

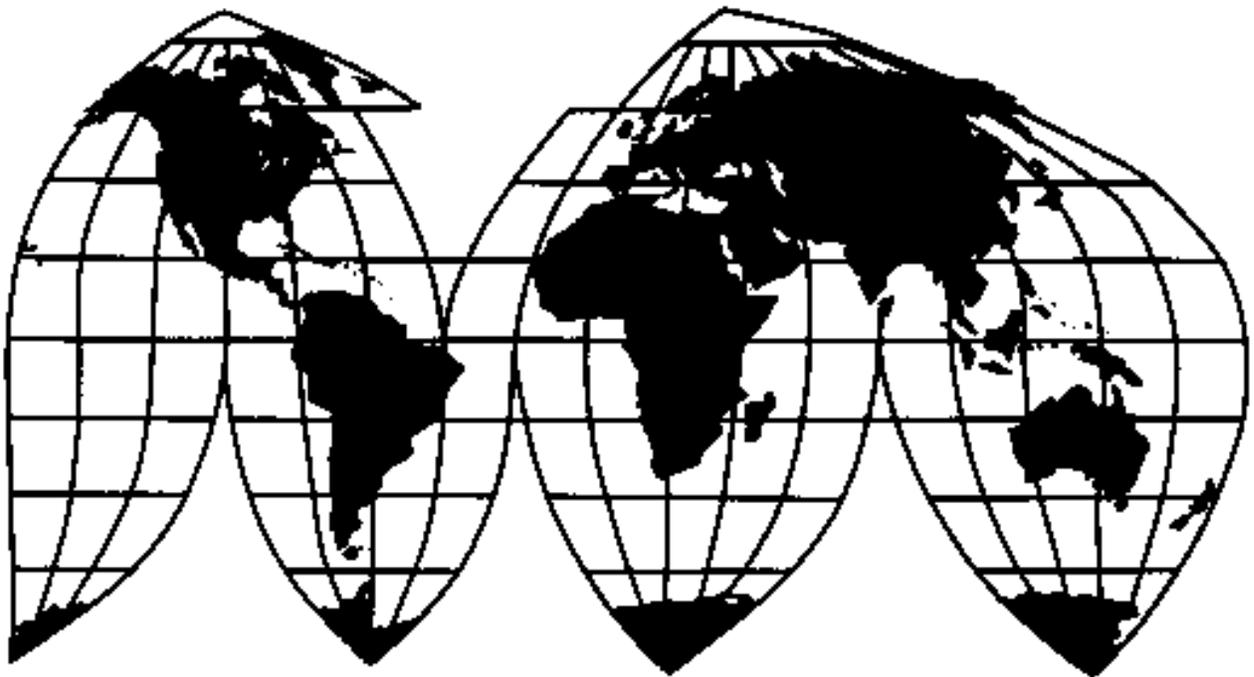
Magnesium From China and Russia

Investigations Nos. 731-TA-1071-1072 (Preliminary)

Publication 3685

April 2004

U.S. International Trade Commission



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Information that would reveal confidential operations of individual concerns may not be published and therefore has been deleted from this report.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**Investigations Nos. 731-TA-1071-1072 (Preliminary)****MAGNESIUM FROM CHINA AND RUSSIA****DETERMINATIONS**

On the basis of the record¹ developed in the subject investigations, the United States International Trade Commission (Commission) determines, pursuant to section 733(a) of the Tariff Act of 1930 (19 U.S.C. § 1673b(a)) (the Act), that there is a reasonable indication that an industry in the United States is materially injured by reason of imports from Russia of pure magnesium, provided for in subheadings 8104.11.00 and 8104.30.00 of the Harmonized Tariff Schedule of the United States (HTS), and imports from China and Russia of alloy magnesium, provided for in subheadings 8104.19.00 and 8104.30.00 of the HTS, that are alleged to be sold in the United States at less than fair value (LTFV).

COMMENCEMENT OF FINAL PHASE INVESTIGATIONS

Pursuant to section 207.18 of the Commission's rules, the Commission also gives notice of the commencement of the final phase of its investigations. The Commission will issue a final phase notice of scheduling, which will be published in the *Federal Register* as provided in section 207.21 of the Commission's rules, upon notice from the Department of Commerce (Commerce) of affirmative preliminary determinations in the investigations under section 733(b) of the Act, or, if the preliminary determinations are negative, upon notice of affirmative final determinations in those investigations under section 735(a) of the Act. Parties that filed entries of appearance in the preliminary phase of the investigations need not enter a separate appearance for the final phase of the investigations. Industrial users, and, if the merchandise under investigation is sold at the retail level, representative consumer organizations have the right to appear as parties in Commission antidumping and countervailing duty investigations. The Secretary will prepare a public service list containing the names and addresses of all persons, or their representatives, who are parties to the investigations.

BACKGROUND

On February 27, 2004, a petition was filed with the Commission and Commerce by US Magnesium Corp., Salt Lake City, UT; United Steelworkers of America, Local 8319, Salt Lake City, UT; and Glass, Molders, Pottery, Plastics & Allied Workers International, Local 374, Long Beach, CA, alleging that an industry in the United States is materially injured by reason of LTFV imports of pure and alloy magnesium from Russia and alloy magnesium from China. Accordingly, effective February 27, 2004, the Commission instituted antidumping duty investigations Nos. 731-TA-1071-1072 (Preliminary).

Notice of the institution of the Commission's investigations and of a public conference to be held in connection therewith was given by posting copies of the notice in the Office of the Secretary, U.S. International Trade Commission, Washington, DC, and by publishing the notice in the *Federal Register* of March 9, 2004 (69 FR 11041). The conference was held in Washington, DC, on March 19, 2004, 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)).

IEWS OF THE COMMISSION

Based on the record in these investigations, we find that there is a reasonable indication that an industry in the United States is materially injured by reason of imports of pure magnesium from Russia, and imports of alloy magnesium from China and Russia, that are allegedly sold in the United States at less than fair value (“LTFV”).

I. THE LEGAL STANDARD FOR PRELIMINARY DETERMINATIONS

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

II. BACKGROUND

Pure magnesium is typically used in the production of aluminum alloys for use in beverage cans and in some automotive parts, in iron and steel desulfurization, as a reducing agent for various nonferrous metals (titanium, zirconium, hafnium, uranium, beryllium), and in magnesium anodes for the protection of iron and steel in underground pipe and water tanks and various marine applications. Alloy magnesium is principally used in structural applications, primarily in castings (die, permanent mold, and sand) and extrusions for the automotive industry.

The petition was 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. During the period 2000-2003, there were two firms that produced pure magnesium and six firms that produced alloy magnesium, and the Commission received questionnaire responses from all of these firms. The producers are located in Utah, Washington, Ohio, California, and Indiana.⁴

Based on quantity, apparent U.S. consumption of pure magnesium decreased *** percent from 2000 to 2003, while apparent U.S. consumption of alloy magnesium increased *** percent during this same period. Domestically produced pure magnesium accounted for *** percent of the U.S. market in 2000, *** percent in 2001, *** percent in 2002, and *** percent in 2003. Domestically produced alloy magnesium accounted for *** percent of the U.S. market in 2000, *** percent in 2001, *** percent in 2002, and *** percent in 2003. Imports of subject pure magnesium accounted for *** percent of the U.S.

¹ 19 U.S.C. § 1673b(a); see also American Lamb Co. v. United States, 785 F.2d 994, 1001-1004 (Fed. Cir. 1986); Aristech Chemical Corp. v. United States, 20 CIT 353, 354 (1996).

² American Lamb, 785 F.2d at 1001 (Fed. Cir. 1986); see also Texas Crushed Stone Co. v. United States, 35 F.3d 1535, 1543 (Fed. Cir. 1994).

³ US Magnesium is the successor company to Magnesium Corporation of America (Magcorp). Since December 1991, Magcorp has filed three previous petitions concerning magnesium imports from Canada, China, Israel, Russia, and/or Ukraine.

⁴ See CR/PR at Table III-1.

market in 2000, *** percent in 2001, *** percent in 2002, and *** percent in 2003. Imports of subject alloy magnesium accounted *** percent of the U.S. market in 2000, *** percent in 2001, *** percent in 2002, and *** percent in 2003.⁵ Imports from nonsubject sources, including Canada and Israel, were also present in the market during the period of investigation.

III. DOMESTIC LIKE PRODUCTS

A. In General

In determining whether there is a reasonable indication that an industry in the United States is materially injured or threatened with material injury by reason of imports of the subject merchandise, the Commission first defines the “domestic like product” and the “industry.”⁶ Section 771(4)(A) of the Tariff Act of 1930, as amended (“the Act”), defines the relevant domestic industry as the “producers as a [w]hole of a domestic like product, or those producers whose collective output of a domestic like product constitutes a major proportion of the total domestic production of the product.”⁷ In turn, 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”⁸

The decision regarding the appropriate domestic like product(s) in an investigation is a factual determination, and the Commission has applied the statutory standard of “like” or “most similar in characteristics and uses” on a case-by-case basis.⁹ No single factor is dispositive, and the Commission may consider other factors it deems relevant based on the facts of a particular investigation.¹⁰ The Commission looks for clear dividing lines among possible like products and disregards minor variations.¹¹ Although the Commission must accept the determination of the Department of Commerce (“Commerce”) as to the scope of the imported merchandise allegedly sold at LTFV, the Commission determines what domestic product is like the imported articles Commerce has identified.¹²

⁵ See CR/PR at Table IV-6.

⁶ 19 U.S.C. § 1677(4)(A).

⁷ 19 U.S.C. § 1677(4)(A).

⁸ 19 U.S.C. § 1677(10).

⁹ See, e.g., NEC Corp. v. Department of Commerce, 36 F. Supp.2d 380, 383 (Ct. Int’l Trade 1998); Nippon Steel Corp. v. United States, 19 CIT 450, 455 (1995); Torrington Co. v. United States, 747 F. Supp. 744, 749 n.3 (Ct. Int’l Trade 1990), aff’d, 938 F.2d 1278 (Fed. Cir. 1991) (“every like product determination ‘must be made on the particular record at issue’ and the ‘unique facts of each case’”). The Commission generally considers a number of factors including: (1) physical characteristics and uses; (2) interchangeability; (3) channels of distribution; (4) customer and producer perceptions of the products; (5) common manufacturing facilities, production processes and production employees; and, where appropriate, (6) price. See Nippon, 19 CIT at 455 n.4; Timken Co. v. United States, 913 F. Supp. 580, 584 (Ct. Int’l Trade 1996).

¹⁰ See, e.g., S. Rep. No. 96-249 at 90-91 (1979).

¹¹ Nippon Steel, 19 CIT at 455; Torrington, 747 F. Supp. at 748-49. See also S. Rep. No. 96-249 at 90-91 (1979) (Congress has indicated that the like product standard should not be interpreted in “such a narrow fashion as to permit minor differences in physical characteristics or uses to lead to the conclusion that the product and article are not ‘like’ each other, nor should the definition of ‘like product’ be interpreted in such a fashion as to prevent consideration of an industry adversely affected by the imports under consideration.”).

¹² Hosiden Corp. v. Advanced Display Mfrs., 85 F.3d 1561, 1568 (Fed. Cir. 1996) (Commission may find single like product corresponding to several different classes or kinds defined by Commerce); Torrington, 747 F. Supp. at 748-752 (affirming Commission determination of six like products in investigations where Commerce found five

(continued...)

B. Product Description

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

The products covered by this investigation are 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 this investigation 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, and 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”¹³ and thus are outside the scope of the existing antidumping orders on magnesium from China (generally referred to as “alloy” magnesium).

The scope of this investigation excludes: (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;”¹⁴ (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.¹⁵

¹² (...continued)
classes or kinds).

¹³ 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.

¹⁴ 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 Notice of Antidumping Duty Order: Pure Magnesium in Granular Form from the People’s Republic of China, 66 FR 57936 (Nov. 19, 2001).

¹⁵ This third 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 Final Determination of Sales at Less Than Fair Value: Pure Magnesium in Granular Form From the People’s Republic of China, 66 FR 49345

(continued...)

The merchandise subject to this investigation is 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 merchandise under investigation is dispositive.¹⁶

Commerce defined the scope of the imported merchandise from Russia within the scope of the investigations as follows.¹⁷

The products covered by this investigation 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 this investigation 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.”¹⁸

The scope of this investigation 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,

¹⁵ (...continued)

(September 27, 2001); Final Determination of Sales at Less Than Fair Value: Pure Magnesium From Israel, 66 FR 49349 (September 27, 2001); 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.

¹⁶ Notice of Initiation of Antidumping Duty Investigations: Magnesium Metal From the People’s Republic of China and the Russian Federation, 69 Fed. Reg. 15293 (March 25, 2004).

¹⁷ Id., 69 F.R. 15293, 15294 (March 25, 2004).

¹⁸ 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.

silicon, rare earth metals/mischmetal, cryolite, silica/fly ash, magnesium oxide, periclase, ferroalloys, dolomite lime, and colemanite.¹⁹

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.

C. Analysis

There are three like product issues in these investigations: (1) whether pure and alloy magnesium are separate like products; (2) whether primary and secondary magnesium are separate like products; and (3) whether cast and granular magnesium are separate like products.²⁰

Petitioners, US Magnesium Corp.; the United Steelworkers of America, Local 8319; and the Glass, Molders, Pottery, Plastics & Allied Workers International, Local 374, contend that there is a single like product encompassing products coextensive with the scope of these investigations, i.e., encompassing primary and secondary pure and alloy magnesium in all cast and granular forms, shapes, and sizes. The Russian producer Avisma Titanium-Magnesium Works (“Avisma”) and a U.S. magnesium purchaser Alcoa take the position that pure and alloy magnesium are separate domestic like products.^{21 22 23}

¹⁹ 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 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); Final Determination of Sales at Less Than Fair Value: Pure Magnesium From Israel, 66 FR 49349 (September 27, 2001); 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.

²⁰ Commissioner Lane finds that there is one domestic like product, coextensive with the scope of these investigations. See Separate Views of Commissioner Charlotte R. Lane.

²¹ Avisma’s Postconference Brief at 2-13.

²² The Chinese producer Nanjing Yunhai Magnesium Co. and Nanjing Welbow Metals Co. (“Nanjing”), and Toyota Tsusho Corporation and Toyota Tsusho America, Inc. (“Toyota”), an importer of magnesium argue that automotive qualified alloy magnesium used in the diecast industry should be treated as a separate like product from pure magnesium or other alloy magnesium. Nanjing/Toyota Comments at 2. Nanjing/Toyota’s argument that automotive qualified alloy magnesium should be treated as a separate domestic like product was raised for the first time in comments submitted after the staff conference in these preliminary investigations, and there is very limited information in the record in these preliminary investigations to fully analyze this issue. For purposes of this preliminary investigation, we include qualified alloy magnesium in the domestic like product of alloy magnesium.

²³ Three U.S. manufacturers of particulate magnesium (chips, granules and powders), Reade Manufacturing Company, Magnesium Elektron North America, Inc., and Hart Metals, Inc., argue that imported ultra high purity magnesium (“UHP”) “***.” Letter from Fried, Frank, Harris, Shriver & Jacobson, dated March 24, 2004, at 2. This argument is at odds with the principle, repeatedly stated by the Commission, that if there is no domestically produced article corresponding to particular merchandise within the scope of an investigation, the Commission must identify the most similar article that is domestically produced. See, e.g., Certain Aluminum Plate from South Africa, Inv. No. 731-TA-1056 (Preliminary), USITC Pub. 3654 (Dec. 2003) at 7-8 n.37. Here, the most similar article to UHP is other pure magnesium.

1. Pure Magnesium vs. Alloy Magnesium

In previous investigations and sunset reviews involving magnesium of both types, the Commission found pure and alloy magnesium to be separate like products.²⁴ The Commission found that although the companies that produce both pure and alloy magnesium do so with the same machinery and employees, and pure and alloy magnesium share certain physical characteristics (but not others), the two products have different principal end uses, are targeted for distinct markets, are generally not interchangeable, are perceived differently by customers due to their different end uses, and have different price trends as a result of their different markets.²⁵

Physical Characteristics and Uses. There is nothing in the record of these preliminary investigations to suggest that the physical characteristics of pure and alloy magnesium have changed since the prior investigations. Pure and alloy magnesium share the basic physical characteristics of being lightweight and strong and having low density. Both products consist mostly of magnesium: pure magnesium contains at least 99.8 percent magnesium by weight, and alloy magnesium usually contains at least 90 percent. 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.²⁶

Pure and alloy magnesium generally have different principal uses. Pure magnesium is typically sold to end users who combine it with other elements (typically aluminum) for use in a final product. Of U.S. producers' total reported commercial U.S. shipments of pure magnesium in 2003, over *** percent were to aluminum producers, and about *** percent were to magnesium granule producers for ultimate use in iron and steel desulfurization.²⁷ Alloy magnesium, on the other hand, is used principally in structural applications (mostly in castings and extrusions for the automotive industry),²⁸ although a significant amount of alloy magnesium also is used in aluminum production. Of U.S. producers' total commercial U.S. shipments of alloy magnesium in 2003, approximately *** percent were to diecasters, and approximately *** percent were to aluminum producers.²⁹

Petitioners contend that the use of alloy magnesium in aluminum production is a relatively new development that has blurred the lines between pure and alloy magnesium. According to petitioners, alloy magnesium began to be used in these applications – and to compete with pure magnesium – as it became available at lower prices in the last few years, both from China and from U.S. producers of

²⁴ Magnesium from Canada, Inv. Nos. 701-TA-309 and 731-TA-528 (Final), USITC Pub. 1992 (Aug. 1992) at 8-11; 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; Pure Magnesium from China, Inv. No. 731-TA-696 (Review), USITC Pub. 3346 (August 2000) at 4-5.

²⁵ E.g., Magnesium from China, Russia, and Ukraine, Inv. Nos. 731-TA-696-698 (Final), USITC Pub. 2885 (May 1995) at 8-9.

²⁶ Confidential Staff Report (“CR”) at I-14, PR at I-11.

²⁷ CR at I-21, PR at I-16.

²⁸ CR at I-21, PR at I-16.

²⁹ CR at I-21, PR at I-16.

secondary magnesium.³⁰ Domestic producers and importers generally were divided on the question of whether there is competition between pure and alloy magnesium.³¹

The two major aluminum producers participating in these investigations also were divided on the question of the extent to which alloy magnesium can be used in aluminum alloying. Alcoa described the interchangeability between pure and alloy magnesium as “severely limited,” and stated that Chinese alloy magnesium accounted for ***.³² Alcan, on the other hand, stated that the development of new technology now permits secondary (i.e., recycled) alloy magnesium to be used in aluminum production.³³ Alcan predicted that it will be able to fill a significant proportion of its magnesium requirements with alloy magnesium obtained in this way.

There is conflicting evidence in the record as to whether the use of secondary alloy magnesium in aluminum production is in fact a new development.³⁴ It is also unclear whether the alloy magnesium that is used in aluminum production is used for the same purposes as pure magnesium. We intend to seek further information in any final phase investigations on the extent to which alloy magnesium is used interchangeably with pure magnesium in aluminum production.

Manufacturing Facilities and Employees. Primary production of pure and alloy magnesium generally occurs in the same facilities and by the same employees, except that additional equipment and labor is involved for the additional step of adding alloying elements.³⁵ The amount of value added to the magnesium in the alloying phase is not great.³⁶ To the extent that 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).

Interchangeability and Customer and Producer Perceptions. As discussed above, the degree of interchangeability between pure and alloy magnesium is limited, with the two products generally used for different purposes. However, there appears to be a limited degree of one-way substitution of alloy magnesium for pure magnesium in aluminum production.³⁷

³⁰ Petition at 29, Conference Transcript at 33-34.

³¹ CR at II-2, PR at II-2.

³² Alcoa Postconference Brief at 6 and 37. Avisma noted conference testimony by Alcoa that indicated that magnesium alloy products containing beryllium (the majority of magnesium alloy products) cannot be used in applications such as the production of aluminum cans because beryllium is toxic. *Id.* at 7-10.

³³ Conference Transcript at 118 and 148 (Yosowitz, Alcan).

³⁴ Compare Conference Transcript at 118 and 148 (Yosowitz, Alcan) with *** to Question 7 in Notes of George Deyman attached to Memorandum INV-BB-044.

³⁵ CR at I-18, PR at I-14. Avisma described a number of additional steps involved in its production of alloy magnesium, and noted that it takes *** as long to make alloy magnesium as it does to make pure magnesium. Avisma Postconference Brief at Exhibit 3. Avisma’s production methods are not relevant to the analysis of the like product factors, which should be limited to domestic production methods. *See, e.g., Torrington Co. v. United States*, 747 F. Supp. 744, 749 (Ct. Int’l Trade 1990), *aff’d*, 938 F.2d 1278 (Fed. Cir. 1991).

³⁶ Conference Transcript at 85-86 (Legge, US Magnesium).

³⁷ *See, e.g.,* CR/PR at Table III-5.

Channels of Distribution. Both pure and alloy magnesium are sold to end users, albeit to different classes of end users. Pure magnesium is mostly sold to aluminum producers, and iron and steel producers, while alloy magnesium is mostly sold to diecasters.³⁸ As discussed above, we intend to examine in any final phase investigations the extent to which pure and alloy magnesium are being used interchangeably, particularly by aluminum alloyers and iron and steel producers.

Price. There is some support in the record for petitioners' claim that the prices for alloy and pure magnesium have converged as the prices for pure magnesium have declined.³⁹ However, although the gap between pure and alloy magnesium pricing narrowed during the period of investigation, pure magnesium generally continues to command a price premium.⁴⁰

Conclusion. Although there is new and somewhat conflicting information in the record of these preliminary investigations with regard to the uses and pricing of alloy magnesium, on balance a finding that pure and alloy magnesium constitute separate domestic like products is again warranted. We intend to seek further information on this issue in any final phase investigations.

2. Primary vs. Secondary Magnesium

Beyond petitioners' arguments that primary and secondary magnesium are a single domestic like product, there is very little information in the record concerning similarities or differences between primary and secondary magnesium. No other party has addressed this domestic like product issue. Virtually all secondary production is of alloy magnesium.⁴¹ 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, for the reasons that petitioners give.⁴² 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) whereas secondary magnesium is made, largely by firms other than US Magnesium, through a recycling process. If secondary magnesium is compared with all primary magnesium (*i.e.*, pure and alloy primary magnesium) the similarities between the primary and secondary products become more attenuated because of the differences between pure and alloy magnesium, which are described above. Based on the limited data in the record, we find that primary and secondary magnesium are part of the same domestic like product. For purposes of these preliminary investigations, we note that the secondary magnesium is part of the domestic like product consisting of alloy magnesium.

³⁸ CR at I-21, PR at I-16.

³⁹ Conference Transcript at 71 (Kaplan, US Magnesium) and 164 (McHale, Alcoa).

⁴⁰ CR/PR at Table III-3.

⁴¹ Petition at 7 n.19.

⁴² Petition at 26-38.

3. Cast vs. Granular Magnesium

One of the Commission's previous Title VII investigations of magnesium addressed the cast vs. granular magnesium like product issue.⁴³ The Commission found that the two types of magnesium were part of the same like product. It noted that granular and ingot magnesium are produced in a continuum of forms and sizes, without any clear dividing line, that they share the same chemical properties, and are sold through similar channels of distribution. The Commission found granular and cast magnesium to be interchangeable at least for significant end uses, particularly in the desulfurization segment. It noted that although the grinding operations generally took place in separate facilities using separate workers, the same production facilities, processes, and workers are used to produce cast and granular magnesium up to the grinding stage. Beyond petitioners' arguments that cast and granular magnesium are a single like product, there is very little information in the record concerning similarities or differences between cast and granular magnesium. No other party has addressed this like product issue. Because there is no evidence in the record suggesting that the like product analysis has changed in any way since the 2001 Investigation, we again find granular and cast magnesium to be part of the same like product.⁴⁴

IV. DOMESTIC INDUSTRIES

The domestic industry is defined as "the producers as a [w]hole of a domestic like product"⁴⁵ In defining the domestic industry, the Commission's general practice has been to include in the industry all of the domestic production of the like product, whether toll-produced, captively consumed, or sold in the domestic merchant market.⁴⁶

Based on our like product determination, we find for these preliminary determinations two domestic industries, one producing pure magnesium and the other producing alloy magnesium.^{47 48}

⁴³ Magnesium from China and Israel, Inv. Nos. 701-TA-403 and 731-TA-895-896 (Final), USITC Pub. 3467 (Nov. 2001). The Commission referred to cast magnesium as "ingot" in that investigation.

⁴⁴ Vice Chairman Hillman and Commission Miller note that they have previously found pure magnesium ingot (cast) and pure granular magnesium to be separate like products (*Magnesium from China and Israel*, Inv. Nos. 701-TA-403 and 731-TA-895-896 (Final), USITC Pub. 3467 (Nov. 2001), Dissenting Views of Commissioners Hillman and Miller). Information received in these preliminary investigations suggests that there may have been a change in the operations of companies that had been found to be pure granular magnesium producers in the 2001 determinations. ***. Counsel for other companies found in the 2001 cases to be producers of pure granular magnesium (Reade, Magnesium Elektron and Hart Metals) reported that these companies are industrial users of subject merchandise but not producers. Letter from Fried, Frank, Harris, Shriver & Jacobson, dated March 19, 2004. In any final investigation on pure magnesium from Russia, Hillman and Miller will seek information to determine the extent of domestic production of pure ingot and granular magnesium.

⁴⁵ 19 U.S.C. § 1677(4)(A).

⁴⁶ See United States Steel Group v. United States, 873 F. Supp. 673, 681-84 (Ct. Int'l Trade 1994), aff'd, 96 F.3d 1352 (Fed. Cir.1996).

⁴⁷ *** imported the subject merchandise and is thus a related party. ***. CR/PR at Table IV-1 n.9. Because these imports are *** compared with *** domestic production (*** in 2003 (CR/PR at Table III-2)), and because ***, we do not find it appropriate to exclude the company from the domestic industry as a related party as defined under 19 U.S.C. §1677(4)(B).

⁴⁸ The record in these preliminary investigations indicates that import quantities of the relevant subject imports for each subject country exceeded the 3 percent statutory negligibility threshold during the pertinent period. CR/PR at Table IV-2. Accordingly, we find that the subject imports are not negligible as defined by 19 U.S.C. § 1677(24).

V. CUMULATION OF IMPORTS OF ALLOY MAGNESIUM

A. In General

For purposes of evaluating the volume and price effects for a determination of reasonable indication of material injury by reason of the subject imports, section 771(7)(G)(i) of the Act requires the Commission to assess cumulatively the volume and effect of imports of the subject merchandise from all countries as to which petitions were filed and/or investigations self-initiated by Commerce on the same day, if such imports compete with each other and with domestic like products in the U.S. market.⁴⁹ In assessing whether subject imports compete with each other and with the domestic like product,⁵⁰ the Commission has generally considered four factors, including:

- (1) the degree of fungibility between the subject 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 geographic markets of subject imports from different countries and the domestic like product;
- (3) the existence of common or similar channels of distribution for subject imports from different countries and the domestic like product; and
- (4) whether the subject imports are simultaneously present in the market.⁵¹

While no single factor is necessarily determinative, and the list of factors is not exclusive, these factors are intended to provide the Commission with a framework for determining whether the subject imports compete with each other and with the domestic like product.⁵² Only a “reasonable overlap” of competition is required.⁵³

⁴⁹ 19 U.S.C. § 1677(7)(G)(i).

⁵⁰ The Uruguay Round Agreements Act (“URAA”) Statement of Administrative Action (“SAA”) expressly states that “the new section will not affect current Commission practice under which the statutory requirement is satisfied if there is a reasonable overlap of competition.” SAA, H.R. Rep. 316, 103d Cong., 2d Sess. at 848 (1994), citing Fundicao Tupy, S.A. v. United States, 678 F. Supp. 898, 902 (Ct. Int’l Trade 1988), aff’d, 859 F.2d 915 (Fed. Cir. 1988).

⁵¹ See Certain Cast-Iron Pipe Fittings from Brazil, the Republic of Korea, and Taiwan, Inv. Nos. 731-TA-278-280 (Final), USITC Pub. 1845 (May 1986), aff’d, Fundicao Tupy, S.A. v. United States, 678 F. Supp. 898 (Ct. Int’l Trade), aff’d, 859 F.2d 915 (Fed. Cir. 1988).

⁵² See, e.g., Wieland Werke, AG v. United States, 718 F. Supp. 50 (Ct. Int’l Trade 1989).

⁵³ See Goss Graphic System, Inc. v. United States, 33 F. Supp. 2d 1082, 1087 (Ct. Int’l Trade 1998) (“cumulation does not require two products to be highly fungible”); 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.”).

B. Analysis⁵⁴

The threshold requirement for cumulation has been satisfied because the petitions with respect to China and Russia were filed on the same day. Based on the record in these preliminary investigations, we find that there is a reasonable overlap of competition between imports of alloy magnesium from China and Russia and between these imports and the domestic like product. First, no party has argued that alloy magnesium from the two countries is not fungible. In 2003, *** metric tons of Chinese alloy magnesium and *** metric tons of Russian alloy magnesium were shipped to diecasters in the United States.⁵⁵ Questionnaire response data confirm that producers and importers view the domestic like product and subject imports as mostly interchangeable. All five domestic producers and most importers reported that the subject imports were “always” or “frequently” interchangeable with each other and the domestic like product.⁵⁶ Second, there is no information in the record that contradicts petitioners’ contention that subject imports from China and Russia are sold in the same geographic markets as the domestic like product. Third, while the channels of distribution for imports from China and Russia appear to be somewhat different – ***⁵⁷ – in both cases sales are made to end users and not to distributors that maintain inventories. The same is true for the domestic like product. Finally, the import statistics make clear that subject imports from both China and Russia have entered the U.S. market in significant quantities during each year of the period of investigation, and accordingly have been simultaneously present in the U.S. market.⁵⁸

In sum, we find that there is a reasonable overlap of competition between the subject imports of alloy magnesium from China and Russia, and between the subject imports and the domestic like product. Consequently, we cumulate subject imports of alloy magnesium from China and Russia for purposes of these preliminary determinations.

VI. **REASONABLE INDICATION OF MATERIAL INJURY BY REASON OF SUBJECT IMPORTS**

A. General Legal Standards

In the preliminary phase of antidumping or countervailing duty investigations, the Commission determines whether there is a reasonable indication that an industry in the United States is materially injured by reason of the imports under investigation.⁵⁹ In making this determination, the Commission must consider the volume of subject imports, their effect on prices for the domestic like product, and their impact on domestic producers of the domestic like product, but only in the context of U.S. production operations.⁶⁰ The statute defines “material injury” as “harm which is not inconsequential, immaterial, or

⁵⁴ Cumulation is not an issue with respect to pure magnesium imports because the scope of the investigation regarding imports from China does not include pure magnesium – it is limited to alloy magnesium.

⁵⁵ CR/PR at Table IV-4.

⁵⁶ CR/PR at Tables II-1 and II-2.

⁵⁷ Avisma Postconference Brief at 17.

⁵⁸ CR/PR at Table IV-2, CR at IV-8, PR at IV-6.

⁵⁹ 19 U.S.C. §§ 1671b(a) and 1673b(a).

⁶⁰ 19 U.S.C. § 1677(7)(B)(i). The Commission “may consider such other economic factors as are relevant to the determination” but shall “identify each [such] factor . . . [a]nd explain in full its relevance to the determination.” 19 U.S.C. § 1677(7)(B). See also *Angus Chemical Co. v. United States*, 140 F.3d 1478 (Fed. Cir. 1998).

unimportant.”⁶¹ In assessing whether there is a reasonable indication that the domestic industry is materially injured by reason of subject imports, we consider all relevant economic factors that bear on the state of the industry in the United States.⁶² No single factor is dispositive, and all relevant factors are considered “within the context of the business cycle and conditions of competition that are distinctive to the affected industry.”⁶³

For the reasons stated below, we determine that there is a reasonable indication that the domestic industry producing pure magnesium is materially injured by reason of imports of pure magnesium from Russia, and that the domestic industry producing alloy magnesium is materially injured by reason of imports of alloy magnesium from China and Russia.

