Barium Carbonate From China

Investigation No. 731-TA-1020 (Final)

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George L. Deyman, Supervisory Investigator

Address all communications to
Secretary to the Commission
United States International Trade Commission
Washington, DC 20436
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Note.—Information that would reveal confidential operations of individual concerns may not be published and therefore has been deleted from this report.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-1020 (Final)

BARIUM CARBONATE FROM CHINA

DETERMINATION

On the basis of the record\(^1\) developed in the subject investigation, the United States International Trade Commission (Commission) determines, pursuant to section 735(b) of the Tariff Act of 1930 (19 U.S.C. § 1673d(b)) (the Act), that an industry in the United States is materially injured by reason of imports from China of barium carbonate, provided for in subheading 2836.60.00 of the Harmonized Tariff Schedule of the United States, that have been found by the Department of Commerce (Commerce) to be sold in the United States at less than fair value (LTFV).

BACKGROUND

The Commission instituted this investigation effective September 30, 2002, following receipt of a petition filed with the Commission and Commerce by Chemical Products Corporation, Cartersville, GA. The final phase of the investigation was scheduled by the Commission following notification of a preliminary determination by Commerce that imports of barium carbonate from China were being sold at LTFV within the meaning of section 733(b) of the Act (19 U.S.C. § 1673b(b)). Notice of the scheduling of the final phase of the Commission’s investigation and of a public hearing to be held in connection therewith was given by posting copies of the notice in the Office of the Secretary, U.S. International Trade Commission, Washington, DC, and by publishing the notice in the Federal Register of April 16, 2003 (68 FR 18670). The hearing was held in Washington, DC, on July 31, 2003, and all persons who requested the opportunity were permitted to appear in person or by counsel.

\(^1\) The record is defined in sec. 207.2(f) of the Commission’s Rules of Practice and Procedure (19 CFR § 207.2(f)).
VIEW OF THE COMMISSION

Based on the record in this investigation, we find that an industry in the United States is materially injured by reason of imports of barium carbonate from China that are sold in the United States at less than fair value ("LTFV").

Summary

Glass production, particularly television glass, accounts for the majority of the total consumption of barium carbonate in the United States; the other major use is brick and tile production. In 2002, low-priced subject imports from China substantially increased their market share, particularly through sales to Techneglas, one of the few U.S. television glass producers. At the same time, nonsubject imports lost substantial market share. While the domestic industry also gained market share as nonsubject imports left the market, barium carbonate purchasers, particularly television glass *** and several specialty glass producers, were able to use the availability of low-priced subject imports to obtain significantly lower prices from the domestic industry. The industry’s financial performance deteriorated as it lowered prices rather than cede volume to subject imports, and as its costs rose. Most of the industry’s price concessions occurred beginning in 2002; the six-month financial data interim period, November 2002 to April 2003, shows the growing impact of falling prices, with the industry’s operating income declining to a ***.

The information collected since the preliminary phase of this investigation (i.e., a television glass producer switching its barium carbonate purchases *** to subject imports and additional evidence that barium carbonate purchasers have leveraged lower prices from the domestic industry by using low-priced subject import bids) demonstrates that the domestic industry is no longer just threatened by subject imports. Rather, the lower prices brought about by subject import competition have resulted in present material injury to the domestic industry, particularly as evidenced by the most recent financial data.

I. DOMESTIC LIKE PRODUCT

A. In General

In determining whether an industry in the United States is materially injured or threatened with material injury by reason of imports of the subject merchandise, the Commission first defines the "domestic like product" and the "industry." Section 771(4)(A) of the Tariff Act of 1930, as amended ("the Act"), defines the relevant domestic industry as the "producers as a whole of a domestic like product, or those producers whose collective output of a domestic like product constitutes a major proportion of the total domestic production of the product." In turn, the Act defines "domestic like product" as "a product which is like, or in the absence of like, most similar in characteristics and uses with, the article subject to an investigation . . . ."

The decision regarding the appropriate domestic like product(s) in an investigation is a factual determination, and the Commission has applied the statutory standard of "like" or "most similar in

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1 Commissioner Charlotte R. Lane did not participate in this investigation or determination.
characteristics and uses” on a case-by-case basis.⁵ No single factor is dispositive, and the Commission may consider other factors it deems relevant based on the facts of a particular investigation.⁶ The Commission looks for clear dividing lines among possible like products and disregards minor variations.⁷ Although the Commission must accept the determination of the Department of Commerce (“Commerce”) as to the scope of the imported merchandise that has been found to be subsidized or sold at LTFV, the Commission determines what domestic product is like the imported articles Commerce has identified.⁸

B. Product Description

Commerce defined the imported merchandise within the scope of this investigation as barium carbonate, regardless of form or grade.⁹ Barium carbonate is a heavy, odorless, white-to-cream colored chemical with the chemical formula BaCO₃. It is found naturally in the mineral wetherite, although most barium carbonate sold commercially is produced synthetically.¹⁰ Both powdered and granular forms of barium carbonate, which typically contain at least 98 percent barium carbonate, have essentially the same chemical composition and similar physical properties but differ principally in their particle size. Whereas the granular form of barium carbonate is more free-flowing than the powdered product owing to its larger particle size,¹¹ the powdered form of barium carbonate has a tendency to clump but has greater reactivity and dispersability.¹² Petitioner Chemical Products Corporation (CPC), the predominant domestic producer, produces a spray-dried grade

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⁵ See, e.g., NEC Corp. v. Department of Commerce, 36 F. Supp. 2d 380, 383 (Ct. Int'l Trade 1998); Nippon Steel Corp. v. United States, 19 CIT 450, 453 (1995); Torrington Co. v. United States, 747 F. Supp. 744, 749 n.3 (Ct. Int'l Trade 1990), aff'd, 938 F.2d 1278 (Fed. Cir. 1991) (“every like product determination ‘must be made on the particular record at issue’ and the ‘unique facts of each case’”). The Commission generally considers a number of factors including: (1) physical characteristics and uses; (2) interchangeability; (3) channels of distribution; (4) customer and producer perceptions of the products; (5) common manufacturing facilities, production processes and production employees; and, where appropriate, (6) price. See Nippon, 19 CIT at 455 n.4; Timken Co. v. United States, 913 F. Supp. 580, 584 (Ct. Int'l Trade 1996).


⁷ Nippon Steel, 19 CIT at 455; Torrington, 747 F. Supp. at 748-49. See also S. Rep. No. 96-249 at 90-91 (1979) (Congress has indicated that the like product standard should not be interpreted in “such a narrow fashion as to permit minor differences in physical characteristics or uses to lead to the conclusion that the product and article are not ‘like’ each other, nor should the definition of ‘like product’ be interpreted in such a fashion as to prevent consideration of an industry adversely affected by the imports under consideration.”).

⁸ Hosiden Corp. v. Advanced Display Mfrs., 85 F.3d 1561, 1568 (Fed. Cir. 1996) (Commission may find a single like product corresponding to several different classes or kinds defined by Commerce); Torrington, 747 F. Supp. at 748-752 (affirming Commission determination of six like products in investigations where Commerce found five classes or kinds).

⁹ 68 Fed. Reg. 46577 (Aug. 6, 2003). Commerce explained that the product under investigation is currently classifiable under subheading 2836.60.00 of the Harmonized Tariff Schedule of the United States (HTSUS), and that, although the HTSUS number is provided for convenience and customs purposes, the written description of the scope is dispositive. Id.

¹⁰ Confidential Staff Report (“CR”) at 1-5, Public Staff Report (“PR”) at 1-4.

¹¹ CR at 1-7, PR at 1-5.

¹² CR at 1-5, PR at 1-4.
of powdered barium carbonate, Micro-Flo™, which is distinguished from other powdered barium carbonate by its flow characteristics, which facilitate feeding into production lines.\textsuperscript{13} ***.\textsuperscript{14}

The two broad sectors in which barium carbonate is used are in the production of (1) television and other specialty glass (which accounted for approximately 79 percent of barium carbonate consumption in 2002) and (2) bricks and tiles (which accounted for approximately 16 percent of barium carbonate consumption in 2002).\textsuperscript{15} In the manufacture of television and specialty glass, barium carbonate serves as a flux and causes barium (in the form of barium oxide) to become part of the glass structure, imparting durability, density, brilliance, and x-ray absorption properties. The latter characteristic allows the glass to be used as an x-ray screening agent in television glass and other cathode ray tubes, the largest single application of barium carbonate.\textsuperscript{16} Only the granular form of barium carbonate is used in these applications due to the nature of the glass producers’ equipment, which requires a highly free-flowing material.\textsuperscript{17} Because of its high refractive index, barium carbonate also is used in production of reflective glass for road and runway signs, markers, and license plates. It is also used in laboratory glass and specialty glass bottles due to its formability properties.\textsuperscript{18}

In the manufacture of bricks, tiles and other clay products, barium carbonate prevents migration of soluble sulfates to the surface that would result in formation of white deposits known as scum.\textsuperscript{19} The powdered form of barium carbonate, which is more dispersable, is used in the manufacture of those products.\textsuperscript{20}

\textbf{C. Domestic Like Product}

In the preliminary determination in this investigation we found that there is no clear dividing line between the granular and powdered forms of the product and accordingly defined the domestic like product as all barium carbonate.\textsuperscript{21} No party has objected to that finding and the record does not indicate

\textsuperscript{13} CR at I-9, PR at I-6. CPC also produces a grade of barium carbonate called Aqua-Flo™, which is similar to Micro-Flo™ but designed for use in ***. \textit{Id.}
\textsuperscript{14} CR at I-7, PR at I-5. In the final phase of this investigation CPC indicated that ***.
\textsuperscript{15} CR & PR at Tables III-3, IV-3, and IV-4. Apart from these principal uses of barium carbonate, it also is used in making frit for glazing structural clay, porcelain, enamel, and iron cast welding product, and to create barium ferrite powder used to manufacture certain magnets. CR at I-8 - I-9, PR at I-5 - I-6. A small quantity of barium carbonate also is produced in a high-purity form used in the production of ***. CR at I-6, PR at I-4. The high-purity grade of the product is ***. \textit{Id.}
\textsuperscript{16} CR at I-6, PR at I-5.
\textsuperscript{17} CR at I-7, PR at I-5.
\textsuperscript{18} CR at I-8, PR at I-5.
\textsuperscript{19} \textit{Id.}
\textsuperscript{20} The powdered form of barium carbonate used in brick and tile manufacture divides further into the less processed powdered form and CPC’s spray-dried (Micro-Flo™) form. Brick and tile production facilities that are located a great distance from CPC’s facility in Cartersville, Georgia, notably those on the West Coast, tend not to use Micro-Flo™ due to high transportation costs. CR at I-9 to I-10, PR at I-6.
\textsuperscript{21} \textit{Barium Carbonate From China}, Inv. No. 731-TA-1020 (Preliminary), USITC Pub. 3561 at 4-7 (Nov. 2002).
a basis for reaching a different conclusion in this final phase investigation. Accordingly, we again define the domestic like product as all barium carbonate.

