by Russian producers in these five-year reviews of the antidumping duty orders for 2004-09, January-June 2009, and January-June 2010 are presented in table IV-17.

Table IV-16

Magnesium: Select data for producers in Russia, 2003 and 2009

* * * * *

⁴³ There was also an unnamed third producer of magnesium in Russia at that time, which sold an “extremely small” amount of magnesium compared to known exports of magnesium from Russia to the United States. *Magnesium from China and Russia, Investigations Nos. 731-TA-1071-1072 (Final)*, INV-CC-031, March 11, 2005, p. VII-4.

⁴⁴ SZD’s main product is granular magnesium; it is not a producer of pure or alloy magnesium metal in ingot form. Rather, SZD purchases magnesium from *** as feedstock for its operations. *Response of SMW and SZD to the Commission’s Notice of Institution*, March 31, 2010, p. 6; and *Response of AVISMA to the Commission’s Notice of Institution*, March 31, 2010, p. 5.

⁴⁵ The periods of review for the two administrative reviews referenced were: October 4, 2004 to March 31, 2006, and April 1, 2008 to March 31, 2009.

Table IV-17

Magnesium: Russian capacity, production, shipments, and inventories, 2004-09, January-June 2009, and January-June 2010

* * * * *

Magnesium Capacity and Production in Russia

The aggregate capacity to produce pure and alloy magnesium ingot in Russia fell from *** metric tons during 2004-06 to *** metric tons in 2007-09. Reported capacity during the first six months of 2010 was the same as in the comparable period during 2009. Both firms acknowledged the declines in reported capacity and SMW, in particular, noted that its “***.”

In the Commission’s questionnaire, the producers were asked to describe any constraints that set the limit on production capacity. AVISMA responded as follows: “***.” SMW simply responded, “***.”

Magnesium production in Russia also generally declined throughout the period for which data were collected in these reviews, whereas capacity utilization fluctuated downward throughout. Reported aggregate production of magnesium in Russia fell from *** metric tons in 2004 to *** metric tons in 2009. Reported production of magnesium in Russia during the first half of 2010 was *** percent higher than in the comparable period in 2009. Capacity utilization during the period examined in these reviews ranged from a low of *** percent (***) to a high of *** percent (***). Capacity utilization in Russia was *** percent during the first half of 2010. The Russian producers reported their capacity to produce pure and alloy magnesium in Russia based on operating *** hours per week, *** weeks per year.

Both AVISMA and SMW indicated in their response to the Commission’s questionnaire that their magnesium production facilities ***. AVISMA explained that it “***.” SMW responded that “***.”

Actual and Anticipated Changes in Capacity in Russia

Russian producers were asked to indicate whether their firm had experienced any plant openings, relocations, expansions, acquisitions, consolidations, closures, prolonged shutdowns, production curtailments, revised labor agreements, or any other change in the character of their operations or organization relating to the production of magnesium since January 1, 2004. Two magnesium producers in Russia indicated in their questionnaire responses that they had experienced such changes since 2004 and provided details concerning these changes. Their responses are presented in table IV-18. The foreign producers were also asked to indicate whether their firm anticipated any changes in the character of their operations or organization relating to the production of magnesium in the future. Both magnesium producers in Russia indicated that they anticipated such changes. Their responses are presented in table IV-19.

Table IV-18

Magnesium: Changes in the character of subject foreign operations

* * * * *

Table IV-19

Magnesium: Anticipated changes in the character of subject foreign operations

* * * * *

Shipments of Magnesium Produced in Russia

Total aggregate shipments of magnesium ingot produced by magnesium producers in Russia fell overall by *** percent from *** metric tons in 2004 to *** metric tons in 2009. However, total shipments were *** during the first half of 2010 than reported in the comparable period of 2009. *** increasingly accounted for a relatively larger share of the Russian producers' total shipments of magnesium ingot during the period examined in these reviews. By 2009, *** accounted for *** percent of the Russian producers' total magnesium shipments. On the other hand, shipments of magnesium to the U.S. market fell as a share of total shipments throughout the period examined from a high of *** percent of total shipments during *** to *** by 2009. ***.

Russian producers were asked to identify export markets (other than the United States) that have been developed since 2004. SMW responded that it has “***.” AVISMA simply indicated that ***.

WORLD MARKET

Worldwide Capacity, Production, and Capacity Utilization

Worldwide capacity, production, and capacity utilization data for primary magnesium, by country, are presented in table IV-20. For the United States and Russia, the data presented are from questionnaire responses submitted in these current five-year reviews. The remaining 2004-08 data presented are estimates published by the USGS, and 2009 data presented for all countries other than the United States and Russia were obtained from various sources, as noted. The 2004-08 capacity data presented for all countries other than the United States and Russia include the capacity at operating plants as well as at plants that are on a standby basis and/or are sitting idle.

Table IV-20

Primary magnesium: World primary magnesium capacity, production, and capacity utilization, by country, 2004-08

Country	2004	2005	2006	2007	2008	2009
Capacity (metric tons)						
Brazil	12,000	12,000	12,000	18,000	18,000	*** ¹
Canada	120,000	123,000 ²	123,000 ²	9,000 ³	9,000 ³	(⁴)
China	447,000	528,000	602,000	873,000	953,000	1,300,000 ⁵
India	900	900	900	900	900	(⁴)
Israel	27,500	27,500	27,500	27,500	27,500	*** ¹
Kazakhstan	10,000	10,000	10,000	10,000	10,000	*** ¹
Russia	*** ¹	*** ¹	*** ¹	*** ¹	*** ¹	*** ¹
Serbia	5,000	5,000	5,000	5,000	5,000	(⁴)
Ukraine	15,000	15,000	15,000	15,000	15,000 ²	(⁴)
United States	*** ¹	*** ¹	*** ¹	*** ¹	*** ¹	*** ¹
Total	***	***	***	***	***	(⁴)

Table continued on following page

Table IV-20–Continued

Primary magnesium: World primary magnesium capacity, production, and capacity utilization, by country, 2004-08

Country	2004	2005	2006	2007	2008	2009
Production (metric tons)						
Brazil	6,000	6,000	6,000	18,000	15,000	*** ¹
Canada	54,000	50,000	65,000	16,300	0	0
China	442,000	470,000	520,000	625,000	559,000	470,000
India	(⁴)	(⁴)	(⁴)	(⁴)	(⁴)	(⁴)
Israel	28,000	27,853	24,581	29,618	35,000	*** ¹
Kazakhstan	18,000	20,000	21,000	21,000	21,000	*** ¹
Russia	*** ¹	*** ¹	*** ¹	*** ¹	*** ¹	*** ¹
Serbia	1,600	1,500	1,500	1,500	1,500	2,000
Ukraine	3	2,000	2,200	2,500	2,500	3,000
United States	*** ¹	*** ¹	*** ¹	*** ¹	*** ¹	*** ¹
Total	***	***	***	***	***	***
Capacity utilization (percent)						
Brazil	50.0	50.0	50.0	100.0	83.3	*** ¹
Canada	45.0	40.7	52.8	181.1	0.0	0.0
China	98.9	89.0	86.4	71.6	58.7	36.2
India	(⁴)	(⁴)	(⁴)	(⁴)	(⁴)	(⁴)
Israel	101.8	101.3	89.4	107.7	127.3	*** ¹
Kazakhstan	180.0	200.0	210.0	210.0	210.0	*** ¹
Russia	*** ¹	*** ¹	*** ¹	*** ¹	*** ¹	*** ¹
Serbia	32.0	30.0	30.0	30.0	30.0	(⁴)
Ukraine	(⁶)	13.3	14.7	16.7	16.7	(⁴)
United States	*** ¹	*** ¹	*** ¹	*** ¹	*** ¹	*** ¹
Total	***	***	***	***	***	(⁴)

¹ Commission questionnaire data.

² Includes 63,000 metric tons per year of idle capacity.

³ Idle capacity.

⁴ Not available.

⁵ *American Metal Market* article.

⁶ Less than 0.05 percent.

Source: Compiled from data submitted in response to Commission questionnaires; Kramer, Deborah A., "Magnesium," *Minerals Yearbooks 2004-08*, U.S. Department of the Interior, U.S. Geological Survey; and Lin, Linda, "China Mg Conf: Capacity Set to Quadruple in 5 Years, says CNIA," *AMM.com*, October 14, 2010, http://www.amm.com/2010-10-14_02-13-00.html, retrieved November 3, 2010.

As the published 2008 USGS data show,⁴⁶ the largest nonsubject countries that have capacity to produce primary magnesium are Brazil (RIMA Industrial S/A), Israel (Dead Sea Magnesium Ltd.), and Kazakhstan (Ust-Kamenogorsk Titanium and Magnesium Plant JSC). The Commission sent letters to the main magnesium producers in all three of these nonsubject countries requesting certain limited information on their magnesium operations. Responses to the Commission's request were received from all three companies. The information these firms provided to the Commission are presented in table IV-21.

Table IV-21

Magnesium: Certain nonsubject country capacity, production, shipments, and inventories, by type of magnesium and by firm, 2009

* * * * *

Global Exports

As shown in table IV-22, China is, by far, the world's largest exporter of product exported under HTS subheading 8104.19.00 (alloy magnesium ingot) (subject merchandise) and under HTS subheadings 8104.11.00 (pure magnesium ingot) (nonsubject merchandise) and 8104.30.00 (magnesium granules) (nonsubject merchandise). During 2009, China alone accounted for 48.0 percent of total global exports of alloy magnesium ingot (subject merchandise) and 65.2 percent of world exports of pure magnesium ingot and granules (nonsubject merchandise).

The Netherlands was the world's second largest exporter of magnesium, followed by Austria, the United States, Russia, and Germany. The Netherlands was home to a magnesium recycling facility (Remag Alloys BV Delfzijl ("Remag")) that was purchased by U.S.-based Aleris International, Inc. ("Aleris") in 2005. Bankrupt Remag had the capacity to recycle 10,000 metric tons of alloy magnesium per year.⁴⁷ Aleris currently describes itself as "a global leader in the production and sale of aluminum rolled and extruded products, recycled aluminum, and specifications alloy manufacturing."⁴⁸ The company also operates alloy recycling facilities in Germany, as well as the United States, the United Kingdom, Norway, and Brazil.⁴⁹ Austria, the world's third largest exporter of magnesium, is home to ECKA Granules, a magnesium recycler and producer of granular magnesium. ECKA Granules also maintains a presence in Germany, as well as the United States, the United Kingdom, Slovenia, Switzerland, Bahrain, Australia, China, and South Korea. ECKA Granules describes itself as "an international leader with its three high-performance sectors Alloying-, Metal-Powders- and Application Technology."⁵⁰ Germany, the world's sixth largest exporter of magnesium, is headquarters to Almamet GmbH, a multinational group of companies with production operations in China, Germany, India, Romania, Russia, Turkey, and Ukraine. The firm's line of products ranges from fine magnesium powders, chips, granules, and mixtures of magnesium and magnesium alloys, as well as lime and carbide.⁵¹

⁴⁶ Calendar year 2008 is the most recent annual period for which data are publicly available.

⁴⁷ Kramer, Deborah A., "Magnesium," *Minerals Yearbook 2005*, U.S. Department of the Interior, U.S. Geological Survey, p. 46.4.

⁴⁸ Aleris company website, <http://aleris.com>, retrieved January 24, 2011.

⁴⁹ Ibid.

⁵⁰ ECKA Granules company website, <http://www.ecka-granules.com>, retrieved January 24, 2011.

⁵¹ Almamet company website, <http://www.almamet.com>, retrieved January 24, 2011.

Table IV-22

Magnesium: Reported worldwide exports from subject countries, leading nonsubject countries, and all other countries, 2004-09

Exporting country	2004	2005	2006	2007	2008	2009
Quantity (metric tons)						
Pure magnesium:						
Subject (Russia)	33,536	25,962	21,481	17,829	12,962	12,452
Nonsubject:						
China	297,810	253,333	253,037	287,850	283,011	158,177
Netherlands	31,331	34,136	41,422	48,505	47,053	33,765
Austria	10,361	13,648	17,101	16,576	14,655	9,876
Canada	11,865	12,139	13,272	3,781	1,675	900
Germany	5,577	10,741	12,419	14,203	12,940	10,147
United States	2,606	2,878	6,968	6,123	4,679	8,986
Czech Republic	1	1	2	74	140	205
United Kingdom	394	733	349	435	936	101
Belgium	1,180	2,179	3,251	987	1,872	1,119
Taiwan	215	698	274	1,301	1,106	1,605
Denmark	26	26	413	11	3	6
Subtotal, leading nonsubject countries	361,367	330,512	348,509	379,846	368,070	224,887
All other countries	7,534	7,064	8,079	8,130	8,227	5,302
World	402,437	363,538	378,069	405,805	389,259	242,640
Alloy magnesium:						
Subject:						
China	80,349	92,911	85,681	106,566	100,789	63,620
Russia	7,732	3,603	9,502	3,541	2,397	431
Subtotal, subject	88,081	96,515	95,183	110,107	103,186	64,051
Nonsubject:						
Netherlands	26,047	28,004	29,944	34,363	38,606	30,386
Austria	4,086	6,679	7,277	16,277	18,009	13,068
Canada	26,592	26,179	19,844	13,509	2,344	151
Germany	3,497	4,392	8,554	9,878	11,389	2,052
United States	3,128	735	1,177	6,985	6,505	8,876
Czech Republic	9,702	9,326	9,162	9,709	10,545	5,486
United Kingdom	5,704	5,588	4,965	4,867	4,061	2,707
Belgium	553	1,155	1,991	1,451	1,185	72
Taiwan	1,459	4,231	1,272	975	1,094	1,049
Denmark	8,589	4,269	2,253	73	81	0
Subtotal, leading nonsubject countries	89,358	90,558	86,439	98,086	93,820	63,847
All other countries	9,869	6,920	5,652	14,870	9,489	4,580
World	187,307	193,993	187,274	223,064	206,496	132,478

Table continued on following page.

Table IV-22–Continued

Magnesium: Reported worldwide exports from subject countries, leading nonsubject countries, and all other countries, 2004-09

Exporting country	2004	2005	2006	2007	2008	2009
Quantity (metric tons)						
All magnesium:						
Subject:						
China	80,349	92,911	85,681	106,566	100,789	63,620
Russia	41,267	29,566	30,983	21,370	15,359	12,883
Subtotal, subject	121,616	122,477	116,664	127,936	116,148	76,503
Nonsubject:						
China	297,810	253,333	253,037	287,850	283,011	158,177
Netherlands	57,378	62,140	71,366	82,868	85,659	64,151
Austria	14,447	20,327	24,378	32,853	32,664	22,944
Canada	38,458	38,317	33,116	17,290	4,019	1,051
Germany	9,074	15,133	20,973	24,081	24,329	12,199
United States	5,735	3,613	8,146	13,108	11,185	17,862
Czech Republic	9,703	9,327	9,164	9,783	10,685	5,691
United Kingdom	6,098	6,321	5,314	5,302	4,997	2,808
Belgium	1,733	3,334	5,242	2,438	3,057	1,191
Taiwan	1,674	4,929	1,546	2,275	2,200	2,653
Denmark	8,615	4,295	2,666	84	84	6
Subtotal, leading nonsubject countries	450,724	421,070	434,948	477,933	461,890	288,734
All other countries	17,403	13,984	13,731	23,000	17,717	9,882
World	589,744	557,531	565,342	628,868	595,754	375,119
Source: Global Trade Atlas, HTS 8104.19.00 (alloy magnesium ingots), 8104.11.00 (pure magnesium ingots), and 8104.30.00 (magnesium granules (believed to be virtually all pure from China)), retrieved November 3, 2010.						

PART V: PRICING AND RELATED INFORMATION

FACTORS AFFECTING PRICES

Raw Material Costs

The primary raw materials used in the production of pure magnesium are brine and certain process materials like fluxes, which remove oxidation from the metal. Of greatest importance to pure magnesium production are energy costs such as natural gas and electricity. The converse is true for alloy magnesium, with scrap magnesium making up a larger proportion of total raw material costs than energy. As discussed in greater detail in *Part III* of this report, raw materials accounted for *** percent of the total cost of goods sold (COGS) in 2004 for pure magnesium, and *** percent for alloy magnesium. Raw materials as a percentage of COGS sold steadily increased for pure magnesium, and accounted for *** percent of COGS in 2009. For alloy magnesium, raw materials as a percentage of COGS fluctuated, peaking at *** percent of COGS in 2005 and falling to *** percent of COGS in 2009.

U.S. producers, importers, and foreign producers were asked about the effect of raw material prices on the selling price of magnesium and whether they expected changes in their raw material costs in the foreseeable future. Many firms stated that energy costs are a major factor in magnesium production and are anticipated to increase in the future. Although U.S. producer *** reported that the change in raw material prices has not affected the firm's selling prices for magnesium, most firms reported that increases in raw materials costs have resulted in an increase in the final selling price.¹ ***.

U.S. Inland Transportation Costs

Both U.S. producers and importers indicated that their firms generally arrange for transportation to the customers' locations. The eight responding U.S. producers reported that U.S. inland transportation costs for magnesium range from 0 to 6 percent of the delivered price. Importers reported that U.S. inland transportation costs of magnesium range from 0 to 10 percent, with 5 of 8 responding importers reporting that these costs range between 3 to 10 percent. A summary of the U.S. inland shipping distances for U.S.-produced magnesium and imported magnesium with associated shares of U.S. shipments by distance shipped for the seven responding U.S. producers and ten responding importers is shown in the following tabulation.

Distance shipped	Shares of U.S. shipments (percent)	
	U.S.-produced	Imported from all sources
Within 100 miles	***	34.7
101 to 1,000 miles	***	61.2
Over 1,000 miles	***	4.3
Total	100.0	100.0
Note.—Because of rounding, figures may not add to the totals shown.		
Source: Compiled from data submitted in response to Commission questionnaires.		

¹ ***.

PRICING PRACTICES

Pricing Methods

*** of the responding domestic producers reported selling magnesium on a transaction-by-transaction basis, and *** of these producers reported using contracts as well. *** of the responding importers reported transaction-by-transaction negotiations; of these importers, four additionally used contracts, and another reported using price lists.

Contract vs. Spot Sales

Eight U.S. producers and nine importers reported their 2009 U.S. commercial shipments of magnesium by type of sale;² their shipment shares, based on quantity, are shown in the following tabulation.³ As the tabulation shows, U.S.-produced magnesium is most commonly sold via long-term contracts, and on a spot basis for importers.⁴

Type of sale	Shares of 2009 U.S. commercial shipments (percent)	
	U.S. producers	U.S. importers
Spot	***	64.9
Short-term contracts	***	35.1
Long-term contracts	***	0.0
Total	100.0	100.0
Note.—Because of rounding, figures may not add to the totals shown.		
Source: Compiled from data submitted in response to Commission questionnaires.		

Four U.S. producers reported typical terms for their long-term contracts. *** reported that their long-term contracts averaged 2 to 3 years, and reported that both price and quantity were fixed by the contract and could not be renegotiated during the contract period.⁵ *** reported that their long-term contracts averaged 5 years and could be renegotiated during the contract period. U.S. producer *** reported the existence of meet-or-release clauses in its long-term contracts, while the other three producers reported that their long-term contracts did not contain meet-or-release clauses.

² Russian producer *** reported that in 2009, contracts lasting one year or longer accounted for *** percent of home market sales and *** percent of third-country sales. *** anticipates that *** will comprise almost *** percent of its total sales in 2011. *** noted that it ***. ***.

³ One Chinese producer (***) reported that it sold 100 percent of its sales on a spot basis. The remaining three Chinese producers did not provide contract information to staff. U.S. foreign producer questionnaire response, section III-2.