B. Conditions of Competition

The following conditions of competition are pertinent to our analysis of both the impact of pure magnesium imports from Russia on the domestic industry producing pure magnesium, and the impact of cumulated alloy magnesium imports from China and Russia on the domestic industry producing alloy magnesium.⁶⁴

1. Demand Conditions

Demand for both pure and alloy magnesium is derived from the demand for the applications in which magnesium is used, namely, aluminum alloying, diecasting, and iron and steel desulfurization, and thus generally follows the cyclical demand in the industries that consume magnesium, which, in turn, generally tracks overall economic activity. There are few products that substitute for pure and alloy magnesium.⁶⁵ While data for consumption of pure magnesium showed *** declines overall over the period of investigation (although rising at the end of the period, from 2002 to 2003), parties generally reported no change or slight increases in demand.⁶⁶ Consumption of alloy magnesium increased *** overall over the period of investigation, after having reached a trough in 2001.⁶⁷

⁶¹ 19 U.S.C. § 1677(7)(A).

⁶² 19 U.S.C. § 1677(7)(C)(iii).

⁶³ 19 U.S.C. § 1677(7)(C)(iii).

⁶⁴ CR/PR at Table IV-2. At petitioners’ request, we have used a four-year period of investigation (except for pricing information), encompassing 2000 through 2003. Petitioners argued that a three-year period of investigation, beginning with 2001, would provide distorted results because, according to petitioners, U.S. Mag *** its production capacity in that year as it modernized its production facility with new electrolytic cells; and because of U.S. Mag’s bankruptcy filing in that year. Petition at 55. None of the respondents objected to this expansion of the normal three-year period of investigation. We intend also to seek pricing information for this extended period in any final phase investigations.

⁶⁵ CR at II-9, PR at II-6.

⁶⁶ Apparent U.S. consumption of pure magnesium was *** metric tons in 2000, *** metric tons in 2001, *** metric tons in 2002, and *** metric tons in 2003. CR/PR at Table IV-5.

⁶⁷ Apparent U.S. consumption of alloy magnesium was *** metric tons in 2000, *** metric tons in 2001, *** metric tons in 2002, and *** metric tons in 2003. CR/PR at Table IV-5.

2. Supply Conditions

There were two domestic primary producers of both pure and alloy magnesium during the period of investigation: US Magnesium (the successor to Magcorp) and Northwest Alloys. Northwest Alloys, which produced mostly pure magnesium captively for Alcoa's internal consumption, closed its plant and ceased production in October 2001.⁶⁸ There were also four domestic secondary producers of alloy magnesium.⁶⁹

The supply of pure and alloy magnesium was affected by the bankruptcy of Magcorp (the predecessor of US Magnesium) in August 2001. At least one purchaser reported ***.⁷⁰ The supply of alloy and especially pure magnesium also was affected by US Magnesium's plant modernization program, which *** the company's production capacity in 2001 and 2002.⁷¹ Most pure magnesium is used in aluminum production,⁷² and some aluminum producers stressed the importance of having a diversified source of supply and not having to rely on a single, perhaps unreliable, supplier.⁷³

Primary magnesium producers that use the electrolytic process (i.e., US Magnesium) have a strong incentive to maintain a continuous level of production because the electrolytic cells used to make primary magnesium must be kept in constant operation to avoid their deterioration. Therefore, when faced with price competition, primary magnesium producers will tend to cut prices to maintain production volume.

Finally, non-subject imports have been an important source of supply throughout the period of investigation.⁷⁴

⁶⁸ Counsel for Alcoa and Northwest Alloys stated at the staff conference that the closure of Northwest Alloys' plant was "due to its position as a global high-cost producer of magnesium" and that the plant "was not closed due to imports of allegedly unfairly traded magnesium from Russia or China." Conference Transcript at 102-103 (Leibowitz).

⁶⁹ CR at III-7-8, PR at III-4.

⁷⁰ Alcan Postconference Brief at 7-10.

⁷¹ CR at III-6, PR at III-3.

⁷² CR at I-21, PR at I-16.

⁷³ Alcan Postconference Brief at 3, Alcoa Postconference Brief at 2.

⁷⁴ Non-subject imports of pure magnesium were 33,443 metric tons in 2000, 13,588 metric tons in 2001, 16,948 metric tons in 2002, and 10,250 metric tons in 2003. CR/PR at Table IV-2. The U.S. market share of these non-subject imports was *** percent in 2000, *** percent in 2001, *** percent in 2002, and *** percent in 2003. As noted in the staff report, some of these non-subject imports are subject to antidumping duties. CR/PR at Table IV-6.

Non-subject imports of alloy magnesium were 28,908 metric tons in 2000, 23,374 metric tons in 2001, 29,823 metric tons in 2002, and 24,455 metric tons in 2003. CR/PR at Table IV-2. The U.S. market share of these non-subject imports was *** percent in 2000, *** percent in 2001, *** percent in 2002, and *** percent in 2003. CR/PR at Table IV-6.

C. Allegedly LTFV Pure Magnesium from Russia

1. Volume of Subject Imports of Pure Magnesium

Section 771(7)(C)(i) of the Act provides that the “Commission shall consider whether the volume of imports of the merchandise, or any increase in that volume, either in absolute terms or relative to production or consumption in the United States, is significant.”⁷⁵

The volume of imports of pure magnesium from Russia increased by 66.2 percent over the period of investigation, a period during which U.S. consumption of pure magnesium fell ***. Imports from Russia were 10,849 metric tons in 2000, 11,259 metric tons in 2001, 14,631 metric tons in 2002, and 18,035 metric tons in 2003. U.S. consumption fell by *** percent over the period of investigation.⁷⁶ The market share of pure magnesium from Russia *** over the period of investigation, at the same time as the domestic industry’s market share declined. Imports of pure magnesium from Russia increased from *** percent of U.S. apparent consumption in 2000, to *** percent in 2001, to *** percent in 2002, and to *** percent in 2003.⁷⁷ The domestic industry’s share of U.S. apparent consumption was *** percent in 2000, *** percent in 2001, *** percent in 2002, and *** percent in 2003.⁷⁸ The ratio of subject imports to production was *** percent in 2000, *** percent in 2001, *** percent in 2002, and *** percent in 2003.⁷⁹

For purposes of these preliminary determinations, we find the volume of imports of pure magnesium from Russia, both in absolute terms and relative to production and consumption in the United States, to be significant.

2. Price Effects of the Subject Imports of Pure Magnesium

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

- (I) there has been significant price underselling by the imported merchandise as compared with the price of domestic like products of the United States, and
- (II) the effect of imports of such merchandise otherwise depresses prices to a significant degree or prevents price increases, which otherwise would have occurred, to a significant degree.⁸⁰

The record indicates that imports of pure magnesium from Russia were generally substitutable for the domestic like product. Information from U.S. producers and importers indicates that domestic pure magnesium and pure magnesium imported from Russia are generally interchangeable.⁸¹

⁷⁵ 19 U.S.C. § 1677(7)(C)(i).

⁷⁶ Apparent U.S. consumption was *** metric tons in 2000, *** metric tons in 2001, *** metric tons in 2002, and *** metric tons in 2003. CR/PR at Table IV-5.

⁷⁷ CR/PR at Table IV-6.

⁷⁸ CR/PR at Table IV-6

⁷⁹ See CR/PR at Tables II-2 and IV-2.

⁸⁰ 19 U.S.C. § 1677(7)(C)(ii).

⁸¹ CR/PR at Tables II-1 and II-2.

The Commission sought pricing data for one type of pure magnesium. The Russian pure magnesium undersold the domestic product in eight out of 12 quarterly comparisons with margins ranging from *** percent to *** percent.⁸² Russian product oversold the domestic product in four of the 12 quarterly comparisons, with margins ranging from *** percent to *** percent.⁸³ We find the underselling by the Russian pure magnesium to be significant.

Prices of pure magnesium from Russia declined over the period of investigation, as did the prices of the domestic product. Although there was an *** in the Russian pure magnesium price (*** from \$*** per pound in the first quarter of 2001 to \$*** per pound), after the second quarter, the overall trend in the pricing of the Russian magnesium was a declining one. From the second quarter of 2001 to the fourth quarter of 2003, prices of the Russian product fell from \$*** per pound to \$*** per pound, or by *** percent.⁸⁴ The per-pound prices of the domestic product fell from \$*** in the first quarter of 2001 to \$*** in the fourth quarter of 2003, or by *** percent, and from \$*** in the second quarter of 2001 to \$*** in the fourth quarter of 2003, or by *** percent.⁸⁵

Purchasers confirmed a number of the lost sales and lost revenue allegations made by petitioners.⁸⁶

Based on the foregoing we find that imports of pure magnesium from Russia have undersold the domestic like product and depressed domestic prices to a significant degree.

3. Impact of the Subject Imports of Pure Magnesium

Section 771(7)(C)(iii) of the Act provides that the Commission, in examining the impact of the subject imports on the domestic industry, “shall evaluate all relevant economic factors which have a bearing on the state of the industry.”⁸⁷ These factors include output, sales, inventories, capacity utilization, market share, employment, wages, productivity, profits, cash flow, return on investment, ability to raise capital, and research and development. No single factor is dispositive and all relevant factors are considered “within the context of the business cycle and conditions of competition that are distinctive to the affected industry.”⁸⁸

⁸² CR/PR at Table V-1.

⁸³ Id. We note that petitioners argue that imports of alloy magnesium from China compete with U.S. producers’ sales of pure magnesium to aluminum alloyers. Petitioners’ Postconference Brief at 31. We intend to examine the degree of such competition in any final phase of these investigations.

⁸⁴ CR/PR at Table V-1.

⁸⁵ Id.

⁸⁶ CR/PR at Tables V-6 and V-7. Although these data are not broken out into pure and alloy magnesium, it is reasonable to assume that Russian sales to aluminum producers were of pure magnesium, as that is the product which Russian producers typically sell to the aluminum industry. CR/PR at Table IV-4.

⁸⁷ 19 U.S.C. § 1677(7)(C)(iii); see also SAA at 851. “In material injury determinations, 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 also may demonstrate that an industry is facing difficulties from a variety of sources and is vulnerable to dumped or subsidized imports.” SAA at 885.

⁸⁸ The statute instructs the Commission to consider the “magnitude of the dumping margin” in an antidumping proceeding as part of its consideration of the impact of imports. 19 U.S.C. § 1677(7)(C)(iii) (V). In its notice of initiation, Commerce estimated a dumping margin for alloy magnesium from China of 141.49 percent and dumping margins for magnesium from Russia ranging from 54.40 percent to 101.24 percent. 69 Fed. Reg. 15293, 15296

(continued...)

Consistent with our finding that the volume of subject pure magnesium from Russia was significant and that there was significant underselling and price depression, we find that subject imports from Russia are having a significant adverse impact on the domestic industry.

Most of the indicators of the domestic pure magnesium industry's condition deteriorated during the period of investigation.⁸⁹ Production and shipments declined ***.⁹⁰ The industry's capacity utilization rate was *** throughout the period of investigation, although it improved *** in 2003 as US Magnesium brought additional electrolytic cells online.⁹¹ As detailed above, the industry's market share fell ***, at the same time as the subject imports gained market share. Employment in the pure magnesium industry also declined overall.⁹² The significant increase in volume and market share of subject imports materially contributed to the declines in the domestic industry's sales and employment.

The domestic pure magnesium industry's financial condition also deteriorated over the period of investigation. Its operating income fell from *** in 2000, to *** in 2001, *** in 2002, and *** in 2003.⁹³ The industry's *** were mainly the result of a combination of lower domestic sales volumes and lower unit values on those domestic sales.⁹⁴ By taking market share and depressing prices, subject imports contributed to the industry's *** financial performance throughout the period of investigation.

We note that respondents have identified a number of other factors which they assert are the cause of any injury to US Magnesium. These include: costs incurred by Magcorp and US Magnesium in connection with its bankruptcy and modernization efforts; alleged corporate mismanagement of Magcorp and US Magnesium and 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; and rising energy costs. We intend to explore these allegations further in any final phase investigations.

⁸⁸ (...continued)
(March 25, 2004).

⁸⁹ As noted above, Northwest Alloys ceased magnesium production in September 2001, and US Magnesium's production capacity was curtailed in 2001 and 2002 as a result of its plant modernization program. We have taken these factors into account in considering the industry's capacity, production, shipments, and employment data. In 2001, Northwest Alloys' capacity was *** metric tons, its production was *** metric tons, its shipments were *** metric tons, and the number of its production and related workers was ***. CR/PR at Table III-2 and Northwest Alloys' Questionnaire Response.

⁹⁰ Production declined from *** metric tons in 2000, to *** metric tons in 2001, to *** metric tons in 2002, and then increased to *** metric tons in 2003. CR/PR at Table III-2. Shipments fell from *** metric tons in 2000, to *** metric tons in 2001, to *** metric tons in 2002, and then increased to *** metric tons in 2003. CR/PR at Table III-3.

⁹¹ The domestic industry's capacity utilization declined from *** percent in 2000, to *** percent in 2001, and then rose to *** percent in 2002, and to *** percent in 2003. CR/PR at Table III-2. See CR at III-6, PR at III-3 for a discussion of US Magnesium's introduction of new electrolytic cells.

⁹² The number of production and related workers declined from *** in 2000, to *** in 2001, to *** in 2002, and then rose to *** in 2003. CR/PR at Table III-8. Hours worked declined from *** in 2000, to *** in 2001, to *** in 2002, and then rose to *** in 2003. CR /PR at Table III-8. Wages paid declined from \$*** in 2000, to \$*** in 2001, to \$*** in 2002, and then rose to \$*** in 2003. CR/PR at Table III-8.

⁹³ CR/PR at Table VI-1.

⁹⁴ The unit values of the industry's commercial sales per metric ton were \$*** in 2000, \$*** in 2001, \$*** in 2002, and \$*** in 2003. CR/PR at Table VI-1.

Based on the record in this preliminary phase, we find that the significant and increasing volume of low priced imports from Russia had a significant negative impact on the U.S. industry. Accordingly, we determine that there is a reasonable indication of material injury by reason of subject imports of pure magnesium from Russia.

D. Allegedly LTFV Alloy Magnesium from China and Russia

1. Volume of Subject Imports of Alloy Magnesium

The volume of imports of alloy magnesium from China and Russia increased by 74.8 percent over the period of investigation. Cumulated imports of alloy magnesium from China and Russia were 9,507 metric tons in 2000, 9,965 metric tons in 2001, 14,001 metric tons in 2002, and 16,616 metric tons in 2003.⁹⁵ As a share of U.S. apparent consumption, cumulated imports of alloy magnesium increased from *** percent in 2000, to *** in 2001, to *** percent in 2002, and to *** percent in 2003.⁹⁶ The ratio of subject imports to production was *** percent in 2000, *** percent in 2001, *** percent in 2002, and *** percent in 2003.⁹⁷

For purposes of these preliminary determinations, we find the volume of cumulated imports of alloy magnesium from China and Russia, both in absolute terms and relative to production and consumption in the United States, to be significant.

2. Price Effects of Imports of Alloy Magnesium

The record indicates that subject imports of alloy magnesium from China and Russia were generally substitutable for the domestic like product. As noted above, information from U.S. producers and importers indicates that domestic alloy magnesium and alloy magnesium imported from China and Russia are generally interchangeable.⁹⁸

The Commission sought pricing data for three types of alloy magnesium, but complete pricing comparisons were possible only for one of these products, product 4.⁹⁹ For this product, subject imports from China and Russia undersold the domestic product in 19 out of 24 quarterly comparisons with margins ranging from *** percent to *** percent.¹⁰⁰ We find this underselling to be significant.

Prices of alloy magnesium from China and Russia generally declined over the period of investigation, as did the prices of the domestic product. Prices of the Chinese product fell from \$*** per pound to \$*** per pound, or by *** percent from the first quarter of 2001 to the last quarter of 2003. Prices of the Russian product fell from \$*** per pound to \$*** per pound, or by *** percent from the first quarter of 2001 to the last quarter of 2003. Prices of the domestic product fell from \$*** per pound to \$*** per pound, or by *** percent over this period.

⁹⁵ CR/PR at Table IV-2.

⁹⁶ CR/PR at Table C-3.

⁹⁷ See CR/PR at Tables II-2 and IV-2.

⁹⁸ CR/PR at Tables III-2 and II-3.

⁹⁹ We will attempt to gather data for other alloy magnesium pricing products in any final phase investigations.

¹⁰⁰ Id.

Purchasers confirmed a number of the lost sales and lost revenue allegations made by petitioners.¹⁰¹

We find, for purposes of these preliminary determinations, that imports of alloy magnesium from China and Russia have depressed domestic prices to a significant degree.

3. Impact of the Subject Imports of Alloy Magnesium

Consistent with our finding that the volume of subject alloy magnesium from China and Russia was significant and that there was significant underselling and price depression, we find that imports of alloy magnesium from China and Russia are having a significant adverse impact on the domestic industry.

The production and shipments of the domestic alloy magnesium industry increased *** over the period of investigation, reflecting the entry of a new producer, Amacor, into the industry during this period.¹⁰² The industry's capacity utilization rates were *** throughout most of the period of investigation.¹⁰³ The industry's market share increased *** over the period of investigation.¹⁰⁴ Employment in the alloy magnesium industry declined, despite the start of production by a new producer.¹⁰⁵

Consistent with the declining prices noted above, unit values of the industry's sales declined *** overall, with only a small improvement in 2003.¹⁰⁶ Consequently, the domestic alloy magnesium industry's financial condition deteriorated in the period under investigation. It *** in each year of the period.¹⁰⁷

Based on the record in this preliminary phase of the investigations, we find that the significant and increasing volume of low priced imports from China and Russia had a significant negative impact on the U.S. industry. Accordingly, we determine that there is a reasonable indication of material injury by reason of subject imports of alloy magnesium from China and Russia.

¹⁰¹ CR/PR at Tables V-6 and V-7.

¹⁰² Amacor began production in 2001, when it produced *** metric tons. The company produced *** metric tons in 2002 and *** metric tons in 2003. CR/PR at Table III-2.

¹⁰³ The domestic industry's capacity utilization declined from *** percent in 2000, to *** percent in 2001, and then rose to *** percent in 2002, and to *** percent in 2003. CR/PR at Table III-2.

¹⁰⁴ The domestic industry's market share was *** percent in 2000, *** percent in 2001, *** percent in 2002, and *** percent in 2003. CR/PR at Table IV-6.

¹⁰⁵ The number of production and related workers was *** in 2000, *** in 2001, to *** in 2002, and *** in 2003. CR/PR at Table III-8. Hours worked were *** in 2000, *** in 2001, *** in 2002, and *** in 2003. CR/PR at Table III-8. Wages paid were \$*** in 2000, \$*** in 2001, \$*** in 2002, and \$*** in 2003. CR/PR at Table III-8.

¹⁰⁶ The unit values of the industry's commercial sales per metric ton were \$*** in 2000, \$*** in 2001, \$*** in 2002, and \$*** in 2003. CR/PR at Table VI-3.

¹⁰⁷ The industry's *** were \$*** in 2000, \$*** in 2001, \$*** in 2002, and \$*** in 2003. CR/PR at Table VI-3.

CONCLUSION

For the foregoing reasons, we determine there is a reasonable indication that an industry in the United States is materially injured by reason of imports of pure magnesium from Russia that are allegedly sold in the United States at less than fair value, and that an industry in the United States is materially injured by reason of imports of alloy magnesium from China and Russia that are allegedly sold in the United States at less than fair value.

SEPARATE VIEWS OF COMMISSIONER CHARLOTTE R. LANE

I join the majority's views in finding that there is a reasonable indication that an industry in the United States is materially injured by reason of imports of alloy magnesium from China and Russia and imports of pure magnesium from Russia, that are sold in the United States at less than fair value. I concur with the majority's findings with respect to related parties and the conditions of competition; however, I find there to be one domestic like product and I therefore write separately to express my views.

I. THE LEGAL STANDARD FOR PRELIMINARY DETERMINATIONS

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

II. DOMESTIC LIKE PRODUCT

A. In General

In determining whether there is a reasonable indication that an industry in the United States is materially injured or threatened with material injury by reason of imports of the subject merchandise, the Commission first defines the “domestic like product” and the “industry.”³ Section 771(4)(A) of the Tariff Act of 1930, as amended (“the Act”), defines the relevant domestic industry as the “producers as a [w]hole of a domestic like product, or those producers whose collective output of a domestic like product constitutes a major proportion of the total domestic production of the product.”⁴ In turn, 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”⁵

The decision regarding the appropriate domestic like product(s) in an investigation is a factual determination, and the Commission has applied the statutory standard of “like” or “most similar in characteristics and uses” on a case-by-case basis.⁶ No single factor is dispositive, and the Commission

¹ 19 U.S.C. § 1673b(a); see also American Lamb Co. v. United States, 785 F.2d 994, 1001-1004 (Fed. Cir. 1986); Aristech Chemical Corp. v. United States, 20 CIT 353, 354 (1996).

² American Lamb, 785 F.2d at 1001 (Fed. Cir. 1986); see also Texas Crushed Stone Co. v. United States, 35 F.3d 1535, 1543 (Fed. Cir. 1994).

³ 19 U.S.C. § 1677(4)(A).

⁴ 19 U.S.C. § 1677(4)(A).

⁵ 19 U.S.C. § 1677(10).

⁶ See, e.g., NEC Corp. v. Department of Commerce, 36 F. Supp.2d 380, 383 (Ct. Int'l Trade 1998); Nippon Steel Corp. v. United States, 19 CIT 450, 455 (1995); Torrington Co. v. United States, 747 F. Supp. 744, 749 n.3 (Ct. Int'l Trade 1990), aff'd, 938 F.2d 1278 (Fed. Cir. 1991) (“every like product determination ‘must be made on the particular record at issue’ and the ‘unique facts of each case’”). The Commission generally considers a number of

(continued...)

may consider other factors it deems relevant based on the facts of a particular investigation.⁷ The Commission looks for clear dividing lines among possible like products and disregards minor variations.⁸ Although the Commission must accept the determination of the Department of Commerce (“Commerce”) as to the scope of the imported merchandise allegedly sold at LTFV, the Commission determines what domestic product is like the imported articles Commerce has identified.⁹

B. Analysis

For purposes of these preliminary determinations, I find one domestic like product, coextensive with the scope of these investigations as defined by Commerce. I discuss below my reasoning regarding pure and alloy magnesium, primary and secondary magnesium, cast and granular magnesium, and automotive qualified alloy magnesium.

Pure and Alloy Magnesium

For the reasons discussed below, I find that pure and alloy magnesium are part of a single domestic like product.

Physical Characteristics and End Uses - The data in these investigations suggest that pure and alloy magnesium have similar physical characteristics and end uses. Pure and alloy magnesium share the same basic physical characteristics of being lightweight, strong, low density metals with high strength-to-weight ratios. Pure magnesium contains at least 99.8 percent magnesium by weight.¹⁰ Alloy magnesium usually contains at least 90.0 percent magnesium by weight. Pure and alloy magnesium also differ from each other inasmuch as alloy magnesium has certain properties that improve its strength, ductility, workability, corrosion resistance, and density, as compared with pure magnesium.¹¹

The end uses of pure and alloy magnesium have recently changed, resulting in greater overlap of common uses between the two products. Pure magnesium is used primarily in the production of aluminum alloys and as a reagent for iron and steel desulfurization.¹² While alloy magnesium has traditionally been used in structural applications, mostly in castings and extrusion for the automotive

⁶ (...continued)

factors 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. *See Nippon*, 19 CIT at 455 n.4; *Timken Co. v. United States*, 913 F. Supp. 580, 584 (Ct. Int’l Trade 1996).

⁷ *See, e.g.*, S. Rep. No. 96-249 at 90-91 (1979).

⁸ *Nippon Steel*, 19 CIT at 455; *Torrington*, 747 F. Supp. at 748-49. *See also* S. Rep. No. 96-249 at 90-91 (1979) (Congress has indicated that the like product standard should not be interpreted in “such a narrow fashion as to permit minor differences in physical characteristics or uses to lead to the conclusion that the product and article are not ‘like’ each other, nor should the definition of ‘like product’ be interpreted in such a fashion as to prevent consideration of an industry adversely affected by the imports under consideration.”).

⁹ *Hosiden Corp. v. Advanced Display Mfrs.*, 85 F.3d 1561, 1568 (Fed. Cir. 1996) (Commission may find single like product corresponding to several different classes or kinds defined by Commerce); *Torrington*, 747 F. Supp. at 748-752 (affirming Commission determination of six like products in investigations where Commerce found five classes or kinds).

¹⁰ Confidential Staff Report (“CR”) at I-13, Public Staff Report (“PR”) at I-11.

¹¹ CR at I-14, PR at I-11.

¹² CR at II-1, PR at I-1.

industry, the data in these investigations show that alloy magnesium is now used in aluminum production.¹³

Petitioners argue that the use of alloy magnesium in aluminum production is “significant.”¹⁴ Respondent Alcoa argues that the use of alloy magnesium in aluminum is limited because most alloy magnesium contains beryllium, which is toxic, and therefore cannot be used to produce aluminum cans, one of the primary uses of aluminum.¹⁵ However, representatives of Alcan aluminum contend that one of the biggest changes in the magnesium industry is the development of new technology that allows aluminum cans to be produced from secondary alloy magnesium.¹⁶ Alcan representatives stated that this change has had a dramatic effect on the aluminum industry’s decision making process regarding the sourcing of magnesium.¹⁷

The data in these investigations breaking down U.S. producers’ commercial shipments by end use in 2003 also suggest that a substantial overlap exists between pure and alloy magnesium in aluminum production. Of the *** tons of magnesium used for domestic aluminum production in 2003, *** tons were pure magnesium while *** tons were alloy magnesium.¹⁸

Interchangeability - The record suggests that pure and alloy magnesium are now both used in the production of aluminum alloys and desulfurization reagents.¹⁹ However, the interchangeability is somewhat limited inasmuch as alloy magnesium has become substitutable for pure magnesium in certain circumstances, but pure magnesium cannot be substituted for alloy magnesium.²⁰

Channels of Distribution - The data in these investigations show that both pure and alloy magnesium are sold to end users. Pure magnesium is normally sold to aluminum alloyers as well as iron and steel producers, while alloy magnesium has traditionally been sold to diecasters.²¹ This distinction between end users has recently become less prominent with aluminum alloyers and iron and steel producers increasingly substituting alloy magnesium for pure magnesium.

Customer and Producer Perceptions - We have obtained limited information in the preliminary phase of these investigations regarding customer and producer perceptions of pure and alloy magnesium. The new technology allowing some alloy magnesium to be used in the production of aluminum alloys and iron and steel desulfurization reagents appears to have increased the perception that pure and alloy magnesium are interchangeable in the production of these products. We expect to gather more information on this issue in the final phase of these investigations.

¹³ Id.

¹⁴ Petition at 48.

¹⁵ Conference Transcript at 150 (McHale, Alcoa).

¹⁶ Conference Transcript at 118 (Yosowitz, Alcan). The Alcan representative confirmed that he was referring to secondary alloy magnesium. Id. at 148.

¹⁷ Id. at 118.

¹⁸ CR/PR at Table III-5.

¹⁹ Conference Transcript at 118 (Yosowitz, Alcan).

²⁰ Petitioners’ Post Conference Brief at 16.

²¹ CR at I-21, PR at I-16.

Magnesium Production Facilities, Processes and Employees - Production facilities, processes, and employees for pure and alloy magnesium are generally the same throughout the industry.²² Therefore, this substantial overlap of production facilities, processes, and employees for pure and alloy magnesium support petitioners' argument that this factor supports a finding of one domestic like product co-extensive with the scope in these investigations. The two main differences in the facilities, processes, and employees utilized in the production of pure and alloy magnesium are the additional equipment and labor involved in the step of adding alloying elements, and the different facilities and employees used for alloy magnesium produced in secondary production.²³

Price - Even though the data regarding prices of pure and alloy magnesium are limited in this preliminary phase of these investigations, prices for alloy magnesium appear to have declined.²⁴ Consequently, the prices for pure and alloy magnesium have converged somewhat.

Conclusion - The record indicates that similarities exist between the physical characteristics and end uses for pure and alloy magnesium and that the production facilities, processes and employees for pure and alloy magnesium are generally the same. The data on interchangeability and customer and producer perceptions show that while pure and alloy magnesium are not completely interchangeable, the use of alloy magnesium in aluminum production and iron and steel desulfurization has increased the amount of interchangeability. Some overlap exists in the channels of distribution between pure and alloy magnesium inasmuch as both products are shipped primarily to end users and, although pricing data are limited, the data suggest that the prices have converged somewhat due to decreasing alloy magnesium prices.

Accordingly, for purposes of the preliminary phase of these investigations, I find that pure and alloy magnesium are part of the same domestic like product. I intend to examine this issue further in any final phase of these investigations and specifically intend to explore further petitioners' arguments regarding the use of secondary alloy magnesium in aluminum alloying and iron and steel production.

Primary and Secondary Magnesium

The record in the preliminary phase of these investigations contains very limited information concerning similarities or differences between primary and secondary magnesium. Virtually all secondary production is of alloy magnesium.²⁵ If secondary magnesium is compared with primary alloy magnesium, then these products are similar in terms of physical characteristics and end uses, interchangeability, customer and producer perceptions, channels of distribution, and price.²⁶ The manufacturing facilities and employees are different for primary and secondary magnesium because primary magnesium is made by US Magnesium through the primary production process (*i.e.*, by decomposing raw materials into magnesium metal), whereas secondary magnesium is made, largely by firms other than US Magnesium, through a recycling process. Based on the limited data in the record, I find that primary and secondary magnesium are part of the same domestic like product.

²² CR at I-21-22, PR at I-17.

²³ CR at I-21-22, PR at I-17.

²⁴ Conference Transcript at 71 (Kaplan, US Magnesium) and 164 (McHale, Alcoa).

²⁵ Petition at 7 n.19.

²⁶ Petition at 26-38.

Cast and Granular Magnesium

In the past, the Commission found that cast and granular magnesium were part of the same domestic like product.²⁷ The Commission noted that cast and granular magnesium are produced in a continuum of forms and sizes, without any clear dividing line, that they share the same chemical properties, and are sold through similar channels of distribution. The Commission found cast and granular magnesium to be interchangeable at least for significant end uses, particularly in the desulfurization segment. It noted that although the grinding operations generally took place in separate facilities using separate workers, the same production facilities, processes, and workers are used to produce cast and granular magnesium up to the grinding stage. Inasmuch as there is no evidence in the record to suggest that the like product analysis has changed in any way since the 2001 Investigations, I find cast and granular magnesium to be part of the same domestic like product.

Automotive Qualified Alloy Magnesium

Because Nanjing/Toyota's argument that automotive-qualified alloy magnesium should be treated as a separate domestic like product was raised for the first time in comments submitted after the staff conference in these preliminary investigations, there is limited information in the record on this issue. The issue on the record does not compel me to find that automotive qualified alloy magnesium is a separate domestic like product. However, I intend to explore this issue in any final phase investigations.

II. DOMESTIC INDUSTRY

The domestic industry is defined as "the producers as a [w]hole of a domestic like product"²⁸ In defining the domestic industry, the Commission's general practice has been to include in the industry all of the domestic production of the like product, whether toll-produced, captively consumed, or sold in the domestic merchant market.²⁹ Based on my definition of the domestic like product, I find one domestic industry producing pure and alloy magnesium.³⁰

III. CUMULATION

For purposes of evaluating the volume and price effects for a determination of reasonable indication of material injury by reason of the subject imports, section 771(7)(G)(I) of the Act requires the Commission to assess cumulatively the volume and effect of imports of the subject merchandise from all countries as to which petitions were filed and/or investigations self-initiated by Commerce on the same day, if such imports compete with each other and with domestic like products in the U.S. market.³¹ In

²⁷ Magnesium from China and Israel, Inv. Nos. 701-TA-403 and 731-TA-895-896 (Final), USITC Pub. 3467 (Nov. 2001) (the "2001 Investigations"). The Commission referred to cast magnesium as "ingot" in those investigations.

²⁸ 19 U.S.C. § 1677(4)(A).

²⁹ See United States Steel Group v. United States, 873 F. Supp. 673, 681-84 (Ct. Int'l Trade 1994), aff'd, 96 F.3d 1352 (Fed. Cir.1996).

³⁰ I concur with the majority's decision not to exclude *** as a related party.