II. DOMESTIC INDUSTRY

The domestic industry is defined as "the producers as a [w]hole of a domestic like product ... ". In defining the domestic industry, the Commission's general practice has been to include in the industry all domestic production of the domestic like product, whether toll-produced, captive, or sold in the domestic merchant market. There were two domestic producers of barium carbonate during the period examined, CPC and Osram Sylvania, with CPC being by far the larger producer. Accordingly, we define the domestic industry as CPC and Osram, the only domestic producers of the domestic like product.

III. MATERIAL INJURY BY REASON OF LESS THAN FAIR VALUE IMPORTS

In the final phase of antidumping duty investigations, the Commission determines whether an industry in the United States is materially injured by reason of the imports under investigation. In making this determination, the Commission must consider the volume of imports, their effect on prices for the domestic like product, and their impact on domestic producers of the domestic like product, but only in the context of U.S. production operations. The statute defines "material injury" as "harm which

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22 In the preliminary phase of the investigation the petitioner indicated that it produced a powdered form of barium carbonate that was used in production of television glass. E.g., USITC Pub. 3561 at 6, n.20. The record in the final phase, however, indicates that only the granular form is used in television glass production. CR at I-7, n. 32, PR at I-5, n.32. **. We note that, while powdered barium carbonate is not used in television glass production, the powdered and granular forms of barium carbonate are interchangeable in production of other specialty glass products. CR at I-8, PR at I-5.


25 CR & PR at III-1. Osram produces **. It accounts for less than *** percent of domestic production; CPC accounts for the remaining *** percent. Osram reported **. CR at III-2, PR at III-1; see also CR at III-2, n.5, PR at III-1, n.5 (**).

26 CR & PR at III-1. In this investigation, no party argues for exclusion of either producer from the domestic industry as a related party. Although CPC purchased subject imports during the period considered (CR at III-11 to III-12, PR at III-4 to III-5), we do not exclude that producer from the domestic industry. Even if CPC's purchases were of a great enough magnitude for it to be deemed "related" by virtue of its purchases, the ratio of CPC's purchases of subject merchandise to its total production was relatively **. CR at III-11, PR at III-5 (CPC's purchases of subject imports were equivalent to **). CPC explains that it purchased the subject merchandise to test its quality, to evaluate the reliability of supply from China, and to explore the possibility of a longer-term relationship with BassTech International ("BassTech"), an importer of subject merchandise. CR at III-12, PR at III-5. CPC reports that it ceased purchasing the subject imports when it concluded that a longer-term relationship with BassTech was inconsistent with CPC's own continued production. Id. The subject merchandise was reportedly **. CR at III-12, n.29, PR at III-5, n.29.


28 19 U.S.C. § 1677(7)(B)(i). The Commission "may consider such other economic factors as are relevant to the determination" but shall "identify each [such] factor . . . [a]nd explain in full its relevance to the determination." 19 U.S.C. § 1677(7)(B). See also, Angus Chemical Co. v. United States, 140 F.3d 1478 (Fed. Cir. 1998).
is not inconsequential, immaterial, or unimportant.” 29 In assessing whether the domestic industry is materially injured by reason of subject imports, we consider all relevant economic factors that bear on the state of the industry in the United States. 30 No single factor is dispositive, and all relevant factors are considered “within the context of the business cycle and conditions of competition that are distinctive to the affected industry.” 31

For the reasons discussed below, we determine that the domestic industry is materially injured by reason of subject imports from China found to be sold in the United States at less than fair value.

A. Conditions of Competition 32

As already noted, the principal uses for barium carbonate are in the production of glass, particularly television glass, and brick and tile. 33 Glass production accounts for approximately 79 percent of total consumption of barium carbonate in the United States. 34 Glass production relies primarily upon the granular form of the product, although the powdered product can be and is used for some glass production. 35 The U.S. producers of television glass are Techneglas, Inc. (part of Nippon Electric Glass), American Video Glass Co. (a joint venture between Corning and Sony Corp.); Thomson; and, until it terminated operations in June 2003, Corning Ashai Video Products Co. (a joint venture between Corning and Ashai Glass). 36

About *** of U.S. producers’ barium carbonate shipments in 2002 were of the granular product. 37 The granular product accounted for an increasing portion of the subject imports from China over the period examined: from *** percent of subject imports in 2000 to *** percent in 2002. 38 The brick and tile industry relies virtually exclusively upon the powdered form of the product, in either the unprocessed powdered form or the spray-dried (Micro-Flo™) form. 39

The parties agree, and the record reflects, that there exists only limited competition between domestic barium carbonate and subject imports in the brick and tile market. *** of CPC’s sales to brick and tile manufacturers is of Micro-Flo™, 40 a specialized form of powdered barium carbonate of which there are no directly equivalent subject imports. 41 In addition, subject imports in powdered form are sold

31 Id.
32 Subject imports from China were above the statute’s negligibility threshold, 19 U.S.C. § 1677(24)(A)(i)(I), during the relevant time period. CR & PR at Table IV-2 (subject imports from China were *** percent of total imports of barium carbonate in 2001 and *** percent of total imports in 2002).
33 CR at I-6, PR at I-4.
34 CR & PR at Tables III-3, IV-3, IV-4. As already noted, the brick and tile sector, which uses a powdered form, accounts for about 16 percent of barium carbonate consumption. Id.
35 Id.
36 CR at III-6, III-9, PR at III-3.
37 CR & PR at Table III-3.
38 CR & PR at Table IV-2.
40 CR & PR at Table III-3.
41 CR at I-9, PR at I-6.
largely in the Western United States, whereas the domestic powdered product is mainly sold in other parts of the country.\textsuperscript{42}

When measured by total apparent domestic consumption, U.S. barium carbonate demand declined from *** short tons in 2000 to *** short tons in 2001, and to *** short tons in 2002. Apparent domestic consumption increased to *** short tons in January through March ("interim") 2003 compared with *** short tons in interim 2002.\textsuperscript{43} Recent declines in demand for barium carbonate may be related to the general slowdown in overall economic conditions as well as increased domestic competition from imported finished television sets, which resulted in less demand for television glass.\textsuperscript{44} In general, there are no substitutes for barium carbonate.\textsuperscript{45}

As noted above, there were two domestic producers of barium carbonate during the period of investigation, CPC and Osram. CPC was by far the larger producer.\textsuperscript{46} Domestic supply was supplemented over the period by subject imports from China as well as nonsubject imports, primarily from Mexico and Germany.\textsuperscript{47} Nonsubject imports declined significantly between 2000 and 2002, while subject imports from China increased in that period.\textsuperscript{48} Mexico had been the principal source of import supply through 2001, but *** producer of barium carbonate in Mexico, Cia. Minera La Valenciana, S.A.

\textsuperscript{42} CR at I-9 to I-10, PR at I-6.

\textsuperscript{43} CR & PR at Table IV-8.

\textsuperscript{44} Of 22 responding end-use purchasers, 12 reported that demand for their finished products was unchanged since 2000, eight reported that demand had decreased, one reported that demand had increased, and one reported that demand had been variable depending upon the plant surveyed. CR at II-5, PR at II-3.

The large glass producers reported *** for their ***, attributing the ***. CR at II-5, PR at II-3. ***. \textsuperscript{4d} CPC contends that concerns about decreased demand for barium carbonate owing to shifts from cathode ray tubes to LCD and plasma televisions, *** shifts in cathode ray tube consumption to large and flat screen tubes, which use more barium carbonate than smaller and curved screen television glass. CPC also argues that LCD and plasma televisions, although projected to comprise *** percent of the market by ***, have not yet become a significant factor in the television market, comprising *** percent of the market in 2003. CPC Posthearing Brief at Q-4; CR at III-10, n.21, PR at III-4, n.21.

See also Qingdao Red Star Chemical Group Import and Export Company, Ltd. ("Red Star") prehearing brief at 2-3; Red Star Posthearing Brief at 7-8; CPC Posthearing Brief at Q-36, Q-43; Certain Color Television Receivers from China and Malaysia, Invs. Nos. 731-TA-1034 and 1035 (Preliminary), USITC Pub. 3607 (June 2003) (imports from Malaysia and China increased by several hundred percent over the period considered).

\textsuperscript{45} CR at I-11, PR at I-7. Most importers and purchasers indicated that there are no substitutes for barium carbonate or that they were not aware of such substitutes. *** stated that strontium carbonate or barium nitrate may be substituted for barium carbonate but that both are *** than barium carbonate, and *** are required if used instead of barium carbonate. CR at II-5, PR at II-3. *** but, as noted in the preliminary determination, the trend has been increasingly not to use lead as an x-ray screening agent in production of cathode ray tubes. USITC Pub. 3561 at 8-9 (three of the four television glass manufacturers in the United States have replaced lead in their television glass with increased quantities of barium carbonate). Although demand for barium carbonate can be affected by the availability at any time of glass cullet (broken, rejected or otherwise unsold glass production) containing barium carbonate, which can be reintroduced into production (CR at I-11, PR at I-7), cullet is not a true substitute for barium carbonate in a long term sense because the cullet itself results from production using barium carbonate. Moreover, there is no indication on the record confirming that cullet had any impact on demand for barium carbonate during the period examined.

\textsuperscript{46} Osram, which accounts for less than *** percent of domestic production, produces ***. CR at III-2, PR at III-1, CR & PR at Table III-2.

\textsuperscript{47} CR & PR at Table IV-2, CR at II-13 to II-15, IV-3, PR at II-7 to II-8, IV-1.

\textsuperscript{48} CR & PR at Table IV-1 (nonsubject imports decreased from *** short tons in 2000 to *** short tons in 2002; they declined further in interim 2003 to *** short tons, compared with *** short tons in the same period in 2002). The volume of subject imports from China is discussed in section III.B. of these Views.
(CMV), ceased production under a marketing agreement with BassTech in ***. ***.49 A separate supply agreement signed *** among BassTech, CMV, and Technegas committed BassTech/CMV to supply approximately *** percent of Technegas’ annual requirements from *** using Red Star’s barium carbonate.50

There is a moderate to high degree of substitution between the domestic barium carbonate and subject imports, with substitution higher with respect to the granular form.51 Red Star contends that the qualification process necessary to become a supplier of purchasers of barium carbonate represents a significant barrier to imports of subject barium carbonate from China. The record indicates, however, that any such barriers are not particularly high or difficult to surmount in the short to medium term.52

B. Volume of Subject Imports

Section 771(7)(C)(i) of the Act provides that the “Commission shall consider whether the volume of imports of the merchandise, or any increase in that volume, either in absolute terms or relative to production or consumption in the United States, is significant.”53

The volume of imports of barium carbonate from China increased irregularly from *** short tons in 2000 to *** short tons in 2002, after declining to *** short tons in 2001.54 The volume of subject imports from China declined in interim 2003 to *** short tons, compared with *** short tons in interim

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49 CR & PR at IV-1.