⁴ Spot sales are usually for one-time delivery; short-term sales are for multiple deliveries for up to 12 months after the purchase agreement; and long-term sales are for multiple deliveries for more than 12 months after the purchase agreement. Short-term and long-term sales may be arranged by contracts or oral agreements.

⁵ *** noted that two long-term contracts have indexed prices. U.S. producer questionnaire response, section IV-7.

Six U.S. producers reported that their short-term contracts are typically six months to a year in length. Three importers reported the length of their short-term contracts, ranging from two to twelve months. Four of the five responding U.S. producers and all three responding importers reported that prices of short-term contracts could not be renegotiated. Four U.S. producers and all three importers reported that their short-term contracts fixed both price and quantity, while two U.S. producers reported that their contracts fixed price only.⁶

*** all purchased magnesium on a long-term contract basis from *** in 2009, and represented approximately *** percent of *** total sales. In addition, three smaller purchasers bought 75 percent or more of their magnesium on a long-term contract basis from several suppliers. Of the remaining 17 responding purchasers, 14 purchased at least 95 percent of their magnesium on a short-term contract basis in 2009. *** reported that it purchased *** percent of its domestic magnesium from *** on a short-term contract basis. Five of the smallest U.S. purchasers bought 100 percent of their magnesium on a spot sales basis. There was no distinct relationship between contract length and firm type.

US Magnesium reported that although during the last few years it has had a higher percentage of long-term contracts, it expects short-term contracts to cover approximately *** percent of its sales volumes in 2011.^{7 8} The remaining *** percent of its sales volume are long-term contracts with ***.⁹ Table V-1 summarizes US Magnesium's forecasted contract sales for 2011. Currently, US Magnesium has signed contracts for 2011 with *** firms totaling approximately *** metric tons, which represents a *** from 2009. If all forecasted contracts for 2011 are signed, US Magnesium's sale volumes will *** from 2009.¹⁰

Table V-1

Magnesium: US Magnesium's forecasted domestic and foreign contract sales for 2011

* * * * *

Russian producer *** reported its long-term customers in Russia and third-country markets. For 2011, *** has already committed *** metric tons of magnesium to *** key customers, with an expected total production of *** metric tons of magnesium in 2011.¹¹ ***.¹² The tabulation below summarizes *** key contract customers from 2009 to 2011.

* * * * *

Russian producer *** reported that ***.¹³ *** reported its long-term customers in Russia and third-country markets. For 2011, *** has committed approximately *** metric tons of magnesium to ***

⁶ *** noted that one short-term contract has indexed prices. U.S. producer questionnaire response, section IV-7.

⁷ Hearing transcript, p. 138 (Tissington).

⁸ In 2009, *** percent of US Magnesium's sales were on a short-term contract basis, totaling approximately \$*** dollars. U.S. producer questionnaire response, section IV-2 and IV-6. US Magnesium's posthearing brief, p. 12.

⁹ ***. US Magnesium's posthearing brief, responses to questions from Commissioner Okun, p. 3 and exhibit 6.

¹⁰ Including material that was ***. U.S. producer questionnaire response, sections IV-2 and IV-2a.

¹¹ ***.

¹² When asked if it received any request for quotes (RFQs) from U.S. purchasers in 2010, *** stated that ***. *** further added that ***. Email from ***, January 10, 2011.

¹³ *** reported that ***.

key customers, with an expected total capacity of *** metric tons of magnesium in 2011.^{14 15} The tabulation below summarizes *** contract customers for 2011.

* * * * *

Sales Terms and Discounts

Four of the eight responding U.S. producers and one of 12 responding importers reported using discounts for their sales of magnesium. *** reported offering annual total volume discounts, and *** reported offering both annual total volume discounts and quantity discounts. Importer *** reported offering both annual total volume discounts and quantity discounts. *** stated that discounts are negotiated on a transaction-by-transaction basis, which generally takes into account the competitive situation, potential purchase volumes, and a committed purchasing percentage.¹⁶

Four of the eight responding U.S. producers (***) and the sole responding Chinese producer (***) reported selling 90 to 100 percent of their magnesium on a produced-to-order basis. U.S. producers *** and six of the seven responding importers reported selling 80 to 100 percent of their magnesium from domestic inventories, and one importer (***) reported selling 100 percent of its magnesium from the foreign manufacturer's inventory.

U.S. producers' lead times when selling from inventory ranged from 3 to 35 days, or 1 to 3 weeks for sales of magnesium that is produced-to-order. U.S. importers reported lead times of 2 to 30 days from domestic inventory or 35 to 45 days for foreign manufacturers' inventory. Chinese producer *** reported lead times of 10 days from its inventory or 15 days for sales of product that is produced-to-order.

PRICE DATA

The Commission asked U.S. producers and importers of magnesium to provide quarterly data for the total quantity and f.o.b. value of magnesium that was shipped to unrelated customers in the U.S. market during the period January 2004 to December 2010. The products for which pricing data were requested are as follows:

Product 1.--Pure magnesium ingots containing at least 99.8 percent magnesium but less than 99.95 percent magnesium.

Product 2.--Alloy magnesium ingots containing less than 99.8 percent magnesium sold to aluminum alloyers and meeting ASTM specifications for alloy magnesium.

Product 3.--Alloy magnesium ingots containing less than 99.8 percent magnesium sold to aluminum alloyers and not meeting ASTM specifications for alloy magnesium.

Product 4.--Alloy magnesium ingots containing less than 99.8 percent magnesium sold to diecasters and meeting ASTM specifications for alloy magnesium.

¹⁴ ***.

¹⁵ An additional *** metric tons of pure magnesium will be dedicated to ***. Foreign producer questionnaire response, section II-3.

¹⁶ U.S. producer questionnaire response, section IV-4.

Five U.S. producers and nine importers provided usable pricing data for sales of the requested products. Two U.S. producers, ***, reported pricing data for product 1; one U.S. producer, ***, reported pricing data for product 2; five U.S. producers (***) provided pricing data for product 3; and three U.S. producers (***) reported pricing data for product 4.¹⁷ One importer (***) reported pricing data for product 4 from China. Four importers (***) reported pricing data for product 1 from Russia. Eight importers reported pricing data for products from nonsubject countries including six for product 1, one for product 2, one for product 3, and two for product 4.^{18 19} Not all firms reported pricing for all products for all quarters. Reported pricing data for the four products are shown in tables V-2 to V-6 and figures V-1 to V-4. These data accounted for 77.7 percent of the quantity of U.S. producers' U.S. shipments of magnesium during the period of investigation.²⁰ Pricing data for product from China accounted for 8.5 percent of total U.S. imports from China during the period of investigation; pricing data for magnesium from Russia accounted for 83.9 percent of total U.S. imports from Russia during the period of investigation.

Table V-2

Magnesium: Weighted-average f.o.b. prices and quantities of domestic and imported product 1, and margins of underselling/(overselling), January 2004-June 2010

* * * * * * *

Table V-3

Magnesium: Weighted-average f.o.b. prices and quantities of domestic product 2, January 2004-June 2010

* * * * * * *

Table V-4

Magnesium: Weighted-average f.o.b. prices and quantities of domestic product 3, January 2004-June 2010

* * * * * * *

Table V-5

Magnesium: Weighted-average f.o.b. prices and quantities of domestic and imported product 4, and margins of underselling/(overselling), January 2004-June 2010

* * * * * * *

¹⁷ ***.

¹⁸ The importers that reported data from nonsubject countries include *** for product 1, *** for product 2, *** for product 3, and *** for product 4.

¹⁹ Quantity data for nonsubject countries as well as China, Russia, and the United States are presented graphically in appendix E. As discussed in *Part IV* of this report, imports from nonsubject countries have comprised a substantial share of overall imports.

²⁰ Data for commercial shipments of magnesium include some magnesium in other than ingot form, but pricing data were requested for the ingot form only.

Figure V-1

Magnesium: U.S. weighted-average quarterly f.o.b. selling prices and quantities of domestic and imported product 1, January 2004-June 2010

* * * * *

Figure V-2

Magnesium: U.S. weighted-average quarterly f.o.b. selling prices and quantities of domestic product 2, January 2004-June 2010

* * * * *

Figure V-3

Magnesium: U.S. weighted-average quarterly f.o.b. selling prices and quantities of domestic product 3, January 2004-June 2010

* * * * *

Figure V-4

Magnesium: U.S. weighted-average quarterly f.o.b. selling prices and quantities of domestic and imported product 4, January 2004-June 2010

* * * * *

Table V-6

Magnesium: Summary of weighted-average f.o.b. prices for products 1-4 from the United States, China, and Russia

Item	Number of quarters	Low price (per pound)	High price (per pound)	Change in price ¹ (percent)
Product 1				
United States	26	\$***	\$***	***
Russia	23	***	***	***
Product 2				
United States	10	***	***	***
Product 3				
United States	26	***	***	***
Product 4				
United States	26	***	***	***
China	1	***	***	--
¹ Percentage change from the first quarter in which price data were available to the last quarter in which price data were available, based on unrounded data.				
Source: Compiled from data submitted in response to Commission questionnaires.				

Price Trends

Weighted-average f.o.b. sale prices of all U.S.-produced magnesium products fluctuated but increased *** from their 2004 levels.²¹ Overall, prices for all four products increased from the first quarter of 2004 to the second quarter of 2010, by amounts ranging from *** percent (***) to *** percent (***)). Prices generally increased in 2004, began falling by the third quarter of 2005 and then experienced *** increases in the fourth quarter of 2007 and the first quarter of 2008.²² For U.S.-produced pure magnesium (product 1), prices generally rose from 2004 through 2010, but experienced a slump in prices from the third quarter of 2005 through the third quarter of 2007.²³ Prices for U.S.-produced alloy magnesium (products 2-4) fluctuated more frequently, with additional periods of falling prices.

For the imported Chinese products, only one quarter of data is available for product 4, so trends are not available.

The weighted-average f.o.b. sale prices of magnesium imported from Russia followed similar trends to those of U.S.-produced magnesium. Prices of imported Russian product 1 generally increased from 2004 through the first quarter of 2009, with several quarters of falling prices during the first half of 2006 and the last three quarters of 2009. Overall, prices for product 1 imported from Russia increased from the first quarter of 2004 to the second quarter of 2010 by *** percent.

U.S. purchasers were asked if there has been a change in the relative prices of domestically produced and Chinese-produced magnesium since 2004. Twenty-one of 26 responding purchasers reported that the price of U.S.-produced magnesium has increased relative to the price of magnesium from China, three purchasers reported that the prices have changed by the same amount, one purchaser reported no change in price, and one purchaser reported that U.S.-produced magnesium has decreased relative to the price of magnesium from China.

U.S. purchasers were asked if there has been a change in the relative prices of domestically produced and Russian-produced magnesium since 2004. Nineteen of 22 responding purchasers reported that the price of U.S.-produced magnesium has increased relative to the price of magnesium from Russia, two purchasers reported that the prices have changed by the same amount, and one purchaser reported no change in price.

Price Comparisons

Margins of underselling and overselling for the period are presented by product category in table V-7 below. The data show that prices of imports from China were lower than the U.S. producers' prices in the only quarterly comparison, with an underselling margin of *** percent. The data show that prices of imports from Russia were higher than the U.S. producers' prices in 19 out of 23 quarterly comparisons, with overselling margins ranging from 1.5 to 57.1 percent, and an average margin of 13.7 percent. The prices of imports from Russia were lower than U.S. producers' prices in four quarterly comparisons, with underselling margins ranging from 1.3 to 30.2 percent, and an average margin of 11.2 percent.

²¹ Between 2004 and 2010, the U.S. price of magnesium has ranged from \$1.13 per pound to \$3.63 per pound, with the largest increases occurring between 2007 and 2008. *Platts Metal Week* and *Metal Bulletin* as cited in the U.S. Geological Survey Mineral Industry Surveys, *Magnesium, 2004-2010*.

²² According to petitioners, after the petition was filed in 2004, spot prices in the U.S. market quickly began to increase; however, it took time for existing contracts with low prevailing prices to expire and for new contracts to be put in place. Hearing transcript, p. 39 (Tissington).

²³ US Magnesium reported its forecasted contract sales for 2011 (see page V-3). With ***, US Magnesium's contracted sales for 2011 suggest that prices for pure magnesium will ***. U.S. Magnesium's weighted-average f.o.b. sale price for alloy magnesium is anticipated to range from \$*** to \$*** in 2011.

Table V-7

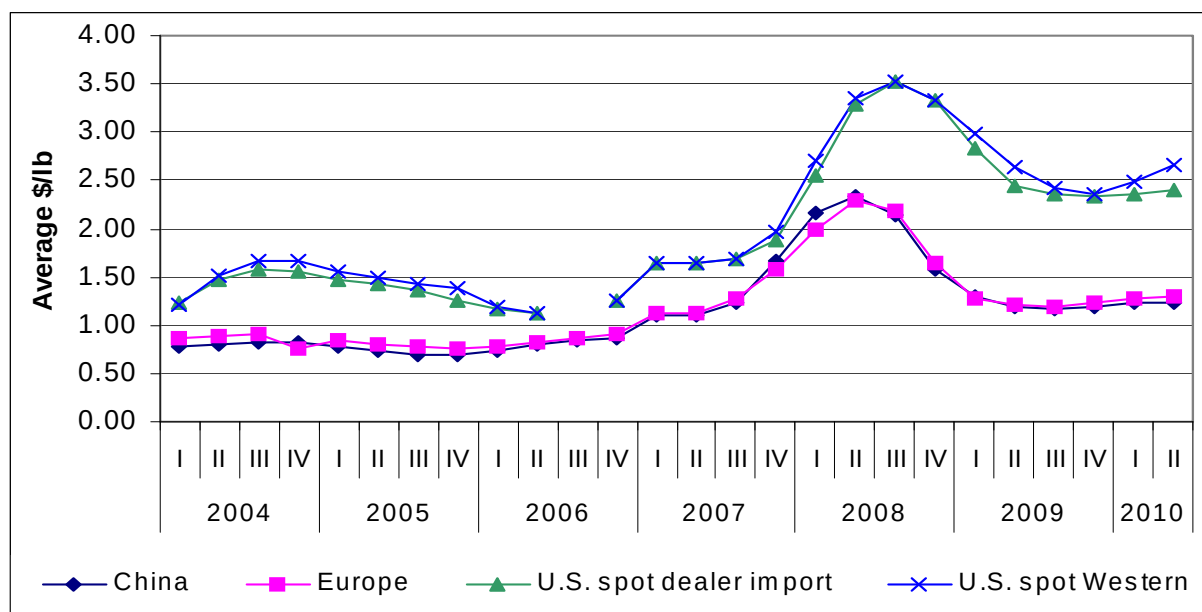
Magnesium: Instances of underselling/(overselling) by magnesium from China and Russia and the ranges and averages of margins for products 1-4, January 2004-June 2010

Item	Underselling					Overselling				
	Number of instances	Range (percent)	Quantity of imports from China (metric tons)	Quantity of imports from Russia (metric tons)	Average margin (percent)	Number of instances	Range (percent)	Quantity of imports from China (metric tons)	Quantity of imports from Russia (metric tons)	Average margin (percent)
By product:										
Product 1	4	1.3 to 30.2	(1)	***	11.2	19	(1.5) to (57.1)	(1)	***	(13.7)
Product 2	0	(1)	(1)	(1)	(1)	0	(1)	(1)	(1)	(1)
Product 3	0	(1)	(1)	(1)	(1)	0	(1)	(1)	(1)	(1)
Product 4	1	***	***	(1)	***	0	(1)	(1)	(1)	(1)
By country:										
China	1	***		***	(1)	0	(1)	(1)	(1)	(1)
Russia	4	1.3 to 30.2		***	11.2	19	(1.5) to (57.1)		***	(13.7)
Total	5	1.3 to 30.2		5,967	11.2	19	(1.5) to (57.1)		***	(13.7)
¹ Not applicable.										
Source: Compiled from data submitted in response to Commission questionnaires.										

Public Price Data

Publicly available quoted magnesium prices are shown in figure V-5. The average U.S. spot Western price increased from \$1.22 per pound in the beginning of 2004, peaked at \$3.53 per pound during the third quarter of 2008, and fell to \$2.65 per pound in the second quarter of 2010. Quoted magnesium prices from the European free market followed similar price trends as quotes on the China free market. At the beginning of 2004, the average China free market and European free market prices were \$0.78 and \$0.86, respectively, peaking at \$2.33 and \$2.30 during the second quarter of 2008, and falling to \$1.24 and \$1.30, respectively, during the second quarter of 2010. The average U.S. prices were consistently higher than average prices in both China and Europe.

Figure V-5
Magnesium: Average quoted quarterly magnesium prices, by data source, January 2004-June 2010



Note.—Beginning-of-quarter prices and end-of-quarter prices were averaged together to obtain an average quarterly price. Prices for U.S. spot dealer import and U.S. spot Western were not published in the U.S. Geological Survey Mineral Industry Surveys for the third quarter of 2006.

Source: *Platts Metal Week* and *Metal Bulletin* as cited in the U.S. Geological Survey Mineral Industry Surveys, *Magnesium*, 2004-2010.

APPENDIX A

***FEDERAL REGISTER* NOTICES AND THE COMMISSION'S STATEMENT ON ADEQUACY**

comments. Include sufficient information with your comments to allow us to authenticate any scientific or commercial data you include.

The comments and recommendations that will be most useful and likely to influence agency decisions are: (1) Those supported by quantitative information or studies; and (2) Those that include citations to, and analyses of, the applicable laws and regulations. We will not consider or include in our administrative record comments we receive after the close of the comment period (*see* **DATES**) or comments delivered to an address other than those listed above (*see* **ADDRESSES**).

B. May I Review Comments Submitted by Others?

Comments, including names and street addresses of respondents, will be available for public review at the address listed under **ADDRESSES**. The public may review documents and other information applicants have sent in support of the application unless our allowing viewing would violate the Privacy Act or Freedom of Information Act. Before including your address, phone number, e-mail address, or other personal identifying information in your comment, you should be aware that your entire comment—including your personal identifying information—may be made publicly available at any time. While you can ask us in your comment to withhold your personal identifying information from public review, we cannot guarantee that we will be able to do so.

II. Background

To help us carry out our conservation responsibilities for affected species, the Endangered Species Act of 1973, section 10(a)(1)(A), as amended (16 U.S.C. 1531 *et seq.*), and our regulations in the Code of Federal Regulations (CFR) at 50 CFR 17, the Marine Mammal Protection Act of 1972, as amended (16 U.S.C. 1361 *et seq.*), and our regulations in the Code of Federal Regulations (CFR) at 50 CFR 18 require that we invite public comment before final action on these permit applications. Under the MMPA, you may request a hearing on any MMPA application received. If you request a hearing, give specific reasons why a hearing would be appropriate. The holding of such a hearing is at the discretion of the Service Director.

III. Permit Applications

[A.] Endangered Species

Applicant: Dr. Ajit Varki, Department of Cellular and Molecular Medicine,

University of California, San Diego, CA, PRT-236267

The applicant requests a permit to acquire from Coriell Institute, Camden, NJ, in interstate commerce DNA and/or cell lines from chimpanzee, (*Pan troglodytes*), gorilla (*Gorilla*), and Bornean orangutan (*Pongo pygmaeus*) for the purpose of scientific research. This notification covers activities to be conducted by the applicant over a one-year period.

Applicant: Exotic Feline Breeding Compound, Inc., Rosamond, CA, PRT-234072

The applicant requests a permit to import one captive bred male Iranian leopard (*Panthera pardus saxicolor*) from Aalborg Zoo, Denmark, for the purpose of enhancement of the survival of the species.