³¹ 19 U.S.C. § 1677(7)(G)(i).

assessing whether subject imports compete with each other and with the domestic like product,³² the Commission has generally considered four factors, including:

- (1) the degree of fungibility between the subject 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 geographic markets of subject imports from different countries and the domestic like product;
- (3) the existence of common or similar channels of distribution for subject imports from different countries and the domestic like product; and
- (4) whether the subject imports are simultaneously present in the market.³³

While no single factor is necessarily determinative, and the list of factors is not exclusive, these factors are intended to provide the Commission with a framework for determining whether the subject imports compete with each other and with the domestic like product.³⁴ Only a “reasonable overlap” of competition is required.³⁵

I find on balance a reasonable overlap of competition and therefore cumulate subject imports from China and Russia for purposes of analyzing present material injury. The threshold requirement for cumulation has been satisfied because the petitions with respect to China and Russia were filed on the same day.³⁶

With respect to fungibility, no party has suggested that imports from each of the subject countries, in the same form, are not fungible with the domestic like product. Fungibility is an issue in this case because 83 percent of the Russian imports are of pure magnesium and only Chinese alloy magnesium is subject to investigation. However, 17 percent of Russian magnesium imports consisted of alloy magnesium in 2003 and no party has argued that alloy magnesium from the two countries is not fungible. In 2003, *** metric tons of Chinese alloy magnesium and *** metric tons of Russian alloy

³² The Uruguay Round Agreements Act (“URAA”) Statement of Administrative Action (“SAA”) expressly states that “the new section will not affect current Commission practice under which the statutory requirement is satisfied if there is a reasonable overlap of competition.” SAA, H.R. Rep. 316, 103d Cong., 2d Sess. at 848 (1994), citing Fundicao Tupy, S.A. v. United States, 678 F. Supp. 898, 902 (Ct. Int’l Trade 1988), aff’d, 859 F.2d 915 (Fed. Cir. 1988).

³³ See Certain Cast-Iron Pipe Fittings from Brazil, the Republic of Korea, and Taiwan, Inv. Nos. 731-TA-278-280 (Final), USITC Pub. 1845 (May 1986), aff’d, Fundicao Tupy, S.A. v. United States, 678 F. Supp. 898 (Ct. Int’l Trade), aff’d, 859 F.2d 915 (Fed. Cir. 1988).

³⁴ See, e.g., Wieland Werke, AG v. United States, 718 F. Supp. 50 (Ct. Int’l Trade 1989).

³⁵ See Goss Graphic System, Inc. v. United States, 33 F. Supp. 2d 1082, 1087 (Ct. Int’l Trade 1998) (“cumulation does not require two products to be highly fungible”); 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.”).

³⁶ The Commission has previously determined that it is appropriate to cumulate imports subject to petitions filed on the same day if the imports compete with each other and the domestic like product, notwithstanding differences in the scope of the subject merchandise between the investigations. See Certain Paint Brushes from China and Indonesia, Inv. Nos. 731-TA-857-858 (Preliminary), USITC Pub. 3327 (September 1999) at 10. Of the six Commissioners participating, Commissioner Crawford dissented on this point.

magnesium were shipped to U.S. diecasters.³⁷ It is clear that competition exists between imports of Chinese alloy magnesium and Russian pure magnesium because in 2003 the majority of U.S. importers' reported commercial shipments of alloy magnesium from China (***) metric tons out of a total of (***) metric tons) went to aluminum manufacturers, which is the same market segment to which much of U.S. importers' commercial shipments of magnesium from Russia (***) metric tons out of a total of (***) metric tons) were also directed.³⁸ Moreover, the questionnaire data from producers and importers confirms that they view the domestic like product and subject imports as mostly interchangeable.

The import data in these investigations show that subject imports from both China and Russia have entered the U.S. market in significant quantities over the period examined, and have thus been simultaneously present in the domestic market.³⁹ Petitioners claim that imports from China and Russia are sold in the same geographic markets as the domestic like product. However, there is no information on the record that supports or contradicts this assertion. Finally, channels of distribution for subject imports from China and Russia are similar but somewhat different. Imports from China and Russia are both sold to end users and not to distributors, just like the domestic like product, but, Chinese imports are sold ***.

I find that fungibility among subject imports and the domestic like product, the simultaneous presence of subject imports in the U.S. market, similar channels of distribution and the alleged geographic overlap among subject imports and the domestic like product strongly support the cumulation of subject imports from China and Russia in these investigations.

VI. REASONABLE INDICATION OF MATERIAL INJURY BY REASON OF SUBJECT IMPORTS

A. General Legal Standards

In the preliminary phase of antidumping or countervailing duty investigations, the Commission determines whether there is a reasonable indication that an industry in the United States is materially injured by reason of the imports under investigation.⁴⁰ In making this determination, the Commission must consider the volume of subject imports, their effect on prices for the domestic like product, and their impact on domestic producers of the domestic like product, but only in the context of U.S. production operations.⁴¹ The statute defines "material injury" as "harm which is not inconsequential, immaterial, or unimportant."⁴² In assessing whether there is a reasonable indication that the domestic industry is materially injured by reason of subject imports, we consider all relevant economic factors that bear on the state of the industry in the United States.⁴³ No single factor is dispositive, and all relevant factors are

³⁷ CR/PR at Table IV-4.

³⁸ Id.

³⁹ CR/PR at Table IV-2.

⁴⁰ 19 U.S.C. §§ 1671b(a) and 1673b(a).

⁴¹ 19 U.S.C. § 1677(7)(B)(i). The Commission "may consider such other economic factors as are relevant to the determination" but shall "identify each [such] factor . . . [a]nd explain in full its relevance to the determination." 19 U.S.C. § 1677(7)(B). See also Angus Chemical Co. v. United States, 140 F.3d 1478 (Fed. Cir. 1998).

⁴² 19 U.S.C. § 1677(7)(A).

⁴³ 19 U.S.C. § 1677(7)(C)(iii).

considered “within the context of the business cycle and conditions of competition that are distinctive to the affected industry.”⁴⁴

For the reasons stated below, I find that there is a reasonable indication that the domestic industry producing pure and alloy magnesium is materially injured by reason of imports of alloy magnesium from China and Russia and pure magnesium from Russia.⁴⁵

B. Volume

Section 771(7)(C)(I) of the Act provides that the “Commission shall consider whether the volume of imports of the merchandise, or any increase in that volume, either in absolute terms or relative to production or consumption in the United States, is significant.”⁴⁶

Apparent U.S. consumption as measured by quantity decreased significantly over the period examined. U.S. consumption declined from *** metric tons in 2000 to *** metric tons in 2001, and then to *** metric tons in 2002, and rose *** to *** metric tons in 2003.⁴⁷ Domestic producers’ market share of consumption, as measured by quantity, declined irregularly over the period examined, increasing from *** percent in 2000, to *** percent in 2001, then decreasing to *** percent in 2002, and increasing to *** percent in 2003.⁴⁸ The volume of cumulated subject imports steadily increased over the period examined, even as overall domestic consumption decreased: cumulated subject imports totaled 20,356 metric tons in 2000, rising to 21,223 metric tons in 2001, then to 28,632 metric tons in 2002 and rising further to 34,651 metric tons in 2003.⁴⁹

As a share of U.S. apparent consumption as measured by quantity, cumulated subject imports increased substantially over the period examined, rising from *** percent in 2000, to *** percent in 2001, to *** percent in 2002, and to *** percent in 2003.⁵⁰ Apparent U.S. consumption, as measured by value, decreased over the period examined, declining from \$*** in 2000, to \$*** in 2001, to \$*** in 2002, and then to \$*** in 2003.⁵¹ Domestic market share of apparent U.S. consumption, as measured by value, also decreased, falling from *** percent in 2000, to *** percent in 2001, to *** percent in 2002, and then rising to *** percent in 2003.⁵² Finally, the market share of subject imports, as measured by value, continuously increased over the period examined, going from *** percent in 2000, to *** percent in 2001, to *** percent in 2002, and *** percent in 2003.⁵³

For purposes of these preliminary determinations, I find the volume of cumulated subject imports from China and Russia, both in absolute terms and relative to consumption in the United States, to be significant.

⁴⁴ 19 U.S.C. § 1677(7)(C)(iii).

⁴⁵ I concur with the majority’s findings as to Conditions of Competition.

⁴⁶ 19 U.S.C. § 1677(7)(C)(I).

⁴⁷ CR/PR at Table IV-5.

⁴⁸ CR/PT at Table IV-6.

⁴⁹ CR/PR at Table IV-2.

⁵⁰ CR/PR at Table IV-6.

⁵¹ CR/PR at Table IV-5.

⁵² CR/PR at Table IV-6.

⁵³ Id.

C. Price

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

- (I) there has been significant price underselling by the imported merchandise as compared with the price of domestic like products of the United States, and
- (II) the effect of imports of such merchandise otherwise depresses prices to a significant degree or prevents price increases, which otherwise would have occurred, to a significant degree.⁵⁴

The record in these investigations shows that subject imports of alloy magnesium from China and Russia and subject imports of pure magnesium from Russia were generally interchangeable with the domestic like product. The Commission gathered pricing data for one type of pure magnesium and three types of alloy magnesium.

Russian imports of pure magnesium undersold domestic pure magnesium in eight out of twelve quarterly price comparisons, with import margins of underselling ranging from *** percent to *** percent.⁵⁵ Prices of subject imports of pure magnesium imports declined over the period examined, with the per-pound price of Russian pure magnesium dropping by *** percent between the second quarter of 2001 and the fourth quarter of 2003.⁵⁶ Prices for domestically produced pure magnesium also declined, with the per-pound price of domestic pure magnesium dropping by *** percent over the same time period.⁵⁷

Even though the Commission sought pricing data for three types of alloy magnesium, complete pricing comparisons were only available for one product. For this product subject imports of alloy magnesium undersold the domestic product in 19 of 24 quarterly pricing comparisons with margins of underselling ranging from *** percent to *** percent.⁵⁸ The price of alloy magnesium from China and Russia as well as the domestic product generally declined over the period examined. Prices for pure magnesium from China fell from \$*** per pound to \$*** per pound, or by *** percent, over the period examined and Russian pure magnesium prices fell from \$*** per pound to \$*** per pound, or by *** percent, over the same time period.⁵⁹ Prices for domestic pure magnesium fell from \$*** per pound in the first quarter of 2001 to \$*** per pound in the fourth quarter of 2003: a *** percent decline. Finally, purchasers confirmed many lost sales and lost revenue allegations made by petitioners.⁶⁰

For purposes of these preliminary determinations, I find underselling by subject imports from China and Russia to be significant. I also find that subject imports from China and Russia have depressed domestic prices to a significant degree.

⁵⁴ 19 U.S.C. § 1677(7)(C)(ii).

⁵⁵ CR/PR at Table V-1.

⁵⁶ Id.

⁵⁷ Id.

⁵⁸ CR/PR at Table V-4.

⁵⁹ Id.

⁶⁰ CR/PR at Table V-5 and V-6.

D. Impact

Section 771(7)(C)(iii) of the Act provides that the Commission, in examining the impact of the subject imports on the domestic industry, “shall evaluate all relevant economic factors which have a bearing on the state of the industry.”⁶¹ These factors include output, sales, inventories, ability to raise capital, research and development, and factors affecting domestic prices. No single factor is dispositive and all relevant factors are considered “within the context of the business cycle and conditions of competition that are distinctive to the affected industry.”⁶²

During the period examined, the domestic industry experienced *** declines in nearly all of its financial indicators while domestic consumption decreased, the volume of subject imports increased and subject imports consistently undersold the domestic industry. The domestic industry’s capacity utilization fell from *** percent in 2000 to *** percent in 2003.⁶³ During this same period, the domestic industry’s average capacity also declined, fluctuating from *** metric tons in 2000, to *** in 2001, to *** in 2002, and then to *** in 2003.⁶⁴ As previously discussed, the domestic industry’s market share as measured by both quantity and value decreased over the period examined while apparent U.S. consumption declined.

The domestic industry’s financial condition was *** over the period examined. During this time the domestic industry’s operating income to sales ratio declined from *** percent in 2000, to *** percent in 2001, *** percent in 2002, and *** percent in 2003.⁶⁵ Furthermore, the domestic magnesium industry’s operating income fell from \$*** in 2000, to *** in 2001, to *** in 2002, and *** in 2003.⁶⁶

Employment in the domestic magnesium industry also declined. The number of production and related workers fell from *** in 2000, to *** in 2001, to *** in 2002 and then to *** in 2003.⁶⁷ Hours worked declined from *** in 2000, to *** in 2001, to *** in 2002, and then to *** in 2003.⁶⁸ Wages paid also fell from \$*** in 2000 to \$*** in 2003.⁶⁹

Based on the record in the preliminary phase of these investigations, I find that the significant and increasing volumes of low-priced subject imports from China and Russia have had a significant impact on the U.S. industry. Accordingly, I determine that there is a reasonable indication that an industry in the United States is materially injured by reason of imports of alloy magnesium from China and Russia and imports of pure magnesium from Russia, that are allegedly sold in the United States at less than fair value.

⁶¹ 19 U.S.C. § 1677(7)(C)(iii).

⁶² Id.

⁶³ CR/PR at Table III-2.

⁶⁴ Id.

⁶⁵ CR/PR at Table VI-5.

⁶⁶ Id.

⁶⁷ CR/PR at Table III-8.

⁶⁸ Id.

⁶⁹ Id.

PART I: INTRODUCTION

BACKGROUND

These investigations were instituted in response to a petition filed with the U.S. International Trade Commission (Commission) and the U.S. Department of Commerce (Commerce) on February 27, 2004, by US Magnesium Corp.,¹ Salt Lake City, UT;² the United Steelworkers of America, Local 8319, Salt Lake City, UT;³ and the Glass, Molders, Pottery, Plastics & Allied Workers International, Local 374, Long Beach, CA.⁴ The petition alleges that an industry in the United States is materially injured, or threatened with material injury, by reason of imports from China of alloy magnesium⁵ and imports from Russia of pure magnesium and alloy magnesium⁶ that are alleged to be sold in the United States at less than fair value (LTFV). Information relating to the background of these investigations is presented in table I-1.

¹ US Magnesium is the successor company to Magnesium Corporation of America (Magcorp). On August 3, 2001, Magcorp filed for protection under Chapter 11 of the U.S. Bankruptcy Code. The bankruptcy court authorized the sale of substantially all of Magcorp's assets to US Magnesium. The sale was completed in June 2002. For additional information on the bankruptcy proceedings, see *Part VI: Financial Experience of U.S. Producers*.

² Since December 1991, Magcorp has filed three previous petitions concerning magnesium imports from Canada, China, Israel, Russia, and/or Ukraine.

³ Union represents workers at US Magnesium's production facility in Rowley, UT.

⁴ Union represents workers at Halaco Engineering Co.'s (Halaco's) production facility in Oxnard, CA. Halaco is a manufacturer of alloy magnesium produced from recycling magnesium-based scrap (secondary magnesium). Halaco is not a petitioner; however, it supports the petition. See Petition at exh. 3.

⁵ The subject merchandise from China 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." The subject merchandise from China is provided for in subheadings 8104.19.00 and 8104.30.00 of the Harmonized Tariff Schedule of the United States (HTS).

There is currently an antidumping duty order on pure magnesium ingot from China (order No. A-570-832, 60 FR 25691, May 12, 1995) that was continued upon an affirmative expedited sunset review (65 FR 55047, September 12, 2000), and an antidumping duty order on pure magnesium in granular form from China (order No. A-570-864, 66 FR 57936, November 19, 2001).

The above-referenced orders also include "off-specification" pure 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. However, for purposes of the current investigation, "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, see the section entitled *The Subject Product* in Part I of this report.

⁶ 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." The subject merchandise from Russia is provided for in subheadings 8104.11.00, 8104.19.00, and 8104.30.00 of the HTS. For a more detailed description of the scope, see the section entitled *The Subject Product* in Part I of this report.

Table I-1
Magnesium: Chronology of investigations Nos. 731-TA-1071 and 1072 (Preliminary)

Date	Action
February 27, 2004	Petition filed with Commerce and the Commission
February 27, 2004	Commission institutes investigations Nos. 731-TA-1071-1072 (Preliminary)
March 9, 2004	Commission publishes notice of institution in the <i>Federal Register</i> ¹
March 19, 2004	Commission's public conference ²
March 25, 2004	Commerce publishes notice of initiation in the <i>Federal Register</i> ³
April 12, 2004	Date of the Commission's vote
April 12, 2004	Date of the Commission's transmittal of determinations to Commerce
April 19, 2004	Date of the Commission's transmittal of views to Commerce
<p>¹ 69 FR 11041, March 9, 2004, presented in app. A. ² A list of witnesses appearing at the conference is presented in app. B. ³ 69 FR 15293, March 25, 2004, presented in app. A.</p> <p>Source: Various <i>Federal Register</i> notices.</p>	

PREVIOUS INVESTIGATIONS

Countervailing Duty and Antidumping Investigations

The Commission has conducted countervailing duty and/or antidumping investigations on magnesium concerning five countries: Canada, China, Israel, Russia, and Ukraine. Table I-2 presents actions taken by the Commission and Commerce with respect to these previous investigations.

On August 26, 1992, the Commission published its affirmative determinations in investigations Nos. 701-TA-309 and 731-TA-528 (Final): Magnesium From Canada.⁷ On May 17, 1995, the Commission published its affirmative determinations in investigations Nos. 731-TA-696-698 (Final): Pure Magnesium From China, Russia, and Ukraine.⁸ On April 28, 1998, the U.S. Court of International Trade (CIT) remanded the Commission's original determination with respect to Ukraine, and upon reconsideration, the Commission made a negative determination with respect to imports of pure magnesium from Ukraine.⁹ On November 20, 2001, the Commission published its determinations in investigations Nos. 701-TA-403 and 731-TA-895-896 (Final): Pure Magnesium From China and Israel.¹⁰

⁷ 57 FR 38696, August 26, 1992. *See Magnesium From Canada*, Invs. Nos. 701-TA-309 and 731-TA-528 (Final), USITC Pub. 2550 (August 1992).

⁸ 60 FR 26456, May 17, 2000. *See Magnesium From China, Russia, and Ukraine*, Invs. Nos. 731-TA-696-698 (Final), USITC Pub. 2885 (May 1995).

⁹ *See Magnesium From Ukraine (Views on Remand)*, Inv. No. 731-TA-698 (Remand), USITC Pub. 3113 (June 1998).

¹⁰ 66 FR 58162, November 20, 2001. *See Magnesium From China and Israel*, Invs. Nos. 701-TA-403 and 731-TA-895-896 (Final), USITC Pub. 3467 (November 2001).

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

Action	Date of action	Federal Register citation
Canada:		
Commission's affirmative determinations in Invs. Nos. 701-TA-309 and 731-TA-528 (Final)	08/26/1992	57 FR 38696
Countervailing duty order issued (C-122-814) ¹ (<i>pure and alloy ingot</i>)	08/31/1992	57 FR 39390
Antidumping duty order issued (A-122-814) ² (<i>pure ingot</i>)	08/31/1992	57 FR 39392
Institution of five-year reviews (full)	08/02/1999	64 FR 41961
Commission's affirmative determinations in five-year reviews	08/02/2000	65 FR 47517
Continuation of countervailing and antidumping duty orders ^{3,4} (<i>pure and alloy ingot</i>)	08/16/2000	65 FR 49964
China:		
Commission's affirmative determination in Inv. No. 731-TA-696 (Final) (<i>pure ingot</i>) ⁵	05/17/1995	60 FR 26456
Antidumping duty order issued ⁷ (A-570-832) (<i>pure ingot</i>)	05/12/1995	60 FR 25691
Institution of five-year sunset review (expedited)	04/03/2000	65 FR 17531
Commission's affirmative determination in five-year review	09/12/2000	65 FR 55047
Continuation of antidumping duty order ⁶ (<i>pure ingot</i>)	08/16/2000	65 FR 49964
Commission's affirmative determination in Inv. No. 731-TA-895 (Final) (<i>pure granular</i>)	11/20/2001	66 FR 58162
Antidumping duty order issued (A-570-864) ⁷ (<i>pure granular</i>)	11/19/2001	66 FR 57936
Israel:		
Institution of Invs. Nos. 701-TA-403 and 731-TA-896 (Preliminary)	10/25/2000	65 FR 63888
Commission's negative determinations in Invs. Nos. 701-TA-403 and 731-TA-896 (Final)	11/20/2001	66 FR 58162
Russia:		
Commission's affirmative determination in Inv. No. 731-TA-697 (Final) (<i>pure ingot</i>) ⁵	05/17/1995	60 FR 26456
Antidumping duty order issued (A-821-805) (<i>pure ingot</i>)	05/12/1995	60 FR 25691
Institution of five-year sunset review (expedited)	04/03/2000	65 FR 17531
Revocation of antidumping duty order ⁸	07/07/2000	65 FR 41944
Termination of five-year review	07/17/2000	65 FR 44076
Institution of Inv. No. 731-TA-897 (Preliminary) (<i>pure ingot and granules</i>)	10/25/2000	65 FR 63888
Commerce's negative final antidumping determination (A-821-813)	09/27/2001	66 FR 49347
Commission terminates Inv. No. 731-TA-897 (Final)	10/04/2001	66 FR 50680
Ukraine:		
Commission's affirmative determination in Inv. No. 731-TA-698 (Final) (<i>pure ingot</i>) ⁵	05/17/1995	60 FR 26456
Antidumping duty order issued (A-823-806) (<i>pure ingot</i>)	05/12/1995	60 FR 25691
Upon reconsideration Commission makes a negative determination	June 1998	(⁹)
Revocation of the antidumping duty order	08/24/1999	64 FR 46182
<p>¹ The countervailing duty order on Canada is on pure and alloy magnesium ingot. ² The antidumping duty order on Canada is on pure magnesium ingot. ³ Based on its sunset review, Commerce found the following weighted-average countervailing duty margins: Norsk Hydro Canada, 1.84 percent <i>ad valorem</i>; and all others, 4.48 percent <i>ad valorem</i> (65 FR 41444, July 5, 2000). ⁴ In its initial "sunset" review, Commerce found the following weighted-average antidumping duty 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 order is Timminco Limited. ⁵ The Commission made a negative determination with respect to alloy magnesium. ⁶ The antidumping duty order on China is on pure magnesium ingot. In its initial "sunset" review, Commerce found the weighted-average antidumping duty margin to be 108.26 percent <i>ad valorem</i> for all other manufacturers and exporters in China (65 FR 47713, August 3, 2000). ⁷ Commerce found the weighted-average antidumping duty 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. ⁸ 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). ⁹ No corresponding <i>Federal Register</i> citation.</p>		
Source: Various <i>Federal Register</i> notices.		

The Commission made an affirmative determination with respect to imports of pure granular magnesium from China, and made a negative determination with respect to imports of pure ingot and pure granular magnesium from Israel.¹¹

Five-Year Review Investigations

On August 2, 1999, the Commission instituted five-year (sunset) review investigations concerning the countervailing and antidumping duty orders on imports of pure and alloy magnesium ingot from Canada.¹² On August 2, 2000, the Commission published its affirmative determinations in these reviews.¹³ On April 3, 2000, the Commission instituted sunset reviews on imports of pure magnesium ingot from China and Russia. On July 17, 2000, Commerce published notice that the review on imports from Russia was terminated.¹⁴ On September 12, 2000, the Commission published its affirmative determination with respect to imports of pure magnesium ingot from China.¹⁵

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. 332-410.¹⁶ The Commission held a public hearing on February 2, 2000, and presented its advice to USTR on March 16, 2000.¹⁷ In a Presidential Proclamation of June 29, 2000, the President added granular magnesium to the list of GSP-eligible articles.¹⁸

ORGANIZATION OF THE REPORT

Information on the subject merchandise, alleged dumping margins, and the domestic like product is presented in Part I. Information on conditions of competition and other economic factors is presented in Part II. Information on the condition of the U.S. industry, including data on capacity, production, shipments, inventories, and employment, is presented in Part III. Information on the volume of imports of

¹¹ Effective October 17, 2000, the Commission instituted investigation No. 731-TA-897 (Preliminary): Magnesium From Russia (65 FR 63888, October 25, 2000). On September 27, 2001, Commerce published its negative final antidumping determination with respect to Russia (66 FR 49347, September 27, 2001). Subsequently, on September 27, 2001, the Commission terminated its investigation with respect to Russia (66 FR 50680, October 4, 2001).

¹² 64 FR 41961, August 2, 1999.

¹³ 65 FR 47517, August 2, 2000.

¹⁴ 65 FR 44076, July 17, 2000. The review was terminated because of a lack of participation by domestic producers. The original antidumping order on Russia excluded the two major Russian magnesium producers, AVISMA and Solikamsk. See original antidumping duty order, 60 FR 25691, May 12, 1995.

¹⁵ 65 FR 55047, September 12, 2000.

¹⁶ 64 FR 73574, December 30, 1999

¹⁷ See *Advice Concerning Possible Modifications to the U.S. Generalized System of Preferences*, Inv. No. 332-410, USITC Pub. 3288 (March 2000).

¹⁸ *Proclamation 7325 of June 29, 2000 to Modify Duty-Free Treatment Under the Generalized System of Preferences and for Other Purposes*, 65 FR 41315, July 3, 2000.

the subject merchandise, apparent consumption, and market shares is presented in Part IV. Part V presents data on prices in the U.S. market. Part VI presents information on the financial experience of U.S. producers. Information on the subject country foreign producers and U.S. importers' inventories is presented in Part VII.

SUMMARY OF DATA PRESENTED IN THE REPORT

A summary of data collected in the investigations is presented in appendix C.¹⁹ U.S. industry data are based on the questionnaire responses of six firms believed to represent all known U.S. production of pure and alloy magnesium in 2000-03.²⁰ Data on U.S. imports are based on official import statistics of Commerce, except as noted.²¹ Data on the industry in China are based on the questionnaire responses of three firms believed to account for approximately *** percent of Chinese exports of the subject merchandise to the United States in 2003. Data on the industry in Russia are based on the questionnaire responses of two firms believed to account for all known Russian exports of the subject merchandise to the United States in 2003.²²

At the request of petitioners, the Commission collected four years of data beginning in 2000 and ending in 2003. US Magnesium gave two reasons for its request: (1) Magcorp filed for bankruptcy in 2001, and (2) there was a transitional period in 2001 in converting from older production cells to newer production cells which resulted in a drop in capacity. Petitioners stated that "2001 is an aberrational year in conducting trends analysis and therefore to have a fair picture of the current condition of the industry it would be much more useful to look at 2000 as the base year."²³ Respondents do not object to the collection and analysis of four years of data beginning in 2000.²⁴

¹⁹ Table C-1 presents data on pure magnesium; table C-2 presents data on alloy magnesium; table C-3 presents data on all magnesium; table C-4 presents data on primary magnesium; and table C-5 presents data on secondary magnesium.

²⁰ For additional information on responding U.S. producers and U.S. producer coverage, *see Part III: U.S. Producers' Production, Shipments, and Employment.*

²¹ For additional information on responding U.S. importers and U.S. importer coverage, *see Part IV: U.S. Imports, Apparent Consumption, and Market Shares.*

²² For additional information on responding foreign producers and foreign producer coverage, *see Part VII: Threat Considerations.*

²³ Testimony of Joseph Dorn, counsel to petitioners, transcript of the Commission's March 19, 2004, conference (conference transcript) at 60-61.

²⁴ *See* testimony of Lewis Leibowitz, counsel to Alcoa, conference transcript at 145-146. *See also* testimony of and John Reilly, Nathan Associates, conference transcript at 146.

THE NATURE AND EXTENT OF ALLEGED SALES AT LTFV

On March 25, 2004, Commerce published its notice of initiation in the *Federal Register*.²⁵ Based on comparisons of export price to normal value, the estimated dumping margin for alloy magnesium from China is 141.49 percent *ad valorem*.²⁶ Based on comparisons of export price to normal value, the estimated range of dumping margins for magnesium from Russia is 54.40 to 68.94 percent *ad valorem* without an adjustment for electricity, and 86.54 to 101.24 percent *ad valorem* with an adjustment for electricity.²⁷ Commerce’s period of investigation is July 1, 2003-December 31, 2003.

SUMMARY OF U.S. MARKET PARTICIPANTS

Table I-3 presents a list of the largest U.S. producers of magnesium in 2000-03. A list of the largest U.S. importers of subject magnesium in 2000-03 is presented in table I-4. Table I-5 presents selected large U.S. purchasers of magnesium during this same period.

**Table I-3
Magnesium: Largest U.S. producers, 2000-03, and party status in these investigations**

*	*	*	*	*	*	*
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**Table I-4
Magnesium: Largest U.S. importers, 2000-03, and party status in these investigations**

*	*	*	*	*	*	*
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**Table I-5
Magnesium: Selected large U.S. purchasers, 2000-03, and party status in these investigations**

*	*	*	*	*	*	*
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²⁵ See 69 FR 15293, March 25, 2004.

²⁶ Petitioners assert that China is a nonmarket economy country, and Commerce is treating China as such with respect to its investigation. Petitioners selected India as the surrogate country for China, and Commerce found the use of India as a surrogate country appropriate for purposes of initiating its investigation.

²⁷ On June 6, 2002, the Department made a determination to consider Russia a market economy, effective April 1, 2002. As such, the petition contains information for calculating normal value using market economy methodology. Commerce’s previous antidumping investigations concerning magnesium from Russia (1995 and 2001) treated Russia as a nonmarket economy country.

THE SUBJECT PRODUCT

Scope (China)

Commerce has defined the product subject to investigation with respect to China as the following²⁸

The products covered by this investigation are 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 this investigation 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, and 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”²⁹ and thus are outside the scope of the existing antidumping orders on magnesium from China (generally referred to as “alloy” magnesium).

The scope of this investigation excludes: (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 (*sic*) 99.8 percent, by weight, that do not conform to an “ASTM Specification for Magnesium Alloy;”³⁰ (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.³¹

²⁸ 69 FR 15293, March 25, 2004.

²⁹ 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*.

³⁰ 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 Notice of Antidumping Duty Order: Pure Magnesium in Granular Form from the People’s Republic of China, 66 FR 57936 (November 19, 2001).

³¹ This third 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 Final Determination of Sales at Less Than Fair Value: Pure Magnesium in Granular Form From the People’s Republic of China, 66 FR 49345

(continued...)

The merchandise subject to this investigation is 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 merchandise under investigation is dispositive.

Scope (Russia)

Commerce has defined the product subject to investigation with respect to Russia as the following—³²

The products covered by this investigation 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 this investigation 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 (*sic*) 99.8 percent, by weight, whether or not conforming to an “ASTM Specification for Magnesium Alloy.”³³

The scope of this investigation 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

³¹ (...continued)

(September 27, 2001); Final Determination of Sales at Less Than Fair Value: Pure Magnesium From Israel, 66 FR 49349 (September 27, 2001); 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.

³² 69 FR 15293, March 25, 2004.

³³ 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*.

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.³⁴

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.

U.S. Tariff Treatment

Table I-6 presents current tariff rates for magnesium. In addition to the general column-1 duty rates, certain imports from Canada and China are subject to antidumping and/or countervailing duty orders. Imports from China of pure magnesium in ingot and granular form³⁵ are currently subject to antidumping duty orders,³⁶ and are therefore excluded from the scope for China. Imports from Canada of pure and alloy magnesium ingot are currently subject to a countervailing duty order,³⁷ and imports from Canada of alloy magnesium are currently subject to an antidumping duty order.³⁸

³⁴ This second 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* 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); Final Determination of Sales at Less Than Fair Value: Pure Magnesium From Israel, 66 FR 49349 (September 27, 2001); 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.

³⁵ The HTS does not distinguish granular magnesium by pure or alloy chemistry. 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).

Imports of granular magnesium from China have declined precipitously since the imposition of preliminary (and subsequently final) antidumping duties on April 30, 2001 (66 FR 21314, April 30, 2001). Imports of granular magnesium from China (HTS subheading 8104.30.00) were 15,262 metric tons in 2000, 3,014 metric tons in 2001, 82 metric tons in 2002, and 13 metric tons in 2003.

³⁶ Antidumping duty order (A-570-832) (pure magnesium ingot) was issued on May 12, 1995 (60 FR 25691, May 12, 1995). Based on its first sunset review, Commerce found the weighted-average antidumping duty margin to be 108.26 for all manufacturers and exporters in China (65 FR 47713, August 3, 2000).

Antidumping duty order (A-570-864) (granular magnesium) was issued on November 19, 2001, imposing weighted-average antidumping duty margins of 24.67 to 305.56 percent *ad valorem* (66 FR 57937, November 19, 2001).

³⁷ Countervailing duty order (C-122-814) (pure and alloy magnesium ingot) was issued on August 31, 1992 (57 FR 39390, August 31, 1992). Based on its first sunset review, Commerce found the following weighted-average countervailing duty margins: Norsk Hydro Canada, 1.84 percent *ad valorem*; and all others, 4.48 percent *ad valorem* (65 FR 41444, July 5, 2000).