50 Id.

51 Some granular barium carbonate is produced in China using a mechanical, compacting process rather than a thermal process. The lower density of the compacted grade limits its use to lower-end (i.e., not television glass) applications in the United States. Hearing Transcript at 142-143, 151, 154, 181-182, 193, and 233. Otherwise, there is no indication that the actual quality of calcined granular barium carbonate from China, or powdered product other than free flowing, is inferior to the same form of the domestic like product. Indeed, as noted, ***. CR & PR at Table IV-7. Eight of 10 responding purchasers reported that the U.S. and Chinese product are of comparable quality, while only 2 reported the U.S. product had a superior quality. CR & PR at Table II-3. Reported differences tended to relate to factors other than product quality (e.g., delivery time, price, reliability of supply, technical support/service, transportation network). Although *** (CR at II-11, PR at II-6), ***. CR at II-10, PR at II-6. Differences were acknowledged between CPC’s Micro-Flo™ and the Chinese powdered product. CR at II-11, PR at II-6 (one importer reported that many brick manufacturers refuse even to try the subject Chinese powdered product because of the easy mixing and better performance of Micro-Flo™); see also CR at I-10, PR at I-6 (CPC stating that its Micro-Flo™ and related Aqua-Flo™ face virtually no Chinese competition).

52 CR at II-9, PR at II-5. Some purchasers reported that certification or prequalification with respect to quality, strength, or other performance characteristics is not necessary. Id. In the brick and tile markets, in which the powdered product is used, qualification does not appear to be a limitation on the sale of the subject imports, although certain brick and tile producers, particularly those located nearer to CPC’s facility in Cartersville, Georgia, have a preference for, and have put in place equipment to accommodate, CPC’s spray-dried powdered Micro-Flo™ product, a fact that may limit the extent to which the Chinese merchandise can compete head-to-head with the U.S. powdered product. CR at I-9 to I-10, PR at I-6. Of the purchasers that provided estimates of the typical time frame to qualify a new supplier, four purchasers reported a time frame of one month or less, two reported 2 to 4 months, nine reported 4 to 6 months, two reported 6 to 12 months, and one reported up to 12 months. CR at II-9, PR at II-5. To the extent qualification is necessary, the Chinese merchandise has been qualified and purchased by major U.S. purchasers, including *** and ***. E.g., CR at II-15, PR at II-8; see also Hearing Transcript at 206-207, *** purchaser questionnaire response at III-25(c).


54 CR & PR at Table IV-1.
From 2000 to 2002, the trend for shipments of subject imports was similar, but shipments did not decline in the interim 2003 period due to sales from importers’ inventories. Shipments of subject imports increased from *** short tons in 2000 to *** short tons in 2002, after declining to *** short tons in 2001. Shipments of subject imports increased to *** short tons in interim 2003 compared with *** short tons in interim 2002.65

As a share of the volume of apparent U.S. consumption, shipments of the subject imports increased from *** percent in 2000 to *** percent in 2002, after declining to *** percent in 2001. In interim 2003, shipments of the subject imports increased as a share of the volume of apparent U.S. consumption to *** percent, compared with *** percent in interim 2002. Subject imports increased relative to domestic production as well; the volume of subject imports was equivalent to *** percent of domestic production in 2000, *** percent in 2001, and *** percent in 2002, then declined in the interim 2003 period to *** percent compared with *** percent in interim 2002.66 The ratio of shipments of subject imports to U.S. production increased from *** percent in 2000 to *** percent in 2002, after declining to *** percent in 2001. The ratio of shipments of subject imports to U.S. production increased in interim 2003 to *** percent compared with *** percent in interim 2002.67

For the foregoing reasons, we find the volume and increase in volume of subject imports to be significant in absolute terms and relative to production and consumption in the United States.68

C. Price Effects of Subject Imports

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

(I) there has been significant price underselling by the imported merchandise as compared with the price of domestic like products of the United States, and

(II) the effect of imports of such merchandise otherwise depresses prices to a significant degree or prevents price increases, which otherwise would have occurred, to a significant degree.69

As discussed in conditions of competition, the record evidence indicates that the bulk of the domestic like product and subject imports are substantially interchangeable and used in the same applications. The quality of subject imports is generally comparable to that of the domestic like product

55 Id. The value of subject imports increased from $*** in 2000 to $*** in 2002 after declining to $*** in 2001. The value of subject imports declined to $*** in interim 2003, compared with $*** in interim 2002. Id. BassTech officials reported that ***. See CR at IV-3 n.7, PR at IV-2, n.7.

56 CR & PR at Table C-1. The value of shipments of subject imports declined from $*** in 2000 to $*** in 2001, then increased to $*** in 2002. The value of shipments of subject imports increased to $*** in interim 2003, compared with $*** in interim 2002. Id.

57 CR & PR at Table IV-8.

58 CR & PR at Table C-1.

59 Id.

60 We acknowledge that subject imports largely replaced nonsubject imports in the U.S. market; however, as noted in section III.C. below, subject imports were sold at unit values that were *** those of the nonsubject imports and had a significant adverse impact on the domestic producer’s prices and revenues.

and there is a moderate to high degree of substitutability between the subject imports and the domestic like product.\textsuperscript{62} Price is a significant factor in purchasing decisions.\textsuperscript{63}

The Commission collected quarterly sales pricing data from the domestic industry and importers for four products during the period examined; however, meaningful price comparison data are available only for two products: calcined granular barium carbonate (product one) and powdered barium carbonate other than free-flowing (product four).\textsuperscript{64} Price comparison data for those products reflect all of CPC’s shipments and virtually all shipments of subject imports from China during 2000 to 2002.\textsuperscript{65}

The record indicates that the subject imports in granular form (product 1) undersold the domestic product in 7 of the 13 comparisons, with margins ranging from 0.1 percent to 9.1 percent.\textsuperscript{66} Underselling was mixed at the beginning of the period when the volume of subject imports was lower, but in the final four quarters of the period, when the volume of subject imports increased by ***, the subject imports *** undersold the domestic like product.\textsuperscript{67} The beginning of this *** underselling coincides with the *** agreement under which Technegas agreed with BassTech and CMV to purchase the Chinese merchandise ***.\textsuperscript{68}

Product 4, the powdered form of barium carbonate (other than free-flowing) represents a smaller portion of the market than does the calcined granular form.\textsuperscript{69} The subject imports of product 4 undersold the domestic product in 13 of the 13 comparisons, with margins ranging from 10.7 percent to 36.0 percent.\textsuperscript{70}

We find these margins of underselling to be significant.\textsuperscript{71}

\textsuperscript{62} As discussed earlier, the majority of apparent consumption is of the granular product, where interchangeability is very high. While there are some limits to direct competition with respect to powdered product, this accounts for a relatively small share of the market.

\textsuperscript{63} CR & PR at Table II-2. Although quality was most often ranked by purchasers as the leading factor in purchasing decisions, price was second most often ranked as the leading factor. Twenty-one purchasers ranked quality as the number one, two, or three most important factor in purchasing decisions; twenty ranked price as number one, two, or three; twelve ranked availability as number one, two, or three; and eighteen ranked other factors as number one, two or three (other factors included whether the supplier is the traditional supplier, service, and meeting specifications). \textit{Id.}

\textsuperscript{64} The pricing products were calcined granular barium carbonate (product 1), compacted granular barium carbonate (product 2), free-flowing barium carbonate (i.e., Micro-Flo\textsuperscript{TM} or similar) (product 3), and powdered barium carbonate other than free-flowing (product 4). CR at V-4, PR at V-2 to V-3. The compacted granular product (product 2) is not produced in the United States so there are no price comparisons. Also, there is conflicting information on the record regarding the extent to which powdered product with enhanced flow properties (product 3) is available from China, but it appears that ***. CR at V-5, n.8, PR at V-3, n.8. Moreover, as noted in the discussion of conditions of competition, in the brick and tile sector there is limited competition between CPC’s Micro-Flo\textsuperscript{TM} product and the subject Chinese imports, with the Chinese product centered in the West and CPC elsewhere.

\textsuperscript{65} CR at V-5, PR at V-3.

\textsuperscript{66} CR & PR at Table V-1.

\textsuperscript{67} \textit{Id.}

\textsuperscript{68} See Red Star Prehearing Brief at Exhibit 2, CPC Posthearing Brief at Exhibit 1 (Supply Agreement among CMV, BassTech, and Technegas).

\textsuperscript{69} CR & PR at Tables III-3, IV-3, IV-4.

\textsuperscript{70} CR & PR at Table V-3.

\textsuperscript{71} Red Star argues that low average unit values found in U.S. import statistics for subject imports to which a witness for CPC referred at the hearing should not be considered because those values, unlike shipment values, do (continued...)
Regarding calcined granular product 1, in which the most direct competition between the subject imports and the domestic like product occurred, prices for both the subject imports and the domestic like product declined in 2002 after having increased in 2001. Prices for both the domestic product and the subject imports declined further in interim 2003, as the volume of subject import shipments and underselling by subject imports increased. Overall, domestic producer prices for product 1 declined *** percent between the first and final quarters of the period considered, and prices of the Chinese granular product declined *** percent between those quarters.

Although the increased volume of subject imports and *** followed the *** supply agreement between BassTech and Technegas, the price effects of subject imports were not limited to sales to Technegas. CPC’s prices to *** declined over the period. CPC’s reported net selling price to Technegas ***. The record indicates that, although the other television glass producers, Thomson, Corning Asahi, and American Video, ***. The record also indicates that the availability of granular subject imports at low prices placed downward pressure on CPC’s prices to *** as well.

Although we note, as explained above, that competition between the domestic like product and the subject imports is more attenuated with respect to product 4 (powdered barium carbonate other than free flowing), domestic producer prices for that product declined over the period of consistent underselling by the Chinese product.

For these reasons, we find that domestic producer prices were significantly depressed by the subject imports over the period considered. Moreover, competition from subject imports have suppressed domestic prices during a time when the domestic industry’s costs of goods sold per short ton (e.g., natural gas, barite ore, labor) increased. We find that the prices of the Chinese product prevented

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71 (...continued)

not reflect the level at which subject imports compete with the domestic like product or reflect the full cost the importer incurred after importation. Red Star Posthearing Brief at 6 & Exhibit 2. Our underselling analysis is not based on these average unit values but rather on the product specific sales based pricing data collected by the Commission.

72 Sales of product 1 to television glass producers were reported to account for *** of CPC’s U.S. shipments by volume during each year of the period, CPC Posthearing Brief at Q-34, CR & PR at Table D-1, CR at III-8, PR at III-3.

73 CR & PR at Table V-1.

74 Id.

75 CR & PR at Table III-4.

76 CR & PR at Table III-4; CPC Posthearing Brief at Exhibit 2, p.2 (price of the Chinese product to Technegas ***). Television glass represented as much as *** percent of CPC’s annual barium carbonate sales. CPC Posthearing Brief at Q-34.