The following applicants each request a permit to import the sport-hunted trophy of one male bontebok (*Damaliscus pygargus pygargus*) culled from a captive herd maintained under the management program of the Republic of South Africa, for the purpose of enhancement of the survival of the species.

Applicant: Terrance David Braden, Williamston, MI, PRT-231677

Applicant: Alan Maiss, Reno, NV, PRT-228691

Applicant: Conroe Taxidermy, Conroe, TX, PRT-230925

On January 26, 2010, we published a **Federal Register** notice inviting the public to comment on several applications for permits to conduct certain activities with endangered species (75 FR 4103). We made an error in reporting the species of the animal in the Conroe Taxidermy application, which starts at the top of column 3 on page 4103. The animal is not a male Scimitar-horned oryx (*Oryx dammah*) as we reported in 75 FR 4103, but rather a male Bontebok (*Damaliscus pygargus pygargus*). All the other information we printed was correct. With this notice, we correct that error and reopen the comment period for PRT-230925.

[B.] [Endangered Marine Mammals and Marine Mammals]

Applicant: U.S. Fish and Wildlife Service, Jacksonville, FL, PRT-770191

The applicant requests a permit and a letter of authorization for the rescue, rehabilitation and release of unlimited number of stranded West Indian manatees (*Trichechus manatus*) in the waters of the United States, the import of rescued manatees, and import and export of biological specimens. This notification covers activities to be

conducted by the applicant over a 5-year period.

Concurrent with publishing this notice in the **Federal Register**, we are forwarding copies of the above applications to the Marine Mammal Commission and the Committee of Scientific Advisors for their review.

Dated: February 19, 2010.

Brenda Tapia,

Program Analyst, Branch of Permits, Division of Management Authority.

[FR Doc. 2010-4168 Filed 2-26-10; 8:45 am]

BILLING CODE 4310-55-P

DEPARTMENT OF THE INTERIOR

Bureau of Land Management

[LLNM910000 L18200000.XG0000]

Notice of Relocation/Change of Street Address for New Mexico State Office

AGENCY: Bureau of Land Management, Interior.

ACTION: Notice.

SUMMARY: The Bureau of Land Management, New Mexico State Office located at 1474 Rodeo Road, Santa Fe, New Mexico has relocated to 301 Dinosaur Trail, Santa Fe, New Mexico.

DATES: *Effective Date:* November 2, 2009.

SUPPLEMENTARY INFORMATION: The office at 1474 Rodeo Road remained open during the move which took place starting on October 26 through November 6, 2009. The mailing address remains the same (P.O. Box 27115, Santa Fe, New Mexico 87502-0115). The main office telephone number has changed to (505) 954-2000.

FOR FURTHER INFORMATION CONTACT: Rosemary Herrell, Branch Chief, Support Services, at (505) 438-7625, BLM New Mexico State Office, P.O. Box 27115, Santa Fe, New Mexico 87502-0115.

Linda S.C. Rundell,
State Director.

[FR Doc. 2010-4055 Filed 2-26-10; 8:45 am]

BILLING CODE 4310-FB-P

INTERNATIONAL TRADE COMMISSION

[Investigation No. 731-TA-1071 and 1072 (Review)]

Magnesium From China and Russia

AGENCY: United States International Trade Commission.

ACTION: Institution of five-year reviews concerning the antidumping duty orders on magnesium from China and Russia.

SUMMARY: The Commission hereby gives notice that it has instituted a review pursuant to section 751(c) of the Tariff Act of 1930 (19 U.S.C. 1675(c)) (the Act) to determine whether revocation of the antidumping duty orders on magnesium from China and Russia would be likely to lead to continuation or recurrence of material injury. Pursuant to section 751(c)(2) of the Act, interested parties are requested to respond to this notice by submitting the information specified below to the Commission;¹ to be assured of consideration, the deadline for responses is March 31, 2010. Comments on the adequacy of responses may be filed with the Commission by May 14, 2010. For further information concerning the conduct of these reviews and rules of general application, consult the Commission's Rules of Practice and Procedure, part 201, subparts A through E (19 CFR part 201), and part 207, subparts A, D, E, and F (19 CFR part 207), as most recently amended at 74 FR 2847 (January 16, 2009).

DATES: *Effective Date:* March 1, 2010.

FOR FURTHER INFORMATION CONTACT:

Mary Messer (tel: 202–205–3193, e-mail: mary.messer@usitc.gov), Office of Investigations, U.S. International Trade Commission, 500 E Street SW., Washington, DC 20436. Hearing-impaired persons can obtain information on this matter by contacting the Commission's TDD terminal on 202–205–1810. Persons with mobility impairments who will need special assistance in gaining access to the Commission should contact the Office of the Secretary at 202–205–2000. General information concerning the Commission may also be obtained by accessing its internet server (<http://www.usitc.gov>). The public record for these reviews may be viewed on the Commission's electronic docket (EDIS) at <http://edis.usitc.gov>.

SUPPLEMENTARY INFORMATION:

Background.—On April 15, 2005, the Department of Commerce issued antidumping duty orders on imports of magnesium (also known as magnesium metal) from China and Russia (70 FR

19928–19931). The Commission is conducting reviews to determine whether revocation of the orders would be likely to lead to continuation or recurrence of material injury to the domestic industry within a reasonably foreseeable time. It will assess the adequacy of interested party responses to this notice of institution to determine whether to conduct full reviews or expedited reviews. The Commission's determinations in any expedited review will be based on the facts available, which may include information provided in response to this notice.

Definitions.—The following definitions apply to these reviews:

(1) *Subject Merchandise* is the class or kind of merchandise that is within the scope of the five-year reviews, as defined by the Department of Commerce.

(2) The *Subject Countries* in these reviews are China and Russia.

(3) The *Domestic Like Product* is 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*. In its original determinations, the Commission found one *Domestic Like Product* to include pure and alloy magnesium, primary and secondary magnesium, and ingot (cast) and granular magnesium. Certain Commissioners defined the *Domestic Like Product* differently.

(4) The *Domestic Industry* is the U.S. producers as a whole of the *Domestic Like Product*, or those producers whose collective output of the *Domestic Like Product* constitutes a major proportion of the total domestic production of the product. In its original determinations, the Commission found one *Domestic Industry* consisting of all producers of the *Domestic Like Product*, including grinders that produce granular magnesium. Certain Commissioners defined the *Domestic Industry* differently.

(5) The *Order Date* is the date that the antidumping duty orders under review became effective. In these reviews, the *Order Date* is April 15, 2005.

(6) An *Importer* is any person or firm engaged, either directly or through a parent company or subsidiary, in importing the *Subject Merchandise* into the United States from a foreign manufacturer or through its selling agent.

Participation in the reviews and public service list.—Persons, including industrial users of the *Subject Merchandise* and, if the merchandise is sold at the retail level, representative consumer organizations, wishing to participate in the reviews as parties

must file an entry of appearance with the Secretary to the Commission, as provided in section 201.11(b)(4) of the Commission's rules, no later than 21 days after publication of this notice in the **Federal Register**. The Secretary will maintain a public service list containing the names and addresses of all persons, or their representatives, who are parties to the reviews.

Former Commission employees who are seeking to appear in Commission five-year reviews are advised that they may appear in a review even if they participated personally and substantially in the corresponding underlying original investigation. The Commission's designated agency ethics official has advised that a five-year review is not considered the "same particular matter" as the corresponding underlying original investigation for purposes of 18 U.S.C. 207, the post employment statute for Federal employees, and Commission rule 201.15(b) (19 CFR 201.15(b)), 73 FR 24609 (May 5, 2008). This advice was developed in consultation with the Office of Government Ethics. Consequently, former employees are not required to seek Commission approval to appear in a review under Commission rule 19 CFR § 201.15, even if the corresponding underlying original investigation was pending when they were Commission employees. For further ethics advice on this matter, contact Carol McCue Verratti, Deputy Agency Ethics Official, at 202–205–3088.

Limited disclosure of business proprietary information (BPI) under an administrative protective order (APO) and APO service list.—Pursuant to section 207.7(a) of the Commission's rules, the Secretary will make BPI submitted in these reviews available to authorized applicants under the APO issued in the reviews, provided that the application is made no later than 21 days after publication of this notice in the **Federal Register**. Authorized applicants must represent interested parties, as defined in 19 U.S.C. 1677(9), who are parties to the reviews. A separate service list will be maintained by the Secretary for those parties authorized to receive BPI under the APO.

Certification.—Pursuant to section 207.3 of the Commission's rules, any person submitting information to the Commission in connection with these reviews must certify that the information is accurate and complete to the best of the submitter's knowledge. In making the certification, the submitter will be deemed to consent, unless otherwise specified, for the

¹ No response to this request for information is required if a currently valid Office of Management and Budget (OMB) number is not displayed; the OMB number is 3117–0016/USITC No. 10–5–211, expiration date June 30, 2011. Public reporting burden for the request is estimated to average 15 hours per response. Please send comments regarding the accuracy of this burden estimate to the Office of Investigations, U.S. International Trade Commission, 500 E Street, SW., Washington, DC 20436.

Commission, its employees, and contract personnel to use the information provided in any other reviews or investigations of the same or comparable products which the Commission conducts under Title VII of the Act, or in internal audits and investigations relating to the programs and operations of the Commission pursuant to 5 U.S.C. Appendix 3.

Written submissions.—Pursuant to section 207.61 of the Commission's rules, each interested party response to this notice must provide the information specified below. The deadline for filing such responses is March 31, 2010. Pursuant to section 207.62(b) of the Commission's rules, eligible parties (as specified in Commission rule 207.62(b)(1)) may also file comments concerning the adequacy of responses to the notice of institution and whether the Commission should conduct expedited or full reviews. The deadline for filing such comments is May 14, 2010. All written submissions must conform with the provisions of sections 201.8 and 207.3 of the Commission's rules and any submissions that contain BPI must also conform with the requirements of sections 201.6 and 207.7 of the Commission's rules. The Commission's rules do not authorize filing of submissions with the Secretary by facsimile or electronic means, except to the extent permitted by section 201.8 of the Commission's rules, as amended, 67 FR 68036 (November 8, 2002). Also, in accordance with sections 201.16(c) and 207.3 of the Commission's rules, each document filed by a party to the reviews must be served on all other parties to the reviews (as identified by either the public or APO service list as appropriate), and a certificate of service must accompany the document (if you are not a party to the reviews you do not need to serve your response).

Inability to provide requested information.—Pursuant to section 207.61(c) of the Commission's rules, any interested party that cannot furnish the information requested by this notice in the requested form and manner shall notify the Commission at the earliest possible time, provide a full explanation of why it cannot provide the requested information, and indicate alternative forms in which it can provide equivalent information. If an interested party does not provide this notification (or the Commission finds the explanation provided in the notification inadequate) and fails to provide a complete response to this notice, the Commission may take an adverse inference against the party pursuant to section 776(b) of the Act in making its determinations in the reviews.

Information to be Provided in Response to this Notice of Institution: If you are a domestic producer, union/worker group, or trade/business association; import/export *Subject Merchandise* from more than one *Subject Country*; or produce *Subject Merchandise* in more than one *Subject Country*, you may file a single response. If you do so, please ensure that your response to each question includes the information requested for each pertinent *Subject Country*. As used below, the term "firm" includes any related firms.

(1) The name and address of your firm or entity (including World Wide Web address) and name, telephone number, fax number, and E-mail address of the certifying official.

(2) A statement indicating whether your firm/entity is a U.S. producer of the *Domestic Like Product*, a U.S. union or worker group, a U.S. importer of the *Subject Merchandise*, a foreign producer or exporter of the *Subject Merchandise*, a U.S. or foreign trade or business association, or another interested party (including an explanation). If you are a union/worker group or trade/business association, identify the firms in which your workers are employed or which are members of your association.

(3) A statement indicating whether your firm/entity is willing to participate in these reviews by providing information requested by the Commission.

(4) A statement of the likely effects of the revocation of the antidumping duty orders on the *Domestic Industry* in general and/or your firm/entity specifically. In your response, please discuss the various factors specified in section 752(a) of the Act (19 U.S.C. 1675a(a)) including the likely volume of subject imports, likely price effects of subject imports, and likely impact of imports of *Subject Merchandise* on the *Domestic Industry*.

(5) A list of all known and currently operating U.S. producers of the *Domestic Like Product*. Identify any known related parties and the nature of the relationship as defined in section 771(4)(B) of the Act (19 U.S.C. 1677(4)(B)).

(6) A list of all known and currently operating U.S. importers of the *Subject Merchandise* and producers of the *Subject Merchandise* in each *Subject Country* that currently export or have exported *Subject Merchandise* to the United States or other countries since the *Order Date*.

(7) A list of 3–5 leading purchasers in the U.S. market for the *Domestic Like Product* and the *Subject Merchandise* (including street address, World Wide Web address, and the name, telephone

number, fax number, and E-mail address of a responsible official at each firm).

(8) A list of known sources of information on national or regional prices for the *Domestic Like Product* or the *Subject Merchandise* in the U.S. or other markets.

(9) If you are a U.S. producer of the *Domestic Like Product*, provide the following information on your firm's operations on that product during calendar year 2009, except as noted (report quantity data in metric tons and value data in U.S. dollars, f.o.b. plant). If you are a union/worker group or trade/business association, provide the information, on an aggregate basis, for the firms in which your workers are employed/which are members of your association.

(a) Production (quantity) and, if known, an estimate of the percentage of total U.S. production of the *Domestic Like Product* accounted for by your firm's(s') production;

(b) Capacity (quantity) of your firm to produce the *Domestic Like Product* (i.e., the level of production that your establishment(s) could reasonably have expected to attain during the year, assuming normal operating conditions (using equipment and machinery in place and ready to operate), normal operating levels (hours per week/weeks per year), time for downtime, maintenance, repair, and cleanup, and a typical or representative product mix);

(c) The quantity and value of U.S. commercial shipments of the *Domestic Like Product* produced in your U.S. plant(s);

(d) The quantity and value of U.S. internal consumption/company transfers of the *Domestic Like Product* produced in your U.S. plant(s); and

(e) The value of (i) net sales, (ii) cost of goods sold (COGS), (iii) gross profit, (iv) selling, general and administrative (SG&A) expenses, and (v) operating income of the *Domestic Like Product* produced in your U.S. plant(s) (include both U.S. and export commercial sales, internal consumption, and company transfers) for your most recently completed fiscal year (identify the date on which your fiscal year ends).

(10) If you are a U.S. importer or a trade/business association of U.S. importers of the *Subject Merchandise* from the *Subject Country(ies)*, provide the following information on your firm's(s') operations on that product during calendar year 2009 (report quantity data in metric tons and value data in U.S. dollars). If you are a trade/business association, provide the information, on an aggregate basis, for the firms which are members of your association.

(a) The quantity and value (landed, duty-paid but not including antidumping) of U.S. imports and, if known, an estimate of the percentage of total U.S. imports of *Subject Merchandise* from each *Subject Country* accounted for by your firm's(s') imports;

(b) the quantity and value (f.o.b. U.S. port, including antidumping duties) of U.S. commercial shipments of *Subject Merchandise* imported from each *Subject Country*; and

(c) the quantity and value (f.o.b. U.S. port, including antidumping duties) of U.S. internal consumption/company transfers of *Subject Merchandise* imported from each *Subject Country*.

(11) If you are a producer, an exporter, or a trade/business association of producers or exporters of the *Subject Merchandise* in the *Subject Country(ies)*, provide the following information on your firm's(s') operations on that product during calendar year 2009 (report quantity data in metric tons and value data in U.S. dollars, landed and duty-paid at the U.S. port but not including antidumping duties). If you are a trade/business association, provide the information, on an aggregate basis, for the firms which are members of your association.

(a) Production (quantity) and, if known, an estimate of the percentage of total production of *Subject Merchandise* in each *Subject Country* accounted for by your firm's(s') production;

(b) Capacity (quantity) of your firm to produce the *Subject Merchandise* in each *Subject Country* (i.e., the level of production that your establishment(s) could reasonably have expected to attain during the year, assuming normal operating conditions (using equipment and machinery in place and ready to operate), normal operating levels (hours per week/weeks per year), time for downtime, maintenance, repair, and cleanup, and a typical or representative product mix); and

(c) The quantity and value of your firm's(s') exports to the United States of *Subject Merchandise* and, if known, an estimate of the percentage of total exports to the United States of *Subject Merchandise* from each *Subject Country* accounted for by your firm's(s') exports.

(12) Identify significant changes, if any, in the supply and demand conditions or business cycle for the *Domestic Like Product* that have occurred in the United States or in the market for the *Subject Merchandise* in each *Subject Country* since the *Order Date*, and significant changes, if any, that are likely to occur within a reasonably foreseeable time. Supply conditions to consider include technology; production methods;

development efforts; ability to increase production (including the shift of production facilities used for other products and the use, cost, or availability of major inputs into production); and factors related to the ability to shift supply among different national markets (including barriers to importation in foreign markets or changes in market demand abroad). Demand conditions to consider include end uses and applications; the existence and availability of substitute products; and the level of competition among the *Domestic Like Product* produced in the United States, *Subject Merchandise* produced in the *Subject Country(ies)*, and such merchandise from other countries.

(13) (OPTIONAL) A statement of whether you agree with the above definitions of the *Domestic Like Product* and *Domestic Industry*; if you disagree with either or both of these definitions, please explain why and provide alternative definitions.

Authority: These reviews are being conducted under authority of title VII of the Tariff Act of 1930; this notice is published pursuant to section 207.61 of the Commission's rules.

By order of the Commission.

Issued: February 24, 2010.

Marilyn R. Abbott,

Secretary to the Commission.

[FR Doc. 2010-4163 Filed 2-26-10; 8:45 am]

BILLING CODE 7020-02-P

DEPARTMENT OF JUSTICE

Notice of Lodging of Consent Decree Under the Clean Air Act

Under 28 CFR 50.7, notice is hereby given that on February 22, 2010, a proposed Consent Decree in *United States v. Cummins, Inc.*, case number 1:10-cv-00275, was lodged with the United States District Court for the District of Columbia.

The Decree resolves the claims of the United States against Cummins, Inc. ("Cummins") for violations of Title II of the Clean Air Act, 42 U.S.C. 7521 *et seq.* (the "Act"). The United States alleged that Cummins sold, offered for sale, or introduced or delivered for introduction into commerce new motor vehicle engines not covered by certificates of conformity, because the engines as actually sold, offered for sale, or introduced or delivered for introduction into commerce are materially different from the engines described in Cummins' applications for certificates of conformity, in that the engines were not equipped with the required emission

control system or aftertreatment device. Under the proposed Decree, Cummins shall: Pay a penalty of \$2.1 million, of which \$1,680,000 shall be paid to the United States and the remainder to the State of California under a parallel administrative agreement; institute a voluntary recall of the affected engines; retire 167.1 tons of NO_x and 30.5 tons of PM, the entire amount of excess pollution attributable to the violation; and dismiss with prejudice a pending Petition for Review in the DC Circuit.

The Department of Justice will receive for a period of thirty (30) days from the date of this publication comments relating to the Decree. Comments should be addressed to the Assistant Attorney General, Environment and Natural Resources Division, and either e-mailed to pubcomment-ees.enrd@usdoj.gov or mailed to P.O. Box 7611, U.S. Department of Justice, Washington, DC 20044-7611, and should refer to the Consent Decree between the United States and Cummins, DOJ Ref. No. 90-5-2-1-09351.