³⁸ Antidumping duty order (A-122-814) (pure magnesium ingot) was issued on August 31, 1992 (57 FR 39392, August 31, 1992). Based on its first sunset review, Commerce found the following weighted-average antidumping duty margins: Norsk Hydro Canada, 21.00 percent *ad valorem*; and all others, 21.00 percent *ad valorem* (65 FR 41436, July 5, 2000). Timminco Limited was excluded from the order.

Table I-6
Magnesium: Tariff rates, 2004

HTS provision	Article description ¹	General ²	Special ³	Column 2 ⁴
		Rates (percent <i>ad valorem</i>)		
8104.11.00 (pure magnesium ingots)	Magnesium and articles thereof: Unwrought magnesium: Containing at least 99.8 percent by weight of magnesium	8.0	Free ⁵	100.0
8104.19.00 (alloy magnesium ingots)	Magnesium and articles thereof: Unwrought magnesium: Other	6.5	Free ⁶	60.5
8104.30.00 (magnesium granules) ⁷	Magnesium and articles thereof: Raspings, turnings and granules, graded according to size; powders	4.4	Free	60.5

¹ An abridged description is provided for convenience; however, an unabridged description may be obtained from the respective headings, subheadings, and legal notes of the HTS.
² Normal trade relations, formerly known as the most-favored-nation duty rate, applicable to imports from China and Russia.
³ For eligible goods under the Generalized System of Preferences, African Growth and Opportunity Act, Caribbean Basin Economic Recovery Act, Andean Trade Preference Act, Israel Free Trade Agreement, Jordan Free Trade Agreement, Chile Free Trade Agreement, Singapore Free Trade Agreement, and NAFTA-originating goods of Canada and Mexico.
⁴ Applies to imports from a small number of countries that do not enjoy normal or preferential trade relations duty status.
⁵ Imports from Singapore enter at a rate of 6.0 percent *ad valorem*.
⁶ Imports from Chile enter at a rate of 5.6 percent *ad valorem* and imports from Singapore enter at a rate of 4.8 percent *ad valorem*.
⁷ Magnesium granules may be either pure magnesium or alloy magnesium.

Source: Harmonized Tariff Schedule of the United States (2004).

Import data for China presented throughout this report are based on HTS subheading 8104.19.00,³⁹ and import data for Russia are based on HTS subheadings 8104.11.00, 8104.19.00, and 8104.30.00.⁴⁰

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.

³⁹ 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). Since such imports are currently under antidumping duty orders and excluded from the scope of the current investigation, imports of granular magnesium (HTS subheading 8104.30.00) are not included in the subject import data for China presented throughout this report.

⁴⁰ There were no imports of granular magnesium (HTS subheading 8104.30.00) from Russia in 2000-03.

Pure magnesium in unwrought form contains at least 99.8 percent magnesium by weight.⁴¹ 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 ASTM specifications for alloy magnesium such as AM50A, AM60B, and AZ91D.⁴² “Off-specification pure” magnesium is 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.⁴³

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 and in some automotive parts, in iron and steel desulfurization, as a reducing agent for various nonferrous metals (titanium, zirconium, hafnium, uranium, beryllium), and in magnesium anodes for the protection of iron and steel in underground pipe and water tanks and various marine applications.

Alloy magnesium 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 seldom used in structural applications, because its specific tensile and yield strengths are low.

Primary magnesium is magnesium produced by decomposing raw materials into magnesium metal, containing less than 50 percent of recycled magnesium-based scrap. Secondary magnesium is magnesium produced by recycling magnesium-based scrap, containing less than 50 percent of primary magnesium.

⁴¹ Ultra-pure 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.

⁴² 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 number represents the percent of magnesium contained in the alloy, by weight. Deborah A. Kramer, *Magnesium, Its Alloys and Compounds*, U.S. Geological Survey Open-File Report 01-341, p. 25. See also, ASTM Standard “Specification for Magnesium Alloys in Ingot Form for Sand Castings, Permanent Mold Castings, and Die Castings,” Designation B 93/B 93M, Annual Book of ASTM Standards, presented in the petition at exh. 27.

⁴³ For purposes of these investigations, “off-specification pure” magnesium is classified as alloy magnesium since, by definition, it contains less than 99.8 percent magnesium by weight.

Granular magnesium consists of all physical forms of magnesium other than ingots, such as raspings, turnings, granules, and powders.⁴⁴ 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.⁴⁵ Lesser amounts of granular magnesium are used in defense applications, such as military ordnance and flares.

Production Process

Primary Magnesium

Most magnesium is derived from magnesium-bearing ores (dolomite, magnesite, brucite, and olivine) or seawater and well and lake brines.⁴⁶ Large deposits of dolomite are widely distributed throughout the world, and dolomite is the principal magnesium-bearing ore found in the United States. Magnesium-bearing ores are mined by open-pit methods, and concentration is usually performed near the mine site due to the high cost of transporting ore. Magnesium is also produced from well and lake brines containing dissolved magnesium salts. In the United States, US Magnesium produces magnesium using brines from the surface waters of the Great Salt Lake in Utah, while Northwest Alloys used dolomite in its process.⁴⁷

Magnesium metal is 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.⁴⁸ The silicothermic process (also known as the Pidgeon process) is used by a majority of the largest producers in China, while the electrolytic process is used by both producers in Russia.⁴⁹ The silicothermic process is said to be less cost-effective than the electrolytic process for production of magnesium.⁵⁰

⁴⁴ 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).

⁴⁵ U.S. grinders typically produce three different steel desulfurization blends: (1) contains 90 percent pure magnesium powder and 10 percent lime; (2) contains 25 percent magnesium and 75 percent lime; and (3) contains 8-10 percent magnesium with the remainder lime and calcium carbonate. Fluorspar and a fluidizer are also incorporated in these products.

⁴⁶ 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.

⁴⁷ Northwest Alloys ceased production in October 2001.

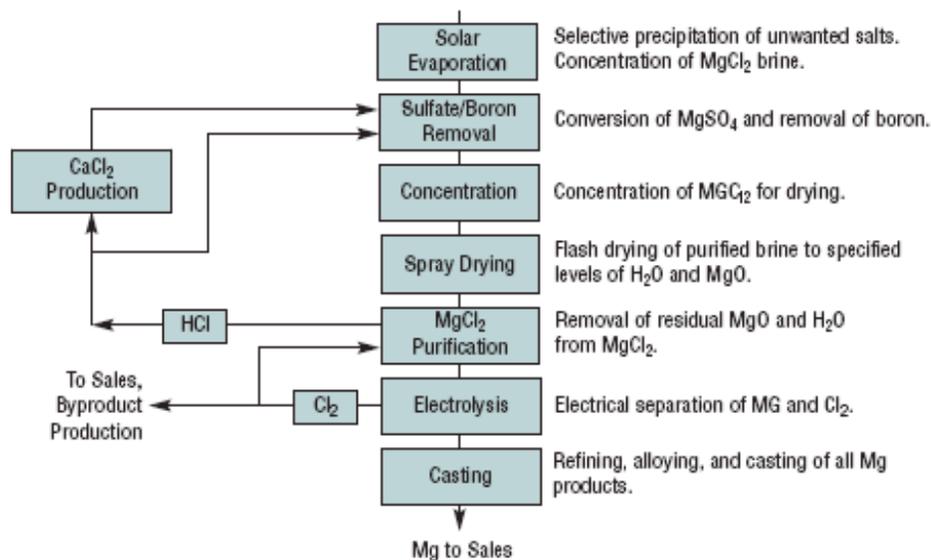
⁴⁸ In Canada, a new process to recover magnesium from asbestos tailings was commercialized in 2000 by Noranda Magnesium (Deborah A. Kramer, *Magnesium, Its Alloys and Compounds*, U.S. Geological Survey Open-File Report 01-341, p. 23). However, in March 2003, Noranda announced the idling of its Métallurgie Magnola plant in Danville, Quebec. See company press release of Métallurgie Magnola, Inc., March 24, 2003.

⁴⁹ Deborah A. Kramer, *Magnesium, Its Alloys and Compounds*, U.S. Geological Survey Open-File Report 01-341, pp. 11-12. The raw material source for silicothermic production in China is Dolomite ($MgCO_3 \cdot CaCO_3$). The raw material source for electrolytic production in Russia is Carnallite ($MgCl_2 \cdot KCl \cdot 6H_2O$).

⁵⁰ See testimony of Mr. Ozzie Wilkinson, Manager, Public Affairs, Northwest Alloys, Inc., transcript of hearing in Invs. Nos. 701-TA-403 and 731-TA-895-896 (Final) at 148 and 174.

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. The metal rises to the surface where it is guided into storage wells and cast into ingots. US Magnesium uses the electrolytic method to produce magnesium. A schematic diagram of US Magnesium's production process is presented in figure I-1.

Figure I-1
Schematic of US Magnesium's production process



Source: *Mining Best Practices Case Study, Office of Industrial Technologies, Energy Efficiency and Renewable Energy, U.S. Department of Energy, August 2001.*

As part of a \$50 million modernization effort begun in 1998 to modernize its magnesium-making capacity,⁵¹ US Magnesium began in 2000 to replace its older cell technology with newer third-generation

⁵¹ In addition to the installation of more energy efficient and environmentally friendly electrolytic "M-cell" technology, the modernization efforts include installation of a melt purification system, the addition of new and larger transport vehicles, and installation of a direct chill caster. (Robert E. Brown, "M-Cell Modernization Improves US Magnesium Process and Environmental Performance," *Light Metal Age*, June 2003, p. 2). According to US Magnesium, implementation of its modernization plan has resulted in a 20-percent reduction in overall production costs.

“M-cell”⁵² technology developed by the company. The company replaced ***. ***.⁵³ According to US Magnesium, these cell improvements have permitted the firm to achieve the following cost reductions:

- *Electrical power*—***;
- *Manpower*—***;
- *Maintenance*—***; and
- *Chlorine emissions*—***.⁵⁴

US Magnesium has proposed to its parent company ***. These options are presently under consideration by the parent company.

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

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.⁵⁵ In those facilities that produce both pure magnesium and alloy magnesium, the same production workers tend to work on both lines.⁵⁶

⁵² M-cell technology uses large, specially-treated electrodes, a reduced inter-electrode distance, and channeled magnesium collection to optimize magnesium production. US Magnesium believes the operating characteristics of its M-cells rival the most advanced designs currently available in the industry. (Robert E. Brown, *M-Cell Modernization Improves US Magnesium Process and Environmental Performance*, Light Metal Age, June 2003, p. 5).

⁵³ Annual capacity at this facility remains at *** metric tons. Staff conversation with ***.

⁵⁴ According to US Magnesium, chlorine releases have been reduced by more than 90 percent during the last six years as a result of its modernization efforts. See testimony of Michael Legge, President, US Magnesium, conference transcript at 19-20.

⁵⁵ Alloy magnesium and pure magnesium typically have common manufacturing facilities and production employees. However, in order to produce alloy magnesium, additional processing equipment and labor are necessary.

⁵⁶ In the petition, US Magnesium noted that “[t]he core production process of pure and alloy magnesium is the same, up to the point when alloys are added to pure magnesium to make alloy magnesium, an additional step that adds relatively little value. The companies that make both pure and alloy magnesium do so using the same machinery, equipment, and workers for both.” Petition, p. 19.

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 powder⁵⁷ and used internally to produce magnesium-based reagent mixtures or, to a lesser extent, pyrotechnic products.⁵⁸

Secondary Magnesium⁵⁹

Secondary magnesium is produced from recycling aluminum alloys⁶⁰ or magnesium-based “scrap.”⁶¹ Magnesium scrap arrives at the recycler in a trailer 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 C. 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, magnesium contained in used 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.

DOMESTIC LIKE PRODUCT ISSUES

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, price.⁶² Petitioners contend that the domestic like product in these investigations is “primary and secondary pure and alloy magnesium in all cast and granular forms, shapes, and sizes,” and that “no clear dividing lines exist along the continuum that would warrant the definition of multiple like products”⁶³ Respondents Alcoa and JSC AVISMA Titanium-Magnesium Works (AVISMA)/VSMPO-Tirus, US, Inc. (VSMPO) contend that

⁵⁷ 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.

⁵⁸ The scope of the current investigations specifically excludes “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.” 69 FR 15293, March 25, 2004.

⁵⁹ 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.

⁶⁰ A significant quantity of magnesium is recovered from aluminum beverage cans that are recycled.

⁶¹ 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-base scrap typically falls into one of four types. Type I is high-grade scrap recovered from diecasting 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 diecasting 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.

⁶² 19 U.S.C. § 1677(4)(A).

⁶³ Petition, vol. 1, pp. 24-25, and petitioners’ postconference brief, p. 4.

there are two domestic like products in these investigations (pure magnesium and alloy magnesium) and that there is a “bright line” between them.⁶⁴ The following discussion of domestic like product factors focuses on the issue of pure magnesium versus alloy magnesium.⁶⁵

Physical Characteristics and Uses

Pure magnesium contains not less than 99.85 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. Over *** percent of U.S. producers’ reported commercial U.S. shipments of pure magnesium in 2003 were to aluminum producers, approximately *** percent were to magnesium granule producers (ultimately to be used in iron and steel desulfurization), and *** were for other uses.

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 diecasting applications. Approximately 70 percent of U.S. producers’ reported commercial U.S. shipments of alloy magnesium in 2003 were to diecasters and approximately 27 percent were to aluminum producers, with the remainder for other uses.

⁶⁴ See testimony of Lewis E. Leibowitz, counsel to Alcoa, conference transcript at 104-105; Alcoa’s postconference brief, pp. 3-8; and AVISMA/VSMPO’s postconference brief, pp. 3-13. In addition, Tianjin Magnesium International Co., Ltd. contends that “magnesium alloy for use by die casters is a different product than pure magnesium” (statement filed by counsel for Tianjin Magnesium, March 24, 2004, p. 10). Respondents Nanjing Yunhai Magnesium Co., Ltd.; Nanjing Welbow Metals Co., Ltd.; Toyota Tsusho Corp.; and Toyota Tsusho America, Inc. contend that automotive qualified alloy magnesium used in diecasting is a separate domestic like product and discuss factors such as physical characteristics and uses, production techniques, consumer and producer perceptions, and price in their March 24, 2004 submission filed by counsel Miller & Chevalier.

⁶⁵ Petitioners addressed three potential domestic like product issues: (1) pure magnesium versus alloy magnesium; (2) primary magnesium versus secondary magnesium, and (3) cast magnesium versus granular magnesium. Petition, vol. 1, pp. 26-38. Respondents commented on pure versus alloy magnesium, but did not comment on primary magnesium versus secondary magnesium and cast magnesium versus granular magnesium.

Reade Manufacturing Co. and Hart Metals, Inc., who specialize in the manufacture and supply of particulate magnesium (chips, granules, and powders), contend that ultra high purity (UHP) magnesium (magnesium that is more than 99.95 percent pure) is a “highly specialized material that is not used in substitution for lower grades of pure or alloy magnesium . . . {and} requires special facilities and processes . . . {and has a } separate market . . . {and} does not compete with other forms of magnesium.” Submission by Fried, Frank, Harris, Shriver, & Jacobson LLP on behalf of Reade Manufacturing and Hart Metals, March 24, 2004, pp. 1-2. However, ***. Ibid, p. 2 and exh. A.

Common Manufacturing Facilities and Production Employees

For US Magnesium, the only current 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 generally using the same machinery, equipment, and workers. Secondary producers of magnesium produce only alloy magnesium, and thus their production facilities are only for alloy magnesium.

Interchangeability

Pure magnesium and alloy magnesium generally have different end uses, but there is an overlap in that both pure magnesium and alloy magnesium produced in the United States are used by aluminum manufacturers.⁶⁶ 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 diecasting 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. Domestically produced alloy magnesium is not generally used as a substitute for pure magnesium, in part because it contains other elements that may not be acceptable for the particular application; however, both it and pure magnesium are used by aluminum producers.

Customer and Producer Perceptions

Customers of domestically produced pure magnesium are largely distinct from customers of domestically produced alloy magnesium. As a result, customer perceptions of these two products are largely different. Aluminum alloyers purchase pure magnesium for its metallurgical properties as it alloys well with aluminum, although they also purchase alloy magnesium. Other firms purchase pure magnesium for its chemical properties. On the other hand, customers, principally automotive diecasters, purchase alloy magnesium because of its structural and mechanical properties. For example, alloy magnesium is ideal for a number of structural components in automobiles.

Channels of Distribution

The vast majority of domestically produced and subject imported pure and alloy magnesium is transported directly from a magnesium production facility (in the case of U.S. producers) 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 diecasters require bar of a certain dimension to fit the specific configuration of their furnace. Domestically produced pure magnesium is typically sold to aluminum producers, whereas alloy magnesium is typically sold to diecasters.

⁶⁶ The majority of reported U.S. shipments of imports of alloy magnesium from China in 2003 was to aluminum manufacturers; however, not all importers reported data, and the end uses for over 50 percent of U.S. importers' U.S. shipments of alloy aluminum from China were not reported and are unknown. *** majority of reported U.S. shipments of pure magnesium from Russia in 2003 was to aluminum manufacturers, and most such shipments of Russian alloy magnesium were to diecasters.

Price

Prices for pure magnesium and alloy magnesium obtained in these investigations are presented in Part V of this report. Price data were requested for (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 diecasters and meeting ASTM specifications for alloy magnesium. *** pricing data were received on domestically produced alloy product 2. Prices for domestically produced pure magnesium product 1 were *** prices for domestically produced alloy magnesium product 4, and the downward trend in the prices of the two products was *** in magnitude. Prices for domestically produced alloy magnesium product 3 were *** those of pure product 1 and alloy product 4, and actually increased during the period for which data were collected.

Previous Commission Findings Concerning Pure Magnesium and Alloy Magnesium

In the antidumping and countervailing duty investigations entitled *Magnesium From Canada* (1992), the Commission found a single domestic like product consisting of all primary magnesium (pure and alloy).⁶⁷ However, a U.S.-Canada binational panel convened under the (pre-NAFTA) U.S.-Canada Trade Agreement ordered the Commission to make new determinations based on separate U.S. industries producing pure magnesium and alloy magnesium. On remand, the Commission found two separate domestic like products (pure magnesium and alloy magnesium). In the antidumping investigations entitled *Magnesium from the People's Republic of China, Russia, and Ukraine* (1995), the Commission found pure magnesium and alloy magnesium to be separate domestic like products.⁶⁸ In the review investigations entitled *Magnesium from Canada* (2000), the Commission did not revisit the issue of like product as no party argued for a different like product definition in the review investigations.⁶⁹ In the review investigation entitled *Pure Magnesium from China* (2000), the Commission continued to define the domestic like product as pure magnesium, including off-spec pure magnesium.⁷⁰ In the antidumping and countervailing duty investigations on *Pure Magnesium from China and Israel* (2001), the Commission found the domestic like product to consist of “pure magnesium that includes both granular magnesium and magnesium ingot.”⁷¹

⁶⁷ *Magnesium from Canada*, Invs. Nos. 701-TA-309 (Final) and 731-TA-528 (Final), USITC Pub. 1992, August 1992, p. 11.

⁶⁸ *Magnesium from the People's Republic of China, Russia, and Ukraine*, Invs. Nos. 731-TA-696-698 (Final), USITC Pub. 2885, May 1995, p. 9. The Commission also defined the domestic product like the imported pure magnesium product to include off-spec pure magnesium. Ibid.

⁶⁹ *Magnesium from Canada*, Invs. Nos. 701-TA-309-A-B and 731-TA-528 (Review), USITC Pub. 3324, July 2000, p. 6.

⁷⁰ *Pure Magnesium from China*, Inv. No. 731-TA-696 (Review), USITC Pub. 3346, August 2000, p. 5.

⁷¹ *Pure Magnesium from China and Israel*, Invs. Nos. 701-TA-403 and 731-TA-895-896 (Final), USITC Pub. 3467, November 2001, p. 9.

Primary, Secondary, Cast, and Granular Magnesium

Other potential domestic like product issues concern primary versus secondary alloy magnesium and cast versus granular magnesium. Most primary and secondary alloy magnesium is similar physically and chemically. However, higher purity secondary alloy magnesium, typically produced from scrap recovered from used automotive parts, is acceptable for use in automotive diecasting applications. Primary and secondary alloy magnesium can be used interchangeably in automotive diecasting 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. Primary and secondary alloy magnesium are produced in separate facilities using separate product processes and employees. Most secondary alloy magnesium is produced by recyclers from delivered scrap which is melted in a steel crucible, while primary magnesium is produced in a primary production facility using magnesium-bearing ores as the raw material. Because primary and higher purity secondary alloy magnesium are largely identical products and are interchangeable for the same purposes, principally automotive diecastings, neither consumers nor producers perceive them to be significantly different products.

The chemical compositions of cast and granular magnesium are identical since granular magnesium is typically ground from cast magnesium. The production facilities, processes, and employees of cast and granular magnesium are the same until the grinding stage. Cast and granular magnesium are considered to be interchangeable for use in the steel desulfurization market. Firms known as grinders are able to use either cast or granular magnesium to produce products required by the steel industry. A producer of reagents for iron and steel desulfurization can have both the granular magnesium and the cast magnesium ground to customer specifications. Producers of reagents for iron and steel desulfurization perceive cast magnesium as potentially useful for use in these reagents because these producers are able to grind cast magnesium to the appropriate size requirements.

PART II: CONDITIONS OF COMPETITION IN THE U.S. MARKET¹

U.S. MARKET SEGMENTS AND CHANNELS OF DISTRIBUTION

According to the International Magnesium Association (IMA), the four principal industrial uses of magnesium are aluminum alloying, structural uses (including diecasting, thixomolding, sand casting, and magnesium wrought products), iron and steel desulfurization, and electrochemical and other.² Traditionally, these magnesium markets were supplied by magnesium in three general product divisions: primary vs. secondary magnesium, pure vs. alloy magnesium, and cast vs. granulated magnesium. In the past, pure primary magnesium was used in cast form for aluminum alloying and in cast or granular form for iron and steel desulfurization, while primary alloy magnesium was used in diecasting (which requires alloy and cannot use pure).³

Petitioners allege that due to efforts to avoid antidumping duties on Chinese pure magnesium, Chinese alloy magnesium is used increasingly by aluminum alloyers, who are interested only in the magnesium content of what they buy, and hence can use alloy magnesium as easily as pure magnesium.⁴ In addition, US Magnesium, the only remaining U.S. producer of primary magnesium, reports that it is also facing increased competition from U.S. producers of secondary magnesium, almost always in alloy form. US Magnesium contends that secondary alloy magnesium competes with its pure magnesium as well.⁵ Thus, petitioners allege that they have seen increased competition for primary pure magnesium from both domestic secondary alloy magnesium and Chinese primary alloy magnesium.⁶

Respondents stated that alloy magnesium is not necessarily substitutable for pure magnesium. They contend, for example, that secondary alloy magnesium for the diecasting industry usually contains beryllium, and thus cannot be used in aluminum cans, which pursuant to FDA requirements must not

¹ The Commission received usable questionnaires from six producers and 19 importers. However, two producers (***) are related, and their answers will be counted once in this chapter. Likewise, two importers (***) are related, and their answers will be counted once. Finally, ***.

² The IMA estimates that the end uses divide up the magnesium market as follows— aluminum alloying 40-45 percent, structural metals (including diecasting) 33-35 percent, iron and steel desulfurization (13 percent) and other uses (7-14 percent). See web page of the IMA (www.intlmag.org/about/IMA.html). Tables III-5 and IV-4 present questionnaire data for shipments by end use.

³ See testimony of Howard Kaplan, Vice President, US Magnesium, conference transcript at 27 and 30.

⁴ See testimony of Joseph Dorn, counsel to petitioners, conference transcript at 7-8; testimony of Howard Kaplan, Vice President, US Magnesium at 27 and 30; and testimony of Dr. Kenneth Button, economist for petitioners at 53-55.

⁵ US Magnesium also cites the shrinking spread between pure and alloy magnesium prices over 2000-03 as evidence of the increased competition between pure and alloy magnesium. See testimony of Howard Kaplan, Vice President, US Magnesium, conference transcript at 28, 30, and 33-34.

⁶ Petitioners further allege that this new type of competition has developed mostly since 2000. Secondary magnesium has been around since the 1960s or 1970s, but its production has increased recently with the higher availability of scrap magnesium. See testimony of Dr. Kenneth Button, economist for petitioners; Howard Kaplan, Vice President, US Magnesium; and Joseph Dorn, counsel to petitioners, conference transcript at 71-74.

contain beryllium.⁷ Alcoa characterized the majority of the alloy product as containing beryllium, meaning that Alcoa could not use it.⁸

Questionnaire responses differed with regard to the extent to which alloy and pure magnesium compete with each other. *** saw increasing substitution of pure magnesium by Chinese alloy magnesium. *** stated that this substitution occurred in the aluminum alloying and iron and steel desulfurization markets, and noted that it does not face substitution of pure for alloy, especially in the diecasting market where diecasters require alloy magnesium.⁹ Six importers (***) acknowledged at least some competition between pure and alloy magnesium.¹⁰ However, *** and seven importers did not see any competition between pure and alloy magnesium.

Geographic Markets

Three producers and 13 importers described their market for magnesium as being a national market or encompassing more than one region of the United States. Two producers and two importers described only one U.S. region as their market.¹¹

SUPPLY AND DEMAND CONSIDERATIONS

U.S. Supply

Domestic Production

Based on available information, U.S. magnesium producers are likely to respond to changes in demand with moderate-to-small changes in the quantity of shipments of U.S.-produced magnesium to the U.S. market. The main contributing factors to the moderate-to-small degree of responsiveness of supply are the high levels of current capacity utilization in pure magnesium production, the low levels of available scrap for secondary production, and the lack of production alternatives. However, some export

⁷ See written statement of Wise Alloys L.L.C, March 24, 2004 at 1. It is not clear to staff whether primary alloy magnesium, the alloy magnesium imported from China for sometime use in aluminum alloying, contains beryllium also. ***. See staff conversation with ***.

⁸ See testimony of Robert McHale, Vice President, Alcoa, conference transcript at 149-150.

⁹ In addition, ***.

¹⁰ For example, *** said it is possible to use alloy magnesium in applications that traditionally used pure. *** said that U.S. and Chinese alloy magnesium competes with other pure magnesium (including Russian) in non-diecasting end uses. *** said that its sales of Chinese alloy magnesium compete with pure magnesium from Russia and other countries. *** said that the distinction between pure and alloy depends on the customer, but that its Chinese alloy magnesium competes with pure magnesium from the United States, Russia, and other countries.

Among importers, *** reported importing Chinese alloy magnesium and selling it to diecast customers. *** reported importing Chinese alloy magnesium and selling it to iron and steel desulfurizers. *** reported importing Chinese alloy magnesium and selling it to aluminum alloyers. *** reported importing Chinese alloy magnesium as well as Russian alloy and pure magnesium, and selling alloy magnesium to aluminum alloyers. Not all U.S. importers of magnesium provided responses to the Commission's questionnaire.

¹¹ US Magnesium reported that *** percent of its sales were to customers more than 1,000 miles from its plant. However, *** reported that most of their sales were 100-1,000 miles from their plants. Seven importers reported that a majority of their sales was between 100 and 1,000 miles from their plants, with two reporting that a majority of their sales was further away and four reporting that the majority of their sales was within 100 miles.

shipments and low levels of capacity utilization in alloy magnesium may allow some more producer responsiveness to price changes.

U.S. magnesium production is divided between US Magnesium, a producer of primary pure and alloy magnesium, and secondary alloy magnesium producers. US Magnesium went through a period of plant improvements in 2001-02. It has been pursuing a modernization plan that has resulted in higher capacity, lower raw material costs, and better environmental performance. However, the changes also required a temporary disruption in US Magnesium's production in 2001 and 2002, and their success allegedly remains dependent on trade action against subject imports.¹² Furthermore, any shutdown of the plant, even temporarily, will cause damage to the production equipment, a condition that necessitates continuous production.¹³

U.S. production of primary pure magnesium has been dropping since 1998, with Dow Magnesium exiting the market in 1998 and Northwest Alloys ceasing production in 2001. US Magnesium characterized these exits as reducing the supply of U.S.-produced primary magnesium by two-thirds.¹⁴ However, Alcoa noted that its Northwest Alloys plant, while shuttered, is still intact.¹⁵

There has, however, been growth in the production of secondary producers in the United States. Amacor began shipments of secondary magnesium in ***. However, secondary producer Garfield reported a fire in its plant in December 2003 that destroyed its plant; it has not resumed production. Furthermore, secondary producer *** reported that ***.¹⁶

U.S. producers reported that they produced no other products on their magnesium production equipment, except for byproducts of magnesium production (such as chlorine). U.S. producers' capacity utilization rose *** in 2003, especially for pure magnesium, but some additional capacity remains (especially for alloy magnesium). Inventories as a percent of shipments dropped over 2000-03, but exports of U.S.-produced pure magnesium grew over the same period.

Subject Imports

Based on available information, the Chinese and Russian producers combined are likely to respond to changes in demand with moderately large changes in the quantity of shipments of magnesium to the U.S. market. The main contributing factors to the moderately high degree of responsiveness of supply are the ample supply of magnesium in China and the worldwide markets for Chinese and Russian magnesium. Chinese and Russian producers are constrained by a lack of production alternatives and

¹² See testimony of Mike Legge, President, US Magnesium, conference transcript at 14-23. In addition, US Magnesium has *** that are described in Part III.

¹³ See testimony of Dr. Kenneth Button, economist for petitioners, conference transcript at 47. In addition, respondents described US Magnesium's ultimate owner as having "siphoned off" cash that could have been used for important investments in plant upgrades. They added that US Magnesium's continuing difficulties can be laid at the feet of its continuing legal and financial problems due to lawsuits over its environmental record and bankruptcy. See testimony of Paula Stern, Chairwoman, The Stern Group, conference transcript at 112.

¹⁴ See testimony of Mike Legge, President of US Magnesium, conference transcript at 13. Alcoa described the closing of Northwest Alloys as being due to its status as a "high-cost" producer, and characterized the closing as unrelated to imports of Chinese or Russian magnesium. See testimony of Lewis Leibowitz, counsel for Alcoa, conference transcript at 102-103.

¹⁵ See testimony of Lewis Leibowitz, counsel for respondents, conference transcript at 156.

¹⁶ Questionnaire of *** and staff conversation with ***.

some difficulties for new Chinese producers in qualifying their material with customers. The U.S. Geological Survey (USGS) characterizes world magnesium production as shifting to China, where lower cost magnesium supply has been growing.¹⁷

China

Based on available information, Chinese producers are likely to respond to changes in demand with large changes in the quantity of shipments of magnesium to the U.S. market. The main contributing factors to the high degree of responsiveness of supply are capacity, inventories, export markets, and production alternatives. While the lack of production alternatives would constrain the supply responsiveness, they are not likely to outweigh the effects of the high potential supply.

Currently, almost all imports of magnesium from China consist of primary alloy magnesium. Petitioners alleged that there are 150-200 magnesium producers in China with a combined capacity of 700,000 metric tons, a level that they characterized as almost twice global demand.¹⁸ However, Alcoa stated that it has been hearing of difficulties for Chinese producers trying to supply the U.S. market.¹⁹ Respondents also said that Chinese capacity is restrained by higher energy and transportation costs, and that these cost increases are causing higher prices.²⁰

Russia

Based on available information, Russian producers are likely to respond to changes in demand with moderate changes in the quantity of shipments of magnesium to the U.S. market. The main contributing factor to the moderate degree of responsiveness of supply is the disputed level of capacity. Petitioners (pointing to past publicly released information on Russian capacity) and Russian producers have presented different versions of Russian capacity that would have very different implications for the degree of Russian responsiveness to price movements.²¹

Currently, the bulk of U.S. imports of Russian magnesium is primary pure magnesium, although there have been some imports from Russia of alloy magnesium since 2000. Russian respondents described Russian producers Avisma and Solikamsk as currently producing “flat-out” and Avisma as unable to supply more magnesium than it has already committed to for 2004.²²

¹⁷ See *Magnesium in U.S. Geological Survey Minerals Yearbook 2002* at 47.6.

