Refined Brown Aluminum Oxide from China

Investigation No. 731-TA-1022 (Second Review)

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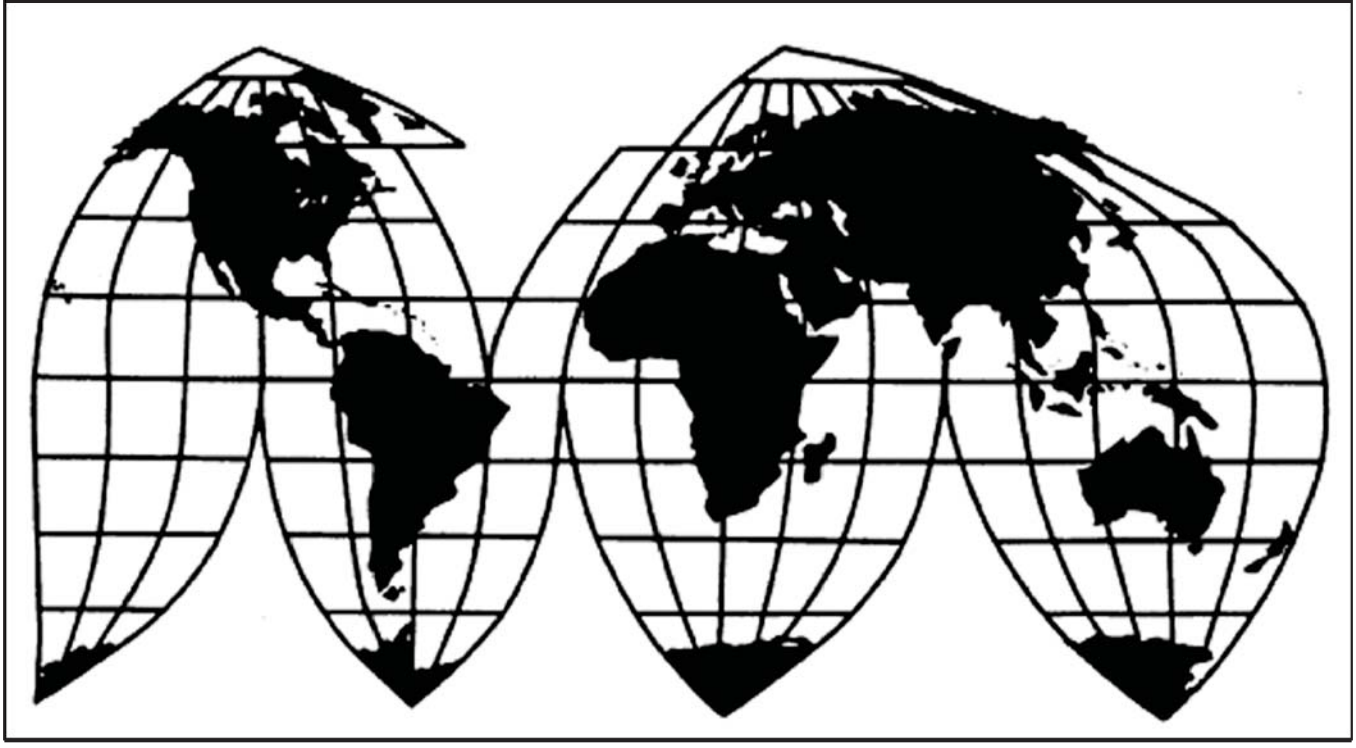
U.S. International Trade Commission



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Note.—Information that would reveal confidential operations of individual concerns may not be published and therefore has been deleted from this report.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

UNITED STATES INTERNATIONAL TRADE COMMISSION

Investigation No. 731-TA-1022 (Second Review)

REFINED BROWN ALUMINUM OXIDE FROM CHINA

DETERMINATION

On the basis of the record[1] developed in the subject five-year review, the United States International Trade Commission ("Commission") determines, pursuant to section 751(c) of the Tariff Act of 1930 (19 U.S.C. § 1675(c)), that revocation of the antidumping duty order on refined brown aluminum oxide from China would be likely to lead to continuation or recurrence of material injury to an industry in the United States within a reasonably foreseeable time.

BACKGROUND

The Commission instituted this review on February 3, 2014 (79 F.R. 6225) and determined on May 9, 2014 that it would conduct an expedited review (79 F.R. 48248, August 15, 2014).

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

Views of the Commission

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

I. Background

The original investigation was instituted in response to an antidumping petition filed by Washington Mills Group Inc. ("Washington Mills") on November 20, 2002. On November 10, 2003, the Commission found that an industry in the United States was materially injured by reason of less than fair value imports of RBAO from China.[1] The U.S. Department of Commerce ("Commerce") issued an antidumping duty order on imports of RBAO from China on November 19, 2003.[2]

On October 1, 2008, the Commission instituted the first five-year review. It conducted an expedited review.[3] On February 19, 2009, the Commission determined that revocation of the antidumping duty order on RBAO from China would be likely to lead to continuation or recurrence of material injury within a reasonably foreseeable time.[4] Commerce issued a notice of continuation of the antidumping duty order on imports of RBAO from China on March 13, 2009.[5]

The Commission instituted this review on February 3, 2014.[6] On March 5, 2014, four domestic producers of RBAO submitted a joint response to the Commission's notice instituting this review,[7] and on April 18, 2014, these parties submitted joint comments on the adequacy of these responses. On May 9, 2014, the Commission found each domestic producer's response to be adequate. It further determined that the domestic interested party group response to the notice of institution was adequate. The Commission did not receive a response to the notice of institution from any respondent interested party. Consequently, it determined that the respondent interested party group response was inadequate. In the absence of any

[1] 68 Fed. Reg. 64369 (Nov. 13, 2003).

[2] 68 Fed. Reg. 65249 (Nov. 19, 2003).

[3] *See* Explanation of Commission Determination on Adequacy. *Refined Brown Aluminum Oxide from China*, Inv. No. 731-TA-1022 (Review), USITC Pub. 4063 (Mar. 2009), at Appendix B.

[4] *Refined Brown Aluminum Oxide from China*, Inv. No. 731-TA-1022 (Review), USITC Pub. 4063 (Mar. 2009) (hereinafter "*Review Opinion"*).

[5] 74 Fed. Reg. 10884 (Mar. 13, 2009).

[6] *Refined Brown Aluminum Oxide from China: Institution of Five-Year Review*, 79 Fed. Reg. 6225 (Feb. 3, 2014).

[7] These four producers are C-E Minerals, Inc. ("C-E Minerals"); Imerys Fused Minerals Niagara Falls, Inc. ("Imerys"); U.S. Electrofused Minerals, Inc.; and Washington Mills (collectively, "the Domestic Producers"). The response also contained data for an additional U.S. producer of RBAO.

circumstances warranting a full review, the Commission unanimously determined to conduct an expedited review of the order.[8]

II. Domestic Like Product and Industry

A. Domestic Like Product

In making its determination under section 751(c) of the Tariff Act, the Commission defines the "domestic like product" and the "industry."[9] The Tariff Act defines "domestic like product" as "a product which is like, or in the absence of like, most similar in characteristics and uses with, the article subject to an investigation under this subtitle."[10] The Commission's practice in five-year reviews is to examine the domestic like product definition from the original investigation and consider whether the record indicates any reason to revisit the prior findings.[11]

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

> ground, pulverized or refined brown artificial corundum, also known as brown aluminum oxide or brown fused alumina, in grit size of 3/8 inch or less. Excluded from the scope of the order is crude artificial corundum in which particles with a diameter greater than 3/8 inch constitute at least 50 percent of the total weight of the entire batch. The scope includes brown artificial corundum in which particles with a diameter greater than 3/8 inch constitute less than 50 percent of the total weight of the batch. The merchandise under investigation is currently classifiable under subheadings 2818.10.20.00 and 2818.10.20.90 of the *Harmonized Tariff Schedule of the United States* (HTSUS).[12]

RBAO is a solid inorganic chemical derived from the aluminum oxide in mined bauxites and produced by crushing, grinding, and sieving brown aluminum oxide ("BAO") in ingot or crude form. The product is sold in a range of sizes, generally but not always with a diameter of

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[8] *See* Explanation of Commission Determination on Adequacy. *Refined Brown Aluminum Oxide from China*, Inv. No. 731-TA-1022 (Second Review), EDIS Doc. 535175 (June 5, 2014).

[9] 19 U.S.C. § 1677(4)(A).

[10] 19 U.S.C. § 1677(10); *see*, *e.g., Cleo Inc. v. United States*, 501 F.3d 1291, 1299 (Fed. Cir. 2007); *NEC Corp. v. Department of Commerce*, 36 F. Supp. 2d 380, 383 (Ct. Int'l Trade 1998); *Nippon Steel Corp. v. United States*, 19 CIT 450, 455 (1995); *Timken Co. v. United States*, 913 F. Supp. 580, 584 (Ct. Int'l Trade 1996); *Torrington Co. v. United States*, 747 F. Supp. 744, 748-49 (Ct. Int'l Trade 1990), *aff'd*, 938 F.2d 1278 (Fed. Cir. 1991); *see also* S. Rep. No. 249, 96th Cong., 1st Sess. 90-91 (1979).

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

[12] 79 Fed. Reg. 26207-26208 (May 7, 2014).

3/8 inch or less,[13] to end users and to distributors.[14] RBAO is used mainly to make abrasives and refractories (heat-resistant furnace linings).[15]

In the original investigation, the Commission found a single domestic like product consisting of all merchandise corresponding to the scope of the investigation as well as any RBAO where particles with a diameter greater than 3/8 inch constituted at least 50 percent of the total weight of the entire batch, as long as this product had been crushed, screened, and sorted into consistent sizes.[16]

The Commission defined the domestic like product more broadly than the scope in order to more accurately reflect the dividing line between crude BAO and RBAO.[17] It found that Commerce's scope did not accurately reflect the dividing line because both the larger and smaller sizes were used for refractories and shared the same channels of distribution. Additionally, the record contained no information that they were produced in distinct facilities.[18] The Commission found that the size of BAO particles did not affect interchangeability because most RBAO was produced to specific customer size specifications.[19] Therefore, the Commission defined the domestic like product to include both the merchandise described by the scope definition and certain RBAO with a diameter greater than the 3/8 inch limitation included in the scope language.[20]

In the expedited first review, the domestic parties indicated that they agreed with the Commission's definition of the domestic like product in the original investigation.[21] The Commission found that the record did not contain any new information that would cause it to revisit its domestic like product definition.[22] Accordingly, it again defined the domestic like product to include all merchandise corresponding to the scope of the order, as well as any RBAO where particles with a diameter greater than 3/8 inch constituted at least 50 percent of the total weight of the entire batch, as long as the product had been crushed, screened, and sorted into consistent sizes.[23]

In this review, the Domestic Producers stated that they agree with the domestic like product definition the Commission adopted in the original investigation and first review.[24] There is no new information in the record indicating that the characteristics of the product at issue have changed since the prior proceedings.[25] Accordingly, we again define the domestic

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[13] Confidential staff Report ("CR") at I-10, I-12, Public Report ("PR") at I-8 - I-9.

[14] CR at I-17, PR at I-12.

[15] CR at I-14, PR at I-10.

[16] *Refined Brown Aluminum Oxide from* China, Inv. No. 731-TA-1022 (Final), USITC Pub. 3643 (Nov. 2003) at 3 ("*Original Determination*").

[17] *Original Determination*, USITC Pub. 3643 at 6-7.

[18] *Original Determination*, USITC Pub. 3643 at 6-7.

[19] *Original Determination*, USITC Pub. 3643 at 6-7.

[20] *Original Determination*, USITC Pub. 3643 at 8-10.

[21] *Review Opinion*, USITC Pub. 4063 at 4.

[22] *Review Opinion*, USITC Pub. 4063 at 4.

[23] *Review Opinion*, USITC Pub. 4063 at 4.

[24] Domestic Producers' Response to Notice of Institution at 16; Domestic Producers' Comments at 1.

[25] CR at I-13 – I-18, PR at I-10 – I-13.

like product to include all merchandise corresponding to the scope of the order, as well as any RBAO where particles with a diameter greater than 3/8 inch constitute as least 50 percent of the total weight of the entire batch, as long as the product has been crushed, screened, and sorted into consistent sizes.

B. Domestic Industry

Section 771(4)(A) of the Tariff Act defines the relevant industry as the domestic "producers as a whole of a domestic like product, or those producers whose collective output of a domestic like product constitutes a major proportion of the total domestic production of the product."[26] In defining the domestic industry, the Commission's general practice has been to include in the industry producers of all domestic production of the like product, whether toll-produced, captively consumed, or sold in the domestic merchant market.

In the original determination, five of the six domestic producers of RBAO imported the subject merchandise from China during the period of investigation, and thus were related parties under the statute. The Commission found that appropriate circumstances existed to exclude one of these producers, Great Lakes Minerals, from the domestic industry, but not to exclude the others. Great Lakes was excluded because it ***.[27] The Commission found that Great Lakes ***.[28] The Commission therefore defined the domestic industry as consisting of all U.S. producers of the domestic like product, with the exception of Great Lakes Minerals.[29]

In the first review, the Commission found that the domestic industry consisted of all six U.S. producers of the domestic like product, none of which imported the subject merchandise from China during the period of review or was otherwise a related party.[30]

In this review, the Domestic Producers have stated that they agree with the Commission's definition from the first review.[31] The sole reported change in composition to the domestic industry since the first review is that the producer previously known as Treibacher Schleifmittel is now known as Imerys Fused Minerals.[32] There are no related party issues in this review because the record indicates that no domestic RBAO producers imported subject merchandise during the period of review.[33] We therefore again define the domestic industry as consisting of all domestic producers of RBAO.

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[26] 19 U.S.C. § 1677(4)(A). The definitions in 19 U.S.C. § 1677 are applicable to the entire subtitle containing the antidumping and countervailing duty laws, including 19 U.S.C. §§ 1675 and 1675a. *See* 19 U.S.C. § 1677.

[27] *Original Determination*, USITC Pub. 3643 at 11.

[28] *Original Determination*, USITC Pub. 3643 at 11.

[29] *Original Determination*, USITC Pub. 3643 at 9-11. The U.S. Court of International Trade upheld the Commission's exclusion of Great Lakes from the domestic industry. Allied Mineral Products, Inc. v. United States, Slip Op. 04-139 (Ct. Int'l Trade Nov. 12, 2004).

[30] *Review Opinion*, USITC Pub. 4063 at 5.

[31] Domestic Producers' Response to Notice of Institution at 16.

[32] Domestic Producers' Response to Notice of Institution at 2.

[33] Domestic Producers' Response to Notice of Institution at 14. The Domestic Producers reported that two U.S. producers, C-E Minerals and Imerys, are related to a Chinese producer of subject merchandise through a mutual parent company in France. Domestic Producers' Response to Notice of

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

A. Legal Standards

In a five-year review conducted under section 751(c) of the Tariff Act, Commerce will revoke an antidumping or countervailing duty order unless: (1) it makes a determination that dumping or subsidization is likely to continue or recur and (2) the Commission makes a determination that revocation of the antidumping or countervailing duty order "would be likely to lead to continuation or recurrence of material injury within a reasonably foreseeable time."[34] The Uruguay Round Agreements Act Statement of Administrative Action ("SAA") states that "under the likelihood standard, the Commission will engage in a counterfactual analysis; it must decide the likely impact in the reasonably foreseeable future of an important change in the status quo – the revocation or termination of a proceeding and the elimination of its restraining effects on volumes and prices of imports."[35] Thus, the likelihood standard is prospective in nature.[36] The U.S. Court of International Trade has found that "likely," as used in the five-year review provisions of the Tariff Act, means "probable," and the Commission applies that standard in five-year reviews.[37]

The statute states that "the Commission shall consider that the effects of revocation or termination may not be imminent, but may manifest themselves only over a longer period of time."[38] According to the SAA, a "'reasonably foreseeable time' will vary from case-to-case, but

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Institution at 2. They also reported that the affiliate in China does not export RBAO to the United States, and that the two domestic producers had not imported subject merchandise, from this affiliate or otherwise, during the period of review. Domestic Producers' Response to Notice of Institution at 14.

[34] 19 U.S.C. § 1675a(a).