During the public comment period, the Decree may be examined on the following Department of Justice Web site, http://www.usdoj.gov/enrd/Consent_Decrees.html. A copy of the Decree may also be obtained by mail from the Consent Decree Library, P.O. Box 7611, U.S. Department of Justice, Washington, DC 20044-7611 or by faxing or e-mailing a request to Tonia Fleetwood (tonia.fleetwood@usdoj.gov), fax no. (202) 514-0097, phone confirmation number (202) 514-1547. In requesting a copy from the Consent Decree Library, please enclose a check in the amount of \$8.25 (25 cents per page reproduction cost) payable to the U.S. Treasury or, if by e-mail or fax, forward a check in that amount to the Consent Decree Library at the stated address.

Maureen Katz,

Assistant Section Chief, Environmental Enforcement Section, Environment and Natural Resources Division.

[FR Doc. 2010-4023 Filed 2-26-10; 8:45 am]

BILLING CODE 4410-15-P

DEPARTMENT OF JUSTICE

Notice of Lodging of Modification of Consent Decree Under the Comprehensive Environmental Response, Compensation and Liability Act

Notice is hereby given that on February 23, 2010, a proposed Consent Decree in *United States v. Schlumberger Technology Corporation*, Civil Action No. 2:10-cv-00783-TON, D.J. Ref. 90-

but not limited to, and especially with respect to the patents, when issued, 43 CFR Subpart 2743, and will contain the following terms, conditions and reservations:

1. A right-of-way thereon reserved to the United States for ditches or canals constructed by the authority of the United States, Act of August 30, 1890 (43 U.S.C. 945);
2. All minerals are reserved to the United States, together with the right to prospect for, mine, and remove such deposits from the same under applicable law and such regulations as the Secretary of the Interior may prescribe, including all necessary access and exit rights;
3. Valid existing rights;
4. Right-of-way N-42787 for fiber optic cable purposes granted to Sprint Communications Company, its successors and assigns, pursuant to the Act of October 21, 1976 (43 U.S.C. 1761);
5. Rights-of-way N-43924 and N-62432 for power line purposes granted to Sierra Pacific Power Company, its successors and assigns, pursuant to the Act of October 21, 1976 (43 U.S.C. 1761);
6. Right-of-way N-46213 for road purposes granted to Elko County, its successors and assigns, pursuant to the Act of October 21, 1976 (43 U.S.C. 1761);
7. Right-of-way N-61260 for telephone line purposes granted to Citizens Communications, its successors and assigns, pursuant to the Act of October 21, 1976 (43 U.S.C. 1761);
8. Right-of-way N-74438 for road purposes granted to William A. Crane, his successors and assigns, pursuant to the Act of October 21, 1976 (43 U.S.C. 1761);
9. Rights of N-77925 for oil and gas lease purposes granted to American Energy Independence Company LLC., pursuant to the Act of December 22, 1987, (30 U.S.C. 181 *et seq.*);
10. Rights of N-83385 for oil and gas lease purposes granted to Wolcott LLC., pursuant to the Act of December 22, 1987, (30 U.S.C. 181 *et seq.*);
11. Rights of N-86702 for oil and gas development contract purposes granted to Rock Investment Group, pursuant to the Act of February 25, 1920 (30 U.S.C. 181 *et seq.*); and
12. An appropriate indemnification clause protecting the United States from claims arising out of lessees/patentee's use, occupancy, or operations on the leased/patented lands.

On publication of this notice in the **Federal Register**, the land described above will be segregated from all other forms of appropriation under the public

land laws, including the general mining laws, except for leasing and/or conveyance under the R&PP Act, leasing under the mineral leasing laws, and disposals under the mineral material disposal laws.

Interested parties may submit comments involving the suitability of the land for a waste water treatment facility. Comments on the classification are restricted to whether the land is physically suited for the proposal, whether the use will maximize the future use or uses of the land, whether the use is consistent with local planning and zoning, or if the use is consistent with state and Federal programs.

Interested parties may submit comments regarding the specific use proposed in the application and plan of development, whether the BLM followed proper administrative procedures in reaching the decision to convey under the R&PP Act, or any other factor not directly related to the suitability of the land for R&PP use.

Before including your address, phone number, e-mail address, or other personal identifying information in your comment, you should be aware that your entire comment—including your personal identifying information—may be made publicly available at any time. While you can ask us in your comment to withhold your personal identifying information from public review, we cannot guarantee that we will be able to do so. Only written comments submitted to the Field Manager, BLM Tuscarora Field Office, will be considered properly filed. Any adverse comments will be reviewed by the BLM Nevada State Director. In the absence of any adverse comments, the decision will become effective on August 20, 2010. The land will not be available for conveyance or lease and eventual conveyance, as applicable, until after the decision becomes effective.

Authority: 43 CFR 2741.5.

David Overcast,

Manager, Tuscarora Field Office.

[FR Doc. 2010-14929 Filed 6-18-10; 8:45 am]

BILLING CODE 4310-HC-P

INTERNATIONAL TRADE COMMISSION

[Investigation Nos. 731-TA-1071 and 1072 (Review)]

Magnesium From China and Russia

AGENCY: United States International Trade Commission.

ACTION: Notice of Commission determinations to conduct full five-year

reviews concerning the antidumping duty orders on magnesium from China and Russia.

SUMMARY: The Commission hereby gives notice that it will proceed with full reviews pursuant to section 751(c)(5) of the Tariff Act of 1930 (19 U.S.C. 1675(c)(5)) to determine whether revocation of the antidumping duty orders on magnesium from China and Russia would be likely to lead to continuation or recurrence of material injury within a reasonably foreseeable time. A schedule for the reviews will be established and announced at a later date. For further information concerning the conduct of these reviews and rules of general application, consult the Commission's Rules of Practice and Procedure, part 201, subparts A through E (19 CFR part 201), and part 207, subparts A, D, E, and F (19 CFR part 207).

DATES: *Effective Date:* June 4, 2010.

FOR FURTHER INFORMATION CONTACT: Mary Messer (202-205-3193), Office of Investigations, U.S. International Trade Commission, 500 E Street, SW., Washington, DC 20436. Hearing-impaired persons can obtain information on this matter by contacting the Commission's TDD terminal on 202-205-1810. Persons with mobility impairments who will need special assistance in gaining access to the Commission should contact the Office of the Secretary at 202-205-2000. General information concerning the Commission may also be obtained by accessing its Internet server (<http://www.usitc.gov>). The public record for these reviews may be viewed on the Commission's electronic docket (EDIS) at <http://edis.usitc.gov>.

SUPPLEMENTARY INFORMATION: On June 4, 2010, the Commission determined that it should proceed to full reviews in the subject five-year reviews pursuant to section 751(c)(5) of the Act. The Commission found that both the domestic and respondent interested party group responses to its notice of institution (75 FR 9252, March 1, 2010) were adequate.¹ A record of the Commissioners' votes, the Commission's statement on adequacy, and any individual Commissioner's statements will be available from the Office of the Secretary and at the Commission's Web site.

Authority: These reviews are being conducted under authority of title VII of the Tariff Act of 1930; this notice is published pursuant to section 207.62 of the Commission's rules.

¹ Commissioner Dean A. Pinkert is not participating in these reviews.

Issued: June 14, 2010.

By order of the Commission.

Marilyn R. Abbott,

Secretary to the Commission.

[FR Doc. 2010-14883 Filed 6-18-10; 8:45 am]

BILLING CODE 7020-02-P

INTERNATIONAL TRADE COMMISSION

[USITC SE-10-020]

Government in the Sunshine Act Meeting Notice

AGENCY HOLDING THE MEETING:

International Trade Commission.

TIME AND DATE: June 24, 2010 at 10:45 a.m.

PLACE: Room 101, 500 E Street, SW., Washington, DC 20436, Telephone: (202) 205-2000.

STATUS: Open to the public.

MATTERS TO BE CONSIDERED:

1. Agenda for future meetings: none.
2. Minutes.
3. Ratification List.
4. Inv. Nos. 701-TA-465 and 731-TA-1161 (Final) (Certain Steel Grating from China)—briefing and vote. (The Commission is currently scheduled to transmit its determinations and Commissioners' opinions to the Secretary of Commerce on or before July 6, 2010.)

5. Outstanding action jackets: none.
In accordance with Commission policy, subject matter listed above, not disposed of at the scheduled meeting, may be carried over to the agenda of the following meeting.

Issued: June 14, 2010.

By order of the Commission.

William R. Bishop,

Hearings and Meetings Coordinator.

[FR Doc. 2010-15014 Filed 6-17-10; 11:15 am]

BILLING CODE 7020-02-P

INTERNATIONAL TRADE COMMISSION

[USITC SE-10-021]

Government in the Sunshine Act Meeting Notice

AGENCY HOLDING THE MEETING:

International Trade Commission.

TIME AND DATE: June 22, 2010 at 9:30 a.m.

PLACE: Room 101, 500 E Street, SW., Washington, DC 20436, Telephone: (202) 205-2000.

STATUS: Open to the public.

MATTERS TO BE CONSIDERED

1. Agenda for future meetings: None.

2. Minutes.
3. Ratification list.
4. Inv. No. 731-TA-1070B (Review) (Certain Tissue Paper Products from China)—briefing and vote. (The Commission is currently scheduled to transmit its determinations and Commissioners' opinions to the Secretary of Commerce on or before July 1, 2010).

5. Outstanding action jackets: None.
In accordance with Commission policy, subject matter listed above, not disposed of at the scheduled meeting, may be carried over to the agenda of the following meeting.

Issued: June 14, 2010.

By order of the Commission.

William R. Bishop,

Hearings and Meetings Coordinator.

[FR Doc. 2010-15013 Filed 6-17-10; 11:15 am]

BILLING CODE 7020-02-P

DEPARTMENT OF JUSTICE

Notice of Lodging of Consent Decree Under the Clean Water Act

Notice is hereby given that on June 2, 2010, a proposed Consent Decree (the "Decree") in *United States v. State of Alaska, Department of Transportation and Public Facilities*, Civil Case No. 3:10-cv-00115-JWS, was lodged with the United States District Court for the District of Alaska.

In a complaint filed on the same day, the United States alleged that the State of Alaska Department of Transportation and Public Facilities ("Alaska DOTPF") was liable, pursuant to Section 309(b) and (d) of the Clean Water Act, 33 U.S.C. 1319(b) and (d), for civil penalties and injunctive relief for discharging fill material without a permit at eleven sites on the Kenai Peninsula during the fall of 2002, in violation of Section 404 of the Act, 33 U.S.C. 1344. The complaint also alleged that Alaska DOTPF violated the Act's requirements governing the discharge of storm water at three road and bridge construction sites during the summers of 2005 and 2006, in violation of Section 402 of the Act, 33 U.S.C. 1342.

Pursuant to the Decree, Alaska DOTPF will (1) pay a civil penalty of \$140,000; (2) pay \$850,000 in mitigation to acquire and protect valuable riparian areas; (3) revegetate three sites at which unpermitted fill was discharged; and (4) undertake various actions to increase the training of its employees and increase the nature and quality of its efforts to inspect for and comply with storm water regulations.

The Department of Justice will receive, for a period of thirty (30) days

from the date of this publication, comments relating to the Decree. Comments should be addressed to the Assistant Attorney General, Environment and Natural Resources Division, and either e-mailed to pubcomment-ees.enrd@usdoj.gov or mailed to P.O. Box 7611, U.S. Department of Justice, Washington, DC 20044-7611, and should refer to *United States v. State of Alaska Department of Transportation and Public Facilities*, D.J. Ref. 90-5-1-1-08977.

During the public comment period, the Decree may be examined on the following Department of Justice Web site, http://www.usdoj.gov/enrd/Consent_Decrees.html. A copy of the Decree may also be obtained by mail from the Consent Decree Library, P.O. Box 7611, U.S. Department of Justice, Washington, DC 20044-7611 or by faxing or e-mailing a request to Tonia Fleetwood (tonia.fleetwood@usdoj.gov), fax no. (202) 514-0097, phone confirmation number (202) 514-1547. In requesting a copy from the Consent Decree Library, please enclose a check in the amount of \$7.75 (25 cents per page reproduction cost) payable to the U.S. Treasury or, if by e-mail or fax, forward a check in that amount to the Consent Decree Library at the stated address.

Maureen Katz,

Assistant Section Chief, Environmental Enforcement Section, Environment and Natural Resources Division.

[FR Doc. 2010-14811 Filed 6-18-10; 8:45 am]

BILLING CODE 4410-15-P

DEPARTMENT OF JUSTICE

Federal Bureau of Investigation

[OMB Number 1110-0011]

Violent Criminal Apprehension Program; Agency Information Collection Activities: Proposed Collection, Comments Requested

ACTION: 60-day notice of information collection under review: Revision of a currently approved collection due to expire 10/31/2010, Violent Criminal Apprehension Program.

The Department of Justice, Federal Bureau of Investigation, Critical Incident Response Group will be submitting the following information collection request to the Office of Management and Budget (OMB) for review and clearance in accordance with established review procedures of the Paperwork Reduction Act of 1995. The proposed information collection is published to obtain comments from the

ITP from the Service. The HCP will include the following: (1) Conservation measures for siting and constructing the Project, (2) postconstruction monitoring to gather data regarding the impact of the first phase on local Indiana bats; and (3) an Adaptive Management Plan to ensure appropriate procedures are in place which adequately modify operations to minimize and mitigate the effects the Project may have on the Indiana bat.

The Project will encompass portions of Adair, Sullivan, and Putnam Counties, Missouri, near the towns of Greencastle and Green City. It will directly affect 240 acres, or 0.7 percent of approximately 36,757 acres of privately leased rural land. This area is an agricultural landscape composed predominately of pasture land, with some cultivated cropland and isolated areas of deciduous forest scattered throughout.

The Project will provide as much as 300 megawatts (MW) of renewable energy from as many as 200 1.5-MW wind energy turbines and the related facilities (access roads, collection lines, operation and maintenance facilities (O&M), substations, and a transmission line). The Project will be constructed in two phases. Phase I involves up to 200 MWs of renewable energy and includes a 16-mile transmission line extending from the Project area east to a substation located southwest of the city of Kirksville, Missouri.

Phase II consists of the balance of the Project and will not be developed until at least 1 full year of postconstruction data is obtained, and the Applicant and the Service have agreed that all reasonable measures have been taken to minimize and mitigate harm to the Indiana bat. This information will be used to determine whether adaptive management is required and to assist in the design and operation of Phase II of the Project.

Turbine installation will temporarily impact a 125-to-150-foot radius surrounding a turbine, with the final footprint limited to a 25-foot radius from the turbine center. The rotor diameter of each turbine will be approximately 82.5 meters (271 feet), with the hub height expected to be at either 80 or 100 m. Assuming a 100-m hub height, the maximum height of each turbine will be 141.25 m (463 feet (ft)) when the rotor blade is at the top of its rotation.

Access roads during construction will be within a 50-ft right-of-way (ROW) and will be used for moving construction equipment among the turbine locations. The access roads will be reduced to 15 feet after construction

and will be used for Project maintenance.

Collection lines, used to transfer power from the turbines to the substations, will be buried underground and will not disturb the landscape after construction is completed. A transmission line will be constructed within a 150-ft-wide ROW. Wood H-frames, varying from 60 to 115 ft in height and spaced from 600 to 700 ft apart, will be used to support the transmission line. The Project may have up to four substations and two O&M facilities.

Environmental Review

The purpose of the public scoping process is to identify relevant issues that will influence the scope of the environmental analysis, including alternatives, and guide the process for developing the EIS. In addition to the Indiana bat, the Service has identified the following preliminary issues: Nonavian wildlife, avian wildlife and bats, topography, geology and soils, water and wetlands resources, air quality, vegetation and land use, and cultural resources.

Authority

We furnish this notice under NEPA regulations (40 CFR 1501.7 and 1508.22). The intent of this notice is to enable us to obtain suggestions and additional information from other agencies and the public on the scope of issues to be considered.

Dated: July 26, 2010.

Tom Melius,

Regional Director, Region 3, Fort Snelling, MN.

[FR Doc. 2010-19721 Filed 8-9-10; 8:45 am]

BILLING CODE 4310-55-P

INTERNATIONAL TRADE COMMISSION

[Investigation Nos. 731-TA-1071-1072 (Review)]

Magnesium From China and Russia

AGENCY: United States International Trade Commission.

ACTION: Scheduling of full five-year reviews concerning the antidumping duty orders on alloy magnesium from China and pure and alloy magnesium from Russia.

SUMMARY: The Commission hereby gives notice of the scheduling of full reviews pursuant to section 751(c)(5) of the Tariff Act of 1930 (19 U.S.C. 1675(c)(5)) (the Act) to determine whether revocation of the antidumping duty

orders on alloy magnesium from China and pure and alloy magnesium from Russia would be likely to lead to continuation or recurrence of material injury within a reasonably foreseeable time. For further information concerning the conduct of these reviews and rules of general application, consult the Commission's Rules of Practice and Procedure, part 201, subparts A through E (19 CFR part 201), and part 207, subparts A, D, E, and F (19 CFR part 207).

DATES: *Effective Date:* July 28, 2010.

FOR FURTHER INFORMATION CONTACT:

Mary Messer (202-205-3193), Office of Investigations, U.S. International Trade Commission, 500 E Street, SW., Washington, DC 20436. Hearing-impaired persons can obtain information on this matter by contacting the Commission's TDD terminal on 202-205-1810. Persons with mobility impairments who will need special assistance in gaining access to the Commission should contact the Office of the Secretary at 202-205-2000. General information concerning the Commission may also be obtained by accessing its Internet server (<http://www.usitc.gov>). The public record for these reviews may be viewed on the Commission's electronic docket (EDIS) at <http://edis.usitc.gov>.

SUPPLEMENTARY INFORMATION:

Background.—On June 4, 2010, the Commission determined that responses to its notice of institution of the subject five-year reviews were such that full reviews pursuant to section 751(c)(5) of the Act should proceed (75 FR 35086, June 21, 2010). A record of the Commissioners' votes, the Commission's statement on adequacy, and any individual Commissioner's statements are available from the Office of the Secretary and at the Commission's Web site.

Participation in the reviews and public service list.—Persons, including industrial users of the subject merchandise and, if the merchandise is sold at the retail level, representative consumer organizations, wishing to participate in these reviews as parties must file an entry of appearance with the Secretary to the Commission, as provided in section 201.11 of the Commission's rules, by 45 days after publication of this notice. A party that filed a notice of appearance following publication of the Commission's notice of institution of the reviews need not file an additional notice of appearance. The Secretary will maintain a public service list containing the names and addresses of all persons, or their

representatives, who are parties to the reviews.

Limited disclosure of business proprietary information (BPI) under an administrative protective order (APO) and BPI service list.—Pursuant to section 207.7(a) of the Commission's rules, the Secretary will make BPI gathered in these reviews available to authorized applicants under the APO issued in the reviews, provided that the application is made by 45 days after publication of this notice. Authorized applicants must represent interested parties, as defined by 19 U.S.C. 1677(9), who are parties to the reviews. A party granted access to BPI following publication of the Commission's notice of institution of the reviews need not reapply for such access. A separate service list will be maintained by the Secretary for those parties authorized to receive BPI under the APO.

Staff report.—The prehearing staff report in the reviews will be placed in the nonpublic record on November 8, 2010, and a public version will be issued thereafter, pursuant to section 207.64 of the Commission's rules.