¹⁸ See testimony of Dr. Kenneth Button, economist for petitioners and Joseph Dorn, counsel to petitioners, conference transcript at 57 and 99, and a 2003 article, “China’s magnesium capacity to jump 46 percent in 2003” from *Platt’s Metal Week* in the petition at exhibit 5. In 2002, USGS estimated Chinese capacity at 300,000 metric tons per year. See Deborah A. Kramer, *Magnesium, Minerals Yearbook 2002*, U.S. Geological Survey, table 7. ***. See staff conversation with ***.

¹⁹ See testimony of Robert McHale, Vice President, Alcoa, conference transcript at 106. In addition, see postconference brief of Tianjin Magnesium at exhibits B, C, D, E, and F.

²⁰ See testimony of Derek Roberts, Vice President, VSMPO-Tirus US, and Jim Gammons, President, Erie Shore Marketing, conference transcript at 124 and 137.

²¹ See petitioners’ postconference brief at 42-43 and testimony of Derek Roberts, Vice President, VSMPO-Tirus US, conference transcript at 124.

²² See testimony of Derek Roberts, Vice President, VSMPO-Tirus US, conference transcript at 123-124.

Nonsubject Imports

Magnesium capacity has been diminishing in many nonsubject countries. Since 2000, Noranda in Canada has shut down 58,000 metric tons of magnesium capacity. In addition, French magnesium production capacity has been reduced by 17,000 metric tons and Norwegian capacity has been reduced by 42,000 metric tons.²³ *** described China and Russia as now supplying 65 percent of the European and North American magnesium markets, with the vast majority of that subject country supply being from China.

U.S. Demand

Demand Characteristics

Magnesium demand consists 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, and has increased over at least the last year. Chinese demand for aluminum is reportedly causing world shortages in aluminum and is driving up worldwide aluminum demand.²⁴ Worldwide aluminum prices were \$1,646 per metric ton over the first two months of 2004, up from \$1,431 over the full year 2003 and \$1,350 over the full year 2002.²⁵ U.S. automakers are expecting strong demand in 2004, although they have not necessarily seen the increases yet and 2003 was the automakers' weakest year since 1998.²⁶ Steel demand in the United States, the driver behind desulfurization demand for magnesium, is also showing renewed strength.²⁷ However, the correlation between the strength of the overall U.S. and world economies and magnesium demand also means that any general economic slowdown would also probably mean a slowdown in magnesium demand.

Demand Trends

Respondents described demand as cyclical, following the wider economy and industrial activity. They described one price and demand trough coming in 1991, followed by rising demand until 1996, and then falling demand until another trough was hit in 2001. However, they described demand as currently rising.²⁸

For pure magnesium, *** stated that demand had increased, citing general economic conditions. Three importers stated that demand had increased, with *** estimating the increase at 2-3 percent yearly and *** describing the increase as considerable. Importers attributed the growth to new capacity in aluminum and increased aluminum use in automobile manufacturing. However, two importers saw pure magnesium demand as unchanged and two saw pure magnesium demand as shrinking.²⁹ Six importers and two producers saw no change in the product range or marketing of pure magnesium.

²³ See testimony of Derek Roberts, Vice President, VSMPO-Tirus US, conference transcript at 121.

²⁴ See *World Faces Aluminum Shortage as China Demand Soars*, Agence France Presse, March 11, 2004.

²⁵ See *Commodity Price Data Pinksheet - March 2004*, World Bank Development Prospects, website at www.worldbank.org/prospects/pinksheets/pink0304.htm.

²⁶ See *U.S. Automakers Expect Better Year in '04*, Knight-Ridder Newspapers, January 14, 2004.

²⁷ See *Managers Fortify Portfolios with Steel*, Investor's Business Daily, March 15, 2004.

²⁸ See testimony of Paula Stern, Chairwoman, The Stern Group, conference transcript at 111.

²⁹ In addition, the IMA reports that total world production of primary magnesium went from 366,900 metric tons in 2000 down to 330,180 metric tons in 2001 and back up to 364,959 metric tons in 2002. See www.intlmag.org/aboutIMA.html.

For alloy magnesium, three producers stated that demand had increased, citing higher automotive demand, the general condition of the economy, and magnesium's continued low price relative to aluminum making it attractive to the automotive industry.³⁰ Twelve importers agreed, with two describing recent demand growth in the range of 8 to 10 percent per year. Two importers stated that demand for alloy magnesium was unchanged.³¹

Substitute Products

Producers and importers generally reported that there were few, if any, regular substitutes for magnesium. Three producers and seven importers stated that aluminum, steel, and/or plastics can at least occasionally substitute for magnesium. *** stated that there are no substitutes for magnesium in aluminum cans, but that in diecasting there can be other downstream products made from aluminum, steel, or plastic instead of magnesium. It added that calcium carbide can substitute for magnesium in steel desulfurization and aluminum and zinc can substitute for magnesium in electrochemical end uses. *** reported that in diecasting, aluminum, steel, and plastics can be total substitutes for magnesium if the magnesium price is too high (specifically, if magnesium becomes more than *** times the price of aluminum), although *** stated that any such substitution would be longer-term. However, one producer and three importers stated that there were no substitutes for magnesium.

Cost Share

In their questionnaire responses, neither producers nor importers expressed detailed knowledge of the cost share that magnesium accounts for in their customers' products. Petitioners described the cost of the magnesium in an aluminum can as ranging from one percent to four percent (for the lid), and that the volume of aluminum used depends little or not at all on the price of magnesium. In addition, they described diecasting as an expensive process where raw materials play a lesser role. They said that while magnesium prices had dropped in recent years, the volume demanded by diecasters had not risen comparably.³² However, aluminum alloyer Alcan described itself as disadvantaged when competing with foreign aluminum producers who can source their magnesium free from U.S. antidumping duties.³³

³⁰ *** reported that demand had fallen, but was referring to demand for its *** relative to imported pure and alloy magnesium.

³¹ In addition, while nine importers and two producers stated that there had been no change in the product range or marketing of alloy magnesium, four importers cited increased demand from new uses for magnesium in the automotive industry.

³² See testimony of Howard Kaplan, Vice President, US Magnesium, and Dr. Kenneth Button, economist for petitioners, conference transcript at 76.

³³ See testimony of Sanford Yosowitz, Vice President, Alcan, conference transcript at 119.

SUBSTITUTABILITY ISSUES

Factors Affecting Purchasing Decisions

Certification and Qualification

Magnesium purchasers require qualification in addition to ASTM certification, and qualification standards are stringent enough to eliminate some suppliers at some times. Some diecasting qualification is more stringent than aluminum alloying qualification³⁴ or more general diecasting qualification, and involves qualifying for use in the automotive parts of the “big three”-- General Motors (GM), Ford, and DaimlerChrysler.³⁵ Respondents described this as a 12-14 month process that allows the qualified to charge higher prices.³⁶

Petitioners allege that Chinese magnesium was not qualified initially (i.e., 1995) to supply the diecasting market, but that some Chinese material can now supply both the diecasting and less stringent portions of the aluminum alloying market.³⁷ Nanjing Yunhai Magnesium Co. and Nanjing Welbow Metals Co. are currently certified to supply Toyota Group and DaimlerChrysler, and stated that fewer than five Chinese producers (including Nanjing) have the technical capabilities to be certified by North American automakers.³⁸ On the other hand, ***.³⁹ In addition, some secondary magnesium is becoming more widely accepted as qualified for automotive end uses.⁴⁰

In addition to certification issues, several magnesium purchasers who testified at the conference on behalf of respondents stated that having alternative sources of supply was important. Though some characterized US Magnesium as an effective supplier, they said that US Magnesium’s legal and financial difficulties made them nervous about its future capability of maintaining supply.⁴¹

³⁴ However, Wise Alloys, a magnesium purchaser and producer of aluminum can stock, describes its process of qualifying a supplier as a three-to-six month process that involves meeting FDA requirements and Wise’s volume needs. See written statement of Wise Alloys L.L.C, March 24, 2004 at 2.

³⁵ See testimony of Howard Kaplan, Vice President, US Magnesium, conference transcript at 75, and staff conversation with ***.

³⁶ See testimony of Jim Gammons, President, Erie Shore Marketing, conference transcript at 152.

³⁷ See testimony of Howard Kaplan, Vice President, US Magnesium, conference transcript at 30.

³⁸ See postconference brief of Nanjing and Toyota Tsusho, pp. 2-3 and ex. 2. In addition, Jim Gammons of Erie Shore Marketing stated that Tianjin Magnesium International Co. is in the process of being certified by automakers. See testimony of Jim Gammons, President, Erie Shore Marketing, conference transcript at 151-152.

³⁹ Staff conversation with ***.

⁴⁰ See testimony of Howard Kaplan, Vice President, US Magnesium, conference transcript at 84-85.

⁴¹ See testimony of Robert McHale, Vice President, Alcoa, and Stanford Yosowitz, Vice President and Executive Counsel, Alcan, conference transcript at 107 and 115-116.

Comparisons of Domestic Products and Imports

Producers and importers were asked to assess how interchangeable magnesium from the United States was with magnesium from subject countries and nonsubject countries. Their answers are summarized in tables II-1 and II-2.

Table II-1

Magnesium: U.S. producers' perceived degree of interchangeability of magnesium produced in the United States and other countries

Source	Number of firms reporting														
	China					Russia					Nonsubject				
	A	F	S	N	O	A	F	S	N	O	A	F	S	N	O
United States	3	2	0	0	–	3	2	0	0	–	3	2	0	0	–
China	/	/	/	/	/	3	2	0	0	–	3	2	0	0	–
Russia	/	/	/	/	/	/	/	/	/	/	3	2	0	0	–

Note: A = Always; F = Frequently; S = Sometimes; N = Never; O = No familiarity.
Source: Compiled from data submitted in response to Commission questionnaires.

Table II-2

Magnesium: U.S. importers' perceived degree of interchangeability of magnesium produced in the United States and other countries

Source	Number of firms reporting														
	China					Russia					Nonsubject				
	A	F	S	N	O	A	F	S	N	O	A	F	S	N	O
United States	2	8	3	0	–	3	7	1	0	–	1	5	2	0	–
China	/	/	/	/	/	2	5	1	0	–	1	5	2	0	–
Russia	/	/	/	/	/	/	/	/	/	/	1	4	2	0	–

Note: A = Always; F = Frequently; S = Sometimes; N = Never; O = No familiarity.
Source: Compiled from data submitted in response to Commission questionnaires.

***, citing articles in American Metal Market and ***, stated that U.S. pure magnesium is increasingly substituted for by Chinese alloy magnesium. *** reported that magnesium in the same form (e.g., pure magnesium in ingot form) is interchangeable from all countries, but that it saw essentially no competition between pure and alloy magnesium. Importer *** said that Chinese quality is less reliable than “Western” magnesium. In addition, *** stated that not all Chinese magnesium producers manufacture alloys to the same quality standards. Alcoa described magnesium as “as much a commodity as aluminum, copper, lead, tin” and stated that magnesium from different national sources is interchangeable.⁴²

⁴² See testimony of Robert McHale, Vice President, Alcoa, conference transcript at 151.

Producers and importers were asked to assess how often differences other than price were significant in sales of magnesium from the United States, subject countries, or nonsubject countries. Their answers are summarized in tables II-3 and II-4.

Table II-3
Magnesium: U.S. producers' perceived importance of factors other than price in sales of magnesium produced in the United States and other countries

Source	Number of firms reporting														
	China					Russia					Nonsubject				
	A	F	S	N	O	A	F	S	N	O	A	F	S	N	O
United States	0	0	3	2	–	0	0	3	2	–	0	0	3	2	–
China	/	/	/	/	/	0	0	3	2	–	0	0	3	2	–
Russia	/	/	/	/	/	/	/	/	/	/	0	0	3	2	–

Note: A = Always; F = Frequently; S = Sometimes; N = Never; O = No familiarity.
 Source: Compiled from data submitted in response to Commission questionnaires.

Table II-4
Magnesium: U.S. importers' perceived importance of factors other than price in sales of magnesium produced in the United States and other countries

Source	Number of firms reporting														
	China					Russia					Nonsubject				
	A	F	S	N	O	A	F	S	N	O	A	F	S	N	O
United States	2	2	6	1	–	1	2	6	1	–	0	1	5	1	–
China	/	/	/	/	/	2	1	3	1	–	0	2	4	1	–
Russia	/	/	/	/	/	/	/	/	/	/	0	2	4	1	–

Note: A = Always; F = Frequently; S = Sometimes; N = Never; O = No familiarity.
 Source: Compiled from data submitted in response to Commission questionnaires.

Importers of *** cited higher quality and technical service for Russian magnesium than for U.S. or Chinese magnesium. However, *** said that Canadian magnesium was of a higher quality than Russian magnesium, and *** said that it could deliver Chinese magnesium faster than U.S. producers could deliver their magnesium.

PART III: U.S. PRODUCERS' PRODUCTION, SHIPMENTS, AND EMPLOYMENT

Information on capacity, production, shipments, inventories, and employment is presented in this section of the report and is based on the questionnaire responses of six firms believed to represent all known U.S. production of pure and alloy magnesium in 2000-03. A summary of U.S. producer data is presented in appendix C.¹

The petition identified 14 U.S. producers of magnesium,² and the Commission sent U.S. producer questionnaires to all of these firms. Six firms responded that they produced the subject merchandise during January 1, 2000, through December 31, 2003. Five firms, ***, indicated that they did not produce the subject merchandise during this period.³ Two firms did not respond to the Commission's questionnaire.⁴

U.S. PRODUCERS

Table III-1 presents a list of U.S. producers responding to the Commission's questionnaires, the locations of corporate headquarters, the positions taken with respect to the petition, reported U.S. production and shares of U.S. production of magnesium in 2003, and whether the firms produced pure and/or alloy magnesium in 2000-03.

Two firms, US Magnesium⁵ and Northwest Alloys, produced pure magnesium during 2000-03. Six firms produced alloy magnesium during this same period. US Magnesium and Northwest Alloys were the only primary magnesium producers while four firms were secondary magnesium producers.

¹ Table C-1 presents summary data for pure magnesium. Table C-2 presents summary data for alloy magnesium. Table C-3 presents summary data for all magnesium. Table C-4 presents summary data for primary magnesium. Table C-5 presents summary data for secondary magnesium.

² See petition, exhs. 1 and 2. In *Magnesium From China and Israel*, Invs. Nos. 701-TA-403 and 731-TA-895-896 (Final), USITC Pub. 3467 (November 2001), the Commission collected and presented information from U.S. grinders that produce granular magnesium (from purchased magnesium ingot) and further internally process the granular magnesium into magnesium-based reagent mixtures for use in iron and desulfurization, and to a lesser extent powder magnesium for pyrotechnic applications. The scope of those investigations included reagent mixtures. However, the scopes of the current investigations specifically exclude "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." 69 FR 15293, March 25, 2004.

³ A sixth firm ***.

⁴ *** did not respond to the Commission's questionnaire. However, based on responses in past investigations, these firms are known to be producers of magnesium-based reagent mixtures.

⁵ US Magnesium is the successor company to Magnesium Corporation of America (Magcorp). On August 3, 2001, Magcorp filed for protection under Chapter 11 of the U.S. Bankruptcy Code. The bankruptcy court authorized the sale of substantially all of Magcorp's assets to US Magnesium. The sale was completed in June 2002.

Table III-1

Magnesium: U.S. producers, locations of corporate headquarters, positions taken with respect to the petition, reported U.S. production and shares of U.S. production in 2003, and types of magnesium produced in January 2000-December 2003

Firms	Location	Position taken with respect to the petition					U.S. production in 2003		Products produced	
		Support	Oppose	Takes no position	Public		Quantity	Share	Pure	Alloy
					Yes	No	Metric tons	Percent		
Primary:										
Northwest Alloys ¹	WA		✓		✓		0	0.0	✓	✓
US Magnesium ²	UT	Petitioner			✓		***	***	✓	✓
Secondary: ³										
Amacor ⁴	IN	***	***	***		✓	***	***		✓
Garfield Alloys ⁵	OH	✓			✓		***	***		✓
Halaco Engineering	CA	✓			✓		***	***		✓
MagReTech ⁶	OH	✓			✓		***	***		✓
Total (6)		***	***	***	5	1	***	100.0	2	6

¹ Northwest Alloys, Addy, WA, is a wholly owned subsidiary of Alcoa, Inc., Pittsburgh, PA. Northwest Alloys ceased operations and production of magnesium on October 1, 2001.

² US Magnesium, Salt Lake City, UT, is a wholly owned subsidiary of Renco Group, Inc., New York, NY. US Magnesium is the successor company to Magnesium Corporation of America (Magcorp). On August 3, 2001, Magcorp filed for protection under Chapter 11 of the U.S. Bankruptcy Code. The bankruptcy court authorized the sale of substantially all of Magcorp's assets to U.S. Magnesium.

³ A fifth firm ***.

⁴ Advanced Magnesium Alloys Corp. (Amacor), Anderson, IN, began operations in 2001. Amacor is owned by JC, LLC and a private investment partner. ***.

⁵ Garfield Alloys, Garfield Heights, OH, is related to MagReTech through common ownership and management. Garfield Alloys's production facility was destroyed in a fire on December 29, 2003. The firm has not resumed production of magnesium. ***.

⁶ MagReTech, Bellevue, OH, is related to Garfield Alloys through common ownership and management. MagReTech ***.

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

U.S. CAPACITY, PRODUCTION, AND CAPACITY UTILIZATION

U.S. producers' capacity, production, and capacity utilization data, by firms, are presented in table III-2.

Table III-2

Magnesium: U.S. producers' capacity, production, and capacity utilization, by types and by firms, 2000-03

* * * * *

Primary Magnesium

Northwest Alloys, a subsidiary of Alcoa, idled its production facility in October 2001. Northwest Alloys was a captive producer of primary magnesium for Alcoa. Alcoa stated that high electricity prices were a driver in its decision to close the Northwest Alloys facility in Addy, WA,⁶ and that the production facility "was not closed due to imports of allegedly unfairly traded magnesium from Russia or China."⁷

Dow Magnesium, a producer in previous magnesium investigations, ceased operations at its 65,000 metric ton magnesium production facility in Freeport, TX, in November 1998 after its plant suffered extensive damage from lightning strikes and flooding.⁸ Dow indicated at the time of its decision not to rebuild the plant that its decision was based on "global market conditions."⁹

US Magnesium experienced a reduction in its production capacity in 2001 and 2002 as the firm began a plant modernization program involving the decommissioning of older production cells and installation of a new type of electrolytic cell to convert magnesium chloride into liquid primary magnesium. The capacity of the plant with 30 new "M-cells" and the 30 older "S-cells" was 39,000 metric tons per year of electrolytic production and 43,000 metric tons per year of total pure and alloy magnesium ingot production.¹⁰

⁶ According to testimony of Alcoa (parent company of Northwest Alloys), Northwest Alloy's closure was due to its position as a global high-cost producer of magnesium, especially because of high energy costs in the Pacific Northwest where its production facility is located. Alcoa stated that Northwest Alloys was not closed due to imports of allegedly unfairly traded magnesium from Russia or China, nor does it believe that any injury to US Magnesium was due to those imports. See testimony of Paula Stern, Chairwoman, The Stern Group, conference transcript at 110. An Alcoa press release of June 22, 2001, indicated that Northwest Alloys was shut down "due to high production costs and unfavorable market conditions." See copy of press release presented in the postconference brief of petitioners, exh. 2.

⁷ See testimony of Lewis Leibowitz, counsel to Alcoa, conference transcript at 102-103.

⁸ See *Pure Magnesium From China and Israel*, Invs. Nos. 731-TA-403 and 731-TA-895-896 (Final), USITC Pub. 3467, November 2001, pp. 22-23.

⁹ See postconference brief of Solikamsk Magnesium Works and Solimin Magnesium, p. 14.

¹⁰ See testimony of Michael Legge, President, US Magnesium, conference transcript at 18.

US Magnesium stated that ***,¹¹ US Magnesium ***. US Magnesium ***. ***.

Secondary Magnesium

Advanced Magnesium Alloys Corp. (Amacor) is a new producer that began operations in 2001.¹² Amacor's secondary magnesium alloy products are certified by the US automotive industry for use in manufacturing automotive components by the magnesium die casting industry and the aluminum industry.¹³

On December 29, 2003, a fire destroyed Garfield Alloys' magnesium recycling plant. The fire burned for two days, and magnesium scrap that had gotten wet exploded. A spark from a grinder used to open one of the metal drums containing scrap was cited as the cause of the fire.¹⁴ Garfield Alloys' owners ***.¹⁵ Some of Garfield Alloys's production has been ***.

*** of four U.S. secondary magnesium producers, ***,¹⁶ ***,¹⁷ and ***,¹⁸ ***.¹⁹ While U.S. producers reported ***, ***.

¹¹ Postconference brief of petitioners, exh. A, p. 24.

¹² On April 3, 2003, Amacor purchased Xstrata Magnesium Corporation (XMC) from Xstrata PLC, Zug, Switzerland, for \$1.2 million. The major asset of XMC is a magnesium recycling plant in Anderson, IN. The Xstrata plant was commissioned in 2000 to recycle scrap to produce magnesium alloy for the U.S. auto industry. The facility comprises two lines capable of processing 25,000 metric tons of magnesium scrap a year, with one line currently commissioned. *See Xstrata Sells Magnesium Division*, Recycling Today, April 8, 2003, retrieved at <http://www.recyclingtoday.com/news/news.asp?ID=3901> on April 5, 2004.

¹³ *See* Amacor's news release *AMACOR Purchases Xstrata Magnesium Corp. (XMC)*, April 3, 2003, retrieved at <http://www.intlmag.org/news-events.html#amacor> on April 5, 2004.

¹⁴ *Magnesium In The Fourth Quarter 2003, Mineral Industry Surveys*, U.S. Geological Survey, February 2004 citing article of David Brooks, *Garfield Plans Magnesium Alloy Comeback*, American Metal Market, v. 112, no. 2-4, January 15, 2004, pp. 1-2.

¹⁵ The company indicated in its U.S. producer questionnaire response that ***. *See* response to question II-3, p. 4.

¹⁶ ***.

¹⁷ ***.

¹⁸ ***.

¹⁹ Under a typical tolling arrangement, the company performing the production (toller) on behalf of another firm is paid a conversion fee (per metric ton) for the processing raw materials (either pure magnesium, alloy magnesium, or magnesium-based scrap) that is provided by the toll-arranging firm. Toller production data are usually included in the toller's data; however, shipments of tolled merchandise are usually included in the toll-arranging firm's data. In this particular industry, the toll-arranging firms are typically diecasters. The Commission did not request trade data from diecasters since such companies produce downstream products that are not subject to these investigations.

U.S. PRODUCERS' SHIPMENTS

Data on U.S. producers' shipments, by types, are presented in table III-3. Table III-4 and figure III-1 present 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-5 and figure III-2.

Table III-3
Magnesium: U.S. producers' shipments, by types, 2000-03

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

Table III-4
Magnesium: U.S. producers' commercial shipments, by types, 2003

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

Figure III-1
Magnesium: U.S. producers' commercial shipments, by types, 2003

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

Table III-5
Magnesium: U.S. producers' commercial shipments, by end users and by types, 2003

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

Figure III-2
Magnesium: U.S. producers' commercial shipments, by end users, 2003

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

Shipments of primary magnesium accounted for *** percent of U.S. producers' commercial shipments in 2003. Secondary magnesium accounted for *** percent of U.S. producers' commercial shipments. In 2003, commodity-grade pure magnesium accounted for *** percent of U.S. commercial shipments, alloy magnesium (meeting ASTM specifications) accounted for *** percent, and alloy magnesium (not meeting ASTM specifications) accounted for *** percent.

A *** of U.S. producers' commercial shipments of magnesium in 2003 (*** percent) went to aluminum alloyers, while *** percent went to diecasters, *** percent to granule/reagent producers, and *** percent to distributors.²⁰

U.S. PRODUCERS' PURCHASES

Information on U.S. producers' purchases are presented in table III-6. Purchases by U.S. producers were relatively small for both pure and alloy magnesium and were equivalent to *** percent of U.S. producers' pure magnesium production in 2002 (the year of the largest amounts purchased), *** percent of U.S. producers' alloy magnesium production in 2002, and *** percent for U.S. producers combined pure and alloy magnesium production in 2002.

Table III-6
Magnesium: U.S. producers' purchases, by types and sources, 2000-03

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

***²¹ ***²² ***²³

U.S. PRODUCERS' INVENTORIES

Data on U.S. producers' inventories of domestically produced magnesium are presented in table III-7. Because of difficulties encountered in the reporting of inventories owing to toll shipments and various reporting anomalies, the inventory data for alloy magnesium are questionable and should be used with caution.

²⁰ With respect to subject imports from China, *** percent of U.S. importers' commercial shipments went to aluminum alloyers, *** percent to diecasters, and *** percent to distributors. With respect to subject imports from Russia, *** percent went to aluminum alloyers, *** percent to diecasters, *** percent to distributors, and *** percent to granule/reagent producers.

²¹ ***.

²² ***.

²³ ***. ***.

Table III-7
Magnesium: U.S. producers' end-of-period inventories, by types, 2000-03

* * * * *

U.S. EMPLOYMENT, WAGES, AND PRODUCTIVITY

U.S. producers' employment data are presented in table III-8.

Table III-8
Magnesium: Average number of production and related workers, hours worked, wages paid to such employees, hourly wages, productivity, and unit labor costs, by types, 2000-03

* * * * *

PART IV: U.S. IMPORTS, APPARENT CONSUMPTION, AND MARKET SHARES

U.S. IMPORTERS

The Commission sent questionnaires to the 25 importers identified in the petition¹ and 23 additional firms identified as importers by Customs, and received usable responses from 20 firms² that are believed to account for approximately 44 percent of subject alloy magnesium imports from China (based on quantity) in 2000-03,³ approximately 93 percent of subject pure magnesium imports from Russia during this same period,⁴ and approximately 92 percent of subject alloy magnesium imports from Russia.⁵ However, because of greater coverage, data for imports presented throughout this section are based on official statistics of Commerce, except as noted.⁶ A list of U.S. importers of the subject merchandise responding to the Commission's questionnaires is presented in Table IV-1.

Table IV-1
Magnesium: U.S. importers, company locations, and subject merchandise imported, by types and by sources, 2000-2003

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

U.S. IMPORTS

Table IV-2 and figures IV-1 and IV-2 present data on U.S. imports of subject merchandise.

¹ See petition at exh. 10 (China) and exh. 11 (Russia).

² Sixteen firms responded that they had not imported the subject merchandise from any source from January 1, 2000, through December 31, 2003. Twelve firms did not respond to the Commission's questionnaire. Based on Customs data, the three largest importers not responding were ***.

³ Based on a comparison of U.S. importer questionnaire responses to official import statistics of Commerce. Imports of subject alloy magnesium from China based on responses to Commission questionnaires were 18,039 metric tons in 2000-03. Official imports of subject alloy magnesium (HTS subheading 8104.19.00) from China were 40,862 metric tons during this same period.

⁴ Based on a comparison of U.S. importer questionnaire responses to official import statistics of Commerce. Imports of subject pure magnesium from Russia based on responses to Commission questionnaires were 50,823 metric tons in 2000-03. Official imports of subject pure magnesium (HTS subheadings 8104.11.00 and 8104.30.00) from Russia were 54,774 metric tons during this same period.

⁵ Based on a comparison of U.S. importer questionnaire responses to official import statistics of Commerce. Imports of subject alloy magnesium from Russia based on responses to Commission questionnaires were 8,458 metric tons in 2000-03. Official imports of subject alloy magnesium (HTS subheadings 8104.19.00) from Russia were 9,225 metric tons during this same period.

⁶ Data from questionnaire responses are used for shipments by types, shipments by end users, and U.S. importers' inventories.

Table IV-2
Magnesium: U.S. imports, by sources, 2000-03

Source	2000	2001	2002	2003
	Quantity (metric tons)			
Pure magnesium: ¹				
Russia ²	10,849	11,259	14,631	18,035
Nonsubject:				
Canada	9,091	3,094	8,265	3,036
China ³	15,506	3,151	173	101
Israel ⁴	6,317	2,817	5,845	4,785
All other sources	2,529	4,526	2,665	2,328
Subtotal, nonsubject	33,443	13,588	16,948	10,250
Total, pure magnesium	44,292	24,846	31,579	28,285
Alloy magnesium: ⁵				
Subject:				
China	6,671	9,321	11,964	12,906
Russia	2,836	643	2,036	3,710
Subtotal, subject	9,507	9,965	14,001	16,616
Nonsubject:				
Canada	21,273	13,592	25,810	21,920
China ⁶	0	0	0	0
Israel	2,306	5,072	2,574	961
All other sources	5,328	4,710	1,440	1,574
Subtotal, nonsubject	28,908	23,374	29,823	24,455
Total, alloy magnesium	38,415	33,339	43,824	41,071
All magnesium:				
Subject:				
China	6,671	9,321	11,964	12,906
Russia	13,685	11,902	16,668	21,745
Subtotal, subject	20,356	21,223	28,632	34,651
Nonsubject:				
Canada	30,364	16,685	34,075	24,956
China	15,506	3,151	173	101
Israel	8,623	7,890	8,419	5,747
All other sources	7,857	9,236	4,104	3,902
Subtotal, nonsubject	62,351	36,962	46,771	34,706
Total, all magnesium	82,706	58,185	75,403	69,356
Table continued. See footnotes at end of table.				

Table IV-2--Continued
Magnesium: U.S. imports, by sources, 2000-03

Source	2000	2001	2002	2003
	Value (\$1,000)			
Pure magnesium: ¹				
Russia ²	26,067	22,229	28,541	34,468
Nonsubject:				
Canada	22,739	9,201	21,923	8,859
China ³	33,872	6,726	304	257
Israel ⁴	19,304	8,312	14,981	11,859
All other sources	7,121	11,872	6,597	5,780
Subtotal, nonsubject	83,037	36,111	43,805	26,756
Total, pure magnesium	109,103	58,340	72,346	61,224
Alloy magnesium: ⁵				
Subject:				
China	13,497	18,744	20,613	24,020
Russia	10,021	1,529	4,355	7,050
Subtotal, subject	23,518	20,273	24,967	31,069
Nonsubject:				
Canada	71,455	40,893	70,710	60,364
China ⁶	0	0	0	0
Israel	12,128	16,024	7,031	2,407
All other sources	20,795	18,091	7,076	7,069
Subtotal, nonsubject	104,378	75,008	84,817	69,841
Total, alloy magnesium	127,896	95,282	109,784	100,910
All magnesium:				
Subject:				
China	13,497	18,744	20,613	24,020
Russia	36,087	23,758	32,896	41,517
Subtotal, subject	49,584	42,502	53,508	65,537
Nonsubject:				
Canada	94,194	50,094	92,632	69,223
China	33,872	6,726	304	257
Israel	31,432	24,336	22,013	14,267
All other sources	27,917	29,964	13,673	12,850
Subtotal, nonsubject	187,415	111,119	128,622	96,597
Total, all magnesium	236,999	153,622	182,130	162,134
Table continued. See footnotes at end of table.				

Table IV-2--Continued
Magnesium: U.S. imports, by sources, 2000-03

Source	2000	2001	2002	2003
	Unit value (per metric ton)			
Pure magnesium: ¹				
Russia ²	\$2,403	\$1,974	\$1,951	\$1,911
Nonsubject:				
Canada	2,501	2,974	2,652	2,918
China ³	2,184	2,135	1,761	2,535
Israel ⁴	3,056	2,950	2,563	2,478
All other sources	2,816	2,623	2,476	2,483
Average, nonsubject	2,483	2,658	2,585	2,610
Average, pure magnesium	2,463	2,348	2,291	2,164
Alloy magnesium: ⁵				
Subject:				
China	2,023	2,011	1,723	1,861
Russia	3,533	2,378	2,138	1,900
Average, subject	2,474	2,035	1,783	1,870
Nonsubject:				
Canada	3,359	3,009	2,740	2,754
China ⁶	(⁷)	(⁷)	(⁷)	(⁷)
Israel	5,258	3,159	2,732	2,504
All other sources	3,903	3,841	4,915	4,491
Average, nonsubject	3,611	3,209	2,844	2,856
Total, alloy magnesium	3,329	2,858	2,505	2,457
All magnesium:				
Subject:				
China	2,023	2,011	1,723	1,861
Russia	2,637	1,996	1,974	1,909
Average, subject	2,436	2,003	1,869	1,891
Nonsubject:				
Canada	3,102	3,002	2,718	2,774
China	2,184	2,135	1,761	2,535
Israel	3,645	3,085	2,615	2,483
All other sources	3,553	3,244	3,331	3,293
Average, nonsubject	3,006	3,006	2,750	2,783
Average, all magnesium	2,866	2,640	2,415	2,338

¹ Consists of HTS subheadings 8104.11.00 (pure magnesium ingot) and 8104.30.00 (granular magnesium).