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

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

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

[38] 19 U.S.C. § 1675a(a)(5).

normally will exceed the 'imminent' timeframe applicable in a threat of injury analysis in original investigations."[39]

Although the standard in a five-year review is not the same as the standard applied in an original investigation, it contains some of the same fundamental elements. The statute provides that the Commission is to "consider the likely volume, price effect, and impact of imports of the subject merchandise on the industry if the orders are revoked or the suspended investigation is terminated."[40] It directs the Commission to take into account its prior injury determination, whether any improvement in the state of the industry is related to the order or the suspension agreement under review, whether the industry is vulnerable to material injury if the orders are revoked or a suspension agreement is terminated, and any findings by Commerce regarding duty absorption pursuant to 19 U.S.C. § 1675(a)(4).[41] The statute further provides that the presence or absence of any factor that the Commission is required to consider shall not necessarily give decisive guidance with respect to the Commission's determination.[42]

In evaluating the likely volume of imports of subject merchandise if the orders under review are revoked and/or a suspended investigation is terminated, the Commission is directed to consider whether the likely volume of imports would be significant either in absolute terms or relative to production or consumption in the United States.[43] In doing so, the Commission must consider "all relevant economic factors," including four enumerated factors: (1) any likely increase in production capacity or existing unused production capacity in the exporting country; (2) existing inventories of the subject merchandise, or likely increases in inventories; (3) the existence of barriers to the importation of the subject merchandise into countries other than the United States; and (4) the potential for product shifting if production facilities in the foreign country, which can be used to produce the subject merchandise, are currently being used to produce other products.[44]

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

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

[40] 19 U.S.C. § 1675a(a)(1).

[41] 19 U.S.C. § 1675a(a)(1). Commerce has not made any duty absorption findings with respect to the order currently under review. CR at I-7, PR at I-6.

[42] 19 U.S.C. § 1675a(a)(5). Although the Commission must consider all factors, no one factor is necessarily dispositive. SAA at 886.

[43] 19 U.S.C. § 1675a(a)(2).

[44] 19 U.S.C. § 1675a(a)(2)(A-D).

United States at prices that otherwise would have a significant depressing or suppressing effect on the price of the domestic like product.[45]

In evaluating the likely impact of imports of subject merchandise if the orders under review are revoked and/or a suspended investigation is terminated, the Commission is directed to consider all relevant economic factors that are likely to have a bearing on the state of the industry in the United States, including but not limited to the following: (1) likely declines in output, sales, market share, profits, productivity, return on investments, and utilization of capacity; (2) likely negative effects on cash flow, inventories, employment, wages, growth, ability to raise capital, and investment; and (3) likely negative effects on the existing development and production efforts of the industry, including efforts to develop a derivative or more advanced version of the domestic like product.[46] All relevant economic factors are to be considered within the context of the business cycle and the conditions of competition that are distinctive to the industry. As instructed by the statute, we have considered the extent to which any improvement in the state of the domestic industry is related to the order under review and whether the industry is vulnerable to material injury upon revocation.[47]

No respondent interested party participated in this expedited review.[48] The record, therefore, contains limited new information with respect to the RBAO industry in China. Accordingly, for our determination, we rely as appropriate on the facts available from the original investigation and prior review, data submitted in the response to the notice of institution, and other public data.

B. Conditions of Competition and the Business Cycle

In evaluating the likely impact of the subject imports on the domestic industry if an order is revoked, the statute directs the Commission to consider all relevant economic factors "within the context of the business cycle and conditions of competition that are distinctive to the affected industry."[49] The following conditions of competition inform our determination.

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

[46] 19 U.S.C. § 1675a(a)(4).

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

[48] During the adequacy phase of this proceeding, the Commission received a letter from American Abrasive Products, Inc., of the City of Industry, California, an importer and distributor of RBAO. Because of deficiencies in the submission, the Commission determined that American Abrasives did not provide an individually adequate response to the notice of institution. CR/PR I-3, n. 5.

[49] 19 U.S.C. § 1675a(a)(4).

Demand Conditions. In the original investigation, the Commission found that U.S. demand for RBAO declined over the period of investigation. This decline reportedly was caused by factors such as an overall deterioration in the economy, weak conditions in the refractory and steel industries, and increasing imports of downstream products. The quantity of apparent U.S. consumption fell by *** percent between 2000 and 2001, by *** percent between 2001 and 2002, and by *** percent when comparing the first six months of 2002 (interim 2002) with the first six months of 2003 (interim 2003).[50]

In the first review, the Commission found that U.S. demand for RBAO had generally increased since imposition of the antidumping duty order. Nevertheless, demand was reported to have declined in 2008 and was projected to decline further in 2009 due to recessionary conditions and a drop in steel production.[51]

In this review, U.S. demand for RBAO continues to be derived from demand for products used in the abrasives and refractories markets, which is strongly linked to activity in the U.S. manufacturing sector. However, due to improvements in technology in many of the industries in the U.S. manufacturing sector, including aerospace, automotive, furniture, construction, and steel, growth in these industries may not translate into an increase in consumption of RBAO.[52] Apparent U.S. consumption in 2013 was 134,645 short tons, which was below both the 167,086 short tons of apparent U.S. consumption in 2007 and the *** short tons of apparent U.S. consumption in 2002.[53]

Supply Conditions. In the original investigation, the Commission specified several changes in the domestic industry that occurred during the period of investigation, including Washington Mills' acquisition of the RBAO operations of another domestic producer, Exolon; the cessation of production by 3M; and the beginning of domestic production by C-E Minerals.[54] Washington Mills purchased raw materials at low prices in 2001 and 2002 from the Defense Logistics Agency (DLA); otherwise all domestic producers of RBAO obtained their raw material from foreign sources, including China, as there was no domestic production of crude BAO.[55] The Commission also stated that the volume of nonsubject imports declined over the period of investigation.[56]

During the first review, the Commission found several changes in the structure of the domestic industry, including the introduction of a new domestic producer, U.S. Electrofused Materials; that Washington Mills sold one of its two U.S. production facilities; and that Great Lakes was no longer an importer of subject merchandise.[57] While the domestic industry's dependence on foreign sources for crude BAO had not changed, Chinese producers of RBAO

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[50] The Commission recognized that the decline in apparent U.S. consumption may have been overstated due to misclassification of refined and crude BAO and over inclusion of white and pink aluminum oxide in the relevant HTSUS subheading. *Original Determination*, USITC Pub. 3643 at 13-14.

[51] *Review Opinion*, USITC Pub. 4063 at 8.

[52] CR at I-40-41; PR at I-29.

[53] CR/PR Table I-7.

[54] *Original Determination*, USITC Pub. 3643 at 12-13.

[55] *Original Determination*, USITC Pub. 3643 at 13.

[56] *Original Determination*, USITC Pub. 3643 at 13-14.

[57] *Review Opinion*, USITC Pub. 4063 at 8-9.

had begun experiencing production difficulties.[58] The Chinese RBAO industry nevertheless remained the largest in the world.[59] The volume of subject imports, however, had declined significantly following the imposition of the order.[60]

In this review, the responding domestic producers report that there are currently six domestic producers of RBAO, *** of which reported information for this review. There have been no major changes to the domestic industry since the first review.[61] The data indicates that in 2013, the domestic industry supplied the largest percentage of RBAO to the U.S. market, followed by nonsubject imports. Nonsubject imports were principally from Canada, Austria, and Brazil.[62] Subject imports had a very small presence in the U.S. market in 2013. In 2013, U.S. producers' domestic shipments were 111,611 short tons, subject imports totaled 1,373 short tons, and nonsubject imports were 21,661 short tons.[63]

Substitutability. In the original investigation, the Commission found a moderate to high degree of substitutability between RBAO from China and the domestic like product.[64] The Commission observed that purchasers characterized price as a very important factor in their purchasing decisions. While quality was the primary consideration for most purchasers, most purchasers reported that the United States and Chinese products were comparable in quality and product consistency, as well as in availability, discounts offered, minimum quantity requirements, packaging, product range, reliability of supply, and U.S. transportation costs. Most purchasers also ranked the U.S. product as superior to the Chinese product in technical support and service and inferior only in terms of (lowest) price. Overall, U.S. producers, importers, and purchasers reported that RBAO produced in the United States was generally interchangeable with RBAO produced in China.[65]

In the first review, the Commission found that the record contained nothing that would suggest that the conditions affecting substitutability had changed significantly since the original investigation.[66]

The information available in this review similarly contains nothing to indicate that the substitutability between subject and domestic RBAO has changed since the original investigation. Accordingly, we again find that there is a moderate to high degree of substitutability between RBAO from China and the domestic like product, and that price continues to be an important factor in purchasing decisions.

[58] *Review Opinion*, USITC Pub. 4063 at 9.
[59] *Review Opinion*, USITC Pub. 4063 at 9.
[60] *Review Opinion*, USITC Pub. 4063 at 10.
[61] CR at I-21, PR at I-15.
[62] CR/PR at Table I-5.
[63] CR/PR at Table I-7.
[64] *Original Determination*, USITC Pub. 3643 at 13.
[65] *Original Determination*, USITC Pub. 3643 at 13.
[66] *Review Opinion*, USITC Pub. 4063 at 9.

C. Likely Volume of Subject Imports

Original Investigation and Prior Review. In the original investigation, the Commission found the volume of the subject imports to be significant, particularly in light of the moderate to high degree of substitutability between subject imports and the domestic product, the importance of price in purchasing decisions, and the prevalence of underselling by substantial margins.[67] Subject imports totaled 68,994 short tons in 2000, 80,547 short tons in 2001, and 57,172 short tons in 2002. In interim 2002 and interim 2003, subject imports were 24,259 short tons and 22,073 short tons, respectively. The market share of subject imports increased from *** percent in 2000 to *** percent in 2002, and was lower in interim 2003 than in interim 2002. The ratio of subject import quantity to production in the United States was 55.7 percent in 2000, 71.0 percent in 2001, 51.9 percent in 2002, 52.2 percent in interim 2002, and 34.3 percent in interim 2003.[68]

In the expedited first review, the Commission found that subject imports declined sharply after imposition of the antidumping duty order in November 2003, although there was a slight increase at the end of the review period in 2007.[69] Subject import quantity declined from 57,172 short tons in 2002 to 13,333 short tons in 2003, and was 2,922 short tons, or 1.7 percent of apparent U.S. consumption, in 2007.[70] The Commission concluded that the volume of subject imports would likely be significant if the order were revoked.[71] Available data indicated that the Chinese RBAO industry was the largest in the world, that it had been expanding rapidly, and that its capacity and production far surpassed apparent U.S. consumption.[72] The Chinese industry also was export oriented.[73] Moreover, since imposition of the antidumping duty order on RBAO, Chinese exports to the United States of fused aluminum oxide, a category that included both crude and refined product, had increased.[74] The Commission found that, if the order on RBAO were revoked, Chinese producers would have an incentive to shift their exports to the higher-valued and more labor-intensive refined product.[75]

Current Review. The information available in this review shows that subject imports have continued to be present in the U.S. market in modest levels since the prior review. Subject imports ranged from 1,160 short tons in 2008 to 1,708 short tons in 2012, and were

[67] *Original Determination*, USITC Pub. 3643 at 14-15; *Original Confidential Determination*, EDIS Doc. 195944 at 20-21.

[68] *Original Determination*, USITC Pub. 3643 at 14-15; *Original Confidential Determination*, EDIS Doc. 195944 at 20-21.

[69] *Review Opinion*, USITC Pub. 4063 at 10.

[70] *Review Opinion*, USITC Pub. 4063 at 10.

[71] *Review Opinion*, USITC Pub. 4063 at 10.

[72] *Review Opinion*, USITC Pub. 4063 at 10-11.

[73] *Review Opinion*, USITC Pub. 4063 at 11.

[74] *Review Opinion*, USITC Pub. 4063 at 11.

[75] *Review Opinion*, USITC Pub. 4063 at 11.

1,373 short tons in 2013.[76] Subject imports from China accounted for 1.0 percent of apparent U.S. consumption in 2013.[77]

In light of its historically large production and demonstrated export orientation, the RBAO industry in China has the ability to increase exports of subject merchandise to the U.S. upon revocation, as it did during the original investigation. Available data indicate that the Commission's prior findings regarding the large size of the RBAO industry in China are still valid.[78] Information that the Domestic Producers provided in their response to the notice of institution indicates that capacity in China has continued to expand rapidly, and that excess capacity in China is greater than U.S. consumption.[79]

Upon revocation, the subject producers are likely, absent the restraining effects of the order, to direct significant volumes of RBAO to the U.S. market as they did during the original investigation. Available data indicate that the industry in China has a significant export orientation. China is by far the world's largest exporter of fused aluminum oxide, the most narrowly defined product that includes the subject merchandise for which data are available.[80] Moreover, the record indicates that the subject industry in China has continued to participate in the U.S. market, albeit at levels well below those observed during the original investigation, during each year from 2007 to 2013.[81] We also note that the United States is a substantial export market for fused aluminum oxide from China.[82] Information available indicates that at least some of the producers of brown fused alumina in China also produce RBAO.[83] If the order on RBAO were revoked, Chinese producers would have an incentive to shift their exports to the higher-valued product. Given all of this, we find that the volume of subject imports would likely increase upon revocation. We further find that the likely volume of subject imports, both in absolute terms and relative to consumption in the United States, would be significant if the order were revoked.[84]

D. Likely Price Effects

Original Investigation and Prior Review. In the original determination, the Commission found that subject imports undersold the domestic like product in 46 of 56 quarterly comparisons, with substantial weighted-average margins of underselling. The Commission observed that prices for both the domestic like product and subject imports generally declined

[76] CR/PR at Table I-5.

[77] CR/PR at Table I-5.

[78] CR at I-48, PR at I-35.

[79] Domestic Producers' Response to Notice of Institution at 10.

[80] CR/PR at Table I-8. The *Global Trade Atlas* data concern items covered by HTS subheading 2818.10, which includes all forms and grades of fused aluminum oxide, a more broadly defined product than RBAO.

[81] CR/PR at Table I-5.

[82] CR/PR at Table I-10

[83] CR at I-48, PR at I-35.

[84] There are no other antidumping orders concerning RBAO from China outside of the United States. CR at I-44; PR at I-32. Due to the nature of this expedited review, there are no data available on inventories of the subject merchandise.

over the period of investigation. It recognized that these declining prices may have been attributable in part to a decline in raw material costs and to weak demand for RBAO, but found that the decline in prices could not be completely attributed to these other factors. The Commission found that there was significant underselling by the subject imports and that the significant volumes of the subject merchandise depressed prices to a significant degree.[85]

The record of the expedited first review did not contain confidential pricing data, though it did contain some limited published data from the trade journal Industrial Minerals. The Commission attributed recent increases in the average unit values of the subject imports to the antidumping duty order.[86] The Commission emphasized its findings that Chinese producers would likely increase exports to the United States significantly in the reasonably foreseeable future.[87] It concluded that, as in the original investigation, if subject imports were to increase, they would likely undersell the domestic like product.[88] Because price continued to be an important factor in purchasing decisions, the subject imports would likely have a significant depressing or suppressing effect on prices for the domestic like product.[89]

Current Review. There is no new product-specific pricing information on the record of this expedited review. Given the substitutable nature of RBAO, we find that price continues to be an important factor in purchasing decisions. In light of the underselling that occurred during the period of the original investigation, we find that if the antidumping duty order were revoked, subject imports from China would likely undersell the domestic like product at high margins, as they did during the original investigation. This in turn would likely require the domestic industry either to cut prices or restrain price increases to match the prices offered by the subject imports, or to risk losing sales to the subject imports.

Accordingly, given the likely significant volume of subject imports, we find that upon revocation subject imports would likely engage in significant underselling of the domestic like product. Additionally, the subject imports would be likely to enter the United States at prices that would have significant depressing or suppressing effects on the price of the domestic like product.

[85] *Original Determination*, USITC Pub. 3643 at 16.
[86] *Review Opinion*, USITC Pub. 4063 at 12.
[87] *Review Opinion*, USITC Pub. 4063 at 16.
[88] *Review Opinion*, USITC Pub. 4063 at 11.
[89] *Review Opinion*, USITC Pub. 4063 at 11-12.

E. Likely Impact[90]

Original Investigation and Prior Review. In the original investigation, the Commission found that most of the domestic industry's performance indicators were weak throughout the period of investigation and that many worsened over the period. At the same time, subject imports were present in significant volumes and were underselling the domestic like product by significant margins. The Commission recognized that there were substantial variations in the financial results of the domestic producers, but concluded that the weak results of one producer in particular were due in significant part to subject imports. The Commission also recognized that declining demand for RBAO played a role in the domestic industry's worsening performance, but concluded that the decline in demand did not detract from the fact that the significant underselling by subject imports, which were present in large volumes and gained increasing market share during the period, had a significant adverse impact on the domestic industry.[91]

In the first review, the Commission received limited information that covered only one year of the period of review and pertained to only some indicia of domestic industry performance.[92] The Commission found that the domestic industry had experienced some positive effects as a result of the order. These included increased capacity, production, capacity utilization, shipments, and net sales, and a slight improvement in financial performance.[93] The Commission concluded that the intensified subject import competition that would likely occur after revocation of the order would likely have a significant adverse impact on the domestic industry, especially in a period of declining demand.[94]

Current Review. The information available concerning the domestic industry's condition in this review consists of the data that the domestic producers provided in response to the notice of institution. Because this is an expedited review, we only have limited information regarding the domestic industry's financial performance. The record is insufficient for us to make a finding on whether the domestic industry is vulnerable to the continuation or recurrence of material injury in the event of revocation of the order.[95]

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[90] Under the statute, "the Commission may consider the magnitude of the margin of dumping" in making its determination in a five-year review. 19 U.S.C. § 1675a(a)(6). The statute defines the "magnitude of the margin of dumping" to be used by the Commission in five-year reviews as "the dumping margin or margins determined by the administering authority under section 1675a(c)(3) of this title." 19 U.S.C. § 1677(35)(C)(iv); *see also* SAA at 887.