Hearing.—The Commission will hold a hearing in connection with the reviews beginning at 9:30 a.m. on December 7, 2010, at the U.S. International Trade Commission Building. Requests to appear at the hearing should be filed in writing with the Secretary to the Commission on or before November 30, 2010. A nonparty who has testimony that may aid the Commission's deliberations may request permission to present a short statement at the hearing. All parties and nonparties desiring to appear at the hearing and make oral presentations should attend a prehearing conference to be held at 9:30 a.m. on December 2, 2010, at the U.S. International Trade Commission Building. Oral testimony and written materials to be submitted at the public hearing are governed by sections 201.6(b)(2), 201.13(f), 207.24, and 207.66 of the Commission's rules. Parties must submit any request to present a portion of their hearing testimony *in camera* no later than 7 business days prior to the date of the hearing.

Written submissions.—Each party to the reviews may submit a prehearing brief to the Commission. Prehearing briefs must conform with the provisions of section 207.65 of the Commission's rules; the deadline for filing is November 18, 2010. Parties may also file written testimony in connection with their presentation at the hearing, as provided in section 207.24 of the Commission's rules, and posthearing briefs, which must conform with the

provisions of section 207.67 of the Commission's rules. The deadline for filing posthearing briefs is December 16, 2010; witness testimony must be filed no later than three days before the hearing. In addition, any person who has not entered an appearance as a party to the reviews may submit a written statement of information pertinent to the subject of the reviews on or before December 16, 2010. On February 1, 2011, the Commission will make available to parties all information on which they have not had an opportunity to comment. Parties may submit final comments on this information on or before February 3, 2011, but such final comments must not contain new factual information and must otherwise comply with section 207.68 of the Commission's rules. All written submissions must conform with the provisions of section 201.8 of the Commission's rules; any submissions that contain BPI must also conform with the requirements of sections 201.6, 207.3, and 207.7 of the Commission's rules. The Commission's rules do not authorize filing of submissions with the Secretary by facsimile or electronic means, except to the extent permitted by section 201.8 of the Commission's rules, as amended, 67 FR 68036 (November 8, 2002). Even where electronic filing of a document is permitted, certain documents must also be filed in paper form, as specified in II (C) of the Commission's Handbook on Electronic Filing Procedures, 67 FR 68168, 68173 (November 8, 2002).

Additional written submissions to the Commission, including requests pursuant to section 201.12 of the Commission's rules, shall not be accepted unless good cause is shown for accepting such submissions, or unless the submission is pursuant to a specific request by a Commissioner or Commission staff.

In accordance with sections 201.16(c) and 207.3 of the Commission's rules, each document filed by a party to the reviews must be served on all other parties to the reviews (as identified by either the public or BPI service list), and a certificate of service must be timely filed. The Secretary will not accept a document for filing without a certificate of service.

Authority: These reviews are being conducted under authority of title VII of the Tariff Act of 1930; this notice is published pursuant to section 207.62 of the Commission's rules.

By order of the Commission.

Issued: August 3, 2010.

Marilyn R. Abbott,

Secretary to the Commission.

[FR Doc. 2010–19599 Filed 8–9–10; 8:45 am]

BILLING CODE 7020–02–P

DEPARTMENT OF JUSTICE

Notice of Lodging of Consent Decree Under the Clean Air Act

Notice is hereby given that on August 4, 2010, a proposed Consent Decree (the "Decree") in *United States v. Massachusetts Bay Transportation Authority ("MBTA") and Massachusetts Bay Commuter Railroad Company, L.L.C.*, Civil Action No. 1:10–cv–11311, was lodged with the United States District Court for the District of Massachusetts.

In a complaint, filed simultaneously with the Decree, the United States alleges that the Massachusetts Bay Transportation Authority ("MBTA") and the Massachusetts Bay Commuter Railroad Company, L.L.C. ("MBCR") violated the Clean Air Act, 42 U.S.C. 7401 *et seq.*, and 310 CMR § 7.11(2)(b), a regulation included in the Massachusetts' State Implementation Plan, by causing, suffering, allowing, or permitting the unnecessary foreseeable idling of a diesel powered locomotive for a continuous period of time longer than thirty minutes, and not subject to the regulation's exception.

Pursuant to the Decree, MBTA and MBCR will: (1) Install sufficient electric plug-in stations throughout the MBTA's commuter rail system to fully supply electric auxiliary power to all diesel locomotives that lay over at all of the MBTA's layover facilities; (2) implement a fuel switch supplemental environmental project ("SEP") that requires Defendants to switch the MBTA's entire commuter train fleet from low sulfur diesel fuel (500 ppm sulfur) to ultra-low sulfur diesel fuel (15 ppm sulfur) two years prior to federal regulations mandating the switch; and (3) retrofit 14 diesel locomotives with new head end power units that have increased emission controls. MBTA and MBCR will also pay a \$225,000 civil penalty to the United States pursuant to the Decree.

The Department of Justice will receive, for a period of thirty (30) days from the date of this publication, comments relating to the Decree. Comments should be addressed to the Assistant Attorney General, Environment and Natural Resources Division, and either e-mailed to pubcomment-ees.enrd@usdoj.gov or mailed to P.O. Box 7611, U.S.

sections 751(a)(1) and 777(i)(1) of the Act.

Dated: June 28, 2010.

Paul Piquado,

Acting Deputy Assistant Secretary for Import Administration.

Appendix—Issues in Decision Memorandum

Comment 1: Appropriate Labor Rate

Comment 2: Surrogate Values

a. Slats

b. Cores

c. Lacquer

Comment 3: Correction of Clerical Errors: Use of Wrong Surrogate Value for Paperboard

Comment 4: Separate Rate Calculation

[FR Doc. 2010-16502 Filed 7-6-10; 8:45 am]

BILLING CODE 3510-DS-P

DEPARTMENT OF COMMERCE

International Trade Administration

[A-570-896, A-821-819]

Magnesium Metal From the People's Republic of China and the Russian Federation: Final Results of the Expedited Sunset Reviews of the Antidumping Duty Orders

AGENCY: Import Administration, International Trade Administration, Department of Commerce.

SUMMARY: On March 1, 2010, the Department of Commerce (“the Department”) initiated sunset reviews of the antidumping duty orders on magnesium metal from the People's Republic of China (“PRC”) and the Russian Federation (“Russia”), pursuant to section 751(c) of the Tariff Act of 1930, as amended (“the Act”). On March 16, 2010, US Magnesium LLS, the petitioner in the magnesium metal investigation, notified the Department that it intended to participate in the PRC and Russia sunset reviews. The Department did not receive a substantive response from any respondent party in either review. Based on the notices of intent to participate and adequate responses filed by the domestic interested party, and the lack of response from any respondent interested party, the Department conducted expedited sunset reviews of the orders pursuant to section 751(c)(3)(B) of the Act and 19 CFR 351.218(e)(1)(ii)(C)(2). As a result of these sunset reviews, the Department finds that revocation of the orders would likely lead to continuation or recurrence of dumping, at the levels indicated in the “Final Results of Sunset Reviews” section of this notice, *infra*.

DATES: *Effective Date:* July 7, 2010.

FOR FURTHER INFORMATION CONTACT:

Frances Veith, AD/CVD Operations, Office 8, Import Administration, International Trade Administration, U.S. Department of Commerce, 14th Street and Constitution Avenue, NW., Washington, DC 20230; telephone: (202) 482-4295.

SUPPLEMENTARY INFORMATION:

Background

On March 1, 2010, the Department initiated sunset reviews of the Chinese and Russian antidumping duty orders on magnesium metal pursuant to section 751(c) of the Act. *See Initiation of Five-Year (“Sunset”) Review*, 75 FR 9160 (March 1, 2010); *see also Notice of Antidumping Duty Order: Magnesium Metal From the People's Republic of China*, 70 FR 19928 (April 15, 2005) and *Notice of Antidumping Duty Order: Magnesium Metal From the Russian Federation*, 70 FR 19930 (April 15, 2005) (collectively, the “Orders”). On March 16, 2010, the Department received timely notices of intent to participate in each of the sunset reviews from US Magnesium, pursuant to 19 CFR 351.218(d)(1)(i). In accordance with 19 CFR 351.218(d)(1)(ii)(A), US Magnesium claimed interested party status under section 771(9)(C) of the Act as a producer of the domestic like product.

On March 31, 2010, US Magnesium filed substantive responses in each of the sunset reviews, within the 30-day deadline as specified in 19 CFR 351.218(d)(3)(i). The Department did not receive a substantive response from any respondent interested party in either sunset review. As a result, pursuant to section 751(c)(3)(B) of the Act and 19 CFR 351.218(e)(1)(ii)(C)(2), the Department conducted expedited sunset reviews of the Orders.

Scope of the Order

PRC

The merchandise covered by the order is magnesium metal, which includes primary and secondary alloy magnesium metal, regardless of chemistry, raw material source, form, shape, or size. Magnesium is a metal or alloy containing by weight primarily the element magnesium. Primary magnesium is produced by decomposing raw materials into magnesium metal. Secondary magnesium is produced by recycling magnesium-based scrap into magnesium metal. The magnesium covered by the order includes blends of primary and secondary magnesium.

The subject merchandise includes the following alloy magnesium metal

products made from primary and/or secondary magnesium including, without limitation, magnesium cast into ingots, slabs, rounds, billets, and other shapes, magnesium ground, chipped, crushed, or machined into raspings, granules, turnings, chips, powder, briquettes, and other shapes: Products that contain 50 percent or greater, but less than 99.8 percent, magnesium, by weight, and that have been entered into the United States as conforming to an “ASTM Specification for Magnesium Alloy”¹ and thus are outside the scope of the existing antidumping orders on magnesium from the PRC (generally referred to as “alloy” magnesium).

The scope of the order excludes the following merchandise: (1) All forms of pure magnesium, including chemical combinations of magnesium and other material(s) in which the pure magnesium content is 50 percent or greater, but less than 99.8 percent, by weight, that do not conform to an “ASTM Specification for Magnesium Alloy;”² (2) magnesium that is in liquid or molten form; and (3) mixtures containing 90 percent or less magnesium in granular or powder form, by weight, and one or more of certain non-magnesium granular materials to make magnesium-based reagent mixtures, including lime, calcium metal, calcium silicon, calcium carbide, calcium carbonate, carbon, slag coagulants, fluorspar, nepheline syenite, feldspar, alumina (Al2O3), calcium aluminate, soda ash, hydrocarbons, graphite, coke, silicon, rare earth metals/mischmetal, cryolite, silica/fly ash, magnesium oxide, periclase, ferroalloys, dolomite lime, and colemanite.³

¹ The meaning of this term is the same as that used by the American Society for Testing and Materials in its *Annual Book of ASTM Standards: Volume 01.02 Aluminum and Magnesium Alloys*.

² This material is already covered by existing antidumping orders. *See Notice of Antidumping Duty Orders: Pure Magnesium From the People's Republic of China, the Russian Federation and Ukraine; Notice of Amended Final Determination of Sales at Less Than Fair Value: Antidumping Duty Investigation of Pure Magnesium From the Russian Federation*, 60 FR 25691 (May 12, 1995), and *Antidumping Duty Order: Pure Magnesium in Granular Form From the People's Republic of China*, 66 FR 57936 (November 19, 2001).

³ This third exclusion for magnesium-based reagent mixtures is based on the exclusion for reagent mixtures in the 2000–2001 investigations of magnesium from the PRC, Israel, and Russia. *See Notice of Final Determination of Sales at Less Than Fair Value: Pure Magnesium in Granular Form From the People's Republic of China*, 66 FR 49345 (September 27, 2001) (“*Pure Magnesium Granular PRC Final*”); *Notice of Final Determination of Sales at Less Than Fair Value: Pure Magnesium From Israel*, 66 FR 49349 (September 27, 2001) (“*Pure Magnesium Granular Israel Final*”); *Notice of Final Determination of Sales at Not Less Than Fair Value:*

Continued

The merchandise subject to the order is currently classifiable under items 8104.19.00 and 8104.30.00 of the Harmonized Tariff Schedule of the United States ("HTSUS"). Although the HTSUS items are provided for convenience and customs purposes, the written description of the subject merchandise is dispositive.

Russia

The merchandise covered by the order are primary and secondary pure and alloy magnesium metal, regardless of chemistry, raw material source, form, shape, or size. Magnesium is a metal or alloy containing by weight primarily the element magnesium. Primary magnesium is produced by decomposing raw materials into magnesium metal. Secondary magnesium is produced by recycling magnesium-based scrap into magnesium metal. The magnesium covered by the order includes blends of primary and secondary magnesium.

The subject merchandise includes the following pure and alloy magnesium metal products made from primary and/or secondary magnesium, including, without limitation, magnesium cast into ingots, slabs, rounds, billets, and other shapes, and magnesium ground, chipped, crushed, or machined into raspings, granules, turnings, chips, powder, briquettes, and other shapes: (1) Products that contain at least 99.95 percent 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 magnesium, by weight (generally referred to as "pure" magnesium); and (3) chemical combinations of magnesium and other material(s) in which the magnesium content is 50 percent or greater, but less than 99.8 percent, by weight, whether or not conforming to an "ASTM Specification for Magnesium Alloy." ⁴

The scope of the order excludes: (1) Magnesium that is in liquid or molten form; and (2) mixtures containing 90 percent or less magnesium in granular or powder form by weight and one or more of certain non-magnesium granular materials to make magnesium-based reagent mixtures, including lime, calcium metal, calcium silicon, calcium carbide, calcium carbonate, carbon, slag coagulants, fluorspar, nepheline syenite, feldspar, alumina (Al₂O₃), calcium aluminate, soda ash, hydrocarbons, graphite, coke, silicon, rare earth metals/mischmetal, cryolite, silica/fly ash, magnesium oxide, periclase, ferroalloys, dolomite lime, and colemanite.⁵

The merchandise subject to this investigation is classifiable under items 8104.11.00, 8104.19.00, and 8104.30.00 of the Harmonized Tariff Schedule of the United States ("HTSUS"). Although the HTSUS items are provided for convenience and customs purposes, the written description of the merchandise under investigation is dispositive.

Analysis of Comments Received

A complete discussion of all issues raised in these sunset reviews are addressed in the accompanying Issues and Decision Memorandum, which is hereby adopted by this notice. See the Department's memorandum entitled, "Issues and Decision Memorandum for the Final Results in the Expedited Sunset Reviews of the Antidumping Duty Orders on Magnesium Metal from the People's Republic of China and the Russian Federation," dated June 29, 2010 ("I&D Memo"). The issues discussed in the accompanying I&D Memo include the likelihood of continuation or recurrence of dumping and the magnitude of the dumping margin likely to prevail if the *Orders* were revoked. Parties can obtain a copy of this public memorandum on file in the Central Records Unit, room 1117, of the main Commerce building. In addition, a complete public copy of the I&D Memo can be accessed directly on the Web at <http://ia.ita.doc.gov/frn>. The paper copy and electronic version of the I&D Memo are identical in content.

Final Results of Sunset Reviews

The Department determines that revocation of the *Orders* on magnesium metal would likely lead to continuation or recurrence of dumping. The Department also determines that the dumping margins likely to prevail if the *Orders* were revoked are as follows:

Manufacturers/Exporters/Producers	Weighted-Average margin (%)
The People's Republic of China	
Tianjin Magnesium International Co., Ltd.	49.66
Beijing Guangling Jinghua Science & Technology Co., Ltd.	49.66
PRC-Wide Entity	141.49
The Russian Federation	
PSC VSMPO-AVISMO Corporation	21.71
Solikamsk Magnesium Works	18.65
All-Others' Rate	21.01

Notification Regarding Administrative Protective Order

This notice also serves as the only reminder to parties subject to administrative protective order ("APO") of their responsibility concerning the return or destruction of proprietary information disclosed under APO in accordance with 19 CFR 351.305.

Timely notification of the return or destruction of APO materials or conversion to judicial protective order is hereby requested. Failure to comply with the regulations and terms of an APO is a violation which is subject to sanction.

We are issuing and publishing these results and notice in accordance with

sections 751(c), 752(c), and 777(i)(1) of the Act.

Dated: June 29, 2010.

Paul Piquado,

Acting Deputy Assistant Secretary for Import Administration.

[FR Doc. 2010-16508 Filed 7-6-10; 8:45 am]

BILLING CODE 3510-DS-P

⁴ *Pure Magnesium From the Russian Federation*, 66 FR 49347 (September 27, 2001) ("Pure Magnesium Granular Russia Final"). These mixtures are not magnesium alloys because they are not chemically combined in liquid form and cast into the same ingot.

⁴ The meaning of this term is the same as that used by the American Society for Testing and Materials in its *Annual Book of ASTM Standards: Volume 01.02 Aluminum and Magnesium Alloys*.

⁵ This second exclusion for magnesium-based reagent mixtures is based on the exclusion for reagent mixtures in the 2000-2001 investigations of

magnesium from China, Israel, and Russia. See *Pure Magnesium Granular PRC Final*; *Pure Magnesium Granular Israel Final*; *Pure Magnesium Granular Russia Final*. These mixtures are not magnesium alloys, because they are not chemically combined in liquid form and cast into the same ingot.

EXPLANATION OF COMMISSION DETERMINATION ON ADEQUACY

in

Magnesium from China and Russia
Inv. Nos. 731-TA-1071 and 1072 (Review)

On June 4, 2010, the Commission determined that it should proceed to a full review in the subject five-year reviews pursuant to section 751(c)(5) of the Tariff Act of 1930, as amended, 19 U.S.C. § 1675(c)(5).¹

The Commission received one joint response from a U.S. producer of magnesium, US Magnesium LLC (“US Mag”), and The United Steel, Paper and Forestry, Rubber, Manufacturing, Energy, Allied Industrial and Service Workers International Union, Local 8319 (“Local 8319”), a labor union representing workers at US Mag’s plant in Rowley, Utah (the “Domestic Interested Party Response”). The Commission determined that the individual response of US Mag/Local 8319 was adequate. The Commission also determined that the domestic interested party group response was adequate.

The Commission received four sets of responses to the notice of institution from the following respondent interested parties: (i) PSC VSMPO-AVISMA Corp., a producer and exporter in Russia of the subject merchandise; (ii) Solikamsk Magnesium Works OAO (“SMW”) and Solikamsk Desulphurizer Works Ltd., producers in Russia of the subject merchandise (SMW is also an importer in the United States); (iii) Alcoa, Inc., an importer of the subject merchandise from Russia; and (iv) Nanjin Yunhai Magnesium Co., Ltd., Taiyuan Tongxiang Magnesium Co., Ltd., Wenxi Regal Magnesium Industry Co. Ltd., and Winca (Hebi) Magnesium Co., Ltd., producers in China of the subject merchandise.² The Commission determined that the individual responses of the respondent interested parties named above were adequate. The Commission also determined that the respondent interested party group responses were adequate. Accordingly, the Commission determined to proceed to a full review.

A record of the Commissioners’ votes is available from the Office of the Secretary and the Commission’s web site (<http://www.usitc.gov>).

¹ Commissioner Pinkert is not participating in these reviews.

² The Commission also received a response to its notice of institution from the Magnesium Group of the North American Die Casting Association, whose members are purchasers and consumers of magnesium. As such, they are not “interested parties.” See 19 U.S.C. § 1677(9).

APPENDIX B

COMMISSION'S HEARING WITNESS LIST

CALENDAR OF PUBLIC HEARING

Those listed below appeared as witnesses at the United States International Trade Commission's hearing:

Subject: Magnesium from China and Russia
Inv. Nos.: 731-TA-1071 and 1072 (Review)
Date and Time: December 7, 2010 - 9:30 a.m.

Sessions were held in connection with these investigations in the Main Hearing Room (room 101), 500 E Street, SW, Washington, DC.