² Imports of pure magnesium from Russia were subject to provisional antidumping duties from April 30, 2001, through September 27, 2001. There were no imports of granular magnesium from Russia in 2000-03.

³ Imports from China of pure magnesium ingot (in metric tons) were 244 in 2000, 137 in 2001, 91 in 2002, and 89 in 2003, and are currently subject to antidumping duty order A-570-832 (60 FR 25691, May 12, 1995). Imports of granular magnesium from China (in metric tons) were 15,262 in 2000, 3,014 in 2001, 82 in 2002, and 13 in 2003, and are currently subject to antidumping duty order A-570-864 (66 FR 57936, November 11, 2001).

⁴ Imports of pure magnesium from Israel were subject to provisional antidumping duties from April 30, 2001, through November 20, 2001.

⁵ Consists of HTS subheading 8104.19.00 (alloy magnesium ingot).

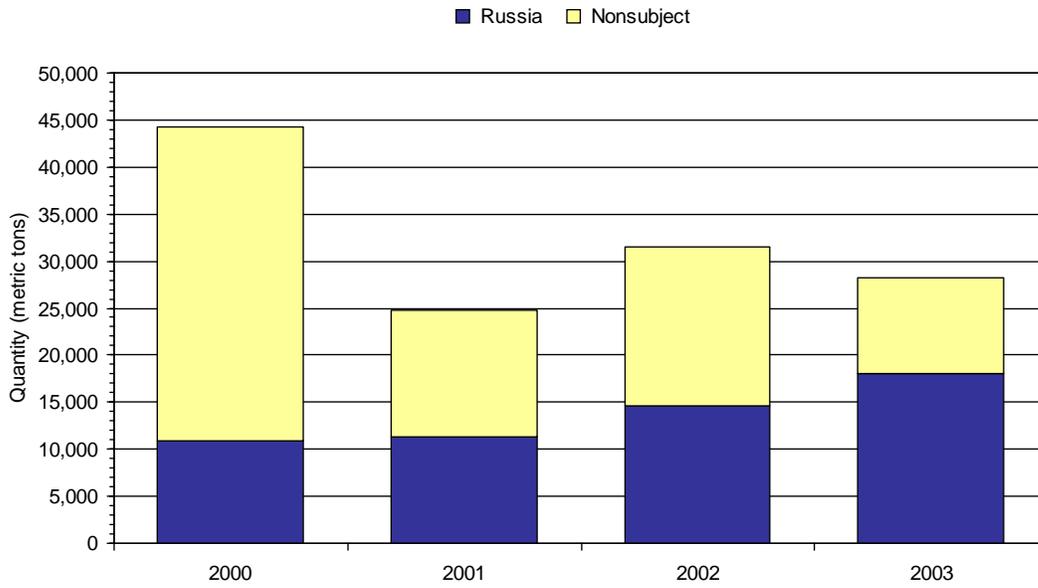
⁶ Imports of "off-specification pure" magnesium (alloy magnesium not meeting ASTM specifications for alloy magnesium) from China entering under this subheading are currently subject to antidumping order A-570-832 (60 FR 25691, May 12, 1995).

⁷ Not applicable.

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

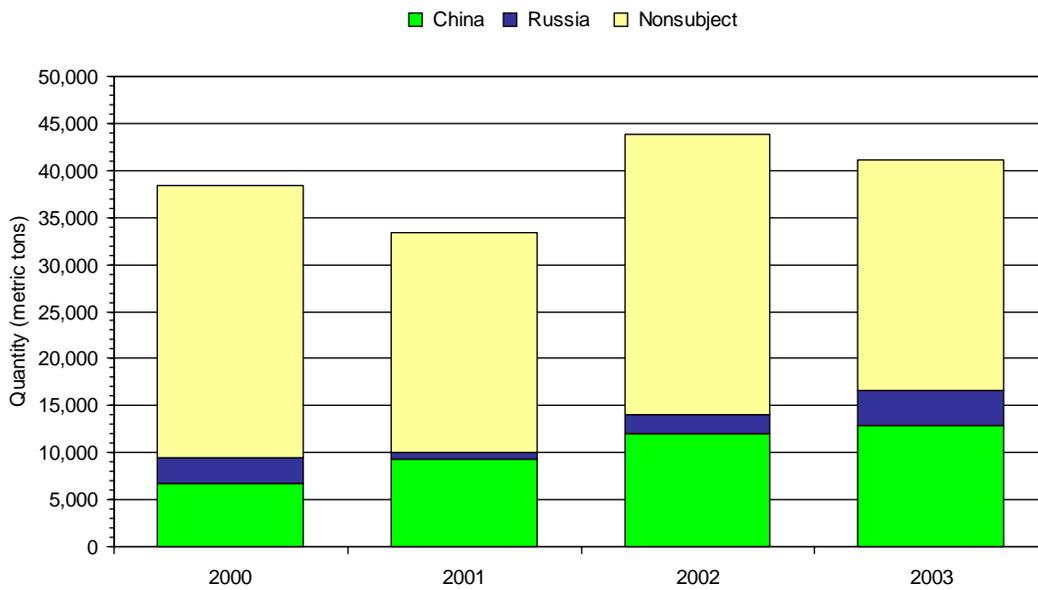
Source: Compiled from official statistics of Commerce.

Figure IV-1
Pure magnesium: U.S. imports, by sources, 2000-03



Source: Table IV-2.

Figure IV-2
Alloy magnesium: U.S. imports, by sources, 2000-03



Source: Table IV-2.

Based on official U.S. import statistics, pure magnesium from Russia was imported in each month during 2000-03. Alloy magnesium from China was also imported in each month during 2000-03, and alloy magnesium from Russia was imported in each month during 2000-03 except for February 2000, April through October 2001, and July 2002.

Based on official U.S. import statistics, the principal U.S. customs districts of entry by far for pure magnesium from Russia during 2000-03 were Baltimore, MD and Philadelphia, PA. The principal U.S. customs districts of entry for alloy magnesium from China during 2000-03 were Detroit, MI; Baltimore, MD; Chicago, IL; St. Louis, MO; and Los Angeles, CA. The principal U.S. customs district of entry by far for alloy magnesium from Russia during 2000-03 was Baltimore, MD. Customs districts listed above for each product are ranked (listed) in order of the volume of metric tons imported through them during 2000-03.

U.S. IMPORTERS' SHIPMENTS

Data on U.S. importers' shipments by types are presented in table IV-3. Table IV-4 presents U.S. importers' shipments by end users. With respect to subject imports from China, *** percent of U.S. importers' commercial shipments went to aluminum alloyers, *** percent to diecasters, and *** percent to distributors. With respect to subject imports from Russia, *** percent went to aluminum alloyers, *** percent to diecasters, *** percent to distributors, and *** percent to granule producers.

Table IV-3
Magnesium: U.S. importers' commercial shipments, by types and by sources, 2003

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

Table IV-4
Magnesium: U.S. importers' commercial shipments, by end users and by sources, 2003

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

U.S. PRODUCERS' IMPORTS

***⁷ ***.

⁷ ***.

APPARENT U.S. CONSUMPTION

Table IV-5 and figures IV-3 and IV-4 present data on apparent U.S. consumption of magnesium.

Table IV-5
Magnesium: U.S. shipments of domestic product, U.S. imports, by sources, and apparent U.S. consumption 2000-03

Source	2000	2001	2002	2003
	Quantity (metric tons)			
Pure magnesium: ¹				
U.S. producers' domestic shipments	***	***	***	***
U.S. imports from—				
Russia	10,849	11,259	14,631	18,035
Nonsubject:				
Canada	9,091	3,094	8,265	3,036
China ²	15,506	3,151	173	101
Israel ³	6,317	2,817	5,845	4,785
All other sources	2,529	4,526	2,665	2,328
Subtotal, nonsubject	33,443	13,588	16,948	10,250
Total imports	44,292	24,846	31,579	28,285
Apparent U.S. consumption	***	***	***	***
Alloy magnesium: ⁴				
U.S. producers' domestic shipments	***	***	***	***
U.S. imports from—				
Subject:				
China	6,671	9,321	11,964	12,906
Russia	2,836	643	2,036	3,710
Subtotal, subject	9,507	9,965	14,001	16,616
Nonsubject:				
Canada	21,273	13,592	25,810	21,920
China ⁵	0	0	0	0
Israel	2,306	5,072	2,574	961
All other sources	5,328	4,710	1,440	1,574
Subtotal, nonsubject	28,908	23,374	29,823	24,455
Total imports	38,415	33,339	43,824	41,071
Apparent U.S. consumption	***	***	***	***
All magnesium:				
U.S. producers' domestic shipments	***	***	***	***
U.S. imports from—				
Subject:				
China	6,671	9,321	11,964	12,906
Russia	13,685	11,902	16,668	21,745
Subtotal, subject	20,356	21,223	28,632	34,651
Nonsubject:				
Canada	30,364	16,685	34,075	24,956
China	15,506	3,151	173	101
Israel	8,623	7,890	8,419	5,747
All other sources	7,857	9,236	4,104	3,902
Subtotal, nonsubject	62,351	36,962	46,771	34,706
Total imports	82,706	58,185	75,403	69,356
Apparent U.S. consumption	***	***	***	***

Table continued. See footnotes at end of table.

Table IV-5--Continued

Magnesium: U.S. shipments of domestic product, U.S. imports, by sources, and apparent U.S. consumption, 2000-03

Source	2000	2001	2002	2003
	Value (\$1,000)			
Pure magnesium: ¹				
U.S. producers' domestic shipments	***	***	***	***
U.S. imports from--				
Russia	26,067	22,229	28,541	34,468
Nonsubject:				
Canada	22,739	9,201	21,923	8,859
China ²	33,872	6,726	304	257
Israel ³	19,304	8,312	14,981	11,859
All other sources	7,121	11,872	6,597	5,780
Subtotal, nonsubject	83,037	36,111	43,805	26,756
Total imports	109,103	58,340	72,346	61,224
Apparent U.S. consumption	***	***	***	***
Alloy magnesium: ⁴				
U.S. producers' domestic shipments	***	***	***	***
U.S. imports from--				
Subject:				
China	13,497	18,744	20,613	24,020
Russia	10,021	1,529	4,355	7,050
Subtotal, subject	23,518	20,273	24,967	31,069
Nonsubject:				
Canada	71,455	40,893	70,710	60,364
China ⁵	0	0	0	0
Israel	12,128	16,024	7,031	2,407
All other sources	20,795	18,091	7,076	7,069
Subtotal, nonsubject	104,378	75,008	84,817	69,841
Total imports	127,896	95,282	109,784	100,910
Apparent U.S. consumption	***	***	***	***
All magnesium:				
U.S. producers' domestic shipments	***	***	***	***
U.S. imports from--				
Subject:				
China	13,497	18,744	20,613	24,020
Russia	36,087	23,758	32,896	41,517
Subtotal, subject	49,584	42,502	53,508	65,537
Nonsubject:				
Canada	94,194	50,094	92,632	69,223
China	33,872	6,726	304	257
Israel	31,432	24,336	22,013	14,267
All other sources	27,917	29,964	13,673	12,850
Subtotal, nonsubject	187,415	111,119	128,622	96,597
Total imports	236,999	153,622	182,130	162,134
Apparent U.S. consumption	***	***	***	***
¹ Consists of HTS subheadings 8104.11.00 (pure magnesium ingot) and 8104.30.00 (granular magnesium). ² Imports from China of pure magnesium ingot are currently subject to antidumping duty order A-570-832 (60 FR 25691, May 12, 1995). Imports of granular magnesium from China are currently subject to antidumping duty order A-570-864 (66 FR 57936, November 11, 2001). ³ Imports of pure magnesium from Israel were subject to provisional antidumping duties from April 30, 2001, through November 20, 2001. ⁴ Consists of HTS subheading 8104.19.00 (alloy magnesium ingot). ⁵ Imports of "off-specification pure" magnesium (alloy magnesium not meeting ASTM specifications for alloy magnesium) from China entering under this subheading are currently subject to antidumping order A-570-832 (60 FR 25691, May 12, 1995).				
Note.--Because of rounding, figures may not add to the totals shown				
Source: Compiled from official statistics of Commerce.				

Figure IV-3
Pure magnesium: Apparent U.S. consumption, by sources, 2000-03

* * * * *

Figure IV-4
Alloy magnesium: Apparent U.S. consumption, by sources, 2000-03

* * * * *

U.S. MARKET SHARES

Table IV-6 presents data on U.S. market shares of magnesium.

Table IV-6
Magnesium: U.S. market shares, 2000-03

* * * * *

PART V: PRICING AND RELATED INFORMATION¹

FACTORS AFFECTING PRICES

Raw Material Costs

Respondents stated that energy costs, especially natural gas prices, are a major factor in magnesium production. They cited high energy costs in Washington State as a cause for the closure of Northwest Alloys, and added that US Magnesium had tried to purchase natural gas from Alcoa because US Magnesium had not forward-hedged natural gas before the recent rise in natural gas prices.²

Transportation Costs to the U.S. Market

Transportation costs for magnesium from China and Russia to the United States (excluding U.S. inland costs) are estimated to be approximately 8.6 percent of the total landed U.S. cost for magnesium from China and 3.1 percent of the total landed U.S. cost for magnesium from Russia.³

U.S. Inland Transportation Costs

Most producers and importers estimated U.S. inland transportation costs as between one and five percent, although two importers stated they could reach 15 percent.

Exchange Rates

Quarterly data reported by the International Monetary Fund indicate that the nominal value of the Russian ruble fluctuated over January 2000 through December 2003, depreciating somewhat and then recovering. However, the real value of the Russian ruble appreciated more substantially over the same period. The nominal value for the Chinese yuan (fixed against the dollar) was flat. Nominal and real (for Russia) values of the currencies are presented in figure V-1.⁴

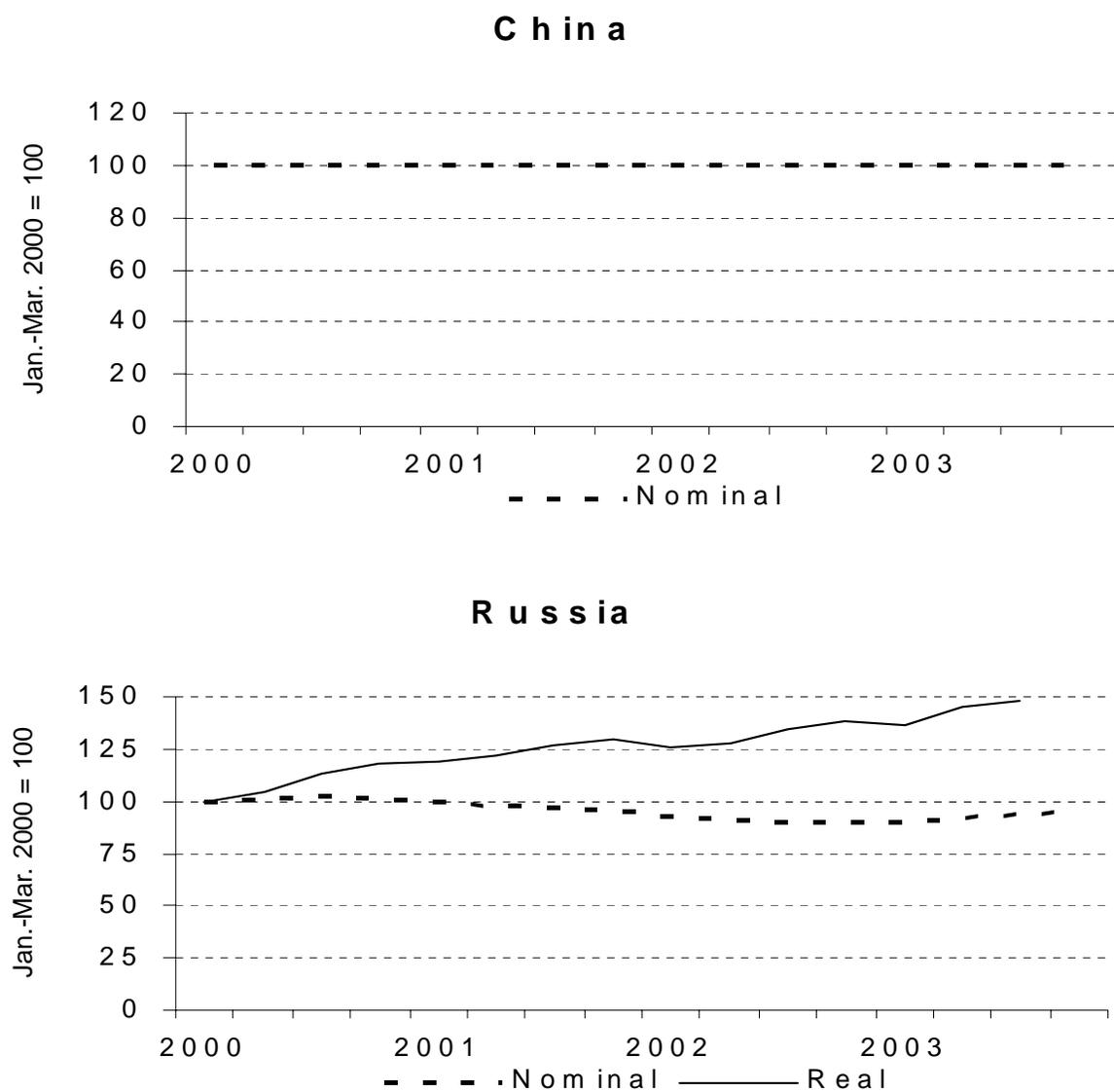
¹ The Commission received usable questionnaires from six producers and 19 importers. However, two producers (***) are related, and their answers will be counted once in this chapter. Likewise, two importers (***) are related, and their answers will be counted once. Finally, ***.

² See testimony of Robert McHale, Vice President, Alcoa, and Paula Stern, Chairwoman, The Stern Group, conference transcript at 108 and 110. Petitioners also noted higher energy prices and said that as they were unable to pass these costs along due to (allegedly) dumped imports, they were caught in a “cost-price squeeze.” See testimony of Mike Legge, President, US Magnesium, conference transcript at 15.

³ These estimates are derived from official import data and represent the transportation and other charges on imports valued on a c.i.f. basis, as compared with customs value.

⁴ China does not publish a producer price index, so no real currency values were calculated for the yuan.

Figure V-1
Exchange rates: Indices of the nominal and real exchange rates of the Chinese yuan and Russian ruble relative to the U.S. dollar, by quarters, January 2000- December 2003.



Source: International Monetary Fund, *International Financial Statistics*, January 2004 and June 2002.

PRICING PRACTICES

Pricing Methods

Alcoa describes magnesium as a commodity that is not sold on exchanges only because of the relatively small volumes sold and the difficulty in storing it.⁵ Published pricing is available from American Metal Market and other organizations. Producers and importers determine price both by transaction-by-transaction negotiations and by contracts for multiple shipments.

*** reported that *** percent of its sales were under contracts of more than one year (long-term), *** percent were under contracts of a year or less (short-term), and *** percent of its sales were spot. Domestic secondary magnesium producers had wide differences in their types of sales; for example, *** made *** percent of its sales as spot sales while *** made *** percent of its sales under short-term or long-term contracts. Among importers, two reported that the majority of their sales was on a spot basis, seven reported that the majority of their sales was under long-term contracts, and four reported that their sales were under short-term contracts. Renegotiation of existing contracts was described as an infrequent occurrence by most producers and importers.⁶ The contracts of ***.

Among U.S. producers, *** reported that a majority of their sales was from inventory while *** reported that the majority of their sales was produced to order. Importers split between seven who reported that a majority of their sales was from inventory and six who reported that the majority of their sales was produced to order.

Sales Terms and Discounts

Magnesium is usually sold directly to the end user on a delivered basis, with discounts (if any) being based on volume or length of contract. Since many transactions are negotiated, discounts may not be “official” but rather handled on a case-by-case basis.

General Price Trends

Prices of magnesium from both US Magnesium and subject imports fell from 2001 to 2003. Respondents attributed lower prices for US Magnesium to US Magnesium’s attempt to regain market share after production changes that lowered production over 2001 and 2002.⁷ One respondent also described prices of Chinese magnesium as now higher than the prices of secondary alloy magnesium from domestic producers.⁸

Petitioners stated that historically, alloy magnesium was less expensive than pure magnesium, but that recent competition between pure and alloy magnesium had erased much of the gap between the two.⁹ Respondents explained that alloy should be less expensive per pound as the alloys added are usually less expensive than the magnesium. One respondent, though, said that its magnesium alloy is more expensive

⁵ See testimony of Robert McHale, Vice President, Alcoa, conference transcript at 151.

⁶ However, ***. See postconference brief of petitioners at 24.

⁷ See testimony of Dr. John Reilly, economist for respondents, conference transcript at 128.

⁸ See testimony of Jim Gammons, President, Erie Shore Marketing, conference transcript at 137.

⁹ See testimony of Howard Kaplan, Vice President, US Magnesium, and Robert McHale, Vice President, Alcoa, conference transcript at 71 and 164.

than pure magnesium, as the beryllium often added to alloy magnesium is expensive, as is the work to add the alloys.¹⁰

PRICE DATA

The Commission requested 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. Data were requested for the period January 2001 through December 2003. 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

Five U.S. producers, seven importers of Chinese magnesium, and four importers of Russian magnesium provided usable pricing data for sales of the requested products, although not all firms reported pricing for all products for all quarters. Pricing data reported by these firms accounted for approximately 74.8 percent of U.S. producers' shipments of magnesium, 43.5 percent of U.S. shipments of subject imports from China in 2003, and 99.3 percent of U.S. shipments of subject imports from Russia in 2003.

Price Comparisons

Product 1 is a pure magnesium product. Among domestic producers, data were supplied by ***. Among importers, data were supplied by the following ***. Products 2 and 3 are alloy magnesium products sold to aluminum alloyers. Petitioners have stated that this product can compete with U.S. pure product. Among domestic producers, *** supplied *** of product 2 data for 2001, and *** supplied data for product 3. Among *** supplied data for product 2, and ***, five supplied data for product 2.

Petitioners allege that product 1 competes with products 2 and 3, and both petitioners and respondents have noted that domestic producers of secondary alloy magnesium (parts of products 2 and 3) compete with U.S. producers' product 1. Data for product 1 are presented in table V-1. Data for products 2 and 3, with margins of underselling relative to U.S. product 1 from table V-1, are presented in tables V-2 and V-3, respectively. Figures V-2 and V-3 present prices and volumes for the main data series from tables V-1 through V-3. These figures and tables allow comparison of U.S. pure primary magnesium prices against both imported primary pure and alloy magnesium and domestically produced secondary alloy magnesium.

¹⁰ See testimony of Jim Gammons, President, Erie Shore Marketing, conference transcript at 155.

Table V-1

Magnesium: Weighted-average f.o.b. selling prices and quantities as reported by U.S. producers and importers of product 1, and margins of underselling/(overselling), by quarters, January 2001-December 2003

* * * * *

Table V-2

Magnesium: Weighted-average f.o.b. selling prices and quantities as reported by U.S. producers and importers of product 2, and margins of underselling/(overselling) with U.S. product 1, by quarters, January 2001-December 2003

* * * * *

Table V-3

Magnesium: Weighted-average f.o.b. selling prices and quantities as reported by U.S. producers of product 3, and margins of underselling/(overselling) with U.S. product 1, by quarters, January 2001-December 2003

* * * * *

Figure V-2

Magnesium: Weighted-average selling prices, as reported by U.S. producers and importers of products 1, 2, and 3, by quarters, January 2001-December 2003

* * * * *

Figure V-3

Magnesium: Quantities, as reported by U.S. producers and importers of products 1, 2, and 3, by quarters, January 2001-December 2003

* * * * *

From January 2001 through December 2003, prices of imports of Chinese product 2 fell *** percent on increasing volume. Chinese product 2 undersold U.S. product 1 in 12 of 12 comparisons, with margins ranging from *** to *** percent.

Over the same period, U.S. producers' prices of product 1 declined by *** percent on increasing volume, while over the same period, prices of imports of Russian product 1 rose *** percent on increasing volume. Russian product 1 undersold U.S. product 1 in 8 of 12 comparisons, with margins ranging from *** to *** percent, and was priced higher than U.S. product 1 in 4 of 12 comparisons, with margins ranging from *** to *** percent.

Russian product 2 was a low volume product that undersold U.S. product 1 in 4 of 9 comparisons and was priced lower than U.S. product 1 in the other five. Prices for U.S. product 3 rose *** percent and undersold U.S. product 1 in 12 of 12 comparisons, with margins ranging from *** to *** percent.

Product 4 is an alloy product for diecasters. Among U.S. producers, *** supplied data, though the bulk of the data were from ***. Among importers of Chinese magnesium, *** supplied data. ***,¹¹ and ***. Among importers of Russian magnesium, *** supplied data. Data for product 4, alloy magnesium sold to diecasters, are presented in table V-4 and figures V-4 and V-5.

Table V-4

Magnesium: Weighted-average f.o.b. selling prices and quantities as reported by U.S. producers and importers of product 4, and margins of underselling/(overselling), by quarters, January 2001-December 2003

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

Figure V-4

Magnesium: Weighted-average selling prices, as reported by U.S. producers and importers of product 4, by quarters, January 2001-December 2003

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

Figure V-5

Magnesium: Quantities, as reported by U.S. producers and importers of product 4, by quarters, January 2001-December 2003

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

¹¹ See staff conversation with ***.

For product 4 during January 2001-December 2003, U.S. producers' prices fell *** percent while prices of imports of Chinese product fell *** percent and prices of imports of Russian product fell *** percent. Chinese product 4 undersold U.S. product 4 in 9 of 12 comparisons, with margins ranging from *** to *** percent. U.S. product 4 undersold Chinese product 4 in 3 of 12 comparisons, with margins ranging from *** to *** percent. Russian product 4 undersold U.S. product 4 in 10 of 12 comparisons, with margins ranging from *** to *** percent, and was priced higher than U.S. product 4 in 2 of 12 comparisons, with margins ranging from *** to *** percent.

LOST SALES AND LOST REVENUES

The Commission requested U.S. producers of magnesium to report any instances of lost sales or lost revenues they experienced due to competition from imports of magnesium from China and/or Russia during January 2000 through December 2003. *** reported *** of the following allegations. The 54 lost sales allegations totaled \$*** and involved *** tons of magnesium, and the 42 lost revenues allegations totaled \$*** and involved *** tons of magnesium. Staff contacted the listed purchasers and a summary of the information obtained follows in tables V-5 through V-8 and the text descriptions below.¹²

*	*	*	*	*	*	*13 14 15 16 17
*	*	*	*	*	*	*18 19 20 21 22

¹² The allegations in tables V-5 and V-7 involve aluminum alloyers. In these allegations, ***. In tables V-6 and V-8, the allegations involve diecasters, and ***.

¹³ See letter from ***.

¹⁴ See e-mail from ***. ***.

¹⁵ See fax from ***.

¹⁶ See staff conversation with ***.

¹⁷ See fax from ***.

¹⁸ See fax from ***.

¹⁹ See fax from ***.

²⁰ See fax from ***.

²¹ See staff conversation with ***.

²² See fax from ***.

Table V-5
Magnesium: U.S. producers' lost revenue allegations involving aluminum alloys

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Table V-6
Magnesium: U.S. producers' lost revenue allegations involving diecasters

*	*	*	*	*	*	*
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Table V-7
Magnesium: U.S. producers' lost sales allegations involving aluminum alloys

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Table V-8
Magnesium: U.S. producers' lost sales allegations involving diecasters

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PART VI: FINANCIAL EXPERIENCE OF U.S. PRODUCERS

BACKGROUND

During the period examined, US Magnesium¹ and Northwest Alloys² provided usable financial data on their operations producing pure and alloy magnesium while Advanced Magnesium Alloys (Amacor), Garfield Alloys, Halaco, and MagReTech³ provided usable financial data on their commercial and tolling operations producing alloy magnesium. These reported data are believed to represent all known production of pure and alloy magnesium in 2000-03. Differences between data reported in the trade and financial sections of the Commission's producers' questionnaire are mainly attributable to a timing difference.

OPERATIONS ON PURE AND ALLOY MAGNESIUM

The Commission requested financial data from producers of pure magnesium as well as producers of alloy magnesium. In addition to data reported for trade, transfers, and internal consumption combined, producers of pure magnesium also reported full data on trade sales alone. Since the data for trade sales alone were repeated in the "all sales" part of the questionnaire, they are not being shown separately. The Commission's questionnaire also requested that producers of alloy magnesium report financial data for all of their sales. Although they reported mostly commercial sales, included within the data were tolling revenues and costs. To the extent possible, separate data on tolling were requested and received from U.S. firms, derived from the firms' questionnaire responses, or from interviews with company officials, and are presented separately from data on sales of pure and alloy magnesium in this section of the report.

Income and loss data for U.S. producers' pure magnesium operations are presented in table VI-1. The quantity and value of total sales fell *** between 2000 and 2001. Sales quantity and value fell *** again between 2001 and 2002, mostly due to the exit from the industry of Northwest Alloys in September 2001. Sales increased between 2002 and 2003. Two factors may have played a role in this increase: one was the small increase in U.S. industrial production, and the other was US Magnesium's emergence from bankruptcy in late June 2002. Also contributing to an increase in sales between 2002 and 2003 was an increase in volume as US Magnesium's new "M" cell operations ramped up.⁴

¹ 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 ***.

² Northwest Alloys (Addy, WA), an operating unit of Alcoa, provided data in the Commission's prior investigations of pure magnesium (*see Pure Magnesium from China and Israel*, Invs. Nos. 701-TA-403 and 731-TA-895-896 (Final), Pub. 3467 (November 2001)). In its press release of June 22, 2001, Alcoa announced that it would shut down Northwest Alloys as of October 1, 2001 "due to high production costs and unfavorable market conditions." (Electricity costs escalated sharply in the U.S. Pacific Northwest as a result of a power crisis.) Alcoa also stated that its magnesium requirements would be sourced through its worldwide contacts. In its questionnaire response it stated that it in fact had stopped producing magnesium by ***, and it provided ***.

³ Amacor started up ***; it initially *** late in these investigations (e-mail from *** of March 29, 2004). Garfield Alloys and MagReTech are ***. *** commercial sales; phone interview with ***. Commission staff were able to construct a more complete questionnaire response for Halaco based on that firm's ***. Only data on *** that were provided by *** were used; although the firm provided data on its operations, ***. Amacor, Garfield Alloys, Halaco, MagReTech, and MagTech reported on a ***.

⁴ Petition, p. 70.

Table VI-1
Pure magnesium: Results of operations of U.S. producers, fiscal years 2000-03

* * * * *

Unit sales values fell in each of the periods investigated, *** the effect of a *** in sales volume between 2000 and 2001, and between 2001 and 2002, and *** the effect of an *** in sales volume between 2002 and 2003. The value of cost of goods sold (COGS) decreased but the unit value increased between 2000 and 2001, attributable to an ***. The value of COGS *** but its unit value did *** to the same extent between 2001 and 2002 because of the decline in volume and the exit of a high cost producer.⁵ Between 2002 and 2003, the value of COGS *** although unit COGS ***, mainly attributable to the increase in sale volume as well as to increased production efficiencies at US Magnesium attributable to its new cell technology.⁶ Operating income dropped *** between 2000 and 2001 to ***, and remained at *** during the following two years. Net income and cash flow fluctuated similarly to operating income, and the ratios of operating income and net income to sales followed similar trends.

Table VI-2 presents data on total net sales, COGS, and operating income for pure magnesium on a firm-by-firm basis. Table VI-3 presents financial data on U.S. producers' operations on alloy magnesium. Table VI-4 presents financial data on U.S. producers' operations on alloy magnesium by firm. Table VI-5 presents financial data on U.S. producers' operations on pure and alloy magnesium combined. Table VI-6 presents financial data on the tolling operations of U.S. producers of alloy magnesium.

⁵ The *** in raw material costs between 2001 and 2002 is attributable to the ***. The firm was a self-described high cost producer and reportedly used a *** contribute to raw material costs. In contrast, US Magnesium uses magnesium chloride brine (water high in salt) which it obtains at low or no cost from the Great Salt Lake, and it initially uses solar evaporation ponds in which the brine is concentrated. Conference transcript, pp. 14-15 (Mr. Legge).