Commerce expedited its antidumping duty review determination and found that revocation of the antidumping duty order would likely lead to continuation or recurrence of dumping at margins up to 111.36 percent. Commerce Final Determination, 79 Fed. Reg. at 42291 (Jul. 21, 2014).

[91] *Original Determination*, USITC Pub. 3456 at 17-19.

[92] *Review Opinion*, USITC Pub. 4063 at 13.

[93] *Review Opinion*, USITC Pub. 4063 at 13.

[94] *Review Opinion*, USITC Pub. 4063 at 13.

[95] Vice Chairman Pinkert finds the evidence on vulnerability to be mixed. The domestic industry's operating income, sales measured in value, and unit values were much higher in this review than in the other periods surveyed, but its operating margin was a relatively low 5.0 percent. Although

The information on the record indicates that, in 2013, the capacity of the reporting domestic producers was 220,000 short tons, production was 114,675 short tons, and capacity utilization was 52.1 percent.[96] U.S. shipments in 2013 were 111,611 short tons valued at $99.97 million.[97] The domestic industry reported that its ratio of operating income to net sales was 5.0 percent.[98] Based on the limited information on the record, we find that should the order be revoked, the likely significant volume and price effects of the subject imports would likely have a significant adverse impact on the production, shipments, sales, market share, and revenues of the domestic industry. This impact would likely cause declines in the domestic industry's financial performance. Trends in U.S. demand will likely exacerbate the adverse effects of subject imports. Apparent consumption has been declining to stagnant since the original period of investigation.[99]

We have also considered the role of factors other than subject imports, including the presence of nonsubject imports, so as not to attribute injury from other factors to the subject imports. While nonsubject imports have increased their market share since the original investigation,[100] the domestic industry has improved its financial performance during that time.[101] Moreover, average unit values for nonsubject imports are higher than those for the domestic industry.[102] Consequently, we find that nonsubject imports are not a cause of the likely adverse effects we have attributed to the subject imports.

Accordingly, we conclude that if the orders were revoked, subject imports would likely have a significant adverse impact on the domestic industry within a reasonably foreseeable time.

IV. Conclusion

For the above reasons, we determine that revocation of the antidumping duty order on RBAO from China would likely lead to continuation or recurrence of material injury to an industry in the United States within a reasonably foreseeable time.

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the industry's U.S. market share improved after the order was in place, it was lower in this review than in the first review. Moreover, apparent U.S. consumption measured in quantity has decreased since the original investigation. CR/PR at Tables I-4 and I-7; CR at I-41; PR at I-29.

[96] CR/PR at Table I-4.

[97] CR/PR at Table I-4.

[98] CR/PR at Table I-4.

[99] CR/PR at Table I-7.

[100] CR/PR at Table I-7.

[101] CR/PR at Table I-4.

[102] *Compare* CR/PR at Table I-4 with CR/PR at Table I-7. Because differences in average unit value may reflect differences in product mix, we view such data with caution.

INFORMATION OBTAINED IN THE REVIEW

INTRODUCTION

On February 3, 2014, in accordance with section 751(c) of the Tariff Act of 1930, as amended ("the Act"),[1] the U.S. International Trade Commission ("Commission" or "USITC") gave notice that it had instituted a second review to determine whether revocation of the antidumping duty order on refined brown aluminum oxide ("RBAO") from China would be likely to lead to a continuation or recurrence of material injury within a reasonably foreseeable time.[2] [3] On May 9, 2014, the Commission determined that the domestic interested party group response to its notice of institution was adequate[4] and that the respondent interested party group response was inadequate.[5] In the absence of respondent interested party responses and any other circumstances that would warrant the conduct of a full review, the Commission determined to conduct an expedited review of the antidumping duty order pursuant to section 751(c)(3) of the Act (19 U.S.C. § 1675(c)(3)).[6] The Commission is scheduled to vote on this review on September 18, 2014, and will notify Commerce of its determination on October 1, 2014. The following tabulation presents selected information relating to the schedule of this five-year review.[7]

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

[2] *Refined Brown Aluminum Oxide from China; Institution of A Five-Year Review*, 79 FR 6225, February 3, 2014. All interested parties were requested to respond to this notice by submitting the information requested by the Commission.

[3] In accordance with section 751(c) of the Act, the U.S. Department of Commerce ("Commerce") published a notice of initiation of a five-year review of the subject antidumping duty order concurrently with the Commission's notice of institution. *Inititation of Five-Year ("Sunset") Review*, 79 FR 6163, February 3, 2014.

[4] The Commission received one submission from domestic producers C-E Minerals, Inc. ("C-E Minerals"); Imerys Fused Minerals Niagara Falls, Inc. ("Imerys"); U.S. Electrofused Minerals, Inc. ("U.S. Electrofused Minerals") and Washington Mills Group, Inc. ("Washington Mills") (collectively referred to herein as "domestic interested parties") in response to its notice of institution for the subject review. The domestic interested parties are represented by counsel. The domestic interested parties reported that together they accounted for *** percent of total U.S. production of RBAO in 2013. They also state that their response, *** includes detailed information from domestic producers accounting for an estimated *** percent of U.S. output and capacity. *Response* of domestic interested parties, March 5, 2014, p. 2.

[5] The Commission did not receive a response from any respondent interested parties to its notice of institution. However, the Commission did receive a letter from American Abrasive Products, Inc. containing certain information that may be relevant to this review, such as the effect of the order on prices for RBAO. However, the firm did not provide in its submission the information that was requested by the Commission in its notice of institution. In its letter, American Abrasive Products, Inc. describes itself as an importer and distributor of different types of abrasives for industrial and manufacturing purposes.

[6] *Refined Brown Aluminum Oxide from China; Institution of A Five-Year Review*, 79 FR 6225, February 3, 2014.

[7] Pertinent *Federal Register* notices are referenced in app. A, and may be found on the Commission's website (www.usitc.gov). The Commission's statement on adequacy is presented in app. B.

Effective Date	Action	*Federal Register* citation
February 3, 2014	Commission's institution of five-year review	79 FR 6225 February 3, 2014
February 3, 2014	Commerce's initiation of five-year review	79 FR 6163 February 3, 2014
May 7, 2014	Commerce's final determination in its expedited five-year review	79 FR 26207 May 7, 2014
May 9, 2014	Commission's determination to conduct an expedited five-year review	79 FR 48248 August 15, 2014
September 18, 2014	Commission's vote	Not applicable
October 1, 2014	Commission's views	Not applicable

The original investigation

On November 20, 2002, a petition was filed with Commerce and the Commission alleging that an industry in the United States was materially injured and threatened with further material injury by reason of less-than-fair-value ("LTFV") imports of RBAO from China.[8] On September 26, 2003, Commerce made an affirmative final LTFV determination[9] and, on November 10, 2003, the Commission completed its original investigation, determining that an industry in the United States was materially injured by reason of LTFV imports of RBAO from

[8] The petition was filed by Washington Mills, North Grafton, Massachusetts. On November 27, 2002, the petition was amended to include two additional petitioners, C-E Minerals, King of Prussia, Pennsylvania, and Treibacher Schleifmittel, Niagara Falls, New York. *Refined Brown Aluminum Oxide From China: Investigation No. 731-TA-1022 (Final),* USITC Publication 3643, November 2003, p. I-1. On March 14, 2003, the petitioners further alleged that critical circumstances existed with respect to imports of RBAO from China. *Notice of Preliminary Determination of Sales at Less Than Fair Value: Refined Brown Aluminum Oxide (Otherwise known as Refined Brown Artificial Corundum or Brown Fused Alumina) from the People's Republic of China,* 68 FR 23966, May 6, 2003.

[9] Commerce further found that critical circumstances existed with respect to subject imports from China. Commerce's determination was company specific only as it applied to Chinese producer/exporter Zibo Jinyu Abrasive Co., Ltd.; otherwise, Commerce applied adverse facts available for all other Chinese producers/exporters as an adverse inference that critical circumstances were applicable for companies that refused to cooperate with its request for information. *Notice of Final Determination of Sales at Less Than Fair Value: Refined Brown Aluminum Oxide (Otherwise known as Refined Brown Artificial Corundum or Brown Fused Alumina) from the People's Republic of China,* 68 FR 55589, September 26, 2003.

China.[10] After receipt of the Commission's final affirmative determination, Commerce issued an antidumping duty order on imports of RBAO from China.[11]

The first five-year review

On October 1, 2008, the Commission instituted the first five-year review. In response to its notice of institution in that review, the Commission received a joint response from four domestic producers, but did not receive any responses from producers or exporters of RBAO in China or from any U.S. importers of the subject merchandise. On January 5, 2009, the Commission found the domestic interested party response to the notice of institution to be adequate and the respondent interested party response to be inadequate, and determined to conduct an expedited review.[12] On February 19, 2009, the Commission determined that revocation of the antidumping duty order on RBAO from China would be likely to lead to continuation or recurrence of material injury to an industry within a reasonably foreseeable time.[13] On March 13, 2009, Commerce issued a notice of continuation of the antidumping duty order on imports of RBAO from China.[14]

Commerce's Original Determination and Subsequent Administrative Review Determinations

Commerce's original determination was published on September 26, 2003,[15] and the antidumping duty order concerning RBAO from China was issued on November 19, 2003.[16] Since the first sunset review of the order, Commerce conducted one administrative review for the period of November 1, 2006 to October 31, 2007, in which it calculated a 46.88 percent

[10] The Commission found that critical circumstances did not exist with respect to imports of the subject merchandise from China. *Refined Brown Aluminum Oxide from China,* 68 FR 64369, November 13, 2003; *Refined Brown Aluminum Oxide From China: Investigation No. 731-TA-1022 (Final),* USITC Publication 3643, November 2003, p. 1.

[11] *Antidumping Duty Order: Refined Brown Aluminum Oxide (Otherwise Known as Refined Brown Artificial Corundum or Brown Fused Alumina) From the People's Republic of China,* 68 FR 65249, November 19, 2003.

[12] See Explanation of Commission Determination on Adequacy. *Refined Brown Aluminum Oxide from China*: Investigation No. 731-TA-1022 (Review), USITC Publication 4063, March 2009, app. B.

[13] *Refined Brown Aluminum Oxide from the China*: Investigation No. 731-TA-1022 (Review), USITC Publication 4063, March 2009. There was no litigation of the Commission's five-year review determination.

[14] *Refined Brown Aluminum Oxide from the People's Republic of China: Notice of Continuation of Antidumping Duty Order*, 74 FR 10884, March 13, 2009.

[15] *Notice of Final Determination of Sales at Less Than Fair Value: Refined Brown Aluminum Oxide (Otherwise known as Refined Brown Artificial Corundum or Brown Fused Alumina) from the People's Republic of China,* 68 FR 55589, September 26, 2003.

[16] *Antidumping Duty Order: Refined Brown Aluminum Oxide (Otherwise Known as Refined Brown Artificial Corundum or Brown Fused Alumina) From the People's Republic of China,* 68 FR 65249, November 19, 2003.

weighted-average dumping margin for Qingdao Shunxingli Abrasives Co., Ltd.[17] No other administrative reviews have been completed since the issuance of the antidumping duty order. Although there have been three scope rulings concerning the antidumping duty order,[18] there have been no new shipper reviews, no changed circumstances determinations, and no duty absorption findings. The order remains in effect for all manufacturers, producers, and exporters of the subject merchandise.[19]

Commerce's Final Result of Expedited First Five-Year Review

On November 20, 2008, Commerce notified the Commission that it did not receive an adequate substantial response to its notice of initiation from respondent interested parties with respect to RBAO from China and that it would conduct an expedited review of the order. Commerce published the final result of its review based on the facts available on January 23, 2009.[20] Commerce concluded that revocation of the antidumping duty order on RBAO from China would likely lead to continuation or recurrence of dumping at margins determined in its original final determination.

Commerce's Final Result of Expedited Second Five-Year Review

On April 30, 2014, Commerce notified the Commission that it did not receive an adequate substantial response to its notice of initiation from respondent interested parties with respect to RBAO from China and that it would conduct a second expedited review of the order. Commerce published the final result of its review based on the facts available on May 7, 2014.[21] Commerce concluded that revocation of the antidumping duty order on RBAO from China would likely lead to continuation or recurrence of dumping at margins determined in its original final determination.[22] Information on Commerce's final determination, antidumping

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[17] *Refined Brown Aluminum Oxide from the People's Republic of China: Final Results of Antidumping Duty Administrative Review*, 74 FR 23682, May 20, 2009.

[18] See the section of this report entitled "Scope" for information concerning Commerce's scope rulings.

[19] *Issues and Decision Memorandum for the Final Results of the Expedited Second Sunset Review of the Antidumping Duty Order on Refined Brown Aluminum Oxide from the People's Republic of China*, from Christian Marsh, Deputy Assistant Secretary for Antidumping and Countervailing Duty Operations, to Paul Piquado, Assistant Secretary for Enforcement and Compliance, International Trade Administration, Department of Commerce, April 30, 2014, pp. 2-3.

[20] *Refined Brown Aluminum Oxide from the People's Republic of China: Final Results of Expedited Sunset Review,* 74 FR 4138, January 23, 2009.

[21] *Refined Brown Aluminum Oxide From the People's Republic of China: Final Results of Expedited Second Sunset Review of the Antidumping Duty Order,* 79 FR 26207, May 7, 2014.

[22] *Issues and Decision Memorandum for the Final Results of the Expedited Second Sunset Review of the Antidumping Duty Order on Refined Brown Aluminum Oxide from the People's Republic of China*, from Christian Marsh, Deputy Assistant Secretary for Antidumping and Countervailing Duty Operations, to Paul Piquado, Assistant Secretary for Enforcement and Compliance, International Trade Administration, Department of Commerce, April 30, 2014, pp. 5-6.

duty order, final administrative review determination, and final results of its expedited first and second five-year reviews is presented in table I-1.

Table I-1
RBAO: Commerce's final determination, antidumping duty order, administrative review determination, and five-year review determinations

Action	Effective date	*Federal Register* citation	Period of investigation/ review	Antidumping duty margins	
				Firm specific	Country-wide[1]
				Percent ad valorem	
Final determination	09/26/2003	68 FR 55589	04/01/2002-09/30/2002	135.18[2]	135.18
Antidumping duty order	11/19/2003	68 FR 65249	--	135.18[2]	135.18
Final results of administrative review	05/20/2009	74 FR 23682	11/01/2006-10/31/2007	46.88[3]	--
Final results of expedited first five-year review	01/23/2009	74 FR 4138	--	135.18[2]	135.18
Final results of expedited second five-year review	05/07/2014	79 FR 26207	--	135.18[2]	135.18

[1] The country-wide rate applies to all companies that otherwise have not received a "firm-specific" rate.
[2] Zibo Jinyu Abrasive Co., Ltd.
[3] Qingdao Shunxingli Abrasives Co. Ltd.

Source: Cited *Federal Register* notices.

In its final results of the expedited second five-year review, Commerce explained that "{i}n determining whether revocation of an antidumping duty order is likely to lead to continuation or recurrence of dumping, the Department shall consider (a) the weighted-average dumping margin for the investigation that continued at any level above *de minimis* after the issuance of the order, and (b) imports of the subject merchandise for the period before and after the issuance of the order. . ." With respect to the subject review, Commerce found that "dumping margins have continued to exist at levels above *de minimis* since the issuance of the order, and there have been substantially lower import levels after the imposition of the order when compared to pre-order levels. . ." Therefore, Commerce found that dumping would likely continue or recur if the order were revoked.[23]

[23] *Issues and Decision Memorandum for the Final Results of the Expedited Sunset Review of the Antidumping Duty Order on Refined Brown Aluminum Oxide from the People's Republic of China*, from Christian Marsh, Deputy Assistant Secretary for Antidumping and Countervailing Duty Operations, to Paul Piquado, Assistant Secretary for Enforcement and Compliance, International Trade Administration, Department of Commerce, April 30, 2014, pp. 5-6.

Related Commission Investigations and Reviews

The Commission has conducted no other related investigations or reviews concerning RBAO.

THE PRODUCT

Commerce's Scope

Commerce has defined the scope of this review as follows:

> The merchandise covered by this investigation is ground, pulverized or refined brown artificial corundum, also known as refined brown aluminum oxide or brown fused alumina, in grit size of 3/8 inch or less. The merchandise covered by this report is currently classifiable under subheadings 2818.10.20.10 and 2818.10.20.90 of the Harmonized Tariff Schedule of the United States (HTSUS).[24]

Commerce has received three separate requests for scope rulings since the original antidumping duty order date. The requestors, outcomes, and completion dates of Commerce's scope rulings are listed in table I-2.