77 Technegas Purchaser Questionnaire Response at II-1.

78 See CR & PR at Table III-4; CR at V-16, PR at V-5 (***); Corning Purchaser Questionnaire Response at III-33 (***); Thomson purchaser questionnaire response at III-25(e), III-19, III-33 (***); CPC Posthearing Brief at Q-8 - Q-9 & Exhibit 6; Red Star Posthearing Brief at Exhibit 1.

79 CPC Posthearing Brief at 36; CPC Posthearing Brief at Q-9 - Q-16 & Exhibits 7-16. E.g., CPC offered *** reduced price to retain business following low-priced bid from Chinese imports. CPC Posthearing Brief at Q-10 - Q-11 & Exhibit 7.

80 CR & PR at Table V-3. ***.

81 Unit cost of goods sold (COGS) increased from $*** in fiscal 2000 to $*** in fiscal 2002, after increasing to $*** in fiscal 2001. In interim 2002-03, unit COGS increased to $*** compared with unit COGS of $*** in interim 2001-02. The ratio of COGS to net sales rose from *** percent in fiscal 2000 to *** percent in fiscal 2001, and fell *** to *** percent in fiscal 2002. The ratio was *** percent in interim 2001-02 and *** percent in interim 2002-03. (continued...)
to a significant degree, the domestic industry from increasing prices sufficiently to cover these increased costs.

Although many of the lost sales and lost revenue allegations by CPC were denied by the purchasers involved or not verified, several were verified.82 Moreover, other record evidence tends to affirm a significant degree of negative price effects due to the subject imports.83 Thus we find significant underselling and significant price depressing and suppressing effects by the subject imports.

D. Impact of the Subject Imports

In examining the impact of the subject imports on the domestic industry, we consider all relevant economic factors that bear on the state of the industry in the United States.84 These factors include output, sales, inventories, capacity utilization, market share, employment, wages, productivity, profits, cash flow, return on investment, ability to raise capital, and research and development. No single factor is dispositive and all relevant factors are considered “within the context of the business cycle and conditions of competition that are distinctive to the affected industry.”85

While the domestic industry has maintained market share in the face of declining shipment volume since 2000,87 we attribute that in part to the exit of the imports from Mexico from the U.S. market

81 (...continued)

82 CR & PR at Table C-1. For financial data, the interim periods are six months (November to April), based on CPC's fiscal year; for production and shipment data, the interim periods are three months (January to March), based on a calendar year.

83 CR at V-13 - V-18, PR at V-5, CR & PR at Tables V-4, V-5.

84 See, e.g., CPC Posthearing Brief at Q-6 to Q-9, Exhibit 6 (although ***, other record evidence supports the fact that subject imports had negative price effects); CPC Prehearing Brief at Exhibit 9, Posthearing Brief at Exhibit 7 (indicating lost revenue allegations with regard to ***, although the allegation to the Commission was ***; see also CPC Posthearing Brief at Q-10 to Q-16 and Exhibits 6-16 and 19 (discussing low-priced offers to sell Chinese merchandise and related price pressures on CPC).

85 19 U.S.C. § 1677(7)(C)(iii). See also SAA at 851, 885 (“In material injury determinations, the Commission considers, in addition to imports, other factors that may be contributing to overall injury. While these factors, in some cases, may account for the injury to the domestic industry, they also may demonstrate that an industry is facing difficulties from a variety of sources and is vulnerable to dumped or subsidized imports.” Id. at 885.).


88 Domestic producer U.S. shipments declined from *** short tons in 2000 to *** short tons in 2002, after declining to *** short tons in 2001. CR & PR at Table C-1. In the interim 2003 period, domestic producer U.S. shipments increased to *** short tons compared with *** short tons in interim 2002. Id. At the same time, however, total U.S. apparent consumption declined from *** short tons in 2000 to *** short tons in 2001 and *** short tons in 2002; total U.S. apparent consumption was *** short tons in interim 2003 compared with *** short tons in interim 2002. Id. Accordingly, while domestic producer U.S. shipments decreased in absolute terms from 2000 to 2002, their share of total consumption increased from *** percent in 2000 to *** percent in 2001 and *** percent in 2002; they were *** percent of apparent consumption in interim 2003 compared with *** percent in interim 2002. Id.
in 2002. Significantly, the fairly traded imports from Mexico were largely replaced with less-than-fair-value imports from China. As discussed earlier, the record indicates that barium carbonate purchasers have been able to use the availability of lower-priced subject imports to obtain price concessions from CPC. Thus, the domestic industry has been able to maintain a large part of its volume only by cutting prices. At the same time, in the face of rising costs, the industry was forced to lower rather than increase prices.

Suppression and depression of domestic granular barium carbonate prices have translated into a decline in the average unit value of the domestic industry’s net sales from $*** in fiscal 2000 to $*** in fiscal 2002, after rising to $*** in fiscal 2001. The average unit value of domestic net sales declined further in interim 2002-03 (November 2002 to April 2003) to $*** compared with $*** in interim 2001-02 (November 2001 to April 2002).89

The domestic industry’s operating income concomitantly declined from $*** in fiscal 2000 to $*** in fiscal 2001, and to $*** in fiscal 2002. As most of the domestic industry’s price concessions occurred early in 2002, the growing impact of falling prices is shown clearly by the six-month financial data for the interim period November 2002 to April 2003, in which operating income declined to $*** of $***, compared with $*** of $*** in that period a year earlier.90

Other indicators of the domestic industry’s performance remained fairly constant or declined somewhat over the period. While the domestic industry’s average capacity and the size of its production workforce were constant over the period, production and capacity utilization declined somewhat.91 However, these indicators are determined mainly by production volume, and we have found that the primary effect of subject imports has been on domestic prices, which the industry cut in the face of import competition in order to maintain sales and production volume. Thus, the adverse impact of subject imports is most evident in the domestic industry’s financial indicators, discussed above.

While we base our finding of material impact on an analysis of the domestic industry as a whole,92 we note that a comparison of the industry’s granular and powdered operations confirms our finding. As discussed earlier, there is generally direct competition between domestic and imported

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88 We note that there is evidence that CMV’s exit from the U.S. market was ***. CR at IV-12, n.17, PR at IV-4, n.17; see also CR & PR at Tables III-4, IV-5 (prices for the domestic like product and subject imports on sales to Techneglas, at which the competition for sale of granular product was most direct, ***.)

89 CR & PR at Table C-1. Financial data were reported *** by CPC, which accounted for *** percent of U.S. production and was the only U.S. producer *** over the period examined. See CR & PR at III-1. Financial data are reported on a fiscal year basis (November to October) and may not necessarily be comparable to data reported on a calendar year basis. The total value of net sales declined from $*** in fiscal 2000 to $*** in fiscal 2001, and to $*** in fiscal 2002; the value of net sales increased in the interim 2002-03 period to $***, compared with a net sales value of $*** in interim 2001-02. On a volume basis, net sales declined from *** short tons in fiscal 2000 to *** short tons in fiscal 2001 and to *** short tons in fiscal 2002; net sales increased to *** short tons in interim 2002-03, compared with *** short tons in interim 2001-02. CR & PR at C-1.

90 CR & PR at Table C-1.

91 Domestic production declined from *** short tons in 2000 to *** short tons in 2002, after declining to *** short tons in 2001; domestic production was *** short tons in interim 2003 compared with *** short tons in interim 2002. CR & PR at Table C-1. The domestic industry’s average capacity was constant at *** short tons in each of the full years and *** short tons in each of the interim periods. CR & PR at Table C-1. Capacity utilization declined from *** percent in 2000 to *** percent in 2002 after declining to *** percent in 2001. Capacity utilization was *** percent in interim 2003 compared with *** percent in interim 2002. Id. The number of production workers was constant at *** over the period examined. Id. We also note, although we do not rely upon, the fact that CPC following the period examined laid off a significant percentage of its staff, the ***. CR at III-4 n.12, PR at III-2, n.12.

granular barium carbonate but limited competition with respect to powdered barium carbonate. The record indicates that the condition of the domestic industry's granular operations declined over the period examined; in contrast, the condition of its powdered operations fell. The domestic industry's commercial sales of granular product fell from short tons in fiscal 2000 to short tons in fiscal 2002, and from in fiscal 2000 to in fiscal 2002 (although ). In contrast, commercial sales of powdered product were roughly steady, falling in volume from short tons in fiscal 2000 to short tons in fiscal 2002, and rising in value from in fiscal 2000 to in fiscal 2002. The domestic industry's operating income on granular product fell from in 2000 to in fiscal 2001 and in fiscal 2002; the interim period were in interim 2001-02 and in interim 2002-03. In contrast, the domestic industry had for powdered product, with operating income of in fiscal 2000, in fiscal 2001, and in fiscal 2002; it was in interim 2001-02 and in interim 2002-03.

In sum, the industry's financial performance has deteriorated significantly as it has lowered its prices on the principal form of barium carbonate, granular barium carbonate, rather than to cede volume to subject imports. We therefore find that the domestic industry producing barium carbonate is materially injured by reason of subject imports from China.

CONCLUSION

For the reasons stated above, we determine that the domestic industry producing barium carbonate is materially injured by reason of subject imports of barium carbonate that are sold in the United States at less than fair value.

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93 The parties agree that competition in the powdered forms of the product is more attenuated. E.g., CPC Posthearing Brief at 8, Red Star Posthearing Brief at 5.

94 CR & PR at Table D-1.

95 CR & PR at Table D-2.

96 CR & PR at Table D-1.

97 CR & PR at Table D-2. Similarly, the domestic industry's operating income ratio for granular product, from percent in fiscal 2000 to percent in fiscal 2001 and percent in fiscal 2002; it was percent in interim 2001-02 and percent in interim 2002-03. CR & PR at Table D-1. In contrast, for its powdered product operations, the operating income ratios were percent in fiscal 2000, percent in fiscal 2001, and percent in fiscal 2002; they were percent in interim 2001-02 and percent in interim 2002-03. CR & PR at Table D-2.
PART I: INTRODUCTION

BACKGROUND

This investigation results from a petition filed by Chemical Products Corp. ("CPC"), Cartersville, GA, on September 30, 2002, alleging that an industry in the United States is materially injured and threatened with further material injury by reason of less-than-fair-value ("LTFV") imports of barium carbonate (regardless of form or grade) from China. Information relating to the background of the investigation is provided below.