⁶ Energy costs, primarily electricity and natural gas, have risen *** between 2002 and 2003. Natural gas may be used to heat magnesium chloride brine, but the firm has predominantly used a system of solar evaporation ponds. Natural gas is used to further refine the molten magnesium that comes from the electrolytic cells to produce pure aluminum and cast into ingots; it also is used to produce alloy magnesium by melting pure magnesium in a furnace as well as to produce electricity in a cogeneration station. Electricity at high amperage is consumed in the production of pure magnesium in the firm's electrolytic cells. The magnesium chloride brine is transferred at the appropriate concentration to the firm's electrolytic cells in which electricity is used to separate magnesium from chlorine and other elements. Energy is classified within ***, and in the fiscal year ended October 31, 2003, accounted for *** percent of total "other factory costs." It is the ***, and is *** the three next major cost categories of ***. Although the newer "M" cells may be efficient, both electricity and natural gas costs have risen. Schedule of other factory costs, fiscal year ended October 31, 2003, received by staff via e-mail from Dr. Ken Button on March 27, 2004.

Table VI-2
Pure magnesium: Results of operations of U.S. producers, by firm, fiscal years 2000-03

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Table VI-3
Alloy magnesium: Results of commercial operations of U.S. producers, fiscal years 2000-03

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Table VI-4
Alloy magnesium: Results of commercial operations of U.S. producers, by firm, fiscal years 2000-03

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Table VI-5
Pure and alloy magnesium: Results of operations of U.S. producers, fiscal years 2000-03

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Table VI-6
Alloy magnesium: Results of tolling operations of U.S. firms, fiscal years 2000-03

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A variance analysis for the reporting U.S. firms is presented in tables VI-7, VI-8, and VI-9, which are for pure, alloy, and pure and alloy magnesium combined, respectively. The information for these variance analyses is derived from tables VI-1, VI-3, and VI-5. The variance analysis provides an assessment of changes in profitability as related to changes in pricing, cost, and volume. This analysis is more effective when the product involved is a homogeneous product with no variation in product mix. Between 2000 and 2003, the unfavorable operating income variance for pure magnesium of \$*** was attributable primarily to unfavorable variances on price and volume that were greater than a favorable net cost/expense variance. The drop in operating income between 2002 and 2003 for pure magnesium of \$*** was likewise attributable to the combined effects of an unfavorable price variance and net volume variance that together were greater than a favorable variance on net cost/expense. The variances in table VI-7 are highly affected by Northwest Alloy’s shutdown and the reduction of total sales by *** percent,

as well as by the *** in 2001. Little weight, therefore, should be given to changes between 2000 and 2001 and between 2001 and 2002. Price variances for alloy magnesium and for combined pure and alloy magnesium were unfavorable during nearly all of the periods examined and accounted for most of the change in operating income, while the remaining two variances were mixed. As with the variances for pure magnesium, variances for alloy and for combined pure and alloy magnesium are affected by Northwest Alloy’s shutdown and the consequent reduction of total sales, as well as by ***.

Consequently little weight should be given to changes between 2000 and 2001 and between 2001 and 2002.

Table VI-7
Pure magnesium: Variance analysis on results of operations of U.S. firms, fiscal years 2000-03

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Table VI-8
Alloy magnesium: Variance analysis on results of commercial operations of U.S. firms, fiscal years 2000-03

*	*	*	*	*	*	*
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Table VI-9
Pure and alloy magnesium: Variance analysis on results of operations of U.S. firms, fiscal years 2000-03

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**CAPITAL EXPENDITURES, RESEARCH AND DEVELOPMENT EXPENSES,
 AND INVESTMENT IN PRODUCTIVE FACILITIES**

The responding firms’ data on capital expenditures, research and development (“R&D”) expenses, and the value of their property, plant, and equipment used in the production of pure magnesium, alloy magnesium, and pure and alloy magnesium combined are shown in tables VI-10, VI-11, and V-12, respectively. Values of these items fell between 2000 and 2001 as well as between 2001 and 2002 for two reasons: Northwest Alloys ***. ***. As noted earlier, US Magnesium recognized *** of \$*** that is reflected in the book value of its property, plant, and equipment in 2001; also the values of its property, plant, and equipment were restated to reflect their fair market values when the firm emerged from bankruptcy in June 2002.

Table VI-10

Pure magnesium: Value of assets, capital expenditures, and R&D expenses of U.S. producers, fiscal years 2000-03

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Table VI-11

Alloy magnesium: Value of assets, capital expenditures, and R&D expenses of U.S. producers, fiscal years 2000-03

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Table VI-12

Pure and alloy magnesium: Value of assets, capital expenditures, and R&D expenses of U.S. producers, fiscal years 2000-03

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CAPITAL AND INVESTMENT

The Commission requested U.S. producers to describe any actual or potential negative effects of imports of pure and alloy magnesium from Russia and alloy magnesium from China on their firms' growth, investment, and ability to raise capital or development and production efforts (including efforts to develop a derivative or more advanced version of the product). Their responses are shown in appendix D.

PART VII: THREAT CONSIDERATIONS

The Commission analyzes a number of factors in making threat determinations.¹ Information on the volume and pricing of imports of the subject merchandise is presented in Parts IV and V, and information on the effects of imports of the subject merchandise on U.S. producers' existing development and production efforts is presented in Part VI. Information on inventories of the subject merchandise; foreign producers' operations, including the potential for "product-shifting;" any other threat indicators, if applicable; and any dumping in third-country markets, follows.

Data on the industry in China are based on the questionnaire responses of three firms believed to account for approximately *** percent of Chinese exports of subject alloy magnesium to the United States in 2003.² Data on the industry in Russia are based on the questionnaire responses of two firms believed to account for all known exports of subject merchandise to the United States in 2003.³

THE INDUSTRY IN CHINA

China is the world's largest producer of primary magnesium (pure and alloy magnesium), with production in 2002 rising by 15 percent to an estimated 230,000 metric tons, or 54 percent of production worldwide.⁴ Chinese production growth slowed to a 5-percent growth rate in 2001, reaching an estimated 200,000 metric tons after growing 58 percent in 2000, following the imposition of antidumping duties by the EU and the United States. Magnesium production in 2003 increased by an estimated 61 percent to 370,000 short tons despite the spread of Severe Acute Respiratory Syndrome (SARS) to China's Shanxi province, which accounts for approximately 68 percent of China's overall magnesium production.⁵

There are conflicting figures and estimates on the levels of capacity and production of magnesium in China. Petitioners indicated that although the U.S. Geological Survey (USGS) stated that China's primary magnesium capacity was 300,000 metric tons in 2002, a representative of the China Magnesium Association was quoted in the press as stating that China's capacity to produce magnesium was 480,000 to 500,000 metric tons in 2002 (with production of 268,000 metric tons), and that capacity would increase to 700,000 metric tons in 2003.⁶ Petitioners also presented a number of press clippings discussing planned capacity increases.⁷ However, respondents pointed out recent problems for the magnesium industry in China; Alcoa discussed price increases for Chinese magnesium "driven by supply

¹ See 19 U.S.C. § 1677(7)(F)(i).

² Based on a comparison of the quantity of Chinese foreign producers' reported export shipments to the United States to the quantity of official import statistics of Commerce. Customs identifies 27 Chinese firms exporting alloy magnesium from China to the United States in 2003. The petition identified 24 Chinese exporters of magnesium to the United States in 2000-03.

³ Based on a comparison of the quantity of Russian foreign producers' reported export shipments to the United States to the quantity of official import statistics of Commerce.

⁴ Deborah A. Kramer, *Magnesium, Minerals Yearbook 2002*, U.S. Geological Survey, table 7.

⁵ *Sars takes toll on China magnesium production*, American Metal Market, May 13, 2003. Found at <http://www.amm.com/subscrib/2003/may/week2/0513nf01.htm>, retrieved March 23, 2004.

⁶ Petitioners' postconference brief, pp. 40-41, citing USGS, *2002 Minerals Yearbook: Magnesium*, table 7, and *Chinese magnesium hot in Europe, but seen moderating*, Platts Metal Week, August 4, 2003, p. 15.

⁷ See e.g., petition exhibits 5, 40-43, and 45, and petitioners' postconference brief, exhibit A-20.

shortages and rising costs for inputs such as wages, energy, ferrosilicon, and freight,”⁸ and respondent Alcan mentioned “recent contract problems with Chinese suppliers” and “numerous reports of Chinese suppliers canceling orders and renegeing long-term contracts.”⁹ According to the USGS, magnesium producers in China “continue to announce planned capacity increases, although some {firms} have delayed previously announced plans because of a sharp rise in fuel costs and raw material and freight restrictions.”¹⁰ ***.¹¹

Information on Chinese producers’ production capacity, production, shipments, and inventories is presented in table VII-1 and figure VII-1.

Table VII-1
Alloy magnesium: Data on the industry in China, 2000-03, and projections for 2004-05

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Figure VII-1
Alloy magnesium: China's capacity, production, and capacity utilization, 2000-03

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⁸ Alcoa’s postconference brief, p. 33.

⁹ Alcan’s postconference brief, pp. 25-26.

¹⁰ *Mineral Industry Surveys, Magnesium in the Fourth Quarter 2003*, USGS, February 2004, p. 2. Specific firms mentioned by the USGS as having plans to increase capacity in 2004 were Shanxi Qizhen Magnesium Corp.; Guangling Jinghua Corp.; Shanxi Zhongyin Corp.; Minhe Magnesium Co.; Winca Magnesium (Hebi) Co., Ltd.; and Hebi Jianghai Smelting Co., Ltd. However, Xinlihua Magnesium Powder Co. “abandoned its plans to begin magnesium alloy production at its plant in Shanxi Province {in December 2003} because it did not receive provincial governmental approval to purchase the necessary equipment” and a “management restructuring at Shanxi Datong Zhongjin Magnesium Industry Co. was expected to delay the company’s planned primary magnesium expansion.” *Ibid.*, p. 2. Producers mentioned as having expanded capacity in 2003 include the above-mentioned Shanxi Qixzhen Magnesium Corp. and Guangling Jinghua Corp. (which opened a new magnesium alloy production line in December 2003 to replace a smaller-capacity older line), and Shanxi Wenxi Baiyu Co., Jilin North Industrial Silicon Corp., and Ningxia Huayuan Magnesium Smelter. USGS, *Mineral Industry Surveys, Magnesium in the Third Quarter 2003*, November 2003, p. 2.

¹¹ See staff conversation with ***.

THE INDUSTRY IN RUSSIA

Information on Russian producers' production capacity, production, shipments, and inventories is presented in table VII-2 and figure VII-2.

Table VII-2
Magnesium: Data on the industry in Russia, 2000-03, and projections for 2004-05

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Figure VII-2
Magnesium: Russia's capacity, production, and capacity utilization, 2000-03

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Solikamsk and AVISMA are Russia's only known magnesium producers. In 2000, Solikamsk announced that it would invest \$95 million, financed by the European Bank for Reconstruction and Development, to expand its magnesium production capacity by nearly 17,000 short tons.¹² The plant expansion was designed to increase Solikamsk's plant capacity to nearly 35,000 short tons.

According to the U.S. Geological Survey, AVISMA produced 26,000 short tons of pure and alloy magnesium in 2003, mostly in the form of ingot for the aluminum industry. AVISMA currently exports much of its production, with more than 50 percent exported to North American aluminum producers and significant amounts to European aluminum consumers. Since 1995, AVISMA has been producing automotive grade AZ91D, AM50A, AM60B, and AM60A magnesium alloys. In 2002, the company announced that it intended to increase production to nearly 29,000 short tons and to sell additional magnesium alloy to the automotive industry. The company has negotiated a number of contracts with U.S., Japanese, and European automotive companies to develop magnesium automotive parts.¹³

Finally, a pilot project is reportedly currently underway to recover magnesium from the Uralasbest asbestos mine located in the Sverdlovsk region of Russia. The project is expected to cost between \$100 million and \$130 million and capacity of the plant is expected to reach 60,000 short tons.¹⁴

¹² Deborah A. Kramer, *Magnesium, Minerals Yearbook 2001*, U.S. Geological Survey, pp. 48.6-48.7.

¹³ Ibid.

¹⁴ Petition at p. 88.

U.S. IMPORTERS' INVENTORIES

Table VII-3 presents data on U.S. importers' end-of-period inventories in 2000-03.

Table VII-3
Magnesium: U.S. importers' end-of-period inventories of imports, by sources, 2000-03

*	*	*	*	*	*	*
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U.S. IMPORTERS' CURRENT ORDERS

Importers were requested to indicate whether their firm imported or arranged for the importation of magnesium from China or Russia for delivery after December 31, 2003. Twelve importers (***) responded "No" and eight importers (***) responded "Yes." Of those that responded "Yes," ***. Other importers (in order of tonnage reported) were ***. *** also responded "Yes" but did not provide actual quantities. Except for ***, none of those responding "Yes" indicated whether the imports would be from China and/or Russia, although in the past ***.

ANTIDUMPING DUTY ORDERS IN THIRD-COUNTRY MARKETS

India 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.¹⁵ The European Union (EU) currently has an antidumping order on imports of pure magnesium (unwrought unalloyed magnesium) from China, that is set to expire on June 26, 2004.¹⁶ In April 2003, Brazil initiated antidumping investigations on imports from China of magnesium ingot and magnesium powder.¹⁷ No determinations have been issued to date.

¹⁵ Postconference brief of petitioners, exh. A, p. 4.

¹⁶ See *Notice of the Impending Expiry of Certain Anti-Dumping Measures (C 2003/C 230/2)*, *Official Journal of the European Union*, September 26, 2003. The petitioners have stated that the EU dumping order on China is no longer in place. See postconference brief of petitioners, exh. A, p. 4.

¹⁷ Postconference brief of petitioners, exh. A, pp. 4-5. See also petition, p. 89, and exh. 55.

APPENDIX A

FEDERAL REGISTER NOTICES

SUMMARY: The Commission hereby gives notice of the institution of investigations and commencement of preliminary phase antidumping investigations Nos. 731–TA–1071–1072 (Preliminary) under section 733(a) of the Tariff Act of 1930 (19 U.S.C. 1673b(a)) (the Act) to determine whether there is a reasonable indication that an industry in the United States is materially injured or threatened with material injury, or the establishment of an industry in the United States is materially retarded, by reason of imports from China of alloy magnesium and imports from Russia of pure and alloy magnesium, provided for in subheadings 8104.11.00, 8104.19.00, and 8104.30.00 of the Harmonized Tariff Schedule of the United States, that are alleged to be sold in the United States at less than fair value. Unless the Department of Commerce extends the time for initiation pursuant to section 732(c)(1)(B) of the Act (19 U.S.C. 1673a(c)(1)(B)), the Commission must reach a preliminary determination in antidumping investigations in 45 days, or in this case by April 12, 2004. The Commission's views are due at Commerce within five business days thereafter, or by April 19, 2004.

For further information concerning the conduct of these investigations 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 and B (19 CFR part 207).

EFFECTIVE DATE: February 27, 2004.

FOR FURTHER INFORMATION CONTACT: Fred Fischer (202–205–3179 / Fred.Fischer@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 investigations may be viewed on the Commission's electronic docket (EDIS) at <http://edis.usitc.gov>.

SUPPLEMENTARY INFORMATION:

Background. These investigations are being instituted in response to a petition filed on February 27, 2004, by U.S. Magnesium Corp., Salt Lake City, UT; United Steelworkers of America, Local 8319, Salt Lake City, UT; and Glass, Molders, Pottery, Plastics & Allied

Workers International, Local 374, Long Beach, CA.

Participation in the investigations and public service list. Persons (other than petitioners) wishing to participate in the investigations as parties must file an entry of appearance with the Secretary to the Commission, as provided in sections 201.11 and 207.10 of the Commission's rules, not later than seven days after publication of this notice in the **Federal Register**. Industrial users and (if the merchandise under investigation is sold at the retail level) representative consumer organizations have the right to appear as parties in Commission antidumping investigations. The Secretary will prepare a public service list containing the names and addresses of all persons, or their representatives, who are parties to these investigations upon the expiration of the period for filing entries of appearance.

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 investigations available to authorized applicants representing interested parties (as defined in 19 U.S.C. § 1677(9)) who are parties to the investigations under the APO issued in the investigations, provided that the application is made not later than seven days after the publication of this notice in the **Federal Register**. A separate service list will be maintained by the Secretary for those parties authorized to receive BPI under the APO.

Conference. The Commission's Director of Operations has scheduled a conference in connection with these investigations for 9:30 a.m. on March 19, 2004, at the U.S. International Trade Commission Building, 500 E Street SW., Washington, DC. Parties wishing to participate in the conference should contact Fred Fischer (202–205–3179 / Fred.Fischer@usitc.gov) not later than March 15, 2004, to arrange for their appearance. Parties in support of the imposition of antidumping duties in these investigations and parties in opposition to the imposition of such duties will each be collectively allocated one hour within which to make an oral presentation at the conference. A nonparty who has testimony that may aid the Commission's deliberations may request permission to present a short statement at the conference.

Written submissions. As provided in sections 201.8 and 207.15 of the Commission's rules, any person may submit to the Commission on or before

**INTERNATIONAL TRADE
COMMISSION**

[Investigation Nos. 731–TA–1071–1072
(Preliminary)]

Magnesium From China and Russia

AGENCY: International Trade
Commission.

ACTION: Institution of antidumping
investigations and scheduling of
preliminary phase investigations.

March 24, 2004, a written brief containing information and arguments pertinent to the subject matter of the investigations. Parties may file written testimony in connection with their presentation at the conference no later than three days before the conference. If briefs or written testimony contain BPI, they must 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).

In accordance with sections 201.16(c) and 207.3 of the rules, each document filed by a party to the investigations must be served on all other parties to the investigations (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 investigations are being conducted under authority of title VII of the Tariff Act of 1930; this notice is published pursuant to section 207.12 of the Commission's rules.

By order of the Commission.

Issued: March 1, 2004.

Marilyn R. Abbott,

Secretary to the Commission.

[FR Doc. 04-5227 Filed 3-8-04; 8:45 am]

BILLING CODE 7020-02-P

DEPARTMENT OF COMMERCE**International Trade Administration**

[A-570-896, A-821-819]

**Notice of Initiation of Antidumping
Duty Investigations: Magnesium Metal
From the People's Republic of China
and the Russian Federation**

AGENCY: Import Administration,
International Trade Administration,
Department of Commerce.

EFFECTIVE DATE: March 25, 2004.

FOR FURTHER INFORMATION CONTACT:

Laurel LaCivita at 202-482-4243
(People's Republic of China) or Mark
Hoadley at (202) 482-3148 (Russian
Federation), Import Administration,
International Trade Administration,
U.S. Department of Commerce, 14th
Street and Constitution Avenue, NW.,
Washington, DC 20230.

Initiation of Investigations*The Petition*

On February 27, 2004, the Department of Commerce (the Department) received a petition filed in proper form by U.S. Magnesium Corporation LLC (US Magnesium), United Steelworkers of America, Local 8319, and Glass, Molders, Pottery, Plastics & Allied Workers International, Local 374 (collectively, "petitioners"), an ad hoc coalition representative of U.S. producers of magnesium metal. Petitioners filed amendments to the petition on March 8, 10, 12, and 15, 2004.

In accordance with section 732(b)(1) of the Tariff Act of 1930 (the Act), petitioners allege that imports of magnesium metal from the People's Republic of China (PRC) and the Russian Federation (Russia), are, or are likely to be, sold in the United States at less than normal value within the meaning of section 731 of the Act, and that such imports are materially injuring, or threatening material injury to, an industry in the United States.

The Department finds that petitioners filed this petition on behalf of the domestic industry because they are an interested party as defined in section 771(9)(G) of the Act and they have demonstrated sufficient industry support with respect to both of the antidumping investigations that they are requesting the Department initiate. *See, infra*, "Determination of Industry Support for the Petition."

Scope of Investigations

People's Republic of China

The products covered by this investigation are 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 this investigation 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, and 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 China (generally referred to as "alloy" magnesium).

The scope of this investigation excludes: (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

The merchandise subject to this investigation is 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 merchandise under investigation is dispositive.

Russia

The products covered by this investigation 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 this investigation 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 this investigation 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.

Determination of Industry Support for the Petition

Section 732(b)(1) of the Act requires that a petition be filed on behalf of the domestic industry. Section 732(c)(4)(A) of the Act provides that the Department's industry support determination, which is to be made before the initiation of the investigation, be based on whether a minimum percentage of the relevant industry supports the petition. A petition meets this requirement if the domestic producers or workers who support the petition account for: (1) At least 25 percent of the total production of the domestic like product; and (2) more than 50 percent of the production of the domestic like product produced by that portion of the industry expressing

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 *Notice of Antidumping Duty Order: Pure Magnesium in Granular Form from the People's Republic of China*, 66 FR 57936 (Nov. 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 China, Israel, and Russia. See *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); *Final Determination of Sales at Less Than Fair Value: Pure Magnesium From Israel*, 66 FR 49349 (September 27, 2001); *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.

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 *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); *Final Determination of Sales at Less Than Fair Value: Pure Magnesium From Israel*, 66 FR 49349 (September 27, 2001); *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.

support for, or opposition to, the petition. Moreover, section 732(c)(4)(D) of the Act provides that, if the petition does not establish support of domestic producers or workers accounting for more than 50 percent of the total production of the domestic like product, the Department shall: (i) Poll the industry or rely on other information in order to determine if there is support for the petition, as required by subparagraph (A), or (ii) determine industry support using a statistically valid sampling method.

Section 771(4)(A) of the Act defines the "industry" as the producers of a domestic like product. The International Trade Commission (ITC), which is responsible for determining whether "the domestic industry" has been injured, must also determine what constitutes a domestic like product in order to define the industry. While both the Department and the ITC must apply the same statutory definition regarding the domestic like product (section 771(10) of the Act), they do so for different purposes and pursuant to a separate and distinct authority. In addition, the Department's determination is subject to limitations of time and information. Although this may result in different definitions of the like product, such differences do not render the decision of either agency contrary to the law.⁶

Section 771(10) of 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 title." Thus, the reference point from which the domestic like product analysis begins is "the article subject to an investigation," *i.e.*, the class or kind of merchandise to be investigated, which normally will be the scope as defined in the petition.

In this case, the domestic like product referred to in the petition is the product defined in the "Scopes of Investigations" section, above, for Russia. While the scope definition for Russia differs from that for the PRC, the domestic like product is the same for both countries and includes all magnesium as defined by the broader Russian scope definition. For the details of the Department's like product analysis, see Attachment VI of *Office of AD/CVD Enforcement Initiation Checklist: Magnesium Metal from the People's Republic of China ("PRC") and the Russian Federation ("Russia")*,

dated March 18, 2004 (*Initiation Checklist*).

Moreover, the Department has determined that the petition contains adequate evidence of industry support; therefore, polling was unnecessary. See Attachment III of the *Initiation Checklist*. Specifically, based on the analysis contained in the *Initiation Checklist*, the Department finds that producers supporting the petition represent over 50 percent of total production of the domestic like product.

Accordingly, the Department determines that this petition is filed on behalf of the domestic industry within the meaning of section 732(b)(1) of the Act.

Period of Investigation

The anticipated period of investigation (POI) for the PRC is July 1, 2003 through December 31, 2003. The anticipated POI for Russia is January 1, 2003 through December 31, 2003.

Export Price and Normal Value

The following are descriptions of the allegations of sales at less than normal value upon which the Department based its decision to initiate these investigations. The sources of data for U.S. prices, constructed value (CV), and factors of production are discussed in greater detail in the *Initiation Checklist*. Should the need arise to use any of this information as facts available under section 776 of the Act in our preliminary or final determinations, we will reexamine the information and revise the margin calculations as necessary.

Regarding an investigation involving a non-market economy (NME) country, the Department presumes, based on the extent of central government control in an NME, that a single dumping margin, should there be one, is appropriate for all NME exporters in the given country. In the course of these investigations, all parties will have the opportunity to provide relevant information related to the issues of a country's NME status and the granting of separate rates to individual exporters. See, *e.g.*, *Notice of Final Determination of Sales at Less Than Fair Value: Silicon Carbide from the People's Republic of China*, 59 FR 22585, 22586-87 (May 2, 1994).

People's Republic of China

Export Price

Petitioners based U.S. price for Chinese exports on the average free on board (FOB) value as indicated by U.S. Customs and Border Protection (CBP) data collected by the Bureau of Census. They used data for the POI, and only for cast magnesium alloys. Petitioners did

not include imports of granular magnesium from China because it is a basket category including both pure and alloy granular magnesium. See the *Initiation Checklist*.

Normal Value

Petitioners assert that the PRC is an NME country, and notes that in all previous investigations the Department has determined that the PRC is an NME. See *Notice of Final Determination of Sales at Less Than Fair Value: Bulk Aspirin From the People's Republic of China*, 65 FR 33805 (May 25, 2000). The PRC will be treated as an NME unless and until its NME status is revoked. See section 771(18)(C)(i) of the Act. Because the PRC's status as an NME remains in effect, petitioners estimated the dumping margin using a NME methodology. Petitioners based their normal value (NV) calculations on the factors of production methodology as described in section 773(c)(3) of Act. They compiled their list of inputs and factor consumption rates from four different sources, including public information provided by respondents in past PRC magnesium proceedings, a technical paper presented at an industry conference, and an affidavit submitted by an employee of U.S. Magnesium.

Petitioners selected India as the surrogate country for the PRC. Petitioners argued that, pursuant to section 773(c)(4) of the Act, India is an appropriate surrogate because it is a market-economy country that is at a comparable level of economic development to the PRC and is a significant producer of comparable merchandise. Based on the information provided by petitioners, we believe that the use of India as a surrogate country is appropriate for purposes of initiating this investigation. See the *Initiation Checklist*.

In accordance with section 773(c)(4) of the Act, petitioners valued factors of production, where possible, on reasonably available, public surrogate country data. To value certain raw materials, petitioners used official Indian government import statistics, excluding those values from countries previously determined by the Department to be NME countries and excluding imports into India from Indonesia, Korea and Thailand, in light of the prevalence of export subsidies in those countries. See *Notice of Final Determination of Sales at Less Than Fair Value: Ferrovandium from the People's Republic of China*, 67 FR 71137, 71139 (Nov. 29, 2002).

Petitioners did not provide factor values for magnesium chloride or aluminum-beryllium hardener, since

⁶ See *Algoma Steel Corp. Ltd. v. United States*, 688 F. Supp. 639, 642-44 (CIT 1988) ("the ITC does not look behind ITA's determination, but accepts ITA's determination as to which merchandise is in the class of merchandise sold at LTFV").

neither price quotes nor Indian import statistics were available. Petitioners valued dolomite using the October 2002 price quote reported in rupees that was contained in a past PRC magnesium proceeding. Petitioners explained that India imported only a small quantity of dolomite during the April 2002 to May 2003 period so that reliable import statistics for this period were not available. Petitioners valued sulphur powder using a September 9, 2003 price quote from the Indian trade magazine, Chemical Weekly. Petitioners relied on Indian import statistics to value the amount of coal used to produce one ton of magnesium metal. Petitioners relied on the Indian electricity rate for industrial users, as reported by the U.S. Department of Energy, to value electricity. For inputs valued in Indian rupees and not contemporaneous with the POI, petitioners used information from wholesale price indices to determine the appropriate adjustments for inflation. In addition, petitioners made currency conversions, where necessary, based on the average rupee/U.S. dollar exchange rate for the POI.

Petitioners valued labor using the regression-based wage rate for the PRC provided by the Department, in accordance with section 351.408(c)(3) of the Department's regulations.

Petitioners valued factory overhead, selling, general, and administrative expenses (SG&A), and profit using the financial statements of two Indian aluminum producers. Petitioners explained that the Department has previously relied on the financial statements of Southern Magnesium, an Indian magnesium producer, to determine these values for Chinese magnesium producers. However, Southern Magnesium is currently classified as a "sick industrial company" under Indian commercial law and has ceased to produce magnesium. Thus, petitioners did not select Southern Magnesium as a surrogate company for calculating factory overhead, SG&A, and profit. Petitioners further explained that they are not aware of any other magnesium producers in any of the potential surrogate countries. Therefore, petitioners selected aluminum as the most comparable merchandise, since India is a known producer of aluminum, and aluminum is a metal produced from ores using an energy-intensive (and especially electricity-intensive) process. Furthermore, petitioners argue that the Department has previously determined that aluminum and magnesium are comparable products within the meaning of the statute, and has relied on data from financial statements of Indian

aluminum producers for the purpose of deriving these components of the cost of production. 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) and accompanying Issues and Decision Memorandum at Comment 3. Likewise, petitioners noted that the Department determined that aluminum was a product comparable to magnesium in the new shipper review of pure magnesium from the PRC. See *Pure Magnesium from the People's Republic of China: Final Results of Antidumping Duty New Shipper Administrative Review*, 63 FR 3085, 3088 (January 21, 1998). Therefore, in the absence of financial data for a producer of the identical merchandise, petitioners have relied upon the financial statements of two Indian producers of comparable merchandise (aluminum) to calculate the ratios for factory overhead, SG&A, and profit.

Based on comparisons of export price (EP) to NV, calculated in accordance with section 773(c) of the Act, the estimated dumping margin for magnesium from the PRC is 141.49 percent. See the *Initiation Checklist* for details on supporting documentation and calculations.

Russia

Export Price

Petitioners were unable to obtain transaction prices for U.S. sales produced in Russia, and, therefore, based U.S. price on the average FOB value as indicated by CBP data collected by the Bureau of Census. The petitioners included values based on this data for the POI for pure magnesium and alloy magnesium. There were no imports of granular magnesium from Russia during this time period, according to the customs data. See the *Initiation Checklist*.

Normal Value

On June 6, 2002, the Department determined to consider Russia as a market economy, effective April 1, 2002. See *Memorandum for Faryar Shirzad from Albert Hsu, Inquiry into the Status of the Russian Federation as a Non-Market Economy Country Under the U.S. Antidumping Law*. As such, the petition contains information for calculating NV using the market economy methodology.

Petitioners provided evidence supporting the conclusion that the Russian home market is viable. However, they were unable to obtain any public or confidential information

on the prices charged by the Russian producers to their Russian customers. As such, petitioners next turned to the World Trade Atlas to locate a suitable third country market for Russian export sales. Based on the volume and value data reported in the World Trade Atlas, the Netherlands is the third country market with the highest volume of sales of magnesium from Russia.

Petitioners then demonstrated that sales to the Netherlands were made at prices below the cost of production (COP), and, that, therefore, NV must be based on CV. See *Initiation Checklist*. They calculated the cost of manufacturing component of NV using the costs of U.S. Magnesium, one of the petitioners, adjusted for known differences between the Russian and U.S. production processes. Because U.S. Magnesium does not maintain product-specific costs in its normal cost accounting system, petitioners also made adjustments to derive product-specific costs for primary pure and alloy magnesium. Petitioners relied on the financial statements of the Russian producers to calculate SG&A, interest expense, and profit.

Petitioners claim that "the energy sector in Russia continues to operate under strict government regulations, resulting in energy prices that are not reflective of market conditions," and provided documentation discussing the general involvement of the Russian government in price setting for, providing subsidies to, and otherwise regulating the Russian electricity industry. Therefore, argue petitioners, the Department should make an adjustment for distorted energy costs. Using publicly available information for "benchmark" prices for electricity in Hungary, Poland, and the Czech Republic, and the actual electricity price paid by one Russian magnesium producer, petitioners derive a figure of \$0.2515 to add to the product-specific NVs. This amounts to an adjustment of between 19.12 to 20.82 percent of the unadjusted NV. We recognize that the valuation of energy costs is a complex issue that will need to be fully examined during the course of this investigation. We intend to examine thoroughly both the factual bases and methodological approaches to this issue with all interested parties.

Based on comparisons of EP to NV, calculated in accordance with section 773(c) of the Act, the estimated range of dumping margins for magnesium from Russia is 54.40 to 68.94 percent without the adjustment for electricity, and 86.54 to 101.24 percent with the adjustment. See the *Initiation Checklist* for details

on supporting documentation and calculations.

Fair Value Comparisons

Based on the data provided by petitioners, there is reason to believe that imports of magnesium from the PRC and Russia are being, or are likely to be, sold at less than normal value.

Allegations and Evidence of Material Injury and Causation

Petitioners allege that the U.S. industry producing the domestic like product is being materially injured, or is threatened with material injury, by reason of the individual and cumulated imports of the subject merchandise sold at less than NV.