Table I-2
RBAO: Commerce's scope rulings

Requestor	Scope ruling	Date of completion	*Federal Register* citation
Cometals Division of Commercial Metals Co.; Wester Mineralien SA (Pty) Ltd.; and Polmineral Sp.zo.o.	Exclusion request granted. Crude brown aluminum oxide, in which particles with a diameter greater than 3/8 inch constitute at least 50 percent of the total weight of the entire batch, that is purchased from China and then refined in a country other than China is outside the scope of the order.	February 3, 2004	70 FR 24533 May 10, 2005
Cometals Division of Commercial Metals Co.	Exclusion request granted. Black aluminum oxide is excluded from the scope of the antidumping duty order.	February 7, 2005	70 FR 41374 July 19, 2005
3M	Exclusion request denied. Semi-friable aluminum oxide and heat-treated aluminum oxide are within the scope of the antidumping duty order.	October 1, 2008	74 FR 14521 March 31, 2009

Source: Cited *Federal Register* notices and *Issues and Decision Memorandum for the Final Results of the Expedited Sunset Review of the Antidumping Duty Order on Refined Brown Aluminum Oxide from the People's Republic of China*, from Christian Marsh, Deputy Assistant Secretary for Antidumping and Countervailing Duty Operations, to Paul Piquado, Assistant Secretary for Enforcement and Compliance, International Trade Administration, Department of Commerce, April 30, 2014, p. 2.

[24] *Refined Brown Aluminum Oxide From the People's Republic of China: Final Results of Expedited Second Sunset Review of the Antidumping Duty Order,* 79 FR 26207, May 7, 2014.

U.S. tariff treatment

Refined brown aluminum oxide is classifiable in the Harmonized Tariff Schedule of the United States ("HTS") under subheading 2818.10.20, imported under statistical reporting number 2818.10.2090 ("artificial corundum, whether or not chemically defined: in grains, or ground, pulverized or refined, other"), and has a normal trade relations tariff rate of 1.3 percent *ad valorem* applicable to imports from China.[25]

Domestic like product and domestic industry

In its original determination, the Commission defined the domestic like product as all merchandise corresponding to the scope of the investigation, as well as any RBAO where particles with a diameter greater than 3/8 inch constitute at least 50 percent of the total weight of the entire batch, as long as this product has been crushed, screened, and sorted into consistent sizes.[26] The Commission defined the domestic industry as all U.S. producers of the domestic like product, as defined above, with the exception of Great Lakes Minerals, which was excluded from the domestic industry as a related party.[27]

No new information was obtained in the first review pertaining to the Commission's domestic like product definition in the original investigation. Therefore, the Commission again defined the domestic like product to include all merchandise corresponding to the scope of Commerce's review, as well as any refined brown aluminum oxide where particles with a diameter greater than 3/8 inch constitute at least 50 percent of the total weight of the entire batch, as long as this product has been crushed, screened, and sorted into consistent sizes.[28]

The domestic interested parties indicated in their response to the Commission's notice of institution in this review that they agree with the definitions of the domestic like product and domestic industry as set out in the Commission's notice of institution and its final determination in the original investigation.[29]

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[25] During the original investigation, the subject merchandise was imported under statistical reporting number 2818.10.2000 of the HTS. Imports that entered the United States under this provision included not only refined brown aluminum oxide, but also items outside the scope of the investigation (e.g., white and pink refined aluminum oxide). However, beginning in 2005, separate data have been collected on white, pink, and ruby aluminum oxide and on the brown product that is subject to the order. The white, pink, and ruby product is currently imported under HTS statistical reporting number 2818.10.2010 ("white, pink or ruby, containing more than 97.5 percent by weight of aluminum oxide").

[26] *Refined Brown Aluminum Oxide From China: Investigation No. 731-TA-1022 (Final),* USITC Publication 3643, November 2003, p. 7.

[27] The Commission reported in the original investigation that there were six domestic producers of RBAO, five of which imported the subject merchandise from China during the period examined and were therefore considered related parties under the statute. However, the Commission excluded only Great Lakes Minerals from the domestic industry. *Refined Brown Aluminum Oxide From China: Investigation No. 731-TA-1022 (Final),* USITC Publication 3643, November 2003, pp. 7 and 10.

[28] *Refined Brown Aluminum Oxide From China: Investigation No. 731-TA-1022 (Review),* USITC Publication 4063, March 2009, p. 4.

[29] *Response* of domestic interested parties, March 5, 2014, p. 16.

The Commission's decision regarding the appropriate domestic product(s) that are "like" the subject imported product 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 (6) price. Information regarding these factors is discussed below.

Physical characteristics

Refined Brown Aluminum Oxide

RBAO (also known as brown fused alumina grain or grits) is a solid inorganic chemical of the formula Al_2O_3. It is a processed form of aluminum oxide (also referred to as alumina) found in mined bauxites.[30] RBAO is processed from fused alumina, which is a granular material with a high density, low porosity, low permeability, and high refractoriness. Fused alumina (or fused aluminum oxide) is produced in various forms, the most common of which are brown fused alumina ("BFA") and white fused alumina ("WFA").[31] BFA has historically accounted for about two-thirds to three-fourths of the global market for fused alumina with WFA accounting for most of the remaining amount.[32] In addition, exports of RBAO from China have generally been more widely available than the white, pink, and red forms.[33]

Industrial Minerals described the primary differences in the two forms of fused alumina in very simple terms as follows: "BFA is considered the tougher all-purpose commodity material with a lower specification and, up until now, a lower price. WFA is the specialist for which consumers pay a premium."[34]

There are two main end-use applications for RBAO: abrasives and refractories.[35] RBAO is used in the manufacture of a variety of abrasive products, such as bonded abrasives (e.g.,

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[30] *Refined Brown Aluminum Oxide From China: Investigation No. 731-TA-1022 (Final),* USITC Publication 3643, November 2003, p. I-2.

[31] Backus, Rachel, "Uphill Struggle," *Industrial Minerals*, December 2007, p. 33 (as cited in the Commission's first review staff report USITC Publication 4063).

[32] Global annual market estimates for BFA and WFA are approximately 1.5 - 1.7 million tons and 550 - 580 thousand tons, respectively. Roberts, Jessica, "Supply trends and prospects for fused alumina," Roskill Information Services, paper presented at 2nd Asian Bauxite and Alumina Conference, Oct. 30-31, 2012, retrieved from *www.roskill.com/reports/industrial-minerals/...alumina.../attachment1*.

[33] Backus, Rachel, "Uphill Struggle," *Industrial Minerals*, December 2007, p. 33; Tran, Alison, "Alumina: Fused and Abused," *Industrial Minerals*, July 2007, pp. 37-43; Taylor, Lindsey, "Hot Stuff: Tabular Alumina Takes the Heat," *Industrial Minerals*, June 2003, p. 43; and Kendall, Tom, "Fused Alumina: Grinding Out a Living," *Industrial Minerals*, October 2005 (as cited in the Commission's first review staff report USITC Publication 4063).

[34] Tran, Alison, "Alumina: Fused and Abused," *Industrial Minerals*, July 2007, p. 37 (as cited in the Commission's first review staff report USITC Publication 4063).

[35] The Commission reported in the original investigation that there were three main end-use markets: refractories, abrasives, and industrial. It also reported that the refractory market was the largest end-use market, consisting of comparatively fewer customers requiring large quantities of relatively coarser RBAO. However, the Commission's staff report in the original investigation divided the

grinding wheels for high tensile materials), coated abrasives (e.g., paper, discs and belts for wood and metalworking), and surface preparation products (e.g., blast media, ceramic deburring tools, and cutting tools to roughen, shape, buff, polish, or finish a workpiece). Refractory applications include use in the linings of furnaces and ovens. Abrasives have historically accounted for about 60 percent of the worldwide demand for RBAO, with refractory uses accounting for the bulk of the remaining 40 percent. Other specialty uses for RBAO include pigments, chemical reagents, optical powders, and non-slip flooring and floor tiles.[36]

Refined White, Pink, and Ruby Aluminum Oxide

Refined white, pink, and red (or ruby) aluminum oxides are generally more chemically pure (in terms of aluminum oxide content) than RBAO. The chemical purity of the brown product typically ranges from 93.0 to 97.0 percent pure, whereas the chemical purity of the white product ranges from 99.5 to 99.9 percent. The higher purity white fused alumina is made from Bayer calcined specialty alumina, whereas the brown fused alumina is produced from a calcined non-metallurgical bauxite feedstock. The pink and red forms of the product are produced by the addition of chromium oxide to the white fused alumina, which increases the toughness of the finished product. Pink fused alumina, which contains less than two percent chromium oxide with small amounts of titanium oxide, has medium-sized sharp or blocky grains, which make it suitable for precision grinding of hard alloy steels. Red fused alumina, which has a higher chromium oxide content (up to three percent) with small quantities of silicon oxide, ferrous oxide, sodium oxide, calcium oxide, and magnesium oxide, has blocky, sharp edged, friable grains and is tougher than pink grades. In addition to differences in purity, other differences in characteristics between RBAO and the pink and white products include hardness and friability.[37]

The more chemically pure refined white and pink aluminum oxides are ordinarily used in separate, specialized abrasive and refractory applications where brown aluminum oxide, because of the higher level of impurities, will not suffice. They historically have not competed in end-use applications because of the premium price commanded by the more pure product. For

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end use markets for abrasives into the bonded/coated market and the industrial market. In agreement with industry publications, these two end-use markets have been combined for purposes of the discussion in this report. *Refined Brown Aluminum Oxide From China: Investigation No. 731-TA-1022 (Final),* USITC Publication 3643, November 2003, p. II-1.

[36] *Refined Brown Aluminum Oxide From China: Investigation No. 731-TA-1022 (Final),* USITC Publication 3643, November 2003, p. I-2; Kendall, Tom, "Fused Alumina: Grinding Out a Living," *Industrial Minerals*, October 2005; O'Driscoll, Mike, "Basics of Abrasives, Part 1: Types and Manufacture," *Industrial Minerals*, January 2007, pp. 37-38; Backus, Rachel, "Uphill Struggle," *Industrial Minerals*, December 2007, pp. 32-38; and "Synthetic Alumina Steels Show," *Industrial Minerals*, March 2008, pp. 39-45 (as cited in the Commission's first review staff report USITC Publication 4063).

[37] *Refined Brown Aluminum Oxide From China: Investigation No. 731-TA-1022 (Final),* USITC Publication 3643, November 2003, p. I-3, and Backus, Rachel, "Uphill Struggle," *Industrial Minerals*, December 2007, pp. 32-38 (as cited in the Commission's first review staff report USITC Publication 4063).

example, in refractory applications, RBAO competed more with calcined clays and calcined bauxite, whereas the refined white fused alumina competed more with tabular alumina.[38]

Micro Powders

Micro powders (or microgrits) are fine-milled grades of fused alumina,[39] which are used in a wide range of abrasive applications in the industrial and electronic industries where fine surface finishing and polishing is required. Prices of these micro powders have historically been nearly three to five times higher than fused alumina in traditional grit sizes.[40]

Manufacturing process

Production of RBAO uses bauxite ores which have been oven dried at high heat (calcined) to drive off both free moisture and chemically combined water. The calcined bauxite is then heated (or fused) to its melting point (about 2100 degrees Fahrenheit) in an electric arc furnace.[41] The varying amounts of impurities, such as iron oxide, silica, and titania, are removed in the electric arc furnace by melting the calcined bauxite with additions of carbon and iron. The carbon reacts with the oxygen in the impurities to form carbon monoxide gas, and the impurities are reduced to their corresponding metals, which, being heavier than aluminum oxide, settle to the bottom of the melt. The addition of iron to the melt results in the formation of iron salts (e.g., ferrosilicates) which also settle to the bottom. The brown aluminum oxide ingot is cooled and removed from the vessel. Impurities are removed from the bottom of the ingot, and the brown aluminum oxide is then refined (crushed, ground, and screened) into specific particle sizes. In general, the more uniform in size, the more expensive and difficult it is to manufacture.[42] The sized material is packaged for shipping to end users and distributors.

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[38] Backus, Rachel, "Uphill Struggle," *Industrial Minerals*, December 2007, pp. 32-38, and Tran, Alison, "Alumina: Fused and Abused," *Industrial Minerals*, July 2007, pp. 37-43 (as cited in the Commission's first review staff report USITC Publication 4063).

[39] One fused alumina processor with facilities in Germany, Poland, and South Africa reported standardized grading attained by micro powders at FEPA grain size F1500. "Wester Expands Fused Alumina/SiC Microgrits Capacity," *Industrial Minerals*, December 2004, p. 15 (as cited in the Commission's first review staff report USITC Publication 4063).

[40] "Minerals to the Grindstone," *Industrial Minerals*, January 2009, pp. 45-50; "Wester Expands Fused Alumina/SiC Microgrits Capacity," *Industrial Minerals*, December 2004, p. 15; and Kendall, Tom, "Fused Alumina: Grinding Out a Living," *Industrial Minerals*, October 2005 (as cited in the Commission's first review staff report USITC Publication 4063).

[41] Producing fused alumina with an electric arc furnace is a very energy intensive process. At the time of the original investigation, none of the U.S. RBAO producers operated an electric arc furnace in the United States. *Refined Brown Aluminum Oxide From China: Investigation No. 731-TA-1022 (Final),* USITC Publication 3643, November 2003, p. I-3, and Backus, Rachel, "Uphill Struggle," *Industrial Minerals*, December 2007, pp. 32-38.

[42] O'Driscoll, Mike, "Basics of Abrasives, Part 1: Types and Manufacture," *Industrial Minerals*, January 2007, pp. 35-39 (as cited in the Commission's first review staff report USITC Publication 4063).

RBAO is produced in separate facilities from white and pink aluminum oxide to avoid contaminating those products with RBAO.[43]

Traditionally, spent aluminum oxide, including RBAO, is transported to landfills for final disposal. However, up to 30 percent of fused aluminum oxide is reportedly recycled back into the manufacturing process in North America. Domestic RBAO producer Washington Mills developed a process that enables it to collect spent aluminum oxide grains and recycle the spent product back into its aluminum oxide furnaces located in Canada. The spent aluminum oxide is blended with new bauxite and the mixture is fed into specially designed furnaces that melt and purify the liquid product. Recycling spent aluminum oxide reportedly has in the past enabled Washington Mills to control overall costs in light of increasing raw materials costs, declining quality of raw material inputs, rising landfill costs, tighter landfill regulations, and higher freight costs.[44]

Interchangeability and customer and producer perceptions[45]

U.S. producers, importers, and purchasers responding to Commission questionnaires in the original investigation agreed that RBAO produced in the United States, China, and other nonsubject countries were interchangeable. They further noted that RBAO is produced to American National Standards Institute ("ANSI") specifications, with many customers requesting certification of the product. Producers in the United States and China reported in the original investigation that they had certified the RBAO they produced to ANSI standards. The domestic interested parties in the first and second five-year reviews indicated in their response to the Commission's notice of institution that the domestic like product and the subject imports from China were fully interchangeable.[46]

Purchasers reported in the original investigation that refined white and pink aluminum oxide is perceived differently than RBAO by both end users and sellers. They further reported that refined white and pink aluminum oxide is ordinarily used in specialized applications where RBAO is not suitable.[47]

In responses to purchaser surveys in this five-year review, purchasers reported that there have not been any changes and do not anticipate any changes in the existence and availability of substitute products for RBAO in the U.S. market or in the market for RBAO in

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[43] Domestic producers Washington Mills and Treibacher reported in the original investigation that they produced the brown and white products in separate facilities. *Response* of domestic interested parties, March 5, 2014, p. 4.

[44] McLeod, Don, "Special Section/Resource Management: Success Story: Recycling Spent Aluminum Oxide," October 1, 2008, found at http://www.ceramicindustry.com, and Olson, Donald W., "Abrasives, Manufactured," U.S. Geological Survey 2014 Minerals Yearbook, p.14.

[45] Unless indicated otherwise, the discussion in this section is based on information contained in *Refined Brown Aluminum Oxide From China: Investigation No. 731-TA-1022 (Final),* USITC Publication 3643, November 2003, p. I-3.

[46] *Response* of domestic interested parties, November 20, 2008, p. 10; *Response* of domestic interested parties, March 10, 2014, p. 13.

[47] *See also* Tran, Alison, "Alumina: Fused and Abused," *Industrial Minerals*, July 2007, pp. 37-43 (as cited in the Commission's first review staff report USITC Publication 4063).

China since 2009. They also reported that there have not been any changes and do not anticipate any changes in the end uses and applications of refined brown alumina oxide in the U.S. market or in the market for refined brown aluminum oxide in China since 2009.