CONGRESSIONAL APPEARANCES:

The Honorable Claire McCaskill, United States Senator, Missouri
The Honorable Michele Bachmann, U.S. Representative, 6th District, Minnesota

STATE GOVERNMENT APPEARANCE:

The Honorable Dan Reitz, State Representative, 116th District, Illinois General Assembly

OPENING REMARKS:

In Support of Continuation of the Antidumping Duty Orders (**Stephen A. Jones**, King & Spalding LLP)
In Opposition to Continuation of the Antidumping Duty Orders (**Lewis E. Leibowitz**,
Hogan Lovells US LLP and **John M. Gurley**, Arent Fox LLP)

In Support of Continuation of the Antidumping Duty Orders:

King & Spalding LLP
Washington, DC
on behalf of

US Magnesium LLC

Michael H. Legge, President, US Magnesium LLC
Cameron F. Tissington, Vice President of Sales and Marketing, US Magnesium LLC
Susan Slade, Director of Marketing, US Magnesium LLC
L. Patrick Hassey, Chairman and Chief Executive Officer, Allegheny Technologies Inc.
Jon D. Walton, Executive Vice President, Human Resources, Chief Legal and
Compliance Officer, Allegheny Technologies Inc.
Cody Brown, President, United Steelworkers, Local 8319
Dr. Kenneth Button, Senior Vice President, Economic Consulting Services LLC
Jennifer Lutz, Senior Economist, Economic Consulting Services LLC

Stephen A. Jones - OF COUNSEL

In Opposition to Continuation of the Antidumping Duty Orders:

Hogan Lovells US LLP
Washington, DC
on behalf of

Spartan Light Metal Products (“Spartan”)
The Magnesium Group of the North American Die Casting Association (“NADCA”)

Daniel Twarog, President, NADCA
Michael Dierks, Vice President, Spartan
Michael Sparks, Executive Vice President of Operations, Spartan
David Peek, Manager, Corporate Purchasing, Spartan
Doug Harmon, Chief Executive Officer, Twin City Die Castings Co.
Jeffrey Rivers, Division President - Product Tech Division, Pace Industries
Allen Schroeder, President, Mag-Tech Casting Corp.
Alan Totten, Sales Manager, PCC-AFT
Eric Treiber, President, Chicago White Metal Casting, Inc.

Lewis E. Leibowitz)
Jonathan T. Stoel) – OF COUNSEL
Charles B. Rosenberg)

Arent Fox LLP
Washington, DC
on behalf of

PSC VSMPO-AVISMA Corp. (“AVISMA”)

John M. Gurley)
Diana Dimitriuc Quaia) – OF COUNSEL

REBUTTAL/CLOSING REMARKS

In Support of Continuation of the Antidumping Duty Orders (**Stephen A. Jones**, King & Spalding LLP)
In Opposition to Continuation of the Antidumping Duty Orders (**Lewis E. Leibowitz**,
Hogan Lovells US LLP and **John M. Gurley**, Arent Fox LLP)

APPENDIX C
SUMMARY DATA

Table C-1
Total magnesium (pure and alloy): Summary data concerning the U.S. market, 2004-09, January-June 2009, and January-June 2010

(Quantity=metric tons, value=1,000 dollars, unit values, unit labor costs, and unit expenses are per metric ton; period changes=percent, except where noted)																
	Reported data							Period changes								
Item	2004	2005	2006	2007	2008	2009	January-June 2009	2010	2004-09	2004-05	2005-06	2006-07	2007-08	2008-09	Jan.-June 2009-10	
U.S. consumption quantity:																
Amount	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	
Producers' share (1)	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	
Importers' share (1):																
Subject sources:																
China	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	
Russia	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	
Subtotal, subject	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	
Nonsubject sources:																
Canada	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	
China	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	
Israel	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	
All other sources	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	
Subtotal, nonsubject	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	
Total imports	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	
U.S. consumption value:																
Amount	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	
Producers' share (1)	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	
Importers' share (1):																
Subject sources:																
China	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	
Russia	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	
Subtotal, subject	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	
Nonsubject sources:																
Canada	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	
China	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	
Israel	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	
All other sources	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	
Subtotal, nonsubject	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	
Total imports	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	
U.S. imports from:																
Subject sources:																
China:																
Quantity	13,262	36	34	46	287	142	111	21	-98.9	-99.7	-4.9	34.8	518.9	-50.5	-80.9	
Value	35,765	89	101	129	1,697	723	616	78	-98.0	-99.8	13.1	28.5	1,214.3	-57.4	-87.4	
Unit value	\$2,697	\$2,452	\$2,918	\$2,781	\$5,907	\$5,091	\$5,534	\$3,663	88.8	-9.1	19.0	-4.7	112.4	-13.8	-33.8	
Ending inventory quantity	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	
Russia:																
Quantity	23,439	12,573	13,038	6,105	2,210	315	20	298	-98.7	-46.4	3.7	-53.2	-63.8	-85.7	1,362.6	
Value	50,843	32,162	29,616	14,198	8,475	1,421	136	951	-97.2	-36.7	-7.9	-52.1	-40.3	-83.2	601.1	
Unit value	\$2,169	\$2,558	\$2,272	\$2,326	\$3,835	\$4,505	\$6,660	\$3,193	107.7	17.9	-11.2	2.4	64.9	17.5	-52.1	
Ending inventory quantity	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	
Subtotal (subject):																
Quantity	36,701	12,610	13,072	6,152	2,498	458	132	319	-98.8	-65.6	3.7	-52.9	-59.4	-81.7	142.5	
Value	86,609	32,251	29,717	14,327	10,172	2,144	751	1,029	-97.5	-62.8	-7.9	-51.8	-29.0	-78.9	36.9	
Unit value	\$2,360	\$2,558	\$2,273	\$2,329	\$4,073	\$4,687	\$5,708	\$3,224	98.6	8.4	-11.1	2.4	74.9	15.1	-43.5	
Ending inventory quantity	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	
Nonsubject sources:																
Canada:																
Quantity	26,265	31,003	29,108	15,261	3,228	733	396	472	-97.2	18.0	-6.1	-47.6	-78.9	-77.3	19.2	
Value	77,352	99,703	87,626	53,304	17,921	3,543	1,615	1,986	-95.4	28.9	-12.1	-39.2	-66.4	-80.2	23.0	
Unit value	\$2,945	\$3,216	\$3,010	\$3,493	\$5,552	\$4,833	\$4,077	\$4,207	64.1	9.2	-6.4	16.0	59.0	-13.0	3.2	
Ending inventory quantity	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	
China:																
Quantity	6,812	1,503	335	3,476	19,113	4,968	4,269	439	-27.1	-77.9	-77.7	938.0	449.9	-74.0	-89.7	
Value	16,255	4,246	809	11,386	106,024	25,196	21,553	1,325	55.0	-73.9	-81.0	1,308.1	831.1	-76.2	-93.9	
Unit value	\$2,386	\$2,826	\$2,415	\$3,276	\$5,547	\$5,071	\$5,048	\$3,019	112.5	18.4	-14.5	35.7	69.3	-8.6	-40.2	
Ending inventory quantity	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	
Israel:																
Quantity	13,320	15,074	10,757	17,188	26,148	16,491	8,043	8,875	23.8	13.2	-28.6	59.8	52.1	-36.9	10.3	
Value	41,228	54,172	31,316	50,915	101,055	65,320	32,018	40,677	58.4	31.4	-42.2	62.6	98.5	-35.4	27.0	
Unit value	\$3,095	\$3,594	\$2,911	\$2,962	\$3,865	\$3,961	\$3,981	\$4,583	28.0	16.1	-19.0	1.8	30.5	2.5	15.1	
Ending inventory quantity	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	
All other sources:																
Quantity	7,256	12,453	5,919	8,906	7,612	4,011	2,140	4,008	-44.7	71.6	-52.5	50.5	-14.5	-47.3	87.3	
Value	24,131	40,524	21,631	31,752	47,519	27,062	15,487	20,201	12.1	67.9	-46.6	46.8	49.7	-43.0	30.4	
Unit value	\$3,326	\$3,254	\$3,655	\$3,565	\$6,243	\$6,748	\$7,238	\$5,040	102.9	-2.1	12.3	-2.4	75.1	8.1	-30.4	
Ending inventory quantity	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	
Subtotal (nonsubject):																
Quantity	53,653	60,033	46,119	44,831	56,101	26,203	14,848	13,794	-51.2	11.9	-23.2	-2.8	25.1	-53.3	-7.1	
Value	158,966	198,645	141,382	147,358	272,520	121,121	70,672	64,189	-23.8	25.0	-28.8	4.2	84.9	-55.6	-9.2	
Unit value	\$2,963	\$3,309	\$3,066	\$3,287	\$4,858	\$4,622	\$4,760	\$4,653	56.0	11.7	-7.4	7.2	47.8	-4.8	-2.2	
Ending inventory quantity	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	
All sources:																
Quantity	90,355	72,642	59,191	50,982	58,599	26,661	14,980	14,113	-70.5	-19.6	-18.5	-13.9	14.9	-54.5	-5.8	
Value	245,575	230,895	171,099	161,685	282,692	123,265	71,424	65,218	-49.8	-6.0	-25.9	-5.5	74.8	-56.4	-8.7	
Unit value	\$2,718	\$3,179	\$2,891	\$3,171	\$4,824	\$4,623	\$4,768	\$4,621	70.1	16.9	-9.1	9.7	52.1	-4.2	-3.1	
Ending inventory quantity	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	

Table continued on next page.

Table C-1--Continued

Total magnesium (pure and alloy): Summary data concerning the U.S. market, 2004-09, January-June 2009, and January-June 2010

(Quantity=metric tons, value=1,000 dollars, unit values, unit labor costs, and unit expenses are per metric ton; period changes=percent, except where noted)															
Item	Reported data							Period changes							
	2004	2005	2006	2007	2008	2009	January-June		2004-09	2004-05	2005-06	2006-07	2007-08	2008-09	Jan.-June 2009-10
							2009	2010							
U.S. producers':															
Average capacity quantity	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Production quantity	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Capacity utilization (1)	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
U.S. shipments:															
Quantity	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Unit value	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Export shipments:															
Quantity	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Unit value	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Ending inventory quantity	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Inventories/total shipments (1) .	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Production workers	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Hours worked (1,000s)	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Wages paid (\$1,000s)	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Hourly wages	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Productivity (tons/1,000 hours) .	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Unit labor costs	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Net sales:															
Quantity	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Unit value	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Cost of goods sold (COGS)	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Gross profit or (loss)	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
SG&A expenses	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Operating income or (loss)	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Capital expenditures	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Unit COGS	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Unit SG&A expenses	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Unit operating income or (loss) .	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
COGS/sales (1)	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Operating income or (loss)/ sales (1)	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***

(1) "Reported data" are in percent and "period changes" are in percentage points.

Note.--Financial data are reported on a fiscal year basis and may not necessarily be comparable to data reported on a calendar year basis. Because of rounding, figures may not add to the totals shown. Unit values and shares are calculated from the unrounded figures.

Source: Compiled from data submitted in response to Commission questionnaires and from official Commerce statistics.

Table C-2
Pure magnesium: Summary data concerning the U.S. market, 2004-09, January-June 2009, and January-June 2010

(Quantity=metric tons, value=1,000 dollars, unit values, unit labor costs, and unit expenses are per metric ton; period changes=percent, except where noted)															
Item	Reported data							Period changes							
	2004	2005	2006	2007	2008	2009	January-June 2009	2010	2004-09	2004-05	2005-06	2006-07	2007-08	2008-09	Jan.-June 2009-10
U.S. consumption quantity:															
Amount	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Producers' share (1)	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Importers' share (1):															
Russia	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Nonsubject sources:															
Canada	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
China	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Israel	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
All other sources	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Subtotal, nonsubject	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Total imports	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
U.S. consumption value:															
Amount	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Producers' share (1)	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Importers' share (1):															
Russia	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Nonsubject sources:															
Canada	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
China	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Israel	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
All other sources	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Subtotal, nonsubject	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Total imports	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
U.S. imports from:															
Russia:															
Quantity	20,798	11,756	13,038	6,105	2,210	315	20	298	-98.5	-43.5	10.9	-53.2	-63.8	-85.7	1,362.6
Value	45,202	30,257	29,616	14,198	8,475	1,421	136	951	-96.9	-33.1	-2.1	-52.1	-40.3	-83.2	601.1
Unit value	\$2,173	\$2,574	\$2,272	\$2,326	\$3,835	\$4,505	\$6,660	\$3,193	107.3	18.4	-11.7	2.4	64.9	17.5	-52.1
Ending inventory quantity	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Nonsubject sources:															
Canada:															
Quantity	2,680	5,564	9,753	1,942	1,029	583	246	472	-78.3	107.6	75.3	-80.1	-47.0	-43.4	91.7
Value	8,923	17,681	24,219	7,195	3,417	2,810	925	1,978	-68.5	98.2	37.0	-70.3	-52.5	-17.8	113.8
Unit value	\$3,330	\$3,178	\$2,483	\$3,705	\$3,321	\$4,823	\$3,756	\$4,189	44.9	-4.6	-21.9	49.2	-10.4	45.2	11.5
Ending inventory quantity	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
China:															
Quantity	6,812	1,503	335	3,476	19,113	4,968	4,269	439	-27.1	-77.9	-77.7	938.0	449.9	-74.0	-89.7
Value	16,255	4,246	809	11,386	106,024	25,196	21,553	1,325	55.0	-73.9	-81.0	1,308.1	831.1	-76.2	-93.9
Unit value	\$2,386	\$2,826	\$2,415	\$3,276	\$5,547	\$5,071	\$5,048	\$3,019	112.5	18.4	-14.5	35.7	69.3	-8.6	-40.2
Ending inventory quantity	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Israel:															
Quantity	8,794	9,041	7,917	14,539	21,846	15,361	7,674	7,790	74.7	2.8	-12.4	83.6	50.3	-29.7	1.5
Value	25,099	30,391	22,638	43,076	83,436	60,410	30,492	35,194	140.7	21.1	-25.5	90.3	93.7	-27.6	15.4
Unit value	\$2,854	\$3,362	\$2,859	\$2,963	\$3,819	\$3,933	\$3,973	\$4,518	37.8	17.8	-14.9	3.6	28.9	3.0	13.7
Ending inventory quantity	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
All other sources:															
Quantity	3,409	3,359	2,343	2,101	1,227	947	565	793	-72.2	-1.5	-30.2	-10.3	-41.6	-22.8	40.3
Value	9,120	10,866	6,683	7,290	7,496	5,971	4,221	4,230	-34.5	19.1	-38.5	9.1	2.8	-20.3	0.2
Unit value	\$2,676	\$3,235	\$2,852	\$3,470	\$6,107	\$6,303	\$7,470	\$5,335	135.6	20.9	-11.8	21.7	76.0	3.2	-28.6
Ending inventory quantity	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Subtotal (nonsubject):															
Quantity	21,694	19,466	20,348	22,057	43,216	21,859	12,755	9,494	0.8	-10.3	4.5	8.4	95.9	-49.4	-25.6
Value	59,397	63,185	54,349	68,948	200,373	94,387	57,191	42,726	58.9	6.4	-14.0	26.9	190.6	-52.9	-25.3
Unit value	\$2,738	\$3,246	\$2,671	\$3,126	\$4,637	\$4,318	\$4,484	\$4,501	57.7	18.6	-17.7	17.0	48.3	-6.9	0.4
Ending inventory quantity	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
All sources:															
Quantity	42,492	31,222	33,386	28,162	45,426	22,174	12,776	9,792	-47.8	-26.5	6.9	-15.6	61.3	-51.2	-23.4
Value	104,599	93,442	83,966	83,146	208,848	95,808	57,327	43,678	-8.4	-10.7	-10.1	-1.0	151.2	-54.1	-23.8
Unit value	\$2,462	\$2,993	\$2,515	\$2,952	\$4,598	\$4,321	\$4,487	\$4,461	75.5	21.6	-16.0	17.4	55.7	-6.0	-0.6
Ending inventory quantity	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***

Table continued on next page.

Table C-2--Continued
Pure magnesium: Summary data concerning the U.S. market, 2004-09, January-June 2009, and January-June 2010

(Quantity=metric tons, value=1,000 dollars, unit values, unit labor costs, and unit expenses are per metric ton; period changes=percent, except where noted)															
Item	Reported data							Period changes							
	2004	2005	2006	2007	2008	2009	January-June 2009	2010	2004-09	2004-05	2005-06	2006-07	2007-08	2008-09	Jan.-June 2009-10
U.S. producers':															
Average capacity quantity	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Production quantity	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Capacity utilization (1)	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
U.S. shipments:															
Quantity	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Unit value	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Export shipments:															
Quantity	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Unit value	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Ending inventory quantity	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Inventories/total shipments (1) .	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Production workers	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Hours worked (1,000s)	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Wages paid (\$1,000s)	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Hourly wages	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Productivity (tons/1,000 hours) .	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Unit labor costs	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Net sales:															
Quantity	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Unit value	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Cost of goods sold (COGS)	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Gross profit or (loss)	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
SG&A expenses	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Operating income or (loss)	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Capital expenditures	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Unit COGS	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Unit SG&A expenses	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Unit operating income or (loss) .	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
COGS/sales (1)	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Operating income or (loss)/ sales (1)	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***

(1) "Reported data" are in percent and "period changes" are in percentage points.

Note.--Financial data are reported on a fiscal year basis and may not necessarily be comparable to data reported on a calendar year basis. Because of rounding, figures may not add to the totals shown. Unit values and shares are calculated from the unrounded figures.

Source: Compiled from data submitted in response to Commission questionnaires and from official Commerce statistics.