Effective date | Action
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September 30, 2002 | Petition filed with Commerce and the Commission; institution of the Commission's investigation
October 25, 2002 | Commerce’s notice of initiation
November 14, 2002 | Commission’s preliminary determination
March 17, 2003 | Commerce’s preliminary determination; scheduling of the final phase of the Commission’s investigation (68 FR 18670, April 16, 2003)
July 31, 2003 | Date of the Commission’s hearing
August 6, 2003 | Commerce’s final determination (68 FR 46577)
September 4, 2003 | Date of the Commission’s vote
September 19, 2003 | Commission’s determination sent to Commerce

PREVIOUS INVESTIGATIONS

On September 9, 1980, an antidumping petition was filed with Commerce and the Commission on imports of barium carbonate and strontium carbonate from the Federal Republic of Germany. On June 4, 1981, the Commission made an affirmative final determination, and Commerce subsequently issued an antidumping duty order. In November 1998, as part of a five-year review investigation, Commerce revoked the antidumping duty order effective January 1, 2000, because no domestic interested party responded to the notice of initiation by the applicable deadline.

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1 CPC is represented by the law firm of Gibson, Dunn & Crutcher LLP.
2 Barium carbonate (BaCO₃) is provided for in subheading 2836.60.00 of the Harmonized Tariff Schedule ("HTS"), with a normal trade relations tariff rate of 2.3 percent ad valorem, applicable to imports from China.
3 Federal Register notices cited in the tabulation are presented in app. A.
4 The list of witnesses appearing at the hearing is presented in app. B.
5 45 FR 63388, September 24, 1980. The petition was filed by CPC, FMC Corp., and Sherwin-Williams Co. On November 6, 1980, the Commission published its affirmative preliminary determination with respect to imports of barium carbonate and a negative preliminary determination with respect to strontium carbonate (45 FR 73812, November 6, 1980).
7 46 FR 32864, June 25, 1981.
8 63 FR 64677, November 23, 1998.
On October 25, 1983, an antidumping petition was filed with Commerce and the Commission on barium chloride and barium carbonate (precipitated) from China.\textsuperscript{9} The Commission made an affirmative preliminary determination on both products;\textsuperscript{10} however, Commerce made a negative final dumping determination regarding imports of barium carbonate.\textsuperscript{11}

**MAJOR FIRMS INVOLVED IN THE U.S. BARIUM CARBONATE MARKET**

There are two U.S. producers of barium carbonate: CPC and Osram Sylvania Products, Inc. ("Osram Sylvania"), Towanda, PA. Osram Sylvania is not a party to the investigation; it *** the petition. Its production of barium carbonate is *** of that of CPC and ***.\textsuperscript{12}

There have been three major sources of U.S. imports of barium carbonate during the period for which data were collected in this investigation (January 2000 through March 2003): China, Germany, and Mexico. The major producer and exporter of barium carbonate from China is Qingdao Red Star Chemical Import & Export Co., Ltd. ("Red Star"), which is a party to the investigation.\textsuperscript{13} The major U.S. importer of barium carbonate from China *** is BassTech International ("BassTech"), Englewood, NJ,\textsuperscript{14} another of the importers from China, Seafortb Mineral & Ore Co., Inc. ("Seafortb"), Houston, TX, is a party to the investigation.\textsuperscript{15} The *** importer of barium carbonate from Germany (*** is Solvay Minerals, Inc. ("Solvay Minerals"), Houston, TX, and the *** importer of barium carbonate from Mexico is Alex Trading, Inc. ("Alex Trading"), Brownsville, TX. Solvay Minerals and Alex Trading are not parties to the investigation.

The major purchasers of barium carbonate consist of the four television glass manufacturers: American Video Glass Co. ("American Video"), Mt. Pleasant, PA; Corning Asahi Video Products Co. ("Corning Asahi"),\textsuperscript{16} State College, PA; Techneglas, Inc. ("Techneglas"), Columbus, OH; and Thomson, Circleville, OH. None are parties to the investigation. Other purchasers generally consist of producers of other glass-related applications and producers of bricks and tiles.

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\textsuperscript{9} The petition was filed by CPC. All synthetically produced barium carbonate is precipitated in the production process.


\textsuperscript{11} Both Commerce and the Commission made affirmative final determinations on barium chloride. In 1999, the Commission completed a five-year review regarding imports of barium chloride from China and continued the order on that product. *Barium Chloride From China*, Investigation No. 731-TA-149 (Review), USITC Pub. 3163, March 1999.

\textsuperscript{12} A representative of Osram Sylvania indicated that ***.

\textsuperscript{13} Red Star is represented by the law firm of White & Case.

\textsuperscript{14} In the preliminary phase of the investigation, BassTech was represented as a party by the law firm of White & Case, but the notice of appearance on behalf of BassTech was withdrawn on June 18, 2003. However, BassTech responded to the Commission's importers' questionnaires in both the preliminary and final phases of the investigation, and filed for party status in the final phase of the investigation on July 8, 2003.

\textsuperscript{15} Seafortb is represented by the law firm of Gardner, Carton & Douglas.

SUMMARY DATA

A summary of data collected in this investigation is presented in appendix C, tables C-1 through C-5. Except as noted, U.S. industry data presented are those of two firms (CPC and Osram Sylvania) that accounted for all known U.S. production of barium carbonate during 2002. U.S. imports are based on responses to the Commission’s questionnaire for importers and account for virtually all imports of barium carbonate from China and for most imports from countries other than China.\textsuperscript{17} Data on the producers in China are based on the questionnaire response of two firms (Red Star and Hebei Xinji Chemical Group Co., Ltd.), which indicated that they accounted for *** percent of production of the subject merchandise in China in 2002.

THE NATURE AND EXTENT OF SALES AT LTFV

Commerce calculated final LTFV dumping margins to be 34.44 percent \textit{ad valorem} for Red Star and 81.30 percent \textit{ad valorem} for all other producers and exporters in China. Commerce’s period of investigation was January 1, 2002 through June 30, 2002.\textsuperscript{18}

THE SUBJECT PRODUCT

The imported product subject to this investigation is barium carbonate regardless of form or grade, currently classifiable under subheading 2836.60.00 of the HTS. Although the HTS subheading is provided for convenience and customs purposes, the written description of the scope of this proceeding is dispositive.\textsuperscript{19}

The Domestic Like Product\textsuperscript{20}

In its 1981 final antidumping determination concerning imports of barium carbonate from West Germany, the Commission found the domestic like product to be “all precipitated barium carbonate.”\textsuperscript{21} In its 1983 preliminary antidumping determination concerning imports of barium carbonate from China, the Commission also found a single domestic like product consisting of “barium carbonate.”\textsuperscript{22}

In the preliminary phase of the current investigation, the Commission defined the domestic like product as all barium carbonate, including both the powdered and granular forms of the product,\textsuperscript{23} which

\textsuperscript{17} Based on a comparison of official statistics of the U.S. Department of Commerce and responses of importers to questionnaires of the Commission.

\textsuperscript{18} 68 FR 46577, August 6, 2003.

\textsuperscript{19} Ibid.

\textsuperscript{20} The Commission’s decision regarding the appropriate domestic products that are “like” the subject imported products is based on a number of factors including (1) physical characteristics and uses; (2) common manufacturing facilities and production employees; (3) interchangeability; (4) customer and producer perceptions; (5) channels of distribution; and, where appropriate, (6) price.

\textsuperscript{21} Precipitated Barium Carbonate From The Federal Republic of Germany, op. cit., p. 5. As noted earlier, all synthetically produced barium carbonate is “precipitated” in the production process.

\textsuperscript{22} Barium Chloride and Barium Carbonate (Precipitated) From The People’s Republic of China, op. cit., p. 6.

\textsuperscript{23} Barium Carbonate From China, Investigation No. 731-TA-1020 (Preliminary), USITC Pub. 3561, November 2002, pp. 6-7.
was the domestic like product advocated by CPC. Respondents have not opposed the definition of the domestic like product as all barium carbonate.

Physical Characteristics and Uses

Barium carbonate is a heavy, odorless, white-to-cream colored chemical with the chemical formula BaCO₃. It is found naturally in the mineral witherite, although most barium carbonate sold commercially is produced synthetically. Barium carbonate is sold commercially in granular, powder, or high-purity grade form. Other than the high-purity form, the following are the grades of barium carbonate sold commercially: (1) a calcined granular grade, (2) a compacted granular grade, (3) a powder grade that has been spray-dried and is free-flowing, and (4) a powder grade that has not been spray-dried and is not free-flowing. Further discussion of these grades is presented below.

The granular and powdered forms of barium carbonate, which typically contain at least 98 percent barium carbonate, have essentially the same chemical composition and similar physical properties, differing principally in their particle size. Granular barium carbonate consists of relatively large particles of barium carbonate, with average particle size in excess of 105 microns (+140 US mesh). Granular barium carbonate is produced either by calcining or by mechanically pressing (compacting) smaller barium carbonate particles into larger particles. The former product is referred to as calcined granular barium carbonate whereas the latter product is referred to as compacted granular barium carbonate. Powdered barium carbonate consists of small, discrete particles with an average particle size of 3-5 microns or less. The very small particle size means that the surface area of individual particles is maximized, which is useful in many applications requiring high reactivity or dispersability. In contrast, granular barium carbonate cannot generally be used in applications which require a high reactivity.

High-purity barium carbonate, which typically has a barium content in excess of 99.5 percent, contains a smaller percentage of impurities than the forms described above. High-purity barium carbonate, ***, is used in the production of ***. Barium carbonate is used principally in the production of specialty glass and bricks and tiles. Its largest single application is in the manufacture of glass for cathode ray tubes. Other glass-related applications include reflective glass beads; ***. Barium carbonate is also used in glass filters and borosilicate glass.

Barium carbonate is used in the manufacture of high-quality glass for a number of reasons: (1) it serves as a flux in glass manufacture; (2) barium (in the form of barium oxide) becomes part of the glass structure where it imparts useful properties to the glass including increased durability, density, and

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24 CPC’s postconference brief, pp. 3-5.
25 A micron is a millionth of a meter.
26 Submission of *** to Commission staff, November 1, 2002.
27 Ibid. ***.
28 Barium carbonate’s use in TVs and computer screens may decline as cathode ray tubes are replaced by certain flat panel TVs (e.g., LCD or plasma) or projection TVs, which require little or no barium carbonate. Alan Chalup, Vice President, BassTech, transcript of the Commission’s October 22, 2002 conference in the preliminary phase of the investigation (“conference transcript”), p. 80.
29 Barium carbonate is a key ingredient for ***. Information provided to staff by ***.
brilliance; and (3) in television sets (TVs) and other cathode ray tube products (such as computer monitors), barium carbonate is able to absorb x-rays, allowing it to be used as an x-ray screening agent.  

Although both granular and powdered barium carbonate are used in glass applications, in most TV glass applications the granular form is required because the equipment used to convey barium carbonate (which relies on jets of air) requires a highly free-flowing material that must fall from silos or storage bins that contain the barium carbonate that is to be dispersed in the glass.  

In general, without special modifications, granular barium carbonate flows much more freely than the powdered form.

The amount of barium carbonate that is used in face plates for TV cathode ray tubes is far from negligible, about eight pounds per 100 pounds of glass. In the United States calcined granular and barium carbonate are used in TV glass production. In China, in contrast, much of the barium carbonate used in TV glass consists of compacted granular barium carbonate. The compacted granular barium carbonate is and the material is not produced in the United States largely because.