Channels of distribution[48]

In general, RBAO shares the same channels of distribution as refined white and pink aluminum oxide, being sold to distributors and end users. In addition, U.S. producers and importers of RBAO distribute the product through both distributors and end users. During the original investigation, U.S. producers sold slightly more of their RBAO to end users, whereas importers generally sold more to distributors. In 2002, U.S. producers shipped 52.4 percent of their product to end users and 47.6 percent to distributors, while importers shipped 37.9 percent to end users and 62.1 percent to distributors.

End users and distributors that responded to the purchaser questionnaire in the original investigation reported that the RBAO they purchased was used in all primary end-use markets; however, the petitioners noted that purchases by refractory and abrasives (bonded/coated) customers tend to be made directly from manufacturers or importers, while general industrial customers (for surface preparation) tend to purchase from distributors.

THE INDUSTRY IN THE UNITED STATES

U.S. producers

U.S. industry data collected in the original investigation were based on the questionnaire responses of five domestic producers that accounted for 100 percent of U.S. production of RBAO during 2002.[49] The five U.S. producers that participated in the original investigation and their shares of total domestic production during 2002 were as follows: C-E Minerals (*** percent), Detroit Abrasives (*** percent),[50] Great Lakes Minerals (*** percent),[51] Treibacher Schleifmittel (*** percent), and Washington Mills (*** percent).[52]

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[48] The discussion in this section is based on information from *Refined Brown Aluminum Oxide From China: Investigation No. 731-TA-1022 (Final),* USITC Publication 3643, November 2003, pp. I-4 and II-1.

[49] A sixth domestic firm (i.e., 3M) produced RBAO for its own use at a plant in, St. Paul, Minnesota, using crude product primarily imported from Washington Mills' Canadian operations until June 2002, when it closed the facility. Following the plant's closure, 3M's Coated Abrasives Division entered into a long-term RBAO supply agreement with Washington Mills. *Refined Brown Aluminum Oxide From China: Investigation No. 731-TA-1022 (Final),* USITC Publication 3643, November 2003, p. III-4.

[50] Detroit Abrasives *** in the original investigation. *Staff Report on Refined Brown Aluminum Oxide from China, Investigation No. 731-TA-1022 (Final)*, October 9, 2003 (INV-AA-154), p. III-6.

[51] In the preliminary phase of original investigation, Great Lakes ***. However, in the final phase of the original investigation, Great Lakes indicated that it ***. *Staff Report on Refined Brown Aluminum Oxide from China, Investigation No. 731-TA-1022 (Final)*, October 9, 2003 (INV-AA-154), p. III-4.

[52] *Staff Report on Refined Brown Aluminum Oxide from China, Investigation No. 731-TA-1022 (Final)*, October 9, 2003 (INV-AA-154), pp. III-1 - III-7.

During the first five-year review, the participating domestic interested parties indicated that there had been several "modest" changes to the structure of the domestic industry since the Commission's original investigation. These changes are listed below:

- Constructed at the former LTV Steel Works industrial park in Aliquippa, Pennsylvania, U.S. Electrofused Minerals, a subsidiary of Brazilian integrated producer ELFUSA, began production of RBAO in the United States.
- Washington Mills sold one of its production facilities (i.e., Lakes Wales, Florida).
- Great Lakes Minerals, a domestic producer that was excluded from the domestic industry during the Commission's original investigation because it was largely dependent upon imports of the subject merchandise, no longer imported RBAO and became a "significant" producer of RBAO in the United States.[53]

During this second five-year review, the domestic interested parties noted in their response to the Commission's notice of institution that at the time of the first review, Imerys Fused Materials ("Imerys") was known as Treibacher Schleifmittel. Otherwise, they noted that there have been no major changes to the domestic industry since the first review. They reported that there are currently six domestic producers of RBAO: C-E Minerals; Detroit Abrasives; Great Lakes Minerals; Imerys Fused Materials (formerly known as Treibacher Schleifmittel); U.S. Electrofused Minerals; and Washington Mills.[54] Details regarding each firm's location(s) and company shares of 2002, 2007, and 2013 total domestic production of RBAO are presented in table I-3.

[53] *Response* of domestic interested parties, November 20, 2008, pp. 4-5 (as cited in the Commission's first review staff report USITC Publication 4063).

[54] *Response* of domestic interested parties, March 5, 2014, p. 2.

Table I-3
RBAO: U.S. producers, locations, and company shares of 2002, 2007, and 2013 total domestic production

Firm	Location	Share of 2002 reported RBAO production (*percent*)	Estimated share of 2007 domestic production (*percent*)	Estimated share of 2013 domestic production (*percent*)
3M	St. Paul, Minnesota	([1])	([1])	([1])
C-E Minerals	Newell, West Virginia	***	***	***
Detroit Abrasives	Owosso, Michigan	***	***	***
Great Lakes Minerals	Wurtland, Kentucky	***	***	***
Imerys/Treibacher Schleifmittel	Niagara Falls, New York	***	***	***
U.S. Electrofused Minerals	Aliquippa, Pennsylvania	([3])	***	***
Washington Mills	North Grafton, Massachusetts Niagara Falls, New York Tonawanda, New York	***	***	***
Total		100.0	***	***

[1] 3M produced RBAO for internal consumption using crude product primarily imported from Washington Mills in Canada until June 2002, when it closed the facility. Following the plant's closure, 3M's Coated Abrasives Division entered into a long-term RBAO supply agreement with Washington Mills.
[2] ***
[3] U.S. Electrofused Minerals was not identified as a domestic producer in the original investigation. Press reports indicate that the company moved into its Aliquippa, Pennsylvania facility in mid-2002.

Source: Staff Report on Refined Brown Aluminum Oxide from China, Investigation No. 731-TA-1022 (Final), October 9, 2003 (INV-AA-154), pp. III-1 - III-7; *Response* of domestic interested parties, November 20, 2008, exh. VII (as cited in the Commission's first review staff report USITC Publication 4063); *Response* of domestic interested parties, March 5, 2014, exh. 1; and "U.S. Electrofused Moves to New Facility," *Ceramic Industry*, August 1, 2002 (as cited in the Commission's first review staff report USITC Publication 4063).

C-E Minerals

C-E Minerals, a sister company of Imerys (formerly Treibacher Schleifmittel) is part of the Imerys family of companies, headquartered in Paris, France. C-E Minerals, headquartered in King of Prussia, Pennsylvania, is a supplier of industrial minerals manufactured and processed at the company's plants in the United States (Georgia, Tennessee, and West Virginia), Venezuela, and China. RBAO is produced by C-E Minerals at its custom sizing and processing plant in Newell, West Virginia. This facility processes not only RBAO, but also bauxite and other

imported minerals. The company imports and processes raw materials supplied from its joint venture Guizhou Star Minerals located in Xiuwen, China.[55]

Detroit Abrasives

Detroit Abrasives, with an RBAO production facility located in Owosso, Michigan, is believed to be *** U.S. producer of RBAO. The company crushes and sieves purchased crude brown aluminum oxide from Canada and China into RBAO as a final product. In 2002 ***.[56] [57]

Great Lakes Minerals

Great Lakes Minerals was formed in March 1999 as a joint venture owned by Alcoa World Chemicals (***), PE Materials (***), and PR Minerals (***). On May 31, 2003, Alcoa World Chemicals sold ***. Great Lakes Minerals specializes in the processing of industrial minerals for the refractory and abrasives markets. The company's production facility, located in Wurtland, Kentucky, was designed to ***.[58]

Imerys Fused Minerals (formerly Treibacher Schleifmittel)

Treibacher Schleifmittel was founded in 1898 in the Austrian village Treibach; "schleifmittel" is the German word for abrasives. The company is currently known as Imerys Fused Minerals and is a sister company of C-E Minerals. It is a wholly owned subsidiary of Imerys, a multinational corporation headquartered in France and a world leader in the refractory and abrasives fields with operating plants in Austria, Bahrain, Brazil, China, Germany, Italy, Slovenia, and the United States. The company's Niagara Falls, New York facility acts as a processing center, grinding, sizing, and treating imported fused aluminas, including RBAO.[59]

U.S. Electrofused Minerals

U.S. Electrofused Minerals was not identified as a domestic producer in the original investigation but was identified as a domestic producer of RBAO by domestic interested parties

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[55] C-E Minerals company website, accessed at http://www.ceminerals.com/.

[56] *Staff Report on Refined Brown Aluminum Oxide from China, Investigation No. 731-TA-1022 (Final)*, October 9, 2003 (INV-AA-154), p. III-6; Detroit Abrasives did not provide a response to the Commission's notice of institution in this review; therefore, company-specific proprietary data are not available.

[57] Current information regarding the break-out for applications is unavailable.

[58] *Staff Report on Refined Brown Aluminum Oxide from China, Investigation No. 731-TA-1022 (Final),* October 9, 2003 (INV-AA-154), pp. III-4-III-6; Great Lakes Minerals company website, accessed at http://www.greatlakesminerals.com/; "Great Lakes Minerals," *Industrial Minerals,* May 2007, p. 98; and "Great Lakes Minerals," *Industrial Minerals,* August 2005, p. 61 (as cited in the Commission's first review staff report USITC Publication 4063).

[59] *Staff Report on Refined Brown Aluminum Oxide from China, Investigation No. 731-TA-1022 (Final)*, October 9, 2003 (INV-AA-154), p. III-3; Imerys Fused Minerals company website, accessed at http://www.imerys-fusedminerals.com/.

participating in the first review and is participating in this current second five-year review. U.S. Electrofused Minerals, a subsidiary of Brazilian integrated producer Elfusa Geral de Electrofusao Ltda. ("Elfusa"), completed construction of its RBAO plant in Aliquippa Pennsylvania, in 2002.[60] Elfusa, is one of the largest manufacturers of fused oxides in the Southern Hemisphere with an annual capacity to produce over 300,000 short tons of fused oxides. According to the company's website, U.S. Electrofused Minerals supplies products such as aluminum oxides, spinel, mullite, bauxite, and silicon carbide. Primary markets for the company's products are the abrasive, refractory, ceramic and investment casting industries.[61]

Washington Mills

Washington Mills, headquartered in North Grafton, Massachusetts, produces a wide range of artificial abrasives, including aluminum oxide abrasives, at facilities located in Tonawanda, New York, Niagara Falls, New York, and North Grafton, Massachusetts.[62] The company also has aluminum oxide production facilities located in Canada and the United Kingdom. On its website, Washington Mills describes itself as follows: "One of the world's largest producers of abrasives and fused mineral products, offering an exceptionally wide line of standard abrasive grain and specialty electro-fused minerals from its worldwide multi-plant locations."[63]

[60] "U.S. Electrofused Moves to New Facility," *Ceramic Industry*, August 1, 2002; *Response* of domestic interested parties, November 20, 2008, p. 4 (as cited in the Commission's first review staff report USITC Publication 4063).

[61] U.S. Electrofused Minerals company website, accessed at http://usminerals.com/.

[62] In 2002, ***. Current market share information is unavailable.

[63] *Staff Report on Refined Brown Aluminum Oxide from China, Investigation No. 731-TA-1022 (Final)*, October 9, 2003 (INV-AA-154); Washington Mills company website, accessed at http://www.washingtonmills.com/.

U.S. producers' trade, employment, and financial data

Data reported by U.S. producers of RBAO in the Commission's original investigation and in response to the Commission's institution notice in the first and second five-year reviews are presented in table I-4. Data presented for the period examined in the final phase of the original investigation were provided by five producers (C-E Minerals, Detroit Abrasives, Great Lakes Minerals,[64] Treibacher Schleifmittel, and Washington Mills) that were believed to have represented 100 percent of the U.S. production of RBAO during 2002. Data presented for 2007 were provided by four producers (C-E Minerals, Great Lakes Minerals, Treibacher Schleifmittel, and Washington Mills) that are believed to have represented *** percent of U.S. production of RBAO during 2002 and *** percent during 2007. Data presented for 2013 were provided by *** producers (***) that are believed to have represented *** percent of U.S. production of RBAO.

[64] The Commission excluded Great Lakes Minerals from the domestic industry in the final phase of the original investigation and, therefore, relied on data presented in table C-2 of the staff report, which excludes all "domestic" data of Great Lakes Minerals, in making its determination. Since the original investigation, however, the company ceased importing the subject merchandise. ***. Table C-2 from the Commission's original staff report (excluding the "domestic" data of Great Lakes Minerals) is provided in appendix C of this report.

Table I-4
RBAO: U.S. producers' trade, employment, and financial data, 2000-02, 2007, and 2013[1]

(Quantity=*short tons*; unit values and unit labor costs=*$/short ton*)

Item	2000	2001	2002	2007	2013
Capacity	217,400	217,400	246,600	250,000	220,000
Production	123,918	113,396	110,074	159,337	114,675
Capacity utilization (*percent*)	57.0	52.2	44.6	63.7	52.1
U.S. shipments:[2]					
Quantity	110,414	96,434	109,808	154,103	111,611
Value (*$1,000*)	51,543	46,506	48,019	86,969	99,971
Unit value	$467	$482	$437	$564	$896
Exports:					
Quantity	10,939	8,649	8,076	([3])	8,107
Value (*$1,000*)	6,083	4,441	4,299	4,478	7,523
Unit value	$556	$513	$532	([3])	$928
Total shipments:					
Quantity	121,353	105,083	117,884	([3])	119,718
Value (*$1,000*)	57,626	50,947	52,318	91,447	107,494
Unit value	$475	$485	$444	([3])	$898
End-of-period inventories	41,923	53,811	47,322	([3])	39,325
Production and related workers (*number*)	186	168	168	([3])	([3])
Hours worked (*1,000 hours*)	388	354	332	([3])	([3])
Wages paid (*$1,000)*	7,618	6,846	6,187	([3])	([3])
Hourly wages	$19.63	$19.34	$18.64	([3])	([3])
Productivity (*short tons/1,000 hours*)	319.4	320.3	331.5	([3])	([3])
Unit labor costs	$61.48	$60.37	$56.21	([3])	([3])
Net sales (*$1,000*)	57,626	50,947	51,837	91,447	115,282
Cost of goods sold ($*1,000*)	52,491	44,981	47,081	([3])	104,446
Gross profit or (loss) ($*1,000*)	5,135	5,966	4,756	([3])	10,836
SG&A (*$1,000*)	4,490	4,304	4,126	([3])	5,120
Operating income or (loss) (*$1,000*)	645	1,662	630	(125)	5,716[4]
COGS/sales (*percent*)	91.1	88.3	90.8	([3])	90.6
Operating income (loss)/sales (*percent*)	1.1	3.3	1.2	(0.1)	5.0[4]

[1] Data presented for 2000-02 were provided by five producers (C-E Minerals, Detroit Abrasives, Great Lakes Minerals, Imerys/Treibacher Schleifmittel, and Washington Mills) in the final phase of the original investigation. These five firms were believed to have represented 100 percent of the U.S. production of RBAO during 2002. For comparison purposes, the domestic industry data presented include the data provided by Great Lakes Minerals, a company excluded by the Commission from the domestic industry as a related party in its original determination. Data presented for 2007 were provided by four producers (C-E Minerals, Great Lakes Minerals, Imerys/Treibacher Schleifmittel, and Washington Mills). These four firms are believed to have represented *** percent of U.S. production of RBAO during 2002 and *** percent during 2007. Data presented for 2013 were provided by *** producers (***), which are believed to have represented *** percent of U.S. production of RBAO during 2013.

[2] Captive shipments amounted to *** percent of total reported US. shipments in 2000, 2001, 2002, 2007, and 2013 respectively.

[3] Not available.

[4] ***

Source: Staff Report on Refined Brown Aluminum Oxide from China, Investigation No. 731-TA-1022 (Final), October 9, 2003 (INV-AA-154), tables III-1 and VI-1; *Response* of domestic interested parties, November 20, 2008, p. 7 at fn. 20, p. 9 at fn. 26, and exh. VII (as cited in the Commission's first review staff report USITC Publication 4063); *Response* of domestic interested parties, March 5, 2014, exh. I.

The Commission noted in its views in the final phase of the original investigation that "{m}ost of the domestic industry's performance indicators were weak throughout the period examined and many worsened over the period."[65] The data collected in the original investigation show that domestic production of RBAO fell from 2000 to 2002 with capacity utilization rates, which were relatively low in 2000, reflecting the drop in production. The domestic industry's inventories *** over the period examined but employment and wages generally declined. Capital expenditures rose during the period examined, although shipments and net sales declined, mirroring the domestic industry's overall poor and deteriorating financial performance.