Table C-3
Alloy magnesium: Summary data concerning the U.S. market, 2004-09, January-June 2009, and January-June 2010

(Quantity=metric tons, value=1,000 dollars, unit values, unit labor costs, and unit expenses are per metric ton; period changes=percent, except where noted)																
Item	Reported data							Period changes								
	2004	2005	2006	2007	2008	2009	January-June 2009	January-June 2010	2004-09	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	Jan.-June 2009-10
U.S. consumption quantity:																
Amount	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Producers' share (1)	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Importers' share (1):																
Subject sources:																
China	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Russia	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Subtotal, subject	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Nonsubject sources:																
Canada	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Israel	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
All other sources	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Subtotal, nonsubject	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Total imports	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
U.S. consumption value:																
Amount	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Producers' share (1)	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Importers' share (1):																
Subject sources:																
China	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Russia	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Subtotal, subject	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Nonsubject sources:																
Canada	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Israel	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
All other sources	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Subtotal, nonsubject	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Total imports	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
U.S. imports from:																
Subject sources:																
China:																
Quantity	13,262	36	34	46	287	142	111	21	-98.9	-99.7	-4.9	34.8	518.9	-50.5	-80.9	
Value	35,765	89	101	129	1,697	723	616	78	-98.0	-99.8	13.1	28.5	1,214.3	-57.4	-87.4	
Unit value	\$2,697	\$2,452	\$2,918	\$2,781	\$5,907	\$5,091	\$5,534	\$3,663	88.8	-9.1	19.0	-4.7	112.4	-13.8	-33.8	
Ending inventory quantity	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Russia:																
Quantity	2,641	817	0	0	0	0	0	0	-100.0	-69.1	-100.0	(3)	(3)	(3)	(3)	
Value	5,642	1,905	0	0	0	0	0	0	-100.0	-66.2	-100.0	(3)	(3)	(3)	(3)	
Unit value	\$2,136	\$2,332	(3)	(3)	(3)	(3)	(3)	(3)	(3)	9.2	(3)	(3)	(3)	(3)	(3)	
Ending inventory quantity	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Subtotal (subject):																
Quantity	15,903	853	34	46	287	142	111	21	-99.1	-94.6	-96.0	34.8	518.9	-50.5	-80.9	
Value	41,407	1,994	101	129	1,697	723	616	78	-98.3	-95.2	-95.0	28.5	1,214.3	-57.4	-87.4	
Unit value	\$2,604	\$2,337	\$2,918	\$2,781	\$5,907	\$5,091	\$5,534	\$3,663	95.5	-10.3	24.9	-4.7	112.4	-13.8	-33.8	
Ending inventory quantity	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Nonsubject sources:																
Canada:																
Quantity	23,586	25,439	19,355	13,319	2,199	150	150	0.08	-99.4	7.9	-23.9	-31.2	-83.5	-93.2	-99.9	
Value	68,429	82,021	63,407	46,109	14,504	733	690	9	-98.9	19.9	-22.7	-27.3	-68.5	-94.9	-98.7	
Unit value	\$2,901	\$3,224	\$3,276	\$3,462	\$6,597	\$4,872	\$4,605	\$110,513	67.9	11.1	1.6	5.7	90.6	-26.2	2,299.9	
Ending inventory quantity	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Israel:																
Quantity	4,526	6,033	2,840	2,649	4,302	1,130	369	1,085	-75.0	33.3	-52.9	-6.7	62.4	-73.7	194.5	
Value	16,129	23,780	8,678	7,839	17,619	4,910	1,526	5,483	-69.6	47.4	-63.5	-9.7	124.8	-72.1	259.4	
Unit value	\$3,564	\$3,941	\$3,056	\$2,959	\$4,096	\$4,343	\$4,140	\$5,051	21.9	10.6	-22.5	-3.2	38.4	6.0	22.0	
Ending inventory quantity	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
All other sources:																
Quantity	3,848	9,095	3,576	6,805	6,385	3,063	1,574	3,215	-20.4	136.4	-60.7	90.3	-6.2	-52.0	104.2	
Value	15,011	29,658	14,948	24,462	40,024	21,091	11,266	15,971	40.5	97.6	-49.6	63.6	63.6	-47.3	41.8	
Unit value	\$3,901	\$3,261	\$4,181	\$3,595	\$6,269	\$6,885	\$7,155	\$4,967	76.5	-16.4	28.2	-14.0	74.4	9.8	-30.6	
Ending inventory quantity	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Subtotal (nonsubject):																
Quantity	31,959	40,567	25,770	22,774	12,885	4,344	2,093	4,301	-86.4	26.9	-36.5	-11.6	-43.4	-66.3	105.5	
Value	99,569	135,459	87,032	78,410	72,147	26,734	13,481	21,463	-73.2	36.0	-35.8	-9.9	-8.0	-62.9	59.2	
Unit value	\$3,115	\$3,339	\$3,377	\$3,443	\$5,599	\$6,154	\$6,442	\$4,991	97.5	7.2	1.1	1.9	62.6	9.9	-22.5	
Ending inventory quantity	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
All sources:																
Quantity	47,863	41,420	25,805	22,820	13,172	4,486	2,204	4,322	-90.6	-13.5	-37.7	-11.6	-42.3	-65.9	96.1	
Value	140,976	137,453	87,133	78,539	73,844	27,457	14,097	21,541	-80.5	-2.5	-36.6	-9.9	-6.0	-62.8	52.8	
Unit value	\$2,945	\$3,319	\$3,377	\$3,442	\$5,606	\$6,120	\$6,396	\$4,984	107.8	12.7	1.8	1.9	62.9	9.2	-22.1	
Ending inventory quantity	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***

Table continued on next page.

Table C-3--Continued
Alloy magnesium: Summary data concerning the U.S. market, 2004-09, January-June 2009, and January-June 2010

(Quantity=metric tons, value=1,000 dollars, unit values, unit labor costs, and unit expenses are per metric ton; period changes=percent, except where noted)															
Item	Reported data							Period changes							
	2004	2005	2006	2007	2008	2009	January-June		2004-09	2004-05	2005-06	2006-07	2007-08	2008-09	Jan.-June 2009-10
							2009	2010							
U.S. producers':															
Average capacity quantity	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Production quantity	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Capacity utilization (1)	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
U.S. shipments:															
Quantity	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Unit value	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Export shipments:															
Quantity	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Unit value	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Ending inventory quantity	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Inventories/total shipments (1) .	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Production workers	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Hours worked (1,000s)	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Wages paid (\$1,000s)	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Hourly wages	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Productivity (tons/1,000 hours) .	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Unit labor costs	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Net sales:															
Quantity	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Unit value	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Cost of goods sold (COGS)	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Gross profit or (loss)	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
SG&A expenses	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Operating income or (loss)	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Capital expenditures	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Unit COGS	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Unit SG&A expenses	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Unit operating income or (loss) .	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
COGS/sales (1)	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Operating income or (loss)/															
sales (1)	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***

(1) "Reported data" are in percent and "period changes" are in percentage points.

Note.--Financial data are reported on a fiscal year basis and may not necessarily be comparable to data reported on a calendar year basis. Because of rounding, figures may not add to the totals shown. Unit values and shares are calculated from the unrounded figures.

Source: Compiled from data submitted in response to Commission questionnaires and from official Commerce statistics.

Table C-4
Granular magnesium (pure): Summary domestic industry data concerning U.S. grinders, 2004-09, January-June 2009, and January-June 2010

(Quantity=metric tons, value=1,000 dollars, unit values, unit labor costs, and unit expenses are per metric ton; period changes=percent, except where noted)

Item	Reported data								Period changes						
	2004	2005	2006	2007	2008	2009	January-June		2004-09	2004-05	2005-06	2006-07	2007-08	2008-09	Jan.-June 2009-10
							2009	2010							
U.S. producers':															
Average capacity quantity	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Production quantity	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Capacity utilization (1)	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
U.S. shipments:															
Quantity	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Unit value	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Export shipments:															
Quantity	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Unit value	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Ending inventory quantity	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Inventories/total shipments (1) .	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Production workers	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Hours worked (1,000s)	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Wages paid (\$1,000s)	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Hourly wages	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Productivity (tons/1,000 hours) .	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Unit labor costs	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Net sales:															
Quantity	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Unit value	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Cost of goods sold (COGS)	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Gross profit or (loss)	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
SG&A expenses	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Operating income or (loss)	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Capital expenditures	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Unit COGS	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Unit SG&A expenses	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Unit operating income or (loss) .	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
COGS/sales (1)	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Operating income or (loss)/															
sales (1)	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***

(1) "Reported data" are in percent and "period changes" are in percentage points.

Note.--Financial data are reported on a fiscal year basis and may not necessarily be comparable to data reported on a calendar year basis. Because of rounding, figures may not add to the totals shown. Unit values and shares are calculated from the unrounded figures.

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

Table C-4 (Reproduced from the original final staff report)
Pure magnesium: Summary data concerning the U.S. market, 2000-03

*	*	*	*	*	*	*
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Table C-5 (Reproduced from the original final staff report)
Alloy magnesium: Summary data concerning the U.S. market, 2000-03

*	*	*	*	*	*	*
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Table C-6 (Reproduced from the original final staff report)
All magnesium: Summary data concerning the U.S. market, 2000-03

*	*	*	*	*	*	*
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APPENDIX D

RESPONSES OF U.S. PRODUCERS, U.S. IMPORTERS, U.S. PURCHASERS, AND FOREIGN PRODUCERS CONCERNING THE SIGNIFICANCE OF THE ANTIDUMPING DUTY ORDERS AND THE LIKELY EFFECTS OF REVOCATION

**U.S. PRODUCERS' COMMENTS REGARDING THE SIGNIFICANCE OF THE
ANTIDUMPING DUTY ORDERS AND THE LIKELY EFFECTS OF REVOCATION**

The Commission requested that U.S. producers describe any anticipated changes in the character of their operations or organization relating to the production of magnesium in the future if the antidumping duty orders on alloy magnesium from China and pure and alloy magnesium from Russia were to be revoked (Question II-4). The following are quotations from the responses of U.S. producers.

“Yes. If the order is revoked, it is expected that the foreign producers will undercut domestic price levels in an attempt to drive *** out of the market.”

“Yes. We would anticipate a recovering *** industry from an improvement in the volatility of price and supply, particularly as it relates to substitute material, and on global markets. ***. We believe revoking the order would result in growth for magnesium die cast products ***. ***.”

“Yes. ** believes that revocation of the antidumping order would return an undetermined volume of magnesium die-casting production to the United States. At this time no formal analysis has been performed by *** in consideration of such an outcome.”

“Yes. ***.”

“No.”

“No.”

“No.”

“No.”

“Yes. If the orders are revoked, *** has no doubt that subject imports from China and Russia would again flood the U.S. market, causing great harm to the U.S. industry. Both China and Russia produce very large volumes of magnesium, yet are producing at levels far below their production capacities. According to the latest U.S. Geological Survey Minerals Yearbook report on magnesium, China had 953,000 MT of capacity to produce primary magnesium in 2008, but produced only 559,000 MT in that year, a capacity utilization rate of only 59 percent. Russia, with a reported 80,000 MT of capacity produced only 37,000 MT, a capacity utilization rate of merely 46 percent. Both countries clearly have substantial unused capacity. Given the recent weakness in global demand for magnesium, *** has no reason to believe that capacity utilization in these countries has improved. Furthermore, despite these low levels of capacity utilization, *** regularly sees articles regarding expansions of capacity. For example, a June 25, 2010 article in the China Magnesium Industry & Market Bulletin noted that “{a} magnesium

alloy line of 20kt annually, constructed by Shenmu County Xingyang Magnesium has reportedly started production.” The article goes on to note that the company receives local government support. Moreover, China Magnesium Corp. Ltd. (“China Magnesium”) has launched an Australian \$12 million (US\$11.5 million) initial public offering (“IPO”) to fund the expansion of its current Chinese magnesium subsidiary, Shanxi Luyuan Magnesium Industry Co. Ltd. in Shanxi Province. China Direct, a U.S.-based company, has stated its intentions to become a significant U.S. importer of Chinese magnesium. An American Metal Market article reports China Direct’s estimate that it would like to ship 25,000 tons annually, for use in the automotive, steel, and aluminum sectors. China Magnesium announced that the IPO, which is scheduled to close on Oct. 20, 2010, will be used to upgrade the current 5,000-tonne-per-year facility and then expanding it to an initial capacity of 20,000 tons per year by the end of 2011. However, China Magnesium also indicated that it had arranged financing for a further expansion of the Chinese plant to 105,000 MT per year by 2013. *** noted a new magnesium production plant being planned in Russia. According to press reports, construction began in 2007. Although construction has been delayed, start up of the first phase is now scheduled for 2011. The Asbest Magnesium Plant also appears to be receiving some financial assistance from the Russian government. *** has noted the very low prices offered by China and Russia in third-country markets. These prices are far below prevailing U.S. prices. For example, although the China Magnesium Industry & Market Bulletin does not report Chinese export prices for alloy magnesium, it does report prices for pure magnesium, which are comparable. In the June 25, 2010 report, export prices are reported between \$2,750-\$2780 per MT (\$1.25-\$1.26 per pound) FOB Xingang, Tianjin. A March 11, 2010 American Metal Market article noted that low prices for Russian magnesium were effectively capping price increases in the European market, with Russian ingot offered at \$2,800 per MT (\$1.27 per pound). These data show that Russian and Chinese suppliers offer very similar prices for magnesium in third-country markets, prices that are well below U.S. market prices. An earlier AMM article noted the fierce competition between Chinese and Russian magnesium suppliers in the European market. Although the cited prices are higher than the 2004 U.S. import AUVs for China and Russia, this increase reflects a significant increase in costs of production (e.g., ferrosilicon and energy). Therefore, if the orders are revoked, producers in China and Russia would have a strong incentive to increase production and ship the resulting increased volumes to the U.S. market. These imports are highly interchangeable with U.S. product. The only way for the subject suppliers to increase sales volumes would be to offer lower prices. When the subject producers flood the U.S. market with very low priced pure and alloy magnesium, *** would be faced with the difficult choice of either lowering its prices to meet the import prices or losing sales volume to the subject imports. Either scenario would injure ***. With lower prices and declining sales volumes, ***’s profitability would suffer. ***. It would soon be forced to cut production and employment, and eventually, probably to cease production entirely.”

The Commission requested U.S. producers to describe the significance of the existing antidumping duty orders covering imports of alloy magnesium from China and pure and alloy magnesium from Russia in terms of their effect on their production capacity, production, U.S. shipments, inventories, purchases, employment, revenues, costs, profits, cash flow, capital expenditures, research and development expenditures, and asset values. (Question II-26). The following are quotations from the responses of U.S. producers.

“*** believes that revocation of the antidumping order would return an undetermined volume of magnesium die-casting production to the United States. At this time no formal analysis has been performed in consideration of such an outcome.”

“ADD has created a 2-tier pricing structure worldwide. One is U.S. market where duties exist and the other is almost every other country where they don’t. However, the orders have protected a domestic supply which most likely won’t continue if dropped.”

“They have created a 2-tier pricing structure in the world—one where dumping duties exist and one where they don’t. However, the orders have ensured a domestic source of supply remains.”

“The effects of the current antidumping duty orders allow *** to compete on an equal playing field in the U.S. Without this order in place, the market would be overrun with low priced Chinese metal and the U.S. producers and recyclers would cease to exist. The existing orders have allowed us to regain domestic market back.”

“Antidumping duties on Mg tend to make the competitiveness of *** Mg products non-competitive to market outside of USA. Additionally, importers will sell Al/Mg master alloys with Mg content under 50% in order to avoid the antidumping duties, thus making *** domestic sales also non-competitive.”

“*** primarily deals with *** so the AD orders have no significance to us.”

“*** much of the effect caused by the duties is unknown. If the duties are removed, however, plans to *** will be eliminated.”

“The antidumping orders against China and Russia have had major beneficial impacts for ***. *** would not still be in operation if these orders had not been put in place. Prior to the orders, the subject imports were causing severe negative effects on the domestic industry. Both China and Russia were shipping large volumes of subject merchandise to the U.S. market at extremely low dumped prices that undersold *** prices. In 2003, Russia shipped 21,745 MT of pure and alloy magnesium to the U.S. market at an AUV of \$0.86 per pound. China shipped 12,906 MT of alloy magnesium to the U.S. market at an AUV of \$0.84 per pound. These AUVs were well below ***. The subject imports depressed and suppressed U.S. prices for pure and alloy magnesium and took sales away from the U.S. industry. The subject imports gained substantial market share at the expense of the U.S. industry. *** lost large volumes of sales to the subject imports and was required to lower its prices to meet subject import competition to maintain an

economically viable level of production volume. Employment levels dropped over the POI, as *** was forced to lay off workers. *** for several years as a result of the subject imports. *** has been able to reassert itself as a viable and growing producer and supplier of *** magnesium and supplier of ***. ***. With antidumping discipline placed on the unfairly priced and disruptive subject imports, the U.S. price levels have returned to economic levels ***. ***.”

“The volatility of supply and lack of a competitively priced raw material since the order has devastated the magnesium die casting industry. This reduces the availability of “class 1” die cast alloy scrap. At the same time; it has reduced *** demand for magnesium die cast products. ***, magnesium die castings have declined *** from 2004 to 2010. They are anticipated to decline *** by 2015. ***. The order for magnesium alloy from Russia seemed to drive the extreme supply and price volatility that occurred in 2007-2008. This disrupted the product development and business case for many end use applications of die cast magnesium alloy. It created the environment where magnesium in the U.S. was not a viable material when compared to the rest of the world, and to substitute materials. There is less technical support in the metallurgical area by the producers. *** has never to our knowledge supported new alloy development or die casting industry efforts to develop new product applications. ***. They seem to be focusing primarily on the primary market. The development action is away from magnesium domestically. Design guides are being issued by *** customers for new applications that do not include magnesium. Applications *** in magnesium in previous years, are rapidly being converted to aluminum, or lost to composite. In 2004, about 50% of the technical publications-in the International Magnesium Association (IMA) were of U.S. origin. By 2008 this number had dropped to about 10% (IMA Proceedings 2004-2008). This represents a loss in technical leadership, as well as technical and manufacturing jobs. This trend can be reversed. However if magnesium alloy can’t be purchased at a competitive level with aluminum and thermoplastics in the U.S. we will continue to see migration away from magnesium. Where weight reduction is very beneficial, a risk assessment will be made for importing complete assemblies. The product development cycle with *** automotive customers is 2-4 years. The direction has been set to move away from magnesium on many product applications. As previously stated, this was reinforced by the extreme price and supply instability during 2007-2008. Until there is belief that these are resolved, it doesn’t bode well for magnesium consumption, and in particular the die casting industry, and it will continue to diminish. If a reasonable price relationship with alternative materials can be maintained, which we believe would happen should the order be revoked, then this trend can be reversed. As demonstrated by *** ability to switch materials, this can happen relatively fast. The design development side of material selection will be slower to reverse. The first products to leave the U.S. were not complex, and were smaller, more easily shipped parts. It is our belief that these jobs are permanently lost. This bankrupted and closed many of the smaller, domestic magnesium die casters. Examples of magnesium applications lost to *** domestic industry are:

- Cellular phone frames- China
- Loudspeaker frames- China
- Laptop housings- China
- Camera housings- China
- Luggage frames- China
- Electric power tools- China
- Roller-blades- China
- Bicycle components- China

Examples of magnesium applications converting to alternate materials, or moving to NAFTA and European competitors:

- Automotive engine valve and head covers: Plastic, Aluminum, Canada, Mexico, Europe
- Steering Wheel Armatures: Aluminum, Mexico, Europe

- Instrument Panels: Canada, Europe
- Chain Saws/Weed Trimmers: Aluminum, Plastic, China, Europe

Sadly, if the order is not lifted, the next loss of products will be the large, complex, highly engineered products, with critical safety or quality requirements, once considered to risky or costly to import due to the long supply chain. These will migrate to NAFTA and European competitors first, then China.”

The Commission requested U.S. producers to describe any anticipated changes in production capacity, production, U.S. shipments, inventories, purchases, employment, revenues, costs, profits, cash flow, capital expenditures, research and development expenditures, or asset values relating to the production of magnesium in the future if the antidumping duty orders on alloy magnesium from China and pure and alloy magnesium from China and Russia were to be revoked (Question II-27). The following are quotations from the responses of U.S. producers.

“Yes. We would expect our *** sales *** to immediately become more competitive on the market. I would estimate our output would double with such revocation of order.”

“Yes. “*** much of the effect caused by the duties is unknown. If the duties are removed, however, plans to *** will be eliminated.”

“No.”

“Yes. We feel that demand for die cast parts produced from primary magnesium alloy would increase, as would the availability of class I die cast magnesium alloy scrap. ***. We believe there is viable and necessary business case in the magnesium die casting industry to reduce the weight of vehicles using magnesium in the U.S. Further, we believe the higher cost of quality, the higher costs of logistics, and the risk associated with complex products over a long supply chain, when coupled with *** technical competency and efficiency *** if the order were revoked. ***.”

“Yes. Pricing would stabilize, tend to move production offshore would decline, imports to U.S. would become less attractive, but domestic source of supply would be in jeopardy.”

“Yes. Pricing would stabilize but domestic supply source would most likely disappear in 1-3 years.”