Barium carbonate is also used to make decorative and specialty glass that requires good formability and a high refractive index, which enables the glass to reflect light more brilliantly. This type of application makes barium carbonate particularly useful as reflective glass for road signs and license plates and to mark roads and runways. Barium carbonate is also used in specialty glass items such as laboratory glass and specialty glass bottles because of its ability to enhance the formability of the glass. Both granular and powdered forms of barium carbonate are used in glass applications other than for cathode ray tubes and, according to CPC, for many processes in this market segment they are interchangeable.

Barium carbonate is also used in the manufacture of bricks, tiles, and other clay products where it reacts with soluble sulfates, thereby preventing the forming of unsightly white deposits known as scum on the surface, which is caused when the soluble sulfates are allowed to migrate to the surface. In addition, barium carbonate is used in making frit that is used in glazing for structural clay, porcelain,

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30 Strontium carbonate is also used in TV glass plates in appreciable amounts in conjunction with barium carbonate because together the two substances absorb potentially hazardous x-rays more effectively than either barium carbonate or strontium carbonate acting alone.

31 Conference transcript (L. Ballard Mauldin, President, CPC), p. 21. “Television glass producers all use the granular form . . . of barium carbonate because it flows very smoothly, and it can be fed into production operations at a very constant and consistent rate” (transcript of the Commission’s July 31, 2003 hearing (“hearing transcript”) (Mr. Mauldin), p. 18).

32 The statement in CPC’s petition, p. 8, that it also produces a “powdered form” of barium carbonate for use in TV glass applications was subsequently amended to reflect the “granular form” instead. E-mail correspondence from CPC, August 1, 2003. ***.

33 ***.

34 ***. See also CPC’s posthearing brief, exh. 7 (**).

35 Conference transcript (Mr. Mauldin), p. 21.

36 Conference transcript (Mr. Mauldin), pp. 22 and 64.

37 Submission by ***.

38 Staff conversation with ***, June 27, 2003.


40 Conference transcript (Mr. Mauldin), p. 25.

41 Conference transcript (Mr. Mauldin), p. 62.
enamel, and iron cast welding products, and to create barium ferrite powder used to manufacture certain magnets.

According to CPC, barium carbonate produced in China is interchangeable with the domestic product for most applications including the largest market, glass, which accounts for the majority of domestic consumption of barium carbonate, and in particular TV glass, the largest sector for the product within the glass market.\textsuperscript{42}

In the structural clay or brick and tile market, which accounts for about 20 percent of domestic consumption, direct competition between CPC and Chinese producers of barium carbonate is somewhat attenuated because CPC produces a Micro-Flo\textsuperscript{TM} grade, a modified form of the powder grade for which there is no direct equivalent in China.\textsuperscript{44} The Micro-Flo\textsuperscript{TM} grade is used in the production of bricks and tiles because it has flow characteristics to facilitate feeding into production lines and because of the dispersability and reactivity of the barium carbonate with the soluble sulfates of the clay.\textsuperscript{45} CPC also produces a grade of barium carbonate called Aqua-Flo\textsuperscript{TM}, which is similar to Micro-Flo\textsuperscript{TM} and is used in similar applications except that Aqua-Flo\textsuperscript{TM} is designed to be used in \textit{***}.\textsuperscript{46} However, Chinese producers of barium carbonate also sell to U.S. structural clay or brick and tile manufacturers, although primarily to ones located in the Western United States because, according to an importer, these customers use different handling equipment that is not dependent on CPC’s Micro-Flo\textsuperscript{TM}.\textsuperscript{47} According to BassTech, these customers did not switch to Micro-Flo\textsuperscript{TM} largely because of the high transportation costs that would be required to ship barium carbonate from CPC’s facility in Cartersville, GA.\textsuperscript{48}

According to CPC, its competitive strength in the brick and tile markets may be weakened by the appearance in the United States of a new grade of barium carbonate produced in China (Supra-Flo), designed to compete with CPC’s Micro-Flo\textsuperscript{TM} in the brick and tile markets.\textsuperscript{49} However, counsel for CPC stated that “with respect to CPC’s Micro-Flo\textsuperscript{TM} and Aqua-Flo\textsuperscript{TM} products, which account for a large portion of its powdered sales and which face virtually no Chinese competition, prices have remained stable.”\textsuperscript{50} A CPC official stated that CPC has “not seen any additional infiltration into our marketplace with what is considered a different grade of a product that would be introduced into the brick and tile industry . . . {and} has been able to sustain our pricing level . . . but . . . that will be the next inroad . . .

\textsuperscript{42} Petition, p. 23.
\textsuperscript{43} Petition, pp. 23-24.
\textsuperscript{44} ***. E-mail from ***, October 28, 2002. Although Micro-Flo\textsuperscript{TM} flows readily, it is not used in TV glass applications because of ***.
\textsuperscript{45} Conference transcript (Mr. Mauldin), pp. 26-27. The Commission’s questionnaire asked purchasers whether they have purchased CPC’s Micro-Flo\textsuperscript{TM} product; 18 purchasers responded “No,” 7 brick producers and 1 non-TV-glass producer responded “Yes.”
\textsuperscript{46} Staff conversation with ***, July 15, 2003.
\textsuperscript{47} The Commission’s questionnaire asked purchasers whether it is necessary to have special equipment to accommodate CPC’s Micro-Flo\textsuperscript{TM} product; 9 purchasers responded “No,” 2 brick producers responded “Yes,” and 14 purchasers responded “Don’t know.” The questionnaire also asked purchasers whether they had put into place equipment to accommodate CPC’s Micro-Flo\textsuperscript{TM} product; 21 purchasers responded “No” and 2 brick producers responded “Yes.”
\textsuperscript{48} Conference transcript, (Mr. Chalup), p. 83.
\textsuperscript{49} CPC’s prehearing brief, p. 38 and exh. 5, and hearing transcript (Mr. Mauldin), p. 23. According to BassTech, barium carbonate produced in China consists of a range of particle sizes. Although spray-dried barium carbonate reportedly does not exist in China, a better-flowing powdered material having a slightly larger particle size is available. Hearing transcript (Mr. Chalup), pp. 199-200.
\textsuperscript{50} Hearing transcript (Joseph H. Price, counsel for CPC), p. 8.
that...the Chinese manufacturers will try to enter, and then price...will become the main topic of discussion.\textsuperscript{51} Counsel for Red Star stated that "customers who are already purchasing CPC's Micro-Flo\textsuperscript{TM} products are paying a premium for that product...{and} are aware that there is powdered product out in the marketplace from China...{but} regardless of whatever attempts may have been made to replace or substitute a Micro-Flo\textsuperscript{TM} product, it ultimately was not successful so these attempts are at best isolated and not a basis for a long-term threat for the Micro-Flo\textsuperscript{TM} product."\textsuperscript{52}

In general, there are no substitutes for barium carbonate. Reportedly, the increased use of glass cullet (finished glass that does not quite meet specifications and that can be recycled and reintroduced into the production line) effectively acts as a substitute for barium carbonate by reducing demand for new purchases of the chemical.\textsuperscript{53}

Manufacturing Process

Although barium carbonate can be extracted from the barium-carbonate containing mineral witherite, in practice it has proven more economical to prepare commercial-grade barium carbonate synthetically using as a raw material barite ore, which contains natural barium sulfate. Barite ore accounted for *** percent of CPC's raw material costs to produce barium carbonate in 2002, and for *** percent of its total cost of goods sold in that year (see table VI-2 in Part VI of this report).

The steps used by CPC to produce commercial grade barium carbonate from barite ore are as follows: \textsuperscript{54}

- Barite ore (barium sulfate), which is highly insoluble, is reduced to barium sulfide, which is very soluble, in a reducing kiln using coke as a carbon source.
- Barium sulfide is dissolved in water and leached to remove impurities.
- The barium sulfide solution is reacted with carbon dioxide gas to produce, as a precipitate, barium carbonate.
- The barium carbonate precipitate is filtered to remove excess water and then dried.
- The dried barium carbonate is pulverized to produce powdered barium carbonate. To produce the granular grade, the dried barium carbonate undergoes an additional processing step, calcination. \textsuperscript{55}

Micro-Flo\textsuperscript{TM} is produced in a process wherein ***, thereby forming tiny micro-sphere particles which resemble granulated product, only smaller. \textsuperscript{56}

\textsuperscript{51} Ibid. (William F. Emberson, Product Manager, Barium Carbonate, CPC), p. 101.
\textsuperscript{52} Ibid. (Adams C. Lee, counsel for BassTech), p. 200.
\textsuperscript{53} Conference transcript (Mr. Chalup), pp. 78-79. According to BassTech, ***.
\textsuperscript{54} Petition, pp. 5-7 and exhibit 1.
\textsuperscript{55} Calcination is heating of a solid to a temperature which is below its melting point but which is sufficiently high to achieve the transformation desired, in this case the transformation to a granular form.
\textsuperscript{56} Staff field trip notes dated June 22, 2003 regarding the June 10, 2003 staff field trip to CPC. ***.
CPC produces ***. In practice, however, end users rarely can switch between these grades, given the constraints of their production facilities\textsuperscript{57} or the barium carbonate characteristics required for the product(s) being produced. CPC reported that it ***.\textsuperscript{58}

According to CPC, the basic production process is common to both CPC and the Chinese producers; however, there are a few significant differences.\textsuperscript{59} Similarities include the raw material used in both countries, which is barite ore, and the fact that CPC and the barium carbonate producers in China produce both the granular and powdered forms of barium carbonate. According to CPC, differences between the domestic and the Chinese production process include the following:\textsuperscript{60}

- CPC uses coke as a carbon source in a gas or fuel oil-fired furnace; producers in China use steam coal as a carbon source and pulverized steam coal as the fuel input for the kiln.\textsuperscript{61}
- Producers in China use a grade of coal having a lower carbon content than the coke used by CPC.
- CPC purchases carbon dioxide gas directly; producers in China don’t have access to reliable sources of carbon dioxide and must produce their own carbon dioxide by reacting limestone (calcium carbonate) and coal in a kiln.
- At CPC, calcining to produce the granular grade is accomplished using the same equipment as for drying because of the availability of natural gas; in China where natural gas is not readily available, producers need to use separate equipment for drying and calcining that is fueled by coal and kerosene, respectively.
- At CPC the production process is designed to ensure that the proper mix of elemental carbon and barite ore is maintained continuously in the reducing kiln to a high degree of accuracy. However, the Chinese producers cannot maintain such a degree of control given the “lumpy” nature of their feedstock. Such a lack of control would result in a substantial loss of efficiency by the Chinese producers, estimated by CPC to amount to about *** percent as compared with CPC’s production process.\textsuperscript{62}

According to CPC, because the Chinese barium carbonate producers lack key energy or chemical inputs as described above, the Chinese production process is far less efficient and more complicated than the production process employed by CPC, resulting in substantial cost disadvantages for the Chinese producers.\textsuperscript{63} In contrast, a representative of BassTech, which imports and markets barium carbonate produced by Red Star, contends that the cost structure of CPC is higher than that of Red Star because CPC must either procure a much lower quality barite ore locally or it must import a higher quality barite.