The domestic interested parties noted in their response to the Commission's notice of institution in the first review that despite a decline in the level of imports of RBAO from China since the antidumping duty order went into effect, "the domestic industry continues to be vulnerable to unfairly traded subject imports because the industry has not experienced significant recovery following the investigation. . ."[66] The data provided by domestic interested parties participating in the first review indicated that the domestic industry had experienced overall improvements in capacity, production, capacity utilization, and shipments in 2007 as compared with 2002. Despite a substantial increase in unit value of shipments from 2002 to 2007, the industry also reported aggregate losses of $125,000 during 2007. ***.[67]

The domestic interested parties noted in their response to the Commission's notice of institution in the second review that the RBAO industry continues to benefit from the antidumping duty order. Its operating profit margin of *** percent represents an improvement over the original period of investigation. However, the domestic interested parties indicated that "such low operating profit margins and total operating profits (just $*** in 2013) cannot justify continued investment, when compared with other alternatives, and particularly if risks were increased by revocation of the order."[68] The data provided by domestic interested parties participating in the second review indicate that the domestic industry experienced declines in capacity, production, capacity utilization, and U.S. shipments in 2013 as compared with 2007. However, exports increased and there was a substantial increase in values and unit values of total shipments in 2013 as compared with 2007. The industry also reported a before tax gain of ***. ***.[69]

Related party issues

Each of the five U.S. producers of RBAO imported the subject merchandise from China during all or part of the period examined in the original investigation. U.S. producers Great

[65] The Commission also noted that "we discount the significance of interim 2003 data due to the pendency of this investigation at that time." *Refined Brown Aluminum Oxide From China: Investigation No. 731-TA-1022 (Final),* USITC Publication 3643, November 2003, p. 17.

[66] *Response* of domestic interested parties, November 20, 2008, p. 7 (as cited in the Commission's first review staff report USITC Publication 4063).

[67] *Response* of domestic interested parties, November 20, 2008, p. 7 (as cited in the Commission's first review staff report USITC Publication 4063).

[68] *Response* of domestic interested parties, March 5, 2014, pp. 6-7.

[69] *Response* of domestic interested parties, March 5, 2014, exhibit 1.

Lakes and C-E Minerals were ***, accounting for *** percent and *** percent, respectively, of reported imports from China from 2000 to June 2003. Great Lakes imported *** and its shipments of imports of RBAO from China were equivalent to *** percent of its U.S.-produced commercial shipments. On the other hand, C-E Minerals ceased importation of the subject merchandise in 2002 when it began its U.S. production operations. Petitioner Washington Mills accounted for *** percent of total reported imports of RBAO from China during 2002 and domestic producer Detroit Abrasives reported a minor amount (i.e., *** tons) of imports of subject merchandise only during 2002. Petitioner Treibacher Schleifmittel, whose subject imports accounted for *** percent of total reported imports of RBAO from China during 2002, reported during the original investigation that it was affiliated with Treibacher Schleifmittel Guizhou Co., Ltd., a Chinese producer of RBAO, and C-E Minerals, a sister company with 100 percent common ownership.[70]

As indicated earlier, the Commission found in the final phase of the original investigation that appropriate circumstances existed to exclude domestic producer Great Lakes Minerals from the domestic industry as a related party. The Commission further determined that Great Lakes Minerals "***."[71]

The domestic interested parties participating in the first review reported in their response to the Commission's notice of institution that C-E Minerals and Imerys/Treibacher Schleifmittel are both related to a producer of subject merchandise in China (Treibacher Schleifmittel Guizhou Co., Ltd.); however, they reported that the related foreign producer did not export the subject merchandise to the United States.[72] The Chinese integrated producer of RBAO (with fusion and processing capabilities) is 90 percent-owned by Treibacher Schleifmittel. The Chinese producer procures Chinese bauxite and mainly manufactures RBAO for Asian markets, although it supplies crude brown fused alumina to Treibacher Schleifmittel in the United States for further processing into RBAO.[73] [74] The domestic interested parties further indicated in their response to the Commission's notice of institution in the first review that none of the domestic producers imported the subject merchandise from China since the original investigation and no other related parties were otherwise identified.

The domestic interested parties participating in this current second five-year review reported that C-E Minerals, Imerys Fused Minerals Niagara Falls, Inc., and Imerys Fused

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[70] *Staff Report on Refined Brown Aluminum Oxide from China, Investigation No. 731-TA-1022 (Final)*, October 9, 2003 (INV-AA-154), pp. III-3 - III-4, III-6, and IV-1.

[71] *Confidential Views of the Commission*, Refined Brown Aluminum Oxide from China, Investigation No. 731-TA-1022 (Final), pp. 15-16.

[72] *Response* of domestic interested parties, November 20, 2008, p. 12 (as cited in the Commission's first review staff report USITC Publication 4063); *Response* of domestic interested parties, March 5, 2014, pp. 14.

[73] "World BFA Production Summary (Ex-China)," *Industrial Minerals*, May 2005, p. 47, and Crossley, Penny, "Abrasive Bauxite: Giving Proppants the Nod," *Industrial Minerals*, July 2002 (as cited in the Commission's first review staff report USITC Publication 4063).

[74] This information is reported in the Commission's first review staff report and current information on the Chinese producer is not publicly available.

Minerals China are all subsidiaries of Imerys, a French public limited liability company. ***. No other related parties were identified by the domestic interested parties in their response.[75]

U.S. IMPORTS AND APPARENT U.S. CONSUMPTION

U.S. imports

During the original investigation, 14 firms believed to have accounted for virtually all imports of subject merchandise from China provided requested trade data to the Commission. As noted earlier, each of the five U.S. producers of RBAO imported the subject merchandise from China during all or part of the period examined in the original investigation. Subject imports made by domestic producers Great Lakes and C-E Minerals (***) accounted for *** percent of reported imports from China during January 2000-June 2003. Domestic producers Washington Mills and Treibacher accounted for *** percent and *** percent, respectively, of total reported imports from China in 2002. Aside from the domestic producers, nine other firms reported imports of subject merchandise, three of whom were parties to the original investigation (Allied of Columbus, OH; Cometals of Fort Lee, NJ; and Saint-Gobain of Worcester, MA). Other companies providing import data were ***, Dauber Co., ***, and Golden Dynamic.[76]

In their response to the Commission's notice of institution in the first review, the domestic interested parties listed the following seven companies that they believed to have been importers of subject merchandise from China: Allied Mineral Products, Inc.; Cometals, a division of Commercial Metals Co.; Dauber Co., Inc.; Fujimi Corp.; Golden Dynamic, Inc.; Saint-Gobain Corp.; and 3M Corp.[77] They also noted that the domestic producers were not importers of the subject merchandise following the Commission's original investigation.[78]

In their response to the Commission's notice of institution in this second five-year review, the domestic interested parties noted that although they do not know all of the importers of RBAO from China, the companies identified as importers in the first sunset review may continue to import.[79] The Commission also received a response from American Abrasive Products, Inc. ("American Abrasive"), a small business that imports and distributes different types of abrasives for industrial and manufacturing use. American Abrasive noted that the antidumping duty order only applies to RBAO in the grit size of 3/8 inches or less and that the petitioners specifically used a definition from which they were exempt. American Abrasive contends that domestic manufacturers are only required to import BAO within the specified grit size for 50 percent or more of each shipment. Grit sizes below 3/8 inches can then be mixed together before being separated out during the sieving process. There are several grit sizes that

[75] *Response* of domestic interested parties, March 5, 2014, p. 14.

[76] *Staff Report on Refined Brown Aluminum Oxide from China, Investigation No. 731-TA-1022 (Final)*, October 9, 2003 (INV-AA-154), pp. IV-1 - IV-2.

[77] *Response* of domestic interested parties, November 20, 2008, exh. V (as cited in the Commission's first review staff report USITC Publication 4063).

[78] Ibid., p. 12.

[79] *Response* of domestic interested parties, March 5, 2014, p. 14.

are exempt from the antidumping order based on the end-use product.[80] According to American Abrasive, the antidumping order should be "either imposed all imports of the product, regardless of grit size, or the distinction of the AD being applied to only shipments containing 50 percent or more of BAO that is 3/8ths of an inch of less should be removed."[81] RBAO import data for annual periods 2002 (original investigation), 2007 (first review), and 2008-2013 (second review) are presented in table I-5.[82] After the imposition of the antidumping duty order, subject imports from China fell from 57,172 short tons in 2002 to 2,922 short tons in 2007. Subject imports from China fluctuated from 2007 to 2013, decreasing to 1,160 short tons in 2008, 1,035 short tons in 2009, 1,199 short tons in 2010, 1,019 short tons in 2011, 1,708 short tons in 2012, and 1,373 short tons in 2013. Unit values of subject imports increased overall subsequent to the order, from $257 per short ton in 2002 to $475 per short ton in 2007 and $1,297 per short ton in 2013.

The domestic interested parties indicated in their response to the Commission's notice of institution in the first review that the antidumping duty order under review has "kept injurious RBAO imports at extremely low levels."[83] Domestic interested parties indicated in their response to the Commission's notice of institution in the second review that "there is now more evidence than was available in 2008 that the U.S. industry is vulnerable to further imports. This is because demand for RBAO and U.S. production plunged in 2009 and have a long way to go before they could be said to be fully recovered…This low level of production, profitability, production, and efficiency is likely to persist for quite some time."[84]

During the period examined in the final phase of the original investigation, U.S. imports of RBAO were primarily from China, which by 2002 accounted for 85.5 percent of total imports. By 2005, China accounted for only 6.5 percent of total U.S. imports of RBAO; however, the share of total U.S. RBAO imports held by the subject imports has since increased to 22.5 percent in 2007 but decreased to 6.3 percent by 2013.

[80] *Response* of American Abrasive Products, Inc., January 16, 2014, p. 1-2.

[81] *Response* of American Abrasive Products, Inc., January 16, 2014, p. 6.

[82] The data for 2002 are from responses to Commission questionnaires in the original investigation for China and from official import statistics for Brazil and Canada for "other" sources entered under HTS statistical reporting number 2818.10.2000. The Commission's staff report in the final phase of the original investigation indicated that the official U.S. import statistics for countries other than Brazil, Canada, and China were predominately, if not totally, nonsubject white and pink refined product. The data for 2007-2013 are from official import statistic for imports entered under HTS statistical reporting number 2818.10.2090.

[83] *Response* of domestic interested parties, November 20, 2008, p. 7 This is because demand for RBAO

[84] *Response* of domestic interested parties, March, 5, 2014, pp. 7-8.

Table I-5
RBAO: U.S. imports, by source, 2002, 2007, and 2008-2013[1]

Source	2002	2007	2008	2009	2010	2011	2012	2013
				Quantity *(short tons)*				
China	57,172	2,922	1,160	1,035	1,199	1,019	1,708	1,373
Nonsubject countries: Austria	(2)	4,184	3,981	2,830	4,994	6,009	5,208	5,735
Brazil	5,122	169	1,495	998	729	1,122	2,293	5,211
Canada	4,551	38	47	-	0.15	54	7,910	7,789
France	(2)	1,160	1,075	183	649	825	340	428
Germany	(2)	878	1,872	554	1,105	660	711	1,017
Italy	(2)	2,003	355	270	134	195	261	93
Other[3]	(2)	1,629	1,354	658	1,580	1,436	1,545	1,387
Total, nonsubject countries	9,673[2]	10,061	10,180	5,493	9,190	10,302	18,234	21,661
Total, all countries	66,844	12,983	11,340	6,528	10,389	11,321	19,942	23,034
				Value *($1,000)*				
China	14,664	1,387	937	901	1,222	803	1,411	1,781
Nonsubject countries: Austria	(2)	7,850	6,934	5,352	10,242	11,775	10,555	12,356
Brazil	3,291	191	1,443	606	413	677	1,365	3,159
Canada	2,472	55	23	-	3	97	7,717	7,860
France	(2)	2,072	2,190	386	1,120	1,856	656	857
Germany	(2)	2,334	2,778	883	1,555	1,192	1,130	1,689
Italy	(2)	1,379	409	357	308	289	377	127
Other[3]	(2)	3,150	2,654	1,398	2,709	2,960	2,873	2,857
Subtotal, nonsubject countries	5,763[2]	17,031	16,431	8,982	16,350	18,846	24,673	28,905
Total, all countries	20,428	18,418	17,368	9,883	17,571	19,648	26,085	30,686

Footnotes continued on the following page.

Table I-5—*Continued*
RBAO: U.S. imports, by source, 2002, 2007, and 2008-2013[1]

Source	2002	2007	2008	2009	2010	2011	2012	2013
Unit value *(per short ton)*								
China	257	475	808	871	1,019	788	826	1,297
Nonsubject countries: Austria	(2)	1,876	1,742	1,891	2,051	1,960	2,027	2,154
Brazil	643	1,134	965	607	567	603	595	606
Canada	543	1,455	489	-	20,000	1,796	976	1,009
France	(2)	1,786	2,037	2,109	1,726	2,250	1,929	2,002
Germany	(2)	2,658	1,484	1,594	1,407	1,806	1,589	1,661
Italy	(2)	688	1,152	1,322	2,299	1,482	1,444	1,366
Other[3]	(2)	1,934	1,960	2,125	1,715	2,061	1,860	2,060
Average, nonsubject countries	596[2]	1,693	1,614	1,635	1,779	1,829	1,353	1,334
Average, all countries	306	1,419	1,532	1,514	1,691	1,736	1,308	1,332
Share of quantity *(percent)*								
China	85.5	22.5	10.2	15.9	11.5	9.0	8.6	6.0
Nonsubject countries: Austria	(2)	32.2	35.1	43.4	48.1	53.1	26.1	24.9
Brazil	7.7	1.3	13.2	15.3	7.0	9.9	11.5	22.6
Canada	6.8	0.3	0.4	-	0.0	0.5	39.7	33.8
France	(2)	8.9	9.5	2.8	6.2	7.3	1.7	1.9
Germany	(2)	6.8	16.5	8.5	10.6	5.8	3.6	4.4
Italy	(2)	15.4	3.1	4.1	1.3	1.7	1.3	0.4
Other[3]	(2)	12.6	11.9	10.1	15.2	12.7	7.7	6.0
Subtotal, nonsubject countries	14.5[2]	77.5	89.8	84.1	88.5	91.0	91.4	94.0
Total, all countries	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Footnotes continued on the following page.

[1] Data presented for 2002 are based on data from importer questionnaire responses received in the Commission's original investigation (China) and from official U.S. import statistics ("other" source). Data presented for 2007-13 are based on official U.S. import statistics. Prior to 2005, the subject merchandise was classified under a statistical reporting number that included all refined aluminum oxide (i.e., subject brown aluminum oxide, as well as nonsubject white, pink, and ruby refined aluminum oxide). Beginning in 2005, the HTS segregated white, pink, and ruby aluminum oxide from the brown product subject to the order. The white, pink, and ruby product is currently classified under HTS statistical reporting number 2818.10.2010 ("white, pink or ruby, containing more than 97.5 percent by weight of aluminum oxide") and the subject merchandise is currently classified under HTS statistical report number 2818.10.2090 ("other").

[2] Not applicable. The Commission's staff report in the original investigation indicates that data presented for "other" imports were for Brazil and Canada only. It explained that U.S. imports from countries other than Canada and possibly Brazil were believed to be predominantly, if not totally, nonsubject white and pink refined aluminum oxide. It added that the official import statistics presented are overstated to the extent that white and pink product (in particular from Brazil) are included.

[3] The largest "other" sources and their respective share of the total quantity of imported RBAO during 2007 include the following: Slovenia (4.5 percent), United Kingdom (3.1 percent), Japan (1.8 percent), and Mexico (1.5 percent). The largest "other" sources and their respective share of the total quantity of RBAO during 2013 include the following: Japan (3.2 percent), Slovenia (1.6 percent), Mexico (1.0 percent), and Czech Republic (0.3 percent).

Source: Compiled from official statistics of the U.S. Department of Commerce. Official import statistics reported through December 2013 reflect revisions available as of July 2014.

Leading nonsubject sources of imports

During the period for which data were collected, imports of RBAO entered the United States from a variety of sources (table I-5). During the first review, Austria, France, Germany, and Italy were the largest nonsubject sources of imports, together accounting for almost two-thirds of total U.S. imports during 2007. The single largest nonsubject source of RBAO during 2005-07 was Austria, which accounted for almost one-third of total U.S. imports of RBAO during 2007. Other relatively large nonsubject sources and their respective shares of the total quantity of imported RBAO during 2007 included the following: Italy (15.4 percent), France (8.9 percent), and Germany (6.8 percent).

During the second review, Austria, Brazil, and Canada were the largest nonsubject sources of imports, together accounting for over three-quarters of total U.S. imports during 2013. The single largest nonsubject source of RBAO during 2008-13 was Austria, which accounted for almost one-quarter of total U.S. imports of RBAO during 2013. Other relatively large nonsubject sources and their respective shares of the total quantity of imported RBAO during 2013 include the following: Canada (33.8 percent), Brazil (22.6 percent), and Germany (4.4 percent).

During 2002, the total quantity of imports of RBAO from all nonsubject sources was 9,673 short tons. The total quantity of imports of RBAO from all nonsubject sources was about 4 percent higher at 10,061 short tons in 2007. The average unit value of all nonsubject imports rose from $596 per short ton in 2002 to $1,693 per short ton in 2007. The unit values of U.S.

imports from nonsubject countries were consistently higher than the average unit values of subject imports from China.