“Yes. If the orders are revoked, *** has no doubt that subject imports from China and Russia would again flood the U.S. market, causing great harm to the U.S. industry. Both China and Russia produce very large volumes of magnesium, yet are producing at levels far below their production capacities. According to the latest U.S. Geological Survey Minerals Yearbook report on magnesium, China had 953,000 MT of capacity to produce primary magnesium in 2008, but produced only 559,000 MT in that year, a capacity utilization rate of only 59 percent. Russia, with a reported 80,000 MT of capacity produced only 37,000 MT, a capacity utilization rate of merely 46 percent. Both countries clearly have substantial unused capacity. Given the recent weakness in global demand for magnesium, *** has no reason to believe that capacity utilization in these countries has improved. Furthermore, despite these low levels of capacity utilization, *** regularly sees articles regarding expansions of capacity. For example, a June 25, 2010 article in the China Magnesium Industry & Market Bulletin noted that “{a} magnesium alloy line of 20kt annually, constructed by Shenmu County Xingyang Magnesium has reportedly started production.” The article goes on to note that the company receives local government support. Moreover, China Magnesium Corp. Ltd. (“China Magnesium”) has launched an Australian \$12 million (US\$11.5 million) initial public offering (“IPO”) to fund the expansion of its current Chinese magnesium subsidiary, Shanxi Luyuan Magnesium Industry Co. Ltd. in Shanxi Province. China Direct, a U.S.-based

company, has stated its intentions to become a significant U.S. importer of Chinese magnesium. An American Metal Market article reports China Direct's estimate that it would like to ship 25,000 tons annually, for use in the automotive, steel, and aluminum sectors. China Magnesium announced that the IPO, which is scheduled to close on Oct. 20, 2010, will be used to upgrade the current 5,000-tonne-per-year facility and then expanding it to an initial capacity of 20,000 tons per year by the end of 2011. However, China Magnesium also indicated that it had arranged financing for a further expansion of the Chinese plant to 105,000 MT per year by 2013. *** noted a new magnesium production plant being planned in Russia. According to press reports, construction began in 2007. Although construction has been delayed, start up of the first phase is now scheduled for 2011. The Asbest Magnesium Plant also appears to be receiving some financial assistance from the Russian government. *** has noted the very low prices offered by China and Russia in third-country markets. These prices are far below prevailing U.S. prices. For example, although the China Magnesium Industry & Market Bulletin does not report Chinese export prices for alloy magnesium, it does report prices for pure magnesium, which are comparable. In the June 25, 2010 report, export prices are reported between \$2,750-\$2780 per MT (\$1.25-\$1.26 per pound) FOB Xingang, Tianjin. A March 11, 2010 American Metal Market article noted that low prices for Russian magnesium were effectively capping price increases in the European market, with Russian ingot offered at \$2,800 per MT (\$1.27 per pound). These data show that Russian and Chinese suppliers offer very similar prices for magnesium in third-country markets, prices that are well below U.S. market prices. An earlier AMM article noted the fierce competition between Chinese and Russian magnesium suppliers in the European market. Although the cited prices are higher than the 2004 U.S. import AUVs for China and Russia, this increase reflects a significant increase in costs of production (e.g., ferrosilicon and energy). Therefore, if the orders are revoked, producers in China and Russia would have a strong incentive to increase production and ship the resulting increased volumes to the U.S. market. These imports are highly interchangeable with U.S. product. The only way for the subject suppliers to increase sales volumes would be to offer lower prices. When the subject producers flood the U.S. market with very low priced pure and alloy magnesium, *** would be faced with the difficult choice of either lowering its prices to meet the import prices or losing sales volume to the subject imports. Either scenario would injure ***. With lower prices and declining sales volumes, ***'s profitability would suffer. ***. It would soon be forced to cut production and employment, and eventually, probably to cease production entirely."

"Yes. *** believes that revocation of the antidumping order would return an undetermined volume of magnesium die-casting production to the United States. At this time no formal analysis has been performed in consideration of such an outcome.

"Yes. Since the domestic market is still in recovery and the fact that price dictates market share, customers will buy the cheapest magnesium units. This typically is Chinese and Russian magnesium. A major aluminum producer has ***. If the orders were reduced or eliminated, the market would flood as we saw in 1994/95 and 2001/02 and prices would force domestics out of the market due to extremely low pricing levels."

**U.S. IMPORTERS' COMMENTS REGARDING THE SIGNIFICANCE OF THE
ANTIDUMPING DUTY ORDERS AND THE LIKELY EFFECTS OF REVOCATION**

The Commission requested U.S. importers to describe any anticipated any changes in the character of their operations or organization (as noted above) relating to the importation of magnesium in the future if the antidumping duty orders on alloy magnesium from China and pure and alloy magnesium from Russia were to be revoked (Question II-4). The following are quotations from the responses of importers.

“Yes. We may purchase a pure magnesium ingot from Russia if the magnesium met our quality specifications.”

“No.”

“No.”

“No.”

“No.”

“No.”

“No.”

“No.”

“Yes. We believe that lots of dumped material from these two countries would enter the US market and our company would lose the small share of the market that we currently have.”

“No.”

“Yes. We would investigate US sources as we would anticipate a price reduction.”

“No.”

“Yes. Potentially we could begin sourcing again and look for opportunities to sell into US market again.”

“No.”

“No.”

“No.”

The Commission requested U.S. importers to describe the significance of the existing antidumping duty orders covering imports of alloy magnesium from China and pure and alloy magnesium from Russia in terms of their effect on their imports, U.S. shipments of imports, and inventories (Question II-10). The following are quotations from the responses of importers.

“None.”

“We have no input to offer as we no longer import magnesium products.”

“Since the volume is very little, no effect to us.”

“*** primarily deals with *** so the AD orders have no significance to us.”

“Costs and selling prices rise.”

“We believe they are very significant to our firm’s imports. We feel confident that if these orders were not in place, the Chinese and Russian producers would be dumping material in the US market, hence making it very difficult for *** to compete with imported material from ***.”

“Eliminates a potential source of pure magnesium.”

“Little or no effect.”

“Our business started whilst the orders were in place.”

“The alloys imported are specialty alloys provided to ***. In some cases, ***.”

“We did not purchase magnesium prior to the anti-dumping order.”

“N/A”

“We stopped importing material once duty was put into place. Because US customer cannot buy high duty material.”

“None.”

“Soon after the antidumping duty order went into effect, Russian magnesium producers halted shipments to the United States. *** has been unable to secure large commercial supplies from those producers. *** has also had some difficulty securing magnesium from Chinese producers given the idiosyncrasies of the Department of Commerce’s non-market economy methodology.”

“The order has no current significance to *** as it has no current plans to import magnesium.”

The Commission requested U.S. importers if they anticipated any changes in their imports, U.S. shipments of imports, or inventories of magnesium in the future if the antidumping duty orders on alloy magnesium from China and pure and alloy magnesium from Russia were to be revoked. They were also asked to supply details as to the time, nature, and significance of such changes and provide underlying assumptions, along with relevant portions of business plans or other supporting documentation for any trends or projections they may provide (Question II-11). The following are the responses of importers.

“No.”

“Yes. We would investigate qualifying US magnesium suppliers anticipating a cost decrease of alloy magnesium.”

“No.”

“Yes. Yes, we would look for new opportunities in North America as before being ***.”

“Yes. Will give us another potential source of material - we may not significantly change our buying behavior - but it will most likely give us a market-driven price.”

“No.”

“Yes. We would expect imports to increase given the higher price of magnesium in the US vs. Europe and Asia.”

“No.”

“No.”

“No.”

“No.”

“No.”

“Yes. . . . we believe the Chinese and Russian producers would be dumping material in the US market if these orders were to be revoked. In addition, both countries have lots of unused capacity, which could be easily brought back and diverted to the US market making things even worse. In sum, we believe our imports and inventories would decrease significantly.”

“No.”

“Yes. *** would likely reverse the outflow of production of magnesium-intensive alloys and bring production back to the United States. *** products will also be more competitive in the global market, which should further increase sales and US production. As a result, *** would increase its demand for magnesium in the U.S. market which would likely increase its demand for magnesium from U.S. producers as well as producers located outside the United States.”

“No.”

**U.S. PURCHASERS COMMENTS REGARDING THE SIGNIFICANCE OF THE
ANTIDUMPING DUTY ORDERS AND THE LIKELY EFFECTS OF REVOCATION**

The Commission requested U.S. purchasers to describe the likely effects of any revocation of the subject antidumping orders on the future activities of their firm and the entire U.S. market (Questions III-33 (1) and III-33 (2)). The following are quotations from the responses of purchasers:

(1) Effects on the activities of the firm

“The effect would be reduced prices which in turn would create significant more opportunities for the use of magnesium in new applications saving significant amount of jobs.”

“We should not be impacted due to the very small amount we use.”

“*** would likely reverse the outflow of production of magnesium-intensive alloys and bring production back to the United States. Our finished products will also be more competitive in the global market, which should further increase sales and U.S. production.”

“I do not believe it would affect *** either positively or negatively because as an industry the cost of magnesium is a pass-through.”

“Allow more competition.”

“Very little effect on revocation of anti-dumping order.”

“Possible cost increase.”

“The effect would be reduced magnesium alloy prices which would allow for more new designs/products as well as some applications coming back to magnesium. This would create new jobs in America.”

“Our business will continue as usual.”

“Our products that consume magnesium are sold outside of the United States. If revocation reduces magnesium pricing, then our products could become more competitive.”

“Likely importation of material depending on availability and price.”

“Will open the market to more choices.”

“Consider importation of mag from China and Russia.”

“The revocation of the antidumping order would increase the supply of magnesium to the U.S. market allowing us more options to secure our mag requirements at world competitive prices.”

“Reduced cost of imported Magnesium would allow us to increase sales.”

“We would have to arrange marketing agreements with new firms.”

“We would likely broaden our base of supply, but will maintain our current philosophy of maintaining a domestic anchor supplier for at least the next 4-5 years.”

“A portion of our purchases will include non-U.S. metal in an effort to remain competitive. All products with U.S. and Canada stipulation will remain supplied from U.S. producers.”

“Revocation of the antidumping duty order would allow our firm access to pricing that is currently available outside the United States and always ensure that we are in a position to offer our customers the most competitive product.”

“We would expect revocation of the duty to immediately lower our costs by bringing U.S. domestic prices in line with global levels.”

“None.”

“It will not effect (sic) our firm as we no longer import magnesium products.”

“Within a year or less, magnesium cost would equalize, we would be able to compete more effectively for existing applications. Less competition from substitute materials withing 6 to 24 months.”

“If the price drops, we would see an increased demand for mag castings.”

“No impact.”

“No change.”

“We believe we could purchase magnesium with less price volatility and supply volatility, and that magnesium would settle into a cost /benefit ratio competitive with aluminum and composites. We could reverse the trend, regain the leadership in product development.”

“Would expect that U.S. prices would decline, and at that time we would consider purchasing from U.S. suppliers.”

“Not a whole lot of anything until die casters return to the U.S.”

“I would anticipate with confidence that our business would increase by double digits and we would gain market share. We would see employment increase and a future expansion on our building. We could compete globally!”

“Improved profitability due to lower cost, and improved market usage of magnesium aerospace structures and components leads to revenue growth, more capital investment, and higher employment.”

(2) Effects on the entire U.S. market

“The effect would be reduced prices which in turn would create significant more opportunities for the use of magnesium in new applications saving significant amount of jobs.”

“The market should see temporary price reductions followed by increased demand and then higher prices as magnesium (as I understand it) is not a viable material due to price and availability as well as the risks working with it.”

“Revocation of the antidumping duty orders for imports of magnesium from China and Russia would likely save the U.S. magnesium die cast industry from extinction.”

“Our firm does not purchase enough mag to have a view.”

“Allow more competition.”

“Very little effect on revocation of anti-dumping order.”

“Possible cost increase.”

“The effect would be reduced magnesium alloy prices which would allow for more new designs/products, as well as some applications coming back to magnesium. This would create new jobs in America.”

“It would create a greater demand for die cast auto parts by driving the alleged costs down and increase the availability of magnesium in the market place.”

“I believe magnesium prices would immediately decrease.”

“Likely importation of material depending on availability and price.”

“Will open the market more choices.”

“Increase competition for U.S. supplier.”

“The revocation of the antidumping order would result in lower prices for magnesium in the U.S. market.”

“Would increase competition and lower prices.”

“Prices in the U.S. should become more competitive with global markets.”

“Much reduced domestic production as/will create greater reliance on off-shore supplies, thus more and more the supply source will control price and availability of product.”

“There will be a significant drop in U.S. pricing. We expect a large influx of non-U.S. produced metal.”

“Currently the U.S. market is limited by the current capacities/growth plans of the few domestic and foreign suppliers that do not have antidumping orders against them. Revocation of the antidumping duty order would remove this restriction.”

“We would expect all U.S. magnesium users to welcome revocation of duties and the consequent magnesium price reduction.”

“Would lower domestic prices.”

“Within a year or less, magnesium cost would equalize, we would be able to compete more effectively for existing applications. Less competition from substitute materials withing 6 to 24 months.”

“It would be bad for primary metal producers. No change for casters in terms of profit.”

“Potentially a decrease in price.”

“A lower price which will stimulate growth in the supply of magnesium based auto parts produced in the U.S.”

“We believe there is insufficient producer capacity in the U.S. to serve a healthy domestic magnesium diecasting market, when you include with demand for primary, and titanium production. It would require imports. Given the development investment by the DOE towards light weighting vehicles featuring use to meet CAFÉ regulations, magnesium would be in strong demand. Prices would be more likely be competitive per unit volume with alternative materials such as aluminum. The Russian producers seem intent to supply their home market. The Chinese have taken the position of restricting exports in favor of their own manufacturing base.”

“Expect business would increase in the U.S. due to the decrease in magnesium price.”

“Some benefit for aluminum producers maybe.”

“The U.S. magnesium die casting industry would increase by double digits. There would be job creation, expansion, and new investments in technology and research and development. It would protect and grow our industry.”

“Improved profitability due to lower cost and improved market usage of magnesium, aerospace structures and components leads to revenue growth, more capital investment, and higher employment.”

“Increased competition would benefit U.S. market and U.S. consumers by increasing supply and thereby reducing artificially high prices.”

**FOREIGN PRODUCERS' COMMENTS REGARDING THE SIGNIFICANCE OF THE
ANTIDUMPING DUTY ORDERS AND THE LIKELY EFFECTS OF REVOCATION**

The Commission requested foreign producers to describe any anticipated changes in the character of their operations or organization relating to the production of subject magnesium in the future if the antidumping duty orders on alloy magnesium from China and pure and alloy magnesium from Russia were to be revoked (Question II-4). The following are quotations from the responses of foreign producers.

“Yes. If this anti-dumping order is to be revoked, we will export our products to the United States of America.”

“No.”

“No.”

“No.”

“No.”

“No.”

“No.”

The Commission requested foreign producers to describe the significance of the existing antidumping duty orders covering imports of alloy magnesium from China and pure and alloy magnesium from Russia in terms of their effect on their production capacity, production, home market shipments, exports to the United States and other markets, and inventories (Question II-12). Firms were asked to compare their operations before and after the imposition of the orders. The following are quotations from the responses of foreign producers.

“***, but we will enlarge our market, so we hope the trade barriers could be canceled so that we can establish the business relationship with them more smoothly.”

“The most significant change since the imposition of the antidumping order in 2005 is the rapid increase in the consumption of alloy magnesium in China (even though 2009 magnesium alloy production declined significantly, as a result of the global economic slump).”

“Before antidumping order in 2004, production capacity was *** MT, production was *** MT, and after antidumping order in 2009, production capacity was *** MT, and production was *** MT, the sales volume for export (excluding USA) and domestic is keeping increasing, sales volume for USA keep the same.”

“No change.”

“The existing U.S. antidumping order on imports of magnesium from Russia has had no effect on ***’s operations, including production capacity, production, home market shipments, exports to various markets, or inventories.”

“***, *** the antidumping order does not play a significant factor in ***’s business plans.”

“The existing antidumping duty order covering imports of alloy magnesium from China has been renewed many times. It existed ***. The existence of the order has limited influence on our company’s operations, except it restrains our exploiting the US market.”

The Commission requested foreign producers to describe any anticipated changes in production capacity, production, home market shipments, exports to the United States and other markets, or inventories relating to the production of magnesium in the future if the antidumping duty orders on alloy magnesium from China and pure and alloy magnesium from Russia were to be revoked (Question II-13). The following are quotations from the responses of foreign producers.

“No. Alloy magnesium demand in China has strengthened due to ***. At the same time, the Chinese magnesium industry has consolidated and smaller, more inefficient producers have been eliminated from the marketplace. This is in part due to efforts by the Chinese government to minimize energy consumption in and the environmental impact of the production of magnesium. In addition, China has imposed a 10% tax on magnesium exports from China, which serves to deter Chinese exports to the United States and to other markets. For these reasons, Chinese Respondents are focused on increasing sales of alloy magnesium in the Chinese market and do not expect to alter their behavior should the antidumping order on magnesium metal be revoked.”

“No.”

“No.”

“Yes. If the order being revoked, our production capacity will not change due to the big capacity in China as a whole image, but our production will be facilitated, so as to the marketing part.”

“Yes. We have not exported to America before, but we will enlarge our market, so we hope the trade barriers could be canceled so that we can establish the business relationship with them more smoothly.”

“No. Alloy magnesium demand in China has strengthened due to ***. At the same time, the Chinese magnesium industry has consolidated and smaller, more inefficient producers have been eliminated from the marketplace. This is in part due to efforts by the Chinese government to minimize energy consumption in and the environmental impact of the production of magnesium. In addition, China has imposed a 10% tax on magnesium exports from China, which serves to deter Chinese exports to the United States and to other markets. For these reasons, Chinese Respondents are focused on increasing sales of alloy magnesium in the Chinese market and do not expect to alter their behavior should the antidumping order on magnesium metal be revoked.”

“No.”

APPENDIX E

**QUARTERLY DOMESTIC AND
NONSUBJECT-COUNTRY PRICE DATA**

Figures E-1 through E-5 present quarterly pricing and quantity data for magnesium from the United States, China, Russia, and nonsubject countries. Nonsubject-country pricing data were received from Brazil, the Czech Republic, Israel, Japan, Taiwan, and the United Kingdom.¹

When comparing domestic producers' pricing data to pricing data from all nonsubject sources, of the *** possible pricing comparisons, domestically produced magnesium was priced *** in *** possible comparisons (*** percent of observations). Domestically produced pure magnesium (product 1) was priced *** than nonsubject-country pure magnesium in *** possible comparisons. Domestically produced alloy magnesium not meeting ASTM specifications (product 3) was priced *** than nonsubject product in *** possible comparisons. Domestically produced alloy magnesium sold to diecasters meeting ASTM specifications (product 4) was priced *** than nonsubject product in *** possible comparisons.

There were no possible pricing comparisons between Chinese pricing data and nonsubject sources. When comparing Russian pricing data to pricing data for all nonsubject sources, there were *** possible comparison for product 1 only. Pure magnesium imported from Russia was priced *** than nonsubject-country pure magnesium in *** possible comparisons (*** percent of observations)]. A summary of margins of underselling and overselling is presented in table E-1.

Figure E-1

Magnesium: Weighted-average quarterly prices and quantities for product 1, January 2004-June 2010

* * * * *

Figure E-2

Magnesium: Weighted-average quarterly prices and quantities for product 2, January 2004-June 2010

* * * * *

Figure E-3

Magnesium: Weighted-average quarterly prices and quantities for product 3, January 2004-June 2010

* * * * *

Figure E-4

Magnesium: Weighted-average quarterly prices and quantities for product 4, January 2004-June 2010

* * * * *

Table E-1

Magnesium: Summary of underselling/(overselling) by product and by year from nonsubject countries, January 2004-June 2010

* * * * *

¹ In these reviews, China is a subject country for products 2 and 4, and a nonsubject country for products 1 and 3.