\textsuperscript{57} CPC’s postconference brief, p. 4.

\textsuperscript{58} CPC could choose to redirect some of its *** into barium carbonate, as the ***. CPC’s posthearing brief, p. Q-49.

\textsuperscript{59} Petition, pp. 5-7, and conference transcript (Mr. Mauldin), p. 18.

\textsuperscript{60} Conference transcript (Mr. Mauldin), p. 18.

\textsuperscript{61} CPC’s reduction kiln can run on natural gas, but it’s primarily fired on waste oil, referred to as #5 oil. Hearing transcript (Mr. Mauldin), p. 106.

\textsuperscript{62} Submission provided by CPC, June 27, 2003.

\textsuperscript{63} Petition, pp. 5-7, and conference transcript (Mr. Mauldin), pp. 18-19.
ore from China.\footnote{Conference transcript (Mr. Chalup), pp. 86-89. BassTech stated that the purity levels of China's barite reserves exceed 94 percent, and estimates that the barite reserves in Cartersville, GA have purity levels of 20 to 30 percent. Hearing transcript (Mr. Chalup), pp. 147-148.} The barite ore that CPC obtains locally is mixed with clay; before the ore can be used for the production of barium carbonate, it must be separated from the clay through a process referred to as beneficiation.\footnote{Beneficiation is ***.} Following beneficiation, the average purity of CPC's U.S. barite ore has been *** percent and the average purity of its Chinese ore has been *** percent.\footnote{CPC's posthearing brief, pp. 51-52, and exh. 22. The average purity of the Chinese ore has been adjusted to consist of ***.}

**Other Domestic Like Product Factors**

Issues pertaining to the channels of distribution, interchangeability, and customer and producer perceptions of barium carbonate are discussed in Part II of this report. Prices are discussed in Part V.
PART II: CONDITIONS OF COMPETITION IN THE U.S. MARKET

U.S. MARKET SEGMENTS/CHANNELS OF DISTRIBUTION

The U.S. market for barium carbonate is largely segmented between two principal categories, glass production and brick/tile production, with small amounts going to other applications. The majority of all shipments and imports is used in glass production. Glass products requiring barium carbonate include cathode ray tubes, light-reflecting glass beads, glass lamps, projection lens glass products, glass tubing and necks, glass filters, and borosilicate glass. Cathode ray tubes account for the majority of all barium carbonate used in glass production. The glass segment of the market is highly concentrated, with four large customers accounting for most of the barium carbonate used in these end uses. Brick and tile production account for a much smaller share of the market than glass production. Barium carbonate is used to make the surface of brick and tile clear. It is also used in making ferrite powder that has applications in certain types of magnets, and in making frit that is used in glazing for structural clay, porcelain, enamel, and iron cast welding rod products.

Barium carbonate in a granular form accounts for *** of all U.S. shipments by CPC and by importers of Chinese material. About *** percent of the quantity of CPC’s shipments was granular in 2002, and about *** percent was powdered. For imports from China, about *** percent was granular and about *** percent was powdered in 2002. *** of CPC’s shipments of granular barium carbonate went to glass manufacturers, while about *** percent of its powdered barium carbonate went to brick and tile manufacturers and the remainder went to other uses. For imports from China about *** percent of U.S. shipments of granular barium carbonate went to glass manufacturers and about *** percent of powdered barium carbonate went to brick and tile manufacturers.

CPC offers powdered barium carbonate products known as Micro-Flo™ and Aqua-Flo™ that are generally considered distinct from any products known to be available from China or other import sources.¹ CPC reported that these products feature pre-dispersed, agglomerated micro particles that increase performance for flow characteristics, reactivity, and dispersability for brick and tile manufacture. CPC also said that it provides lab analysis and field service, and that it also leases specialized feeding equipment for use with these products. Eight purchasers reported buying Micro-Flo™ during the 2000-02 period. None of these eight firms was able to identify any similar imported product available from China.²

CPC reported that it sells throughout the entire United States while most importers of Chinese material reported that they sell in specific regions or states. Regional market areas reported by importers included the East Coast, the Midwest, and the West Coast. Specific states that were listed as important market areas for imports from China included Alabama, Arizona, California, Illinois, Kentucky, Ohio, and Pennsylvania.

U.S. inland shipping distances for U.S.-produced barium carbonate were compared with those for imports from China. CPC reported that *** percent of its U.S. sales occur within 100 miles of its production facility, *** percent are within distances of 101 to 1,000 miles, and *** percent occur at distances of over 1,000 miles from its facility. For imports from China, an average of *** percent of sales occur within 100 miles of importers’ storage facilities or ports of entry, about *** percent are within 101 to 1,000 miles, and *** involve distances of over 1,000 miles.

¹ Aqua-Flo™ is identical to Micro-Flo™ except that it is available in a slurry form rather than a powdered form, and this has advantages in certain uses (staff conversation with ***).
² CPC cited evidence in its prehearing brief of a company, ***.
Delivery lead times vary widely for both U.S.-produced barium carbonate and imports from China. CPC reported that they range from *** to ***, while lead times for imports from China range from *** to as much as *** for other importers.

SUPPLY AND DEMAND CONSIDERATIONS

U.S. Supply

The sensitivity of the domestic supply to changes in price depends on several factors including the level of excess capacity, the availability of alternate markets for U.S.-produced barium carbonate, inventory levels, and the ability to shift to the manufacture of other products. The record evidence indicates that the industry has some flexibility in expanding output and U.S. shipments in response to an increase in price.

The U.S. industry has had *** excess capacity for both granular and powdered barium carbonate during 2000-02. The capacity utilization rate for granular barium carbonate was *** percent in 2000, *** percent in 2001, and *** percent in 2003. The rate for the powdered products ranged between *** and *** percent during 2000-02.

The ratio of exports of the U.S. industry's powdered barium carbonate to its volume of U.S. shipments ranged between *** and *** percent during 2000-02. During January-March 2003 it was *** percent as compared to *** percent during the same period in the previous year. The ratio of the U.S. industry's end-of-period inventories to its U.S. shipments for granular barium carbonate ranged between *** percent and *** percent during 2000-02. For powdered barium carbonate the ratio ranged between *** percent and *** percent during those years.

U.S. Demand

Since barium carbonate is an intermediate product used principally in the production of glass products and brick and tile as noted earlier, the demand for barium carbonate is closely linked to the level of economic activity in those industries. The overall demand for barium carbonate as measured by apparent consumption in quantity terms decreased steadily from 2000 to 2002, and increased between interim periods.

When asked how the demand for barium carbonate in the United States has changed since 2000, *** did not assess changes in demand during that period, but predicted that it was likely to decline in the future, while the majority of responding importers said that demand has decreased. CPC said ***.

Among importers, *** stated that demand has decreased and attributed much of the decline to generally recessionary economic conditions. However, it also stated that the demand for TV glass used in cathode-ray picture tube TV sets is declining because of the increasing popularity of flat panel (e.g., LCD and plasma) TVs which do not use TV glass. In addition, *** said that the increased recycling of glass cullet4 has allowed TV glass producers to reduce the volume of barium carbonate purchased while reducing their costs.5 *** attributed the decline in demand to recessionary conditions and reduced demand for barium carbonate used in ferrite powder. It also stated that two major consumers of barium

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3 CPC's export markets are ***. All barium carbonate exports to these markets are ***. CPC ***. Osram Sylvania's exports consist of ***.

4 *** said that glass cullet refers to fragments of scrap glass from production operations which are collected and recycled to the furnace for melting. Cullet can be generated internally or purchased from recyclers.

5 When end-user purchasers were asked to discuss any factors affecting changes in demand for barium carbonate since January 2000, none of the responding firms cited glass cullet as a factor.
carbonate, ***, have substantially cut back on their purchases. *** attributed the weak demand for barium carbonate to economic conditions and *** reported that demand has declined due to changes in manufacturing formulas.

Purchasers that produce end-use products that use barium carbonate as an input were asked to discuss any changes in the demand for their final products that had occurred since January 1, 2000. Of the 22 end-use purchasers that responded, 12 reported that demand was unchanged, eight reported that demand had decreased, one reported that demand had increased, and one reported that demand had been variable depending upon the plant surveyed. Among the larger glass manufacturing purchasers, ***. *** also stated that demand had decreased, citing competition from imports of glass and TV sets. *** also said that the demand for its products had decreased. It attributed the decline to ***.

**Substitute Products**

When asked whether other products could be substituted for barium carbonate, *** most importers and purchasers either answered that no substitutes existed or indicated that they were not aware of substitutes. *** stated that strontium carbonate, lead, and glass cullet are potential substitutes, but no other importers listed any substitute products. *** stated that either strontium carbonate or barium nitrate may be substituted for barium carbonate, but both products are *** than barium carbonate, and *** are required if they are used in applications instead of barium carbonate.

**Cost Share**

Questionnaire responses indicate that barium carbonate usually accounts for a relatively small share of the total cost of the products that use it as an input. CPC reported that it accounts for *** to *** percent of the cost of a TV glass panel and less than *** percent of the cost of brick and tile products. One importer, ***, estimated that it generally accounts for less than 10 percent of the total cost of products that require it. None of the other importers provided estimates of cost shares, but a large number of purchasers presented estimates for a variety of products. Cost estimates for brick were 2 percent or less. Estimates for different glass products ranged from less than 1 percent to as much as 29 percent, but in most cases, the share was 10 percent or less. In addition to brick and glass, purchasers reported the use of barium carbonate in the manufacture of chemical products, coatings, and casting powder. The cost share of barium carbonate in these applications was also typically 10 percent or less.

**SUBSTITUTABILITY ISSUES**

The extent of substitutability between domestic products and subject imports, between domestic products and nonsubject imports, and between subject and nonsubject imports is examined in this section. Much of the discussion is based on information obtained from purchaser questionnaires.

Of the 26 purchasers that provided questionnaires, 22 are manufacturers and 4 are distributors. The manufacturing firms that used barium carbonate include nine producers of glass products, four brick manufacturers, and nine firms producing other products including specialty chemicals, lamps, coating, ceramic products, and continuous cast moldings for the U.S. steel industry. Eleven of the purchasers reported that they bought granular barium carbonate during 2000-02 and 17 reported buying powdered barium carbonate during this period. Four firms reported purchases of Chinese-produced granular barium carbonate, and eight reported purchases of Chinese-produced powdered barium carbonate.