Following the first five-year review, the total quantity of imports of RBAO from all nonsubject sources increased by 113 percent from 10,180 short tons in 2008 to 21,660 short tons in 2013. The average unit value of all nonsubject imports increased from $1,614 per short ton in 2008 to $1,829 per short ton in 2011, but fell to $1,334 per short ton in 2013. The unit values of U.S. imports from nonsubject countries were consistently higher than the average unit values of subject imports from China.

Ratio of imports to U.S. production

Information concerning the ratio of U.S. imports to U.S. production of RBAO is presented in table I-6. Subject imports of RBAO from China amounted to 55.7 percent of U.S. production during 2000, increased to 71.0 percent during 2001, but fell markedly after that point. Subject imports of RBAO from China were equivalent to only 1.8 percent of U.S. production during 2007 and 1.2 percent 2013. The ratio of nonsubject imports to domestic production fell during the period examined in the final phase of the Commission's original investigation. Nonsubject imports amounted to 6.3 percent of U.S. production during 2007 and only 1.9 percent in 2013.

Table 1-6
RBAO: Ratio of U.S. imports to U.S. production, by sources, 2000-2002, 2007, and 2013[1]

Item	2000	2001	2002	2007	2013
			Quantity *(short tons)*		
U.S. production	123,918	113,396	110,074	159,337	114,675
			Ratio of U.S. imports to production *(percent)*		
China	55.7	71.0	51.9	1.8	1.2
Other	42.2	25.2	8.8	6.3	1.9
Total imports	97.8	96.3	60.7	8.1	20.1

[1] Production data presented for 2000-02 were provided by five producers believed to have represented 100 percent of the U.S. production of RBAO during 2002. For comparison purposes, the domestic industry data presented include the data provided by Great Lakes Minerals, which was excluded by the Commission from the domestic industry as a related party in its original determination. Data presented for 2007 were provided by four producers believed to have represented *** percent of U.S. production of RBAO during 2002 and *** percent during 2007. Data presented for 2013 include data from *** producers, representing *** percent of production during 2013.

Source: Staff Report on Refined Brown Aluminum Oxide from China, Investigation No. 731-TA-1022 (Final), October 9, 2003 (INV-AA-154), tables III-1 and IV-1 (2000-02); official Commerce statistics, HTS statistical reporting number 2818.10.2090 (for 2007 U.S. import data); *Response* of domestic interested parties, November 20, 2008, exh. VII (for 2007 production data) (as cited in the Commission's first review staff report USITC Publication 4063) , and *Response* of domestic interested parties, March 5, 2014, exh. I (for 2013 production data).

Apparent U.S. consumption and market shares

Domestic demand for RBAO is ultimately derived from demand for end uses in which it is employed. The two main end-use applications for RBAO are for production of items used in the abrasives and refractories markets.[85] The domestic abrasives and refractories markets are strongly linked to activity in the U.S. manufacturing sector, especially manufacturing output in the aerospace, automotive, furniture, construction, and steel industries. However, because of improvements in technology in many industries in the U.S. manufacturing sector, growth in these industries may not necessarily lead to an increase in consumption of RBAO (e.g., improved material surface quality that requires less grinding and finishing operations that use abrasives).[86] The U.S. Geological Survey estimated the quantity of apparent U.S. consumption of all forms of fused aluminum oxide, including RBAO, to be 253,532 short tons in 2007 and 156,528 short tons in 2012. The estimated value of apparent U.S. consumption of all forms of fused aluminum oxide was $35 million in 2002. The value of apparent U.S consumption for 2005 to 2012 are presented in the following tabulation.[87]

Year	Apparent U.S. consumption (*in million dollars*)
2005	64.4
2006	11.7
2007	74.5
2008	121.0
2009	21.8
2010	72.5
2011	105.0
2012	79.5

Apparent U.S. consumption and market shares of RBAO for 2000-02, 2007, and 2013 are presented in table I-7. During the period examined in the final phase of the original investigation, apparent U.S. consumption of RBAO fell. Calculated apparent U.S. consumption for 2007 was modestly higher than the level reported in 2002 and apparent U.S. consumption for 2013 was lower than the level reported in 2007. The domestic interested parties indicated in their response to the Commission's notice of institution in the first review that demand "increased slowly" from 2003 to 2007 before declining in 2008.

[85] *Refined Brown Aluminum Oxide From China: Investigation No. 731-TA-1022 (Final),* USITC Publication 3643, November 2003, p. II-1.

[86] Olson, Donald W., Abrasives, Manufactured, U.S. Geological Survey, 2007-12 Minerals Yearbooks.

[87] Olson, Donald W., Abrasives, Manufactured, U.S. Geological Survey, 2002-12 Minerals Yearbooks.

Table 1-7
RBAO: U.S. producers' U.S. shipments, U.S. shipments of imports, and apparent U.S. consumption, 2000-02, 2007, and 2013

Item	2000	2001	2002	2007	2013
			Quantity *(short tons)*		
U.S. producers' U.S. shipments[1]	***	***	***	154,103	111,611
U.S. imports from—					
China	66,046	71,461	68,864	2,922	1,373
Other sources[2]	52,247	28,632	9,673	10,061	21,661
Total import shipments	118,293	100,093	78,536	12,983	23,034
Apparent U.S. consumption	***	***	***	167,086	134,645
			Value (1,000 dollars)		
U.S. producers' U.S. shipments[1]	***	***	***	86,969	99,971
U.S. shipments of imports from—					
China	21,796	22,456	22,057	1,387	1,781
Other sources[2]	20,465	11,399	5,763	17,031	28,905
Total import shipments	42,262	33,855	27,820	18,418	30,686
Apparent U.S. consumption	***	***	***	105,387	130,657
			Share of consumption based on quantity *(percent)*		
U.S. producers' U.S. shipments[1]	***	***	***	92.2	82.9
U.S. shipments of imports from—					
China	***	***	***	1.7	1.0
Other sources[2]	***	***	***	6.0	16.1
Total import shipments	***	***	***	7.8	17.1
Apparent U.S. consumption	100.0	100.0	100.0	100.0	100.0
			Share of consumption based on value *(percent)*		
U.S. producers' U.S. shipments[1]	***	***	***	82.5	76.5
U.S. shipments of imports from—					
China	***	***	***	1.3	1.4
Other sources[2]	***	***	***	16.2	22.1
Total import shipments	***	***	***	17.5	23.5
Apparent U.S. consumption	100.0	100.0	100.0	100.0	100.0

[1] The Commission's staff report in the final phase of the original investigation indicated that to avoid double-counting, it excluded the U.S. producers' shipments of Great Lakes.

Source: Staff Report on Refined Brown Aluminum Oxide from China, Investigation No. 731-TA-1022 (Final), October 9, 2003 (INV-AA-154), table IV-3; *Response* of domestic interested parties, November 20, 2008, exh. VII (as cited in the Commission's first review staff report USITC Publication 4063); *Response* of domestic interested parties, March 5, 2014, exh. 1; and official Commerce statistics, HTS statistical reporting number 2818.10.2090.

They explained that demand was strong for the larger refractory grades of RBAO used in the steel industry but that demand for RBAO in the general industrial abrasives and the bonded

They explained that demand was strong for the larger refractory grades of RBAO used in the steel industry but that demand for RBAO in the general industrial abrasives and the bonded coated segments weakened based primarily on the downturn in domestic auto production.[88] In their response to the Commission's notice of institution in the second review, the domestic interested parties noted that "{o}ne forecaster predicts that the overall market for abrasives will increase by about 4 percent per year, as demand for durable goods such as motor vehicles continue to improve, and demand for refractories will grow about 3.3 percent per year, pacing growth in steel, other metals, and ceramics industries."[89]

The domestic producers' market share based on quantity fell from *** percent in 2000 to *** percent in 2001, but increased to *** percent in 2002. The subject imports from China gained market share from *** percent in 2000 to *** percent in 2002. The domestic RBAO industry held an estimated 92.2 percent of apparent U.S. consumption on the basis of quantity in 2007 and 82.9 percent in 2013, and an estimated 82.5 percent on the basis of value in 2007 and 76.5 percent in 2013. On the other hand, China held a 1.7-percent share of the U.S. market in 2007 on the basis of quantity and 1.0 percent in 2013, and other sources held a 6.0-percent share in 2007 on the basis of quantity and a 16.1-percent share in 2013.

[88] *Response* of domestic interested parties, November 20, 2008, p. 7 (as cited in the Commission's first review staff report USITC Publication 4063).

[89] *Response* of domestic interested parties, March 5, 2014, p. 8.

ANTIDUMPING ACTIONS OUTSIDE THE UNITED STATES

In October 1997, an antidumping duty order on all types of fused alumina from China (95 percent of which was brown fused alumina, including RBAO) was put in place by the European Union ("EU"). The duty imposed was a flat rate of 240 Euros per metric ton. The EU order, which was viewed by Treibacher Schleifmittel as somewhat ineffective, expired in October 2002. No other antidumping actions concerning RBAO outside the United States were identified in the domestic interested parties' response to the Commission's notice of institution in this review nor were any other actions identified in public searches for information.[90]

THE WORLD MARKET

Global Trade Atlas import and export data show that during 2008-13, China, Ukraine, and Hungary were the largest net exporters of items covered by HTS subheading 2818.10 (all forms and grades of fused aluminum oxide). Japan, South Korea, Germany, and Austria were the largest net importers, based on quantity, of the items under that subheading. *Global Trade Atlas* data concerning the net trade balance reported for the United States, China, and other selected nonsubject countries are presented in table I-8. These data show that China consistently held the largest net export trade balance during every annual period from 2008-13, reaching a level more than twenty times the size of the net export trade balance held by the second largest country, Hungary.

[90] *Staff Report on Refined Brown Aluminum Oxide from China, Investigation No. 731-TA-1022 (Final)*, October 9, 2003 (INV-AA-154), p. VII-5; "BFA Anti-Dumping Measure Expires," *Industrial Minerals*, November 2002, p. 10, and Kendall, Tom, "Fused Alumina: Grinding Out a Living," *Industrial Minerals*, October 2005.

Table I-8
Aluminum oxide: China and selected nonsubject country exports, imports, and trade balances, 2008-13[1]

Item	2008	2009	2010	2011	2012	2013
			Quantity (*short tons*)			
China:						
Exports	904,000	347,000	870,000	900,000	812,000	786,000
Imports	72,000	46,000	67,000	63,000	58,000	52,000
Trade Balance	832,000	301,000	803,000	837,000	754,000	734,000
United States:						
Exports	25,000	14,000	23,000	23,000	23,000	29,000
Imports	45,000	29,000	49,000	51,000	77,000	97,000
Trade Balance	(20,000)	(15,000)	(26,000)	(28,000)	(55,000)	(68,000)
Austria:						
Exports	0	0	0	0	4,000	6,000
Imports	75,000	47,000	80,000	77,000	69,000	65,000
Trade Balance	(75,000)	(47,000)	(80,000)	(77,000)	(65,000)	(59,000)
Germany:						
Exports	65,000	35,000	56,000	60,000	49,000	50,000
Imports	156,000	68,000	120,000	149,000	118,000	129,000
Trade Balance	(91,000)	(32,000)	(64,000)	(89,000)	(69,000)	(79,000)
Hungary:						
Exports	40,000	24,000	36,000	43,000	45,000	45,000
Imports	1,000	1,000	1,000	1,000	2,000	2,000
Trade Balance	38,000	23,000	35,000	42,000	43,000	43,000
Japan:						
Exports	13,000	6,000	9,000	12,000	9,000	12,000
Imports	198,000	81,000	180,000	171,000	180,000	159,000
Trade Balance	(185,000)	(75,000)	(171,000)	(159,000)	(171,000)	(148,000)
South Korea:						
Exports	8,000	2,000	4,000	5,000	4,000	6,000
Imports	76,000	51,000	80,000	99,000	96,000	88,000
Trade Balance	(68,000)	(50,000)	(76,000)	(94,000)	(92,000)	(82,000)
Ukraine:						
Exports	43,000	24,000	38,000	35,000	34,000	35,000
Imports	1,000	1,000	2,000	2,000	2,000	2,000
Trade Balance	42,000	23,000	36,000	33,000	32,000	33,000

[1]Positive numbers presented for "trade balance" show net exports and numbers in parentheses presented for "trade balance" show net imports.

Source: Global Trade Atlas (HTS subheading 2818.10, which includes all grades (e.g., brown, white, pink, and red) of crude and refined aluminum oxide).

Production capacity

For each year during 2008-12, the U.S. Geological Survey estimated global production capacity for the products in HTS subheading 2818.10 (aluminum oxides) at 1,312,000 short tons with China accounting for 772,000 short tons, or 59 percent of the global total. Germany was the country with the second highest production capacity at 88,000 short tons, or seven percent of global production capacity for each year in that timeframe.[91]

THE SUBJECT INDUSTRY IN CHINA

In the original investigation, the Commission transmitted foreign producer questionnaires to 15 producers and six exporters of RBAO in China that were believed to have accounted for most of the subject merchandise exported to the United States at that time. Nine producers and four exporters responded to the Commission's request for information during the original investigation. These producers' exports of the subject merchandise to the United States accounted for 59.8 percent of the total U.S. imports of refined aluminum oxide (all grades) from China during 2002. According to information provided in the petition, China's level of production of brown aluminum oxide (refined and crude) in 2001 was estimated to be 550,000 to 600,000 short tons. According to Chinese customs figures, China exported nearly 490,000 short tons of fused alumina (85 to 90 percent is estimated to have been brown aluminum oxide (refined and crude)). In 2000, the United States (28.7 percent) was the top export market for Chinese exports, followed by Japan (27.0 percent), South Korea (7.7 percent), the Netherlands (4.5 percent) and South Africa (4.3 percent). Other export destinations included Canada, India, Italy, Taiwan and Thailand.[92]

The Commission did not receive any responses to the Commission's notice of institution in the first or second review from Chinese producers of the subject merchandise. However, the domestic interested parties' response to the Commission's notice of institution in the first review listed 11 known producers of RBAO in China that had exported the subject merchandise to the United States or other countries since 2002.[93] They pointed out that since the imposition of the antidumping duty order on RBAO, Chinese capacity to produce the subject merchandise has "skyrocketed" and argued that the domestic industry remains threatened by Chinese overcapacity and underselling.[94] They further pointed out that Chinese RBAO capacity was at

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[91] U.S. Geological Survey Mineral Commodity Summaries 2010, 2011, 2012, 2013, and 2014.

[92] *Staff Report on Refined Brown Aluminum Oxide from China, Investigation No. 731-TA-1022 (Final)*, October 9, 2003 (INV-AA-154), pp. VII-1 - VII-2.

[93] The 11 Chinese producers listed include the following firms: Bosai Minerals Group Co., Ltd.; Guizhou Dazhong No.7 Grind Co.; Hainan Meida Import and Export Co., Ltd.; Henan Mianchi Great Wall Corundum Co., Ltd.; Xiyang Mianchi; Henan Yilong High & New Materials. Co., Ltd.; Sanmenxia Mingzhu Electric Smelting Co., Ltd.; Shanxi Qinxin Group; Taiyuan Twin-Tower Aluminum Oxide, Inc.; Qingdao Shunxingli Abrasives Co., Ltd.; and Zibo Jinyu Abrasive Co. *Response* of domestic interested parties, November 20, 2008, exh. VI (as cited in the Commission's first review staff report USITC Publication 4063).

[94] *Response* of domestic interested parties, November 20, 2008, pp. 7 and 11 (as cited in the Commission's first review staff report USITC Publication 4063).

least 1.1 million tons in 2007, a level far greater than the U.S. industry's production capacity of approximately *** short tons in 2007.[95] They argued that "{w}hile demand from the Chinese steel industry for RBAO for refractories has certainly grown over the POR, that demand is now placating along with the worldwide steel industry decline, leaving the Chinese with a large amount of excess capacity."[96]

In their response to the Commission's notice of institution in this second five-year review, the domestic producers noted that China had the largest RBAO industry in the world at the time of the original investigation and that its capacity has grown significantly since that time. They reported that recent reports indicate that Chinese capacity likely is still expanding rapidly, even as demand is weak both at home in China and abroad. They noted that at least 200,000 metric tons of RBAO refining capacity was either added by Chinese firms in 2013 or is anticipated. The domestic producers provided a listing of more than 150 Chinese producers of brown fused alumina in their response. They indicated that these firms either themselves produce RBAO or would supply feedstock to RBAO producers.[97]

China has long been described as the leading global producer of brown fused alumina, the feedstock material used in the production of RBAO.[98] China's supply problems have resulted in increasing prices globally and the tightening of global supply for brown fused alumina and the RBAO from which it is made. In December 2007, *Industrial Minerals* reported that the Chinese fused alumina supply problems were primarily due to the following factors:

- increased Chinese domestic demand;
- tighter Chinese environmental controls that restrict the supply of alumina as plants are closed or operate less frequently;
- increased Chinese power costs and availability;
- efforts to divert scarce bauxite and power resources in china to other more strategic industries;
- increased cost of domestic Chinese transportation; and
- increased sea freight cost and scarcity of bulk ocean vessels.[99]

By 2008, because of the shortages of bauxite and electrical power in China, the publication reported that Chinese production of brown fused alumina was "well below peak levels, possibly as low as 50% capacity."[100] [101]

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[95] *Response* of domestic interested parties, November 20, 2008, p. 9 (as cited in the Commission's first review staff report USITC Publication 4063).