Petitioners contend that the industry's injured condition and threat of being injured is evident in the domestic industry's decline in domestic capacity, capacity utilization, production, and shipments, loss of U.S. market share, declining employment, declining average unit sales values/industry price erosion, declining financial performance, inability to complete capital and R&D projects, specific instances of lost sales and revenue, and excess capacity in the PRC and Russia. Injury is caused by imports of subject merchandise, which are different under the PRC scope than under the Russian scope. We have assessed the allegations and supporting evidence regarding material injury and causation and we have determined that these allegations are properly supported by adequate evidence and meet the statutory requirements for initiation. See the *Initiation Checklist*.

Initiation of Antidumping Investigations

Based upon our examination of the petition we have found that it meets the requirements of section 732 of the Act. Therefore, we are initiating antidumping duty investigations to determine whether imports of magnesium from the PRC and Russia are being, or are likely to be, sold in the United States at less than normal value. We will make our preliminary determinations no later than 140 days after the date of this initiation, unless this deadline is extended pursuant to section 733(b)(1)(A) of the Act.

Distribution of Copies of the Petition

In accordance with section 732(b)(3)(A) of the Act, a copy of the public version of the petition has been provided to the representatives of the governments of the PRC and Russia. We will attempt to provide a copy of the public version of the petition to each exporter named in the petition, as

provided for under 19 CFR 351.203(c)(2).

ITC Notification

We have notified the ITC of our initiations as required by section 732(d) of the Act.

Preliminary Determinations by the ITC

The ITC will preliminarily determine no later than April 12, 2004, whether there is a reasonable indication that imports of magnesium from the PRC and Russia are causing material injury, or threatening to cause material injury, to a U.S. industry. A negative ITC determination for either country will result in the investigation being terminated with respect to that country; otherwise, these investigations will proceed according to statutory and regulatory time limits.

This notice is issued and published pursuant to section 777(i) of the Act.

Dated: March 18, 2004.

Joseph A. Spetrini,

Acting Assistant Secretary for Import Administration.

[FR Doc. 04-6717 Filed 3-24-04; 8:45 am]

BILLING CODE 3510-DS-P

APPENDIX B

CALENDAR OF PUBLIC CONFERENCE



UNITED STATES INTERNATIONAL TRADE COMMISSION

WASHINGTON, DC

CALENDAR OF PUBLIC CONFERENCE

Those listed below appeared as witnesses at the United States International Trade Commission's conference held in connection with the following investigations:

MAGNESIUM FROM CHINA AND RUSSIA
Investigations Nos. 731-TA-1071-1072 (Preliminary)

March 19, 2004 - 9:30 a.m.

The conference was held in the Main Hearing Room of the United States International Trade Commission Building, 500 E Street, SW, Washington, DC.

In Support of the Imposition of Antidumping Duties—

King & Spalding LLP
Washington, DC
on behalf of

- US Magnesium LLC
- United Steelworkers of America, Local 8319
- Glass, Molders, Pottery, Plastics & Allied Workers International, Local 374

- Michael Legge, President, US Magnesium
- Howard Kaplan, Vice President of Chemicals and Byproducts, US Magnesium
- Kenneth R. Button, Ph.D., Senior Vice President, Economic Consulting Services
- Jennifer Lutz, Senior Economist, Economic Consulting Services

Joseph W. Dorn)
Stephen J. Narkin) —OF COUNSEL

CALENDAR OF PUBLIC CONFERENCE—Continued

In Opposition to the Imposition of Antidumping Duties—

Hogan & Hartson LLP
Washington, DC
on behalf of

- Alcoa, Inc.
 - Robert J. McHale, Vice-President, Metal Purchases East, Alcoa Materials Management
 - Paula Stern, Chairwoman, The Stern Group, Inc.

Lewis E. Leibowitz)–OF COUNSEL

Barnes, Richardson & Colburn LLP
Washington, DC
on behalf of

- Alcan Aluminum Corp.
 - Sanford Yosowitz, Vice President and Executive Counsel, Alcan Aluminum Corp.

Robert A. Shapiro)–OF COUNSEL

Coudert Brothers LLP
Washington, DC
on behalf of

- JSC AVISMA Titanium-Magnesium Works
- VSMPO-Tirus, US, Inc.
 - Derek Roberts, VSMPO-Tirus
 - John Reilly, Ph.D., Nathan Associates

John M. Gurley)–OF COUNSEL

Vorys, Sater, Seymour and Pease LLP
Washington, DC
on behalf of

- Solikamsk Magnesium Works
- Solimin Magnesium Corp.

Frederick P. Waite)
Kimberly R. Young)–OF COUNSEL

CALENDAR OF PUBLIC CONFERENCE—Continued

In Opposition to the Imposition of Antidumping Duties—Continued

On behalf of

- Erie Shore Global Marketing, Port Clinton, OH
- Tianjin Magnesium International Company, Ltd., Tianjin, China
 - Jim Gammons, President, Erie Shore Global Marketing
 - Zhang Zhonghui, Principal, Tianjin Magnesium International Company, Ltd.
 - Zhang Qing Song, Principal, Tianjin Magnesium International Company, Ltd.

On behalf of

- Metal Exchange Corp., St. Louis, MO
 - Michael Kelley, Vice President, Metal Exchange Corp.

APPENDIX C

SUMMARY DATA

Table C-1
Pure magnesium: Summary data concerning the U.S. market, 2000-03

Item	Reported data				Period changes			
	2000	2001	2002	2003	2000-03	2000-01	2001-02	2002-03
	Quantity=metric tons; value=\$1,000; unit labor costs are per metric ton; period changes=percent, except where noted							
U.S. consumption quantity:								
Amount	***	***	***	***	***	***	***	***
Producers' share ¹	***	***	***	***	***	***	***	***
Importers' share: ¹								
Russia	***	***	***	***	***	***	***	***
Nonsubject:								
Canada	***	***	***	***	***	***	***	***
China	***	***	***	***	***	***	***	***
Israel	***	***	***	***	***	***	***	***
All other sources	***	***	***	***	***	***	***	***
Subtotal, nonsubject	***	***	***	***	***	***	***	***
Total imports	***	***	***	***	***	***	***	***
U.S. consumption value:								
Amount	***	***	***	***	***	***	***	***
Producers' share ¹	***	***	***	***	***	***	***	***
Importers' share: ¹								
Russia	***	***	***	***	***	***	***	***
Nonsubject:								
Canada	***	***	***	***	***	***	***	***
China	***	***	***	***	***	***	***	***
Israel	***	***	***	***	***	***	***	***
All other sources	***	***	***	***	***	***	***	***
Subtotal, nonsubject	***	***	***	***	***	***	***	***
Total imports	***	***	***	***	***	***	***	***
U.S. imports from--								
Russia:								
Quantity	10,849	11,259	14,631	18,035	66.2	3.8	30.0	23.3
Value	26,067	22,229	28,541	34,468	32.2	-14.7	28.4	20.8
Unit value	\$2,403	\$1,974	\$1,951	\$1,911	-20.5	-17.8	-1.2	-2.0
Ending inventory quantity	***	***	***	***	***	***	***	***
Nonsubject:								
Canada:								
Quantity	9,091	3,094	8,265	3,036	-66.6	-66.0	167.2	-63.3
Value	22,739	9,201	21,923	8,859	-61.0	-59.5	138.3	-59.6
Unit value	\$2,501	\$2,974	\$2,652	\$2,918	16.7	18.9	-10.8	10.0
Ending inventory quantity	(²)	(²)	(²)	(²)	(³)	(³)	(³)	(³)
China:								
Quantity	15,506	3,151	173	101	-99.3	-79.7	-94.5	-41.2
Value	33,872	6,726	304	257	-99.2	-80.1	-95.5	-15.4
Unit value	\$2,184	\$2,135	\$1,761	\$2,535	16.1	-2.3	-17.5	44.0
Ending inventory quantity	0	0	0	0	(³)	(³)	(³)	(³)
Israel:								
Quantity	6,317	2,817	5,845	4,785	-24.2	-55.4	107.5	-18.1
Value	19,304	8,312	14,981	11,859	-38.6	-56.9	80.2	-20.8
Unit value	\$3,056	\$2,950	\$2,563	\$2,478	-18.9	-3.5	-13.1	-3.3
Ending inventory quantity	(²)	(²)	(²)	(²)	(³)	(³)	(³)	(³)
All other sources:								
Quantity	2,529	4,526	2,665	2,328	-8.0	79.0	-41.1	-12.6
Value	7,121	11,872	6,597	5,780	-18.8	66.7	-44.4	-12.4
Unit value	\$2,816	\$2,623	\$2,476	\$2,483	-11.8	-6.9	-5.6	0.3
Ending inventory quantity	***	***	***	***	***	***	***	***

Table continued. See footnotes at end of table.

Table C-1--Continued
Pure magnesium: Summary data concerning the U.S. market, 2000-03

Quantity=metric tons; value=\$ 1,000; unit labor costs are per metric ton; period changes=percent, except where noted								
Item	Reported data				Period changes			
	2000	2001	2002	2003	2000-03	2000-01	2001-02	2002-03
U.S. imports from--Continued								
Nonsubject--Continued								
Subtotal:								
Quantity	33,443	13,588	16,948	10,250	-69.3	-59.4	24.7	-39.5
Value	83,037	36,111	43,805	26,756	-67.8	-56.5	21.3	-38.9
Unit value	\$2,483	\$2,658	\$2,585	\$2,610	5.1	7.0	-2.7	1.0
Ending inventory quantity	***	***	***	***	***	***	***	***
Total, all sources:								
Quantity	44,292	24,846	31,579	28,285	-36.1	-43.9	27.1	-10.4
Value	109,103	58,340	72,346	61,224	-43.9	-46.5	24.0	-15.4
Unit value	\$2,463	\$2,348	\$2,291	\$2,164	-12.1	-4.7	-2.4	-5.5
Ending inventory quantity	***	***	***	***	***	***	***	***
U.S. producers: ⁴								
Average capacity quantity	***	***	***	***	***	***	***	***
Production quantity	***	***	***	***	***	***	***	***
Capacity utilization ¹ (percent)	***	***	***	***	***	***	***	***
U.S. shipments:								
Quantity	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***
Unit value	\$***	\$***	\$***	\$***	***	***	***	***
Export shipments:								
Quantity	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***
Unit value	\$***	\$***	\$***	\$***	***	***	***	***
Ending inventory quantity	***	***	***	***	***	***	***	***
Inventories/total shipments ¹	***	***	***	***	***	***	***	***
Production workers	***	***	***	***	***	***	***	***
Hours worked (1,000)	***	***	***	***	***	***	***	***
Wages paid (\$1,000)	***	***	***	***	***	***	***	***
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.
² Not available; included in "all other" inventories.
³ Not applicable.
⁴ Consists of data from the following firms: US Magnesium and Northwest Alloys.

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. Shares are calculated from the unrounded figures.

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

Table C-2
Alloy magnesium: Summary data concerning the U.S. market, 2000-03

Quantity=metric tons; value=\$ 1,000; unit labor costs are per metric ton; period changes=percent, except where noted								
Item	Reported data				Period changes			
	2000	2001	2002	2003	2000-03	2000-01	2001-02	2002-03
U.S. consumption quantity:								
Amount	***	***	***	***	***	***	***	***
Producers' share ¹	***	***	***	***	***	***	***	***
Importers' share: ¹								
Subject:								
China	***	***	***	***	***	***	***	***
Russia	***	***	***	***	***	***	***	***
Subtotal, subject	***	***	***	***	***	***	***	***
Nonsubject:								
Canada	***	***	***	***	***	***	***	***
China	***	***	***	***	***	***	***	***
Israel	***	***	***	***	***	***	***	***
All other sources	***	***	***	***	***	***	***	***
Subtotal, nonsubject	***	***	***	***	***	***	***	***
Total imports	***	***	***	***	***	***	***	***
U.S. consumption value:								
Amount	***	***	***	***	***	***	***	***
Producers' share ¹	***	***	***	***	***	***	***	***
Importers' share: ¹								
Subject:								
China	***	***	***	***	***	***	***	***
Russia	***	***	***	***	***	***	***	***
Subtotal, subject	***	***	***	***	***	***	***	***
Nonsubject:								
Canada	***	***	***	***	***	***	***	***
China	***	***	***	***	***	***	***	***
Israel	***	***	***	***	***	***	***	***
All other sources	***	***	***	***	***	***	***	***
Subtotal, nonsubject	***	***	***	***	***	***	***	***
Total imports	***	***	***	***	***	***	***	***
U.S. imports from—								
Subject:								
China:								
Quantity	6,671	9,321	11,964	12,906	93.5	39.7	28.4	7.9
Value	13,497	18,744	20,613	24,020	78.0	38.9	10.0	16.5
Unit value	\$2,023	\$2,011	\$1,723	\$1,861	-8.0	-0.6	-14.3	8.0
Ending inventory quantity	***	***	***	***	***	***	***	***
Russia:								
Quantity	2,836	643	2,036	3,710	30.8	-77.3	216.6	82.2
Value	10,021	1,529	4,355	7,050	-29.6	-84.7	184.7	61.9
Unit value	\$3,533	\$2,378	\$2,138	\$1,900	-46.2	-32.7	-10.1	-11.1
Ending inventory quantity	***	***	***	***	***	***	***	***
Subtotal, subject:								
Quantity	9,507	9,965	14,001	16,616	74.8	4.8	40.5	18.7
Value	23,518	20,273	24,967	31,069	32.1	-13.8	23.2	24.4
Unit value	\$2,474	\$2,035	\$1,783	\$1,870	-24.4	-17.8	-12.3	4.9
Ending inventory quantity	***	***	***	***	***	***	***	***
Nonsubject:								
Canada:								
Quantity	21,273	13,592	25,810	21,920	3.0	-36.1	89.9	-15.1
Value	71,455	40,893	70,710	60,364	-15.5	-42.8	72.9	-14.6
Unit value	\$3,359	\$3,009	\$2,740	\$2,754	-18.0	-10.4	-8.9	0.5
Ending inventory quantity	(²)	(²)	(²)	(²)	(³)	(³)	(³)	(³)
China:								
Quantity	0	0	0	0	(³)	(³)	(³)	(³)
Value	0	0	0	0	(³)	(³)	(³)	(³)
Unit value	(³)							
Ending inventory quantity	0	0	0	0	(³)	(³)	(³)	(³)

Table continued. See footnotes at end of table.

Table C-2--Continued
Alloy magnesium: Summary data concerning the U.S. market, 2000-03

Item	Reported data				Period changes			
	2000	2001	2002	2003	2000-03	2000-01	2001-02	2002-03
Quantity=metric tons; value=\$1,000; unit labor costs are per metric ton; period changes=percent, except where noted								
U.S. imports from--Continued								
Nonsubject:--Continued								
Israel:								
Quantity	2,306	5,072	2,574	961	-58.3	119.9	-49.3	-62.6
Value	12,128	16,024	7,031	2,407	-80.2	32.1	-56.1	-65.8
Unit value	\$5,258	\$3,159	\$2,732	\$2,504	-52.4	-39.9	-13.5	-8.4
Ending inventory quantity	(²)	(²)	(²)	(²)	(³)	(³)	(³)	(³)
All other sources:								
Quantity	5,328	4,710	1,440	1,574	-70.5	-11.6	-69.4	9.3
Value	20,795	18,091	7,076	7,069	-66.0	-13.0	-60.9	-0.1
Unit value	\$3,903	\$3,841	\$4,915	\$4,491	15.1	-1.6	28.0	-8.6
Ending inventory quantity	***	***	***	***	***	***	***	***
Subtotal, nonsubject:								
Quantity	28,908	23,374	29,823	24,455	-15.4	-19.1	27.6	-18.0
Value	104,378	75,008	84,817	69,841	-33.1	-28.1	13.1	-17.7
Unit value	\$3,611	\$3,209	\$2,844	\$2,856	-20.9	-11.1	-11.4	0.4
Ending inventory quantity	***	***	***	***	***	***	***	***
Total, all sources:								
Quantity	38,415	33,339	43,824	41,071	6.9	-13.2	31.4	-6.3
Value	127,896	95,282	109,784	100,910	-21.1	-25.5	15.2	-8.1
Unit value	\$3,329	\$2,858	\$2,505	\$2,457	-26.2	-14.2	-12.3	-1.9
Ending inventory quantity	***	***	***	***	***	***	***	***
U.S. producers: ⁴								
Average capacity quantity	***	***	***	***	***	***	***	***
Production quantity	***	***	***	***	***	***	***	***
Capacity utilization ¹ (percent)	***	***	***	***	***	***	***	***
U.S. shipments:								
Quantity	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***
Unit value	\$***	\$***	\$***	\$***	***	***	***	***
Export shipments:								
Quantity	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***
Unit value	\$***	\$***	\$***	\$***	***	***	***	***
Ending inventory quantity	***	***	***	***	***	***	***	***
Inventories/total shipments ¹	***	***	***	***	***	***	***	***
Production workers	***	***	***	***	***	***	***	***
Hours worked (1,000)	***	***	***	***	***	***	***	***
Wages paid (\$1,000)	***	***	***	***	***	***	***	***
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.

² Not available; included in "all other" inventories.

³ Not applicable.

⁴ Consists of data from the following firms: US Magnesium, Northwest Alloys, Amacor, Garfield Alloys, Halaco, and MagReTech.

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. Shares are calculated from the unrounded figures.

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

Table C-3
Magnesium: Summary data concerning the U.S. market, 2000-03

Quantity=metric tons; value=\$ 1,000; unit labor costs are per metric ton; period changes=percent, except where noted								
Item	Reported data				Period changes			
	2000	2001	2002	2003	2000-03	2000-01	2001-02	2002-03
U.S. consumption quantity:								
Amount	***	***	***	***	***	***	***	***
Producers' share ¹	***	***	***	***	***	***	***	***
Importers' share: ¹								
Subject:								
China	***	***	***	***	***	***	***	***
Russia	***	***	***	***	***	***	***	***
Subtotal, subject	***	***	***	***	***	***	***	***
Nonsubject:								
Canada	***	***	***	***	***	***	***	***
China	***	***	***	***	***	***	***	***
Israel	***	***	***	***	***	***	***	***
All other sources	***	***	***	***	***	***	***	***
Subtotal, nonsubject	***	***	***	***	***	***	***	***
Total imports	***	***	***	***	***	***	***	***
U.S. consumption value:								
Amount	***	***	***	***	***	***	***	***
Producers' share ¹	***	***	***	***	***	***	***	***
Importers' share: ¹								
Subject:								
China	***	***	***	***	***	***	***	***
Russia	***	***	***	***	***	***	***	***
Subtotal, subject	***	***	***	***	***	***	***	***
Nonsubject:								
Canada	***	***	***	***	***	***	***	***
China	***	***	***	***	***	***	***	***
Israel	***	***	***	***	***	***	***	***
All other sources	***	***	***	***	***	***	***	***
Subtotal, nonsubject	***	***	***	***	***	***	***	***
Total imports	***	***	***	***	***	***	***	***
U.S. imports from—								
Subject:								
China:								
Quantity	6,671	9,321	11,964	12,906	93.5	39.7	28.4	7.9
Value	13,497	18,744	20,613	24,020	78.0	38.9	10.0	16.5
Unit value	\$2,023	\$2,011	\$1,723	\$1,861	-8.0	-0.6	-14.3	8.0
Ending inventory quantity	***	***	***	***	***	***	***	***
Russia:								
Quantity	13,685	11,902	16,668	21,745	58.9	-13.0	40.0	30.5
Value	36,087	23,758	32,896	41,517	15.0	-34.2	38.5	26.2
Unit value	\$2,637	\$1,996	\$1,974	\$1,909	-27.6	-24.3	-1.1	-3.3
Ending inventory quantity	***	***	***	***	***	***	***	***
Subtotal, subject:								
Quantity	20,356	21,223	28,632	34,651	70.2	4.3	34.9	21.0
Value	49,584	42,502	53,508	65,537	32.2	-14.3	25.9	22.5
Unit value	\$2,436	\$2,003	\$1,869	\$1,891	-22.4	-17.8	-6.7	1.2
Ending inventory quantity	***	***	***	***	***	***	***	***
Nonsubject:								
Canada:								
Quantity	30,364	16,685	34,075	24,956	-17.8	-45.0	104.2	-26.8
Value	94,194	50,094	92,632	69,223	-26.5	-46.8	84.9	-25.3
Unit value	\$3,102	\$3,002	\$2,718	\$2,774	-10.6	-3.2	-9.5	2.0
Ending inventory quantity	(²)	(²)	(²)	(²)	(³)	(³)	(³)	(³)
China:								
Quantity	15,506	3,151	173	101	-99.3	-79.7	-94.5	-41.2
Value	33,872	6,726	304	257	-99.2	-80.1	-95.5	-15.4
Unit value	\$2,184	\$2,135	\$1,761	\$2,535	16.1	-2.3	-17.5	44.0
Ending inventory quantity	0	0	0	0	(³)	(³)	(³)	(³)

Table continued. See footnotes at end of table.

Table C-3--Continued
Magnesium: Summary data concerning the U.S. market, 2000-03

Item	Reported data				Period changes			
	2000	2001	2002	2003	2000-03	2000-01	2001-02	2002-03
Quantity=metric tons; value=\$1,000; unit labor costs are per metric ton; period changes=percent, except where noted								
U.S. imports from--Continued								
Nonsubject--Continued								
Israel:								
Quantity	8,623	7,890	8,419	5,747	-33.4	-8.5	6.7	-31.7
Value	31,432	24,336	22,013	14,267	-54.6	-22.6	-9.5	-35.2
Unit value	\$3,645	\$3,085	\$2,615	\$2,483	-31.9	-15.4	-15.2	-5.1
Ending inventory quantity	(²)	(²)	(²)	(²)	(³)	(³)	(³)	(³)
All other sources:								
Quantity	7,857	9,236	4,104	3,902	-50.3	17.5	-55.6	-4.9
Value	27,917	29,964	13,673	12,850	-54.0	7.3	-54.4	-6.0
Unit value	\$3,553	\$3,244	\$3,331	\$3,293	-7.3	-8.7	2.7	-1.1
Ending inventory quantity	***	***	***	***	***	***	***	***
Subtotal, nonsubject:								
Quantity	62,351	36,962	46,771	34,706	-44.3	-40.7	26.5	-25.8
Value	187,415	111,119	128,622	96,597	-48.5	-40.7	15.8	-24.9
Unit value	\$3,006	\$3,006	\$2,750	\$2,783	-7.4	0.0	-8.5	1.2
Ending inventory quantity	***	***	***	***	***	***	***	***
Total, all sources:								
Quantity	82,706	58,185	75,403	69,356	-16.1	-29.6	29.6	-8.0
Value	236,999	153,622	182,130	162,134	-31.6	-35.2	18.6	-11.0
Unit value	\$2,866	\$2,640	\$2,415	\$2,338	-18.4	-7.9	-8.5	-3.2
Ending inventory quantity	***	***	***	***	***	***	***	***
U.S. producers ¹ :								
Average capacity quantity	***	***	***	***	***	***	***	***
Production quantity	***	***	***	***	***	***	***	***
Capacity utilization ¹ (percent)	***	***	***	***	***	***	***	***
U.S. shipments:								
Quantity	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***
Unit value	***	***	***	***	***	***	***	***
Export shipments:								
Quantity	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***
Unit value	\$***	\$***	\$***	\$***	***	***	***	***
Ending inventory quantity	***	***	***	***	***	***	***	***
Inventories/total shipments ¹	***	***	***	***	***	***	***	***
Production workers	***	***	***	***	***	***	***	***
Hours worked (1,000)	***	***	***	***	***	***	***	***
Wages paid (\$1,000)	***	***	***	***	***	***	***	***
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.

² Not available; included in "all other" inventories.

³ Not applicable.

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. Shares are calculated from the unrounded figures.

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

Table C-4
Primary magnesium: Summary data concerning the U.S. market, 2000-03

Quantity=metric tons; value=\$ 1,000; unit labor costs are per metric ton; period changes=percent, except where noted								
Item	Reported data				Period changes			
	2000	2001	2002	2003	2000-03	2000-01	2001-02	2002-03
U.S. consumption quantity:								
Amount	***	***	***	***	***	***	***	***
Producers' share ¹	***	***	***	***	***	***	***	***
Importers' share: ¹								
Subject:								
China	***	***	***	***	***	***	***	***
Russia	***	***	***	***	***	***	***	***
Subtotal, subject	***	***	***	***	***	***	***	***
Nonsubject:								
Canada	***	***	***	***	***	***	***	***
China	***	***	***	***	***	***	***	***
Israel	***	***	***	***	***	***	***	***
All other sources	***	***	***	***	***	***	***	***
Subtotal, nonsubject	***	***	***	***	***	***	***	***
Total imports	***	***	***	***	***	***	***	***
U.S. consumption value:								
Amount	***	***	***	***	***	***	***	***
Producers' share ¹	***	***	***	***	***	***	***	***
Importers' share: ¹								
Subject:								
China	***	***	***	***	***	***	***	***
Russia	***	***	***	***	***	***	***	***
Subtotal, subject	***	***	***	***	***	***	***	***
Nonsubject:								
Canada	***	***	***	***	***	***	***	***
China	***	***	***	***	***	***	***	***
Israel	***	***	***	***	***	***	***	***
All other sources	***	***	***	***	***	***	***	***
Subtotal, nonsubject	***	***	***	***	***	***	***	***
Total imports	***	***	***	***	***	***	***	***
U.S. imports from—								
Subject:								
China:								
Quantity	6,671	9,321	11,964	12,906	93.5	39.7	28.4	7.9
Value	13,497	18,744	20,613	24,020	78.0	38.9	10.0	16.5
Unit value	\$2,023	\$2,011	\$1,723	\$1,861	-8.0	-0.6	-14.3	8.0
Ending inventory quantity	***	***	***	***	***	***	***	***
Russia:								
Quantity	13,685	11,902	16,668	21,745	58.9	-13.0	40.0	30.5
Value	36,087	23,758	32,896	41,517	15.0	-34.2	38.5	26.2
Unit value	\$2,637	\$1,996	\$1,974	\$1,909	-27.6	-24.3	-1.1	-3.3
Ending inventory quantity	***	***	***	***	***	***	***	***
Subtotal, subject:								
Quantity	20,356	21,223	28,632	34,651	70.2	4.3	34.9	21.0
Value	49,584	42,502	53,508	65,537	32.2	-14.3	25.9	22.5
Unit value	\$2,436	\$2,003	\$1,869	\$1,891	-22.4	-17.8	-6.7	1.2
Ending inventory quantity	***	***	***	***	***	***	***	***
Nonsubject:								
Canada:								
Quantity	30,364	16,685	34,075	24,956	-17.8	-45.0	104.2	-26.8
Value	94,194	50,094	92,632	69,223	-26.5	-46.8	84.9	-25.3
Unit value	\$3,102	\$3,002	\$2,718	\$2,774	-10.6	-3.2	-9.5	2.0
Ending inventory quantity	(²)	(²)	(²)	(²)	(³)	(³)	(³)	(³)
China:								
Quantity	15,506	3,151	173	101	-99.3	-79.7	-94.5	-41.2
Value	33,872	6,726	304	257	-99.2	-80.1	-95.5	-15.4
Unit value	\$2,184	\$2,135	\$1,761	\$2,535	16.1	-2.3	-17.5	44.0
Ending inventory quantity	0	0	0	0	(³)	(³)	(³)	(³)

Table continued. See footnotes at end of table.

Table C-4--Continued

Primary magnesium: Summary data concerning the U.S. market, 2000-03

Item	Reported data				Period changes			
	2000	2001	2002	2003	2000-03	2000-01	2001-02	2002-03
Quantity=metric tons; value=\$ 1,000; unit labor costs are per metric ton; period changes=percent, except where noted								
U.S. imports from--Continued								
Nonsubject--Continued								
Israel:								
Quantity	8,623	7,890	8,419	5,747	-33.4	-8.5	6.7	-31.7
Value	31,432	24,336	22,013	14,267	-54.6	-22.6	-9.5	-35.2
Unit value	\$3,645	\$3,085	\$2,615	\$2,483	-31.9	-15.4	-15.2	-5.1
Ending inventory quantity	(²)	(²)	(²)	(²)	(³)	(³)	(³)	(³)
All other sources:								
Quantity	7,857	9,236	4,104	3,902	-50.3	17.5	-55.6	-4.9
Value	27,917	29,964	13,673	12,850	-54.0	7.3	-54.4	-6.0
Unit value	\$3,553	\$3,244	\$3,331	\$3,293	-7.3	-8.7	2.7	-1.1
Ending inventory quantity	***	***	***	***	***	***	***	***
Subtotal, nonsubject:								
Quantity	62,351	36,962	46,771	34,706	-44.3	-40.7	26.5	-25.8
Value	187,415	111,119	128,622	96,597	-48.5	-40.7	15.8	-24.9
Unit value	\$3,006	\$3,006	\$2,750	\$2,783	-7.4	0.0	-8.5	1.2
Ending inventory quantity	***	***	***	***	***	***	***	***
Total, all sources:								
Quantity	82,706	58,185	75,403	69,356	-16.1	-29.6	29.6	-8.0
Value	236,999	153,622	182,130	162,134	-31.6	-35.2	18.6	-11.0
Unit value	\$2,866	\$2,640	\$2,415	\$2,338	-18.4	-7.9	-8.5	-3.2
Ending inventory quantity	***	***	***	***	***	***	***	***
U.S. producers: ⁴								
Average capacity quantity	***	***	***	***	***	***	***	***
Production quantity	***	***	***	***	***	***	***	***
Capacity utilization ¹ (percent)	***	***	***	***	***	***	***	***
U.S. shipments:								
Quantity	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***
Unit value	\$***	\$***	\$***	\$***	***	***	***	***
Export shipments:								
Quantity	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***
Unit value	\$***	\$***	\$***	\$***	***	***	***	***
Ending inventory quantity	***	***	***	***	***	***	***	***
Inventories/total shipments ¹	***	***	***	***	***	***	***	***
Production workers	***	***	***	***	***	***	***	***
Hours worked (1,000)	***	***	***	***	***	***	***	***
Wages paid (\$1,000)	***	***	***	***	***	***	***	***
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.

² Not available; included in "all other" inventories.

³ Not applicable.

⁴ Consists of data from the following firms: US Magnesium and Northwest Alloys.

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. Shares are calculated from the unrounded figures.

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

Table C-5
Secondary magnesium: Summary data concerning the U.S. market, 2000-03

Quantity=metric tons; value=\$1,000; unit labor costs are per metric ton; period changes=percent, except where noted								
Item	Reported data				Period changes			
	2000	2001	2002	2003	2000-03	2000-01	2001-02	2002-03
U.S. producers: ¹								
Average capacity quantity	***	***	***	***	***	***	***	***
Production quantity	***	***	***	***	***	***	***	***
Capacity utilization ² (percent)	***	***	***	***	***	***	***	***
U.S. shipments:								
Quantity	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***
Unit value	\$***	\$***	\$***	\$***	***	***	***	***
Export shipments:								
Quantity	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***
Unit value	\$***	\$***	\$***	\$***	***	***	***	***
Ending inventory quantity	***	***	***	***	***	***	***	***
Inventories/total shipments ²	***	***	***	***	***	***	***	***
Production workers	***	***	***	***	***	***	***	***
Hours worked (1,000)	***	***	***	***	***	***	***	***
Wages paid (\$1,000)	***	***	***	***	***	***	***	***
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 ²	***	***	***	***	***	***	***	***

¹ Consists of data from the following firms: Amacor, Garfield Alloys, Halaco, and MagReTech.

² 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. Shares are calculated from the unrounded figures.

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

APPENDIX D

**ALLEGED EFFECTS OF IMPORTS ON U.S. PRODUCERS'
EXISTING DEVELOPMENT AND PRODUCTION EFFORTS,
GROWTH, INVESTMENT, AND ABILITY TO RAISE CAPITAL**

The Commission requested U.S. producers to describe any actual or anticipated negative effects of imports since January 1, 2000, on their return on investment or growth, investment, ability to raise capital, existing development and production efforts (including efforts to develop a derivative or more advanced version of the product), or the scale of capital investments as a result of imports of pure and alloy magnesium from Russia or alloy magnesium from China. The firms did not distinguish between China and Russia in their responses, which are as follows:

Actual Negative Effects

* * * * *

Anticipated Negative Effects

* * * * *