[96] *Response* of domestic interested parties, November 20, 2008, p. 9 (as cited in the Commission's first review staff report USITC Publication 4063).

[97] *Response* of domestic interested parties, March 5, 2014, pp. 9-11 and exh. 14.

[98] Backus, Rachel, "Uphill Struggle," *Industrial Minerals*, December 2007, pp. 32-38 (as cited in the Commission's first review staff report USITC Publication 4063).

[99] Backus, Rachel, "Uphill Struggle," *Industrial Minerals*, December 2007, pp. 32-38 (as cited in the Commission's first review staff report USITC Publication 4063).

[100] O'Driscoll, Mike, "Mineral Processing in Asia," *Industrial Minerals*, March 2008, pp. 77-81 (as cited in the Commission's first review staff report USITC Publication 4063).

RBAO operations

Table I-9 presents trade data for the Chinese RBAO industry compiled during the original investigation (2002-02) and U.S. imports from China for 2007 and 2013. As these data show, Chinese production increased throughout the period for which data were collected in the original investigation. Moreover, the Chinese producers also reported in their questionnaire responses in the original investigation that they forecasted production to increase further in 2003 and 2004 over the 2002 level. During the period examined in the original investigation, the Chinese producers operated their facilities at relatively low aggregate capacity utilization rates ranging from 69.3 to 75.2 percent.[102] [103]

[101] This information is reported in the Commission's first five-year review and no current information on this subject is publicly available.

[102] *Staff Report on Refined Brown Aluminum Oxide from China, Investigation No. 731-TA-1022 (Final)*, October 9, 2003 (INV-AA-154), table VII-1.

[103] There was no Chinese response to the notice of institution in this current second five-year review and no information on the Chinese RBAO industry is otherwise publicly available.

Table I-9
RBAO: China's capacity, production, and inventories, 2000-02,[1] 2007, and 2013

Item	2000	2001	2002	2007	2013
			Quantity (*short tons*)		
Capacity	155,809	193,879	219,027	([2])	([2])
Production	113,098	144,185	164,795	([2])	([2])
End-of-period inventories	23,476	17,910	20,134	([2])	([2])
Shipments:					
Internal consumption	2,493	5,257	4,654	([2])	([2])
Home market	64,310	88,940	94,279	([2])	([2])
Exports:					
United States	35,286	29,801	34,173	2,922[3]	1,373[3]
All other markets	91,941	123,830	124,807	([2])	([2])
Total exports	127,227	153,631	158,980	([2])	([2])
Total shipments	194,030	247,828	257,913	([2])	([2])
			Ratios and Shares (*percent*)		
Capacity utilization	72.6	74.4	75.2	([2])	([2])
Inventories to production	20.8	12.4	12.2	([2])	([2])
Inventories to total shipments	12.1	7.2	7.8	([2])	([2])
Share of total quantity of shipments:					
Internal consumption	1.3	2.1	1.8	([2])	([2])
Home market	33.1	35.9	36.6	([2])	([2])
Exports to:					
United States	18.2	12.0	13.2	([2])	([2])
All other markets	47.4	50.0	48.4	([2])	([2])
All export markets	65.6	62.0	61.6	([2])	([2])

[1] Data presented for 2000-02 were provided in the final phase of the original investigation by nine producers and four exporters in China. These producers' exports of the subject merchandise to the United States accounted for 59.8 percent of the total U.S. imports of refined aluminum oxide (all grades) from China during 2002.
[2] Not available.
[3] Official import statistics for HTS statistical reporting number 2818.10.2090 (more specific to refined brown aluminum oxide) is presented in lieu of export data because *Global Trade Atlas* Chinese export data are for HTS subheading 2818.10, which includes all forms (i.e., crude and refined) and all grades (e.g., brown, white, pink, and red) of fused aluminum oxide.

Source: Staff Report on Refined Brown Aluminum Oxide from China, Investigation No. 731-TA-1022 (Final), October 9, 2003 (INV-AA-154), table VII-1 (2000-02), and official Commerce statistics (HTS statistical reporting number 2818.10.2090 (2007 and 2013)).

Export profile

Global Trade Atlas statistics concerning exports of crude and refined fused alumina (HTS subheading 2818.10) from China for 2008-2013 are presented in table I-10. These data show that total exports of fused aluminum oxide from China to the world decreased by 13.2 percent from 904,514 short tons in 2008 to 785,564 short tons in 2013. The two largest export markets for Chinese fused aluminum oxide during 2008-13 were the United States and Japan, accounting for 14.2 percent and 18.0 percent of total exports of fused aluminum oxide made by China during 2013, respectively.

Table I-10
Fused aluminum oxide: China's export shipments, 2008-13

Item	2008	2009	2010	2011	2012	2013
			Quantity *(short tons)*			
Exports:						
United States	198,334	42,566	165,223	167,372	141,234	111,886
Japan	163,703	62,861	155,825	138,560	151,988	141,374
Netherlands	87,693	15,046	54,708	59,039	36,688	32,424
India	36,297	21,778	54,049	57,950	54,501	47,530
Korea	61,887	40,916	68,396	76,729	76,899	75,514
Italy	56,793	11,967	42,799	46,758	43,463	34,154
Russia	29,040	15,739	27,396	38,917	19,710	12,543
Taiwan	29,157	21,902	40,612	43,671	38,607	43,801
Thailand	31,135	18,744	36,725	33,447	33,403	35,926
All other[1]	210,474	95,490	223,972	237,353	216,005	250,411
World	904,514	347,009	869,706	899,797	812,497	785,564
			Value *($1,000)*[2]			
Exports:						
United States	94,987	22,144	79,146	89,904	80,567	64,354
Japan	103,393	38,765	98,567	98,661	106,804	99,676
Netherlands	47,479	8,165	30,303	32,237	21,588	23,657
India	18,976	7,083	27,828	35,439	34,265	29,697
Korea	37,239	20,301	39,947	50,558	50,995	53,642
Italy	33,072	6,159	22,993	27,488	27,238	20,777
Russia	13,888	6,302	14,710	26,238	13,992	9,683
Taiwan	15,135	10,942	22,249	26,279	23,438	26,637
Thailand	16,938	10,312	22,095	22,166	20,570	24,228
All other[1]	123,351	52,452	124,524	150,810	143,665	171,521
World	504,457	182,625	482,361	559,780	523,122	523,872

Table continued on the following page.

Table I-10—*Continued*
Fused aluminum oxide: China's export shipments, 2008-13

Item	2008	2009	2010	2011	2012	2013
			Unit value (*per short ton*)			
Exports:						
United States	$479	$520	$479	$537	$570	$575
Japan	632	617	633	712	703	705
Netherlands	541	543	554	546	588	730
India	523	325	515	612	629	625
Korea	602	496	584	659	663	710
Italy	582	515	537	588	627	608
Russia	478	400	537	674	710	772
Taiwan	519	500	548	602	607	608
Thailand	544	550	602	663	616	674
All other[1]	586	549	556	635	665	685
World	558	526	555	622	644	667
			Share of quantity (*percent*)			
Exports:						
United States	21.9	12.3	19.0	18.6	17.4	14.2
Japan	18.1	18.1	17.9	15.4	18.7	18.0
Netherlands	9.7	4.3	6.3	6.6	4.5	4.1
India	4.0	6.3	6.2	6.4	6.7	6.1
Korea	6.8	11.8	7.9	8.5	9.5	9.6
Italy	6.3	3.4	4.9	5.2	5.3	4.3
Russia	3.2	4.5	3.2	4.3	2.4	1.6
Taiwan	3.2	6.3	4.7	4.9	4.8	5.6
Thailand	3.4	5.4	4.2	3.7	4.1	4.6
All other[1]	23.3	27.5	25.8	26.4	26.6	31.9
World	100.0	100.0	100.0	100.0	100.0	100.0

[1] The "all other" category includes data for 82 export markets for the Chinese material. The largest of these other export markets for the Chinese product include Poland, Germany, Turkey, and Slovenia.
[2] F.o.b. port in China.

Source: Global Trade Atlas, (HTS subheading 2818.10, which includes all forms (i.e., crude and raw) and all grades (e.g., brown, white, pink, and red) of fused aluminum oxide.

APPENDIX A

FEDERAL REGISTER NOTICES

The Commission makes available notices relevant to its investigations and reviews on its website, www.usitc.gov. In addition, the following tabulation presents, in chronological order, *Federal Register* notices issued by the Commission and Commerce during the current proceeding.

Citation	Title	Link
79 FR 6225 February 3, 2014	*Refined Brown Aluminum Oxide from China; Institution of A Five-Year Review*	http://www.gpo.gov/fdsys/pkg/FR-2014-02-03/pdf/2014-01894.pdf
79 FR 6163 February 3, 2014	*Initiation of Five-Year ("Sunset") Review*	http://www.gpo.gov/fdsys/pkg/FR-2014-02-03/pdf/2014-02226.pdf
79 FR 26207 May 7, 2014	*Refined Brown Aluminum Oxide From the People's Republic of China: Final Results of Expedited Second Sunset Review of the Antidumping Duty Order*	http://www.gpo.gov/fdsys/pkg/FR-2014-05-07/pdf/2014-10516.pdf
79 FR 48248 August 15, 2014	*Refined Brown Aluminum Oxide From China; Scheduling of an Expedited Five-Year Review*	http://www.gpo.gov/fdsys/pkg/FR-2014-08-15/pdf/2014-19389.pdf

APPENDIX B

COMMISSION'S STATEMENT ON ADEQUACY

EXPLANATION OF COMMISSION DETERMINATION ON ADEQUACY

in

Refined Brown Aluminum Oxide from China
Inv. No. 731-TA-1022 (Second Review)

On May 9, 2014, the Commission unanimously determined to conduct an expedited review in the subject five-year review pursuant to section 751(c)(3)(B) of the Tariff Act of 1930, as amended, 19 U.S.C. §1675(c)(3)(B).

The Commission unanimously determined that the domestic interested party group response to the notice of institution was adequate. The Commission received adequate responses filed jointly by four U.S. producers of refined brown aluminum oxide: C-E Minerals, Inc.; Imerys Fused Minerals Niagara Falls, Inc.; U.S. Electrofused Minerals, Inc.; and Washington Mills Group, Inc. ***. Because the Commission received an adequate response from interested parties accounting for a substantial share of U.S. production of refined brown aluminum oxide, the Commission determined that the domestic interested party group response was adequate.

The Commission also unanimously determined that the respondent interested party group response was inadequate, as no respondent interested party filed a response to the notice of institution.

The Commission did not find any circumstances that would warrant conducting a full review. The Commission, therefore, decided to conduct an expedited review of this order.

A record of the Commissioners' votes is available from the Office of the Secretary and at the Commission's web site (www.usitc.gov).

APPENDIX C

TABLE C-2 FROM COMMISSION'S STAFF REPORT IN THE FINAL PHASE OF THE ORIGINAL INVESTIGATION

The Commission excluded Great Lakes Minerals from the domestic industry in the final phase of the original investigation. Therefore, the Commission relied on data presented in table C-2 of the staff report, which excludes all "domestic" data of Great Lakes Minerals, in making its determination. Since the original investigation, however, domestic producer Great Lakes Minerals has ceased importing the subject merchandise. ***. Table C-2 from the Commission's original staff report has been reproduced in this appendix.

Table C-2

RBAO: Summary data concerning the U.S. market (excluding all "domestic" data reported by Great Lakes), 2000-2002, January-June 2002 and January-June 2003

(Quantity=*short tons*; value=*1,000 dollars*, unit values, unit labor costs, and unit expenses are *per ton*; and period changes=*percent*, except where noted)

Item	Calendar year			January-June		Period changes			
	2000	2001	2002	2002	2003	2000-2002	2000-2001	2001-2002	Jan.June 2002-Jan.-June 2003
U.S. consumption quantity:									
Amount	***	***	***	***	***	***	***	***	***
Producers' share[1]	***	***	***	***	***	***	***	***	***
Importers' share:[1]									
China (Great Lakes)	***	***	***	***	***	***	***	***	***
China (all other)	***	***	***	***	***	***	***	***	***
China (total)	***	***	***	***	***	***	***	***	***
Other sources	***	***	***	***	***	***	***	***	***
Total	***	***	***	***	***	***	***	***	***
U.S. consumption value:									
Amount	***	***	***	***	***	***	***	***	***
Producers' share[1]	***	***	***	***	***	***	***	***	***
Importers' share:[1]									
China (Great Lakes)	***	***	***	***	***	***	***	***	***
China (all other)	***	***	***	***	***	***	***	***	***
China (total)	***	***	***	***	***	***	***	***	***
Other sources	***	***	***	***	***	***	***	***	***
Total	***	***	***	***	***	***	***	***	***
U.S. shipments of imports from--									
China (Great Lakes)									
Quantity	***	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***	***
Unit value	***	***	***	***	***	***	***	***	***
Ending inventory	***	***	***	***	***	***	***	***	***
China (all other)									
Quantity	***	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***	***
Unit value	***	***	***	***	***	***	***	***	***
Ending inventory	***	***	***	***	***	***	***	***	***
China (total)									
Quantity	66,046	71,461	68,864	40,391	28,262	4.3	8.2	-3.6	-30.0
Value	21,796	22,456	22,057	12,772	9,939	1.2	3.0	-1.8	-22.2
Unit value	$330.02	$314.24	$320.29	$316.22	$351.67	-2.9	-4.8	1.9	11.2
Ending inventory	29,858	38,487	29,983	24,151	17,605	0.4	28.9	-22.1	-27.1
Other sources:[2]									
Quantity	52,247	28,632	9,673	5,489	3,948	-81.5	-45.2	-66.2	-28.1
Value	20,465	11,399	5,763	3,227	2,654	-71.8	-44.3	-49.4	-17.8
Unit value	$391.70	$398.14	$595.83	$587.81	$672.16	52.1	1.6	49.7	14.3
Ending inventory	0	0	0	0	0	(3)	(3)	(3)	(3)
All sources:									
Quantity	118,293	100,093	78,536	45,880	32,210	-33.6	-15.4	-21.5	-29.8
Value	42,262	33,855	27,820	15,999	12,592	-34.2	-19.9	-17.8	-21.3
Unit value	$357.26	$338.24	$354.23	$348.71	$390.95	-0.8	-5.3	4.7	12.1
Ending inventory	29,858	38,487	29,983	24,151	17,605	0.4	28.9	-22.1	-27.1

Table continued on next page.

(Quantity=*short tons*; value=*1,000 dollars*, unit values, unit labor costs, and unit expenses are *per ton*; and period changes=*percent*, except where noted)

Item	Calendar year			January-June		Period changes			
	2000	2001	2002	2002	2003	2000-2002	2000-2001	2001-2002	Jan.June 2002-Jan.-June 2003
U.S. producers'--									
Capacity quantity	***	***	***	***	***	***	***	***	***
Production quantity	***	***	***	***	***	***	***	***	***
Capacity utilization[1]	***	***	***	***	***	***	***	***	***
U.S. shipments:									
Quantity	***	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***	***
Unit Value	***	***	***	***	***	***	***	***	***
Export shipments:									
Quantity	***	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***	***
Unit Value	***	***	***	***	***	***	***	***	***
Ending inventory quantity	***	***	***	***	***	***	***	***	***
Inventories/total shipments[1]	***	***	***	***	***	***	***	***	***
Production workers	***	***	***	***	***	***	***	***	***
Hours worked (*1,000 hours*)	***	***	***	***	***	***	***	***	***
Wages paid (*1,000 dollars*)	***	***	***	***	***	***	***	***	***
Hourly wages	***	***	***	***	***	***	***	***	***
Productivity (tons per *1,000 hours*)	***	***	***	***	***	***	***	***	***
Unit labor costs	***	***	***	***	***	***	***	***	***
Net sales:									
Quantity	***	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***	***
Unit value	***	***	***	***	***	***	***	***	***
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] "Reported data" are in percent and "period changes" are in percentage points.
[2] U.S. imports from other sources.
[3] Not applicable.
[4] Undefined.

Note.—Financial data are reported on a fiscal year bases and may not necessarily be comparable to data reported on a calendar year basis. Because of rounding, figures may not add to the totals shown. Unit values and shares are calculated from the unrounded figures.

Source: Compiled from data submitted in response to Commission producer and importer (China) questionnaires and official Commerce statistics.