The combined value of purchases of both granular and powdered barium carbonate reported by these firms decreased annually during 2000-02. For the granular products, purchases were valued at $*** million in 2000, $*** million in 2001, and $*** million in 2002. Purchases of U.S.-produced granular barium carbonate ranged between *** percent and *** percent of the total annual reported value
of purchases during 2000-02, while purchases of imports of the granular product from nonsubject countries decreased from *** percent of the value in 2000 to *** percent in 2002 and purchases of the granular product from China increased from *** percent in 2000 to *** percent in 2002. Four firms (American Video, Corning Asahi, Technegas, and Thomson) accounted for most purchases of the granular product. Information on the combined purchases of these firms is presented in table II-1 below.

For powdered barium carbonate, annual purchases amounted to $*** million in 2000, $*** million in 2001, and $*** million in 2002. Purchases from CPC increased from *** percent of the total value of powdered purchases in 2000 to *** percent in 2002, while purchases of powdered imports from nonsubject countries decreased from *** percent in 2000 to *** percent in 2002, and purchases from China increased from *** percent of annual purchases in 2000 to *** percent in 2002.

Table II-1
Barium carbonate: Purchases by the largest glass manufacturers, 2000-02

* * * * * * * *

Factors Affecting Purchasing Decisions

Purchasers reported that a variety of factors are considered important in purchases of barium carbonate. When asked to rank the three most important factors considered in purchasing decisions, quality ranked highest, with 13 of the 25 purchasers that responded to the question choosing this as their number one factor, and 21 purchasers choosing quality as one of their top three factors (table II-2). Price\(^7\) was the next most important factor in purchasing decisions, with 5 of the responding purchasers choosing price as their number one factor and 20 purchasers choosing price as one of their top three factors. Other factors mentioned by purchasers included traditional supplier, service, and meeting specifications. Among the largest purchasers, ***.\(^8\)

Table II-2
Barium carbonate: Ranking of factors used in purchasing decisions, as reported by U.S. purchasers

<table>
<thead>
<tr>
<th>Factor</th>
<th>Number of firms reporting</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number one factor</td>
</tr>
<tr>
<td>Availability</td>
<td>3</td>
</tr>
<tr>
<td>Price</td>
<td>5</td>
</tr>
<tr>
<td>Quality</td>
<td>13</td>
</tr>
<tr>
<td>Other(^2)</td>
<td>4</td>
</tr>
</tbody>
</table>

\(^1\) Two firms ranked only one factor rather than three factors.
\(^2\) Other factors include traditional supplier, service, and meeting specifications.

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

\(^6\) Some of the data in this table differ from similar data presented elsewhere in the report.

\(^7\) In some cases firms ranked “total cost” as one of the three important purchasing factors. Total cost was included under price in table II-2.

\(^8\) ***.
In order to obtain more information on purchasing decisions, firms were asked how often they purchase the barium carbonate that is offered at the lowest price. Purchasers were instructed to answer always, usually, sometimes, or never. Among the 24 responding purchasers that answered the question, one selected always, six selected usually, ten selected sometimes, and seven selected never. Among the large glass purchasers, ***. Before buying barium carbonate from a potential supplier, purchasers often require the supplier to undergo a qualification process. Sixteen of the 26 purchasers reported that their suppliers were required to become certified or pre-qualified with respect to the quality, strength, or other performance characteristics of the barium carbonate that they offer. The qualification process varies from purchaser to purchaser, but it often involves tests of samples and plant trials in order to ensure that the barium carbonate meets the purchaser’s specifications.

In the purchaser questionnaire in the final phase of the investigation, respondents were asked to estimate the time it typically takes to qualify a new supplier. The time frame cited by purchasers that responded to the question were 1 month or less (4 purchasers), 2-4 months (2 purchasers), 4-6 months (9 purchasers), 6-12 months (2 purchasers), and “up to 12” months (1 purchaser). ***. A factor in qualifying barium carbonate is the physical strength of the barium carbonate granules, which, if unsatisfactory, would disintegrate, thereby clogging the handling system. Another concern is the presence of trace impurities that cannot be removed by leaching. If these are not removed in the production of TV glass, for example, an undesirable color could be imparted on the television screen.

In the final phase of the investigation, TV glass producers and other purchasers were requested to provide information concerning any attempts to certify or prequalify the Chinese product. ***. In ***.

Comparison of Domestic Products and Subject Imports

While CPC and importers of barium carbonate from China offer competing products that are commonly sold in the same channels of distribution, often to the same customers, some factors other than price may limit the extent of competition. These factors are discussed below.

When asked whether U.S.-produced barium carbonate and imported barium carbonate from China can be used interchangeably, *** and five importers of barium carbonate from China answered yes, while two other importers of Chinese material answered no, and two answered that they did not know. Of the two importers that answered no, one said that many users prefer CPC’s Micro-Flo™ product or German-produced barium carbonate to imports from China. The other importer of Chinese material that answered no said that CPC offers a fuller product range than Chinese suppliers. In addition to these responses, ***, an importer of barium carbonate from *** said that imports from China can be used interchangeably with U.S.-produced barium carbonate.

CPC and importers were also asked whether differences in product characteristics or sales conditions between U.S.-produced barium carbonate and imports from China have a significant effect on sales of the products. CPC said that ***, **. It said that ***. In addition, *** said that the TV glass industry requires both barium carbonate and strontium carbonate in its production process, and that it requires approved suppliers to offer both materials. CPC offers *** barium carbonate *** to the TV

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9 Conference transcript (Mr. Chalup), pp. 118-119.
10 Conference transcript (Mr. Chalup), p. 119.
11 The terms “prequalify” and “qualify” are used interchangeably herein.
12 ***.
13 ***.
glass producers. However, according to BassTech, Red Star, the largest Chinese producer, ***. Among other importers of barium carbonate from China, one firm said that many brick manufacturers refuse to even try Chinese-produced barium carbonate because of the easy mixing and better performance of Micro-Flo™. Another importer said that the Chinese industry has a cost structure advantage over the U.S. industry, and still another, ***, said that it imports barium carbonate primarily using ***. Of the other five importers of Chinese material, three said that differences in product characteristics and sales conditions do not have an effect on sales, and two did not respond to the question. *** also said that there are no differences between the U.S.-produced and Chinese-produced products that affect sales.

In addition to these questions for producers and importers, purchasers that are familiar with both U.S.-produced and imported barium carbonate from China were asked whether the products are used in the same applications. All of the nine purchasers that specifically compared barium carbonate from the two countries answered yes. Among the major TV glass producers, ***.

Purchasers were also asked to compare U.S.-produced barium carbonate with imported barium carbonate from China for selected characteristics, noting whether the domestic product was superior, comparable, or inferior to the subject imports. The characteristics chosen were availability, delivery terms, delivery time, discounts offered, minimum quantity requirements, packaging, product consistency, product quality, product range, reliability of supply, technical support/service, transportation network, U.S. transportation costs, and price (table II-3). Ten purchasers provided comparisons in these categories. The results show that a majority of purchasers ranked the United States product superior in technical support, while a majority also ranked it inferior in price (i.e., its price is higher than that of the Chinese product). In addition, 5 of 10 purchasers ranked the U.S.-produced barium carbonate superior in delivery time, reliability of supply, and its transportation network. In all other categories a majority of purchasers ranked the U.S. and Chinese products comparable. Among the major glass producers, ***.

**Comparison of Domestic Products and Nonsubject Imports**

CPC and the importers were asked whether U.S.-produced barium carbonate and imports from nonsubject countries14 are interchangeable in use, and whether differences in product characteristics or sales conditions have a significant effect on sales of the products. CPC said that imports from *** can be used interchangeably with its products. However, it also stated that its Micro-Flo™ product *** (see earlier discussion). Among importers that responded, six firms stated that U.S.-produced barium carbonate and imports from nonsubject countries can be used interchangeably, and six stated that there are no differences in product characteristics or sales conditions that have a significant effect on sales of the products.

In addition, purchasers that are familiar with both U.S.-produced and imported barium carbonate from nonsubject sources were asked whether the products are used in the same applications. Four firms *** all reported that the U.S.-produced barium carbonate is used in the same applications as imports from Germany. Three firms *** reported that it has the same uses as imports from Mexico, and one firm, ***, reported that it has the same uses as imports from Japan.

---

14 Germany and Mexico account for the majority of nonsubject imports.
Table II-3
Barium carbonate: Comparisons between U.S.-produced and imported products from China, as reported by U.S. purchasers

<table>
<thead>
<tr>
<th>Factor</th>
<th>Number of firms reporting</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>U.S. superior</td>
</tr>
<tr>
<td>Availability</td>
<td>2</td>
</tr>
<tr>
<td>Delivery terms</td>
<td>0</td>
</tr>
<tr>
<td>Delivery time</td>
<td>5</td>
</tr>
<tr>
<td>Discounts offered(^1)</td>
<td>0</td>
</tr>
<tr>
<td>Lowest price(^2)</td>
<td>1</td>
</tr>
<tr>
<td>Minimum quantity requirements</td>
<td>1</td>
</tr>
<tr>
<td>Packaging</td>
<td>0</td>
</tr>
<tr>
<td>Product consistency</td>
<td>2</td>
</tr>
<tr>
<td>Product quality</td>
<td>2</td>
</tr>
<tr>
<td>Product range</td>
<td>2</td>
</tr>
<tr>
<td>Reliability of supply</td>
<td>5</td>
</tr>
<tr>
<td>Technical support/service</td>
<td>6</td>
</tr>
<tr>
<td>Transportation network</td>
<td>5</td>
</tr>
<tr>
<td>U.S. transportation costs</td>
<td>2</td>
</tr>
</tbody>
</table>

\(^1\) Two firms did not provide comparisons on discounts offered.
\(^2\) A rating of superior means that the price is generally lower. For example, if a firm reports “U.S. superior,” this means that it rates the U.S. product’s price generally lower than the Chinese product’s price.

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

Purchasers were also asked to compare U.S.-produced barium carbonate with imported barium carbonate from nonsubject sources in the selected characteristics described earlier, noting whether the domestic product was superior, comparable, or inferior to the imports. Four firms made usable comparisons involving Germany, Japan, and Mexico. Two firms that compared the United States and Germany reported that the products are comparable in all 15 characteristics, while a third ranked the United States superior to Germany in availability, delivery time, and transportation network, inferior in product range, and comparable in all other characteristics. The only firm that compared the United States with Japan, ranked the United States superior in availability, delivery terms, delivery time, price and reliability of supply, and comparable in all other characteristics. The only firm that compared the U.S.-produced product with imports from Mexico for all 15 characteristics, ranked the United States comparable to Mexico in all characteristics.

Comparison of Subject Imports and Nonsubject Imports

CPC and the importers were asked whether imports from China and imports from nonsubject sources are interchangeable in use, and whether differences in product characteristics
or sales conditions have a significant effect on sales of the products. CPC stated that ***. ***. Four of the importers that responded to the question all stated that the products can be used interchangeably and that product characteristics and sales conditions do not have a significant effect on sales. However, one importer, who said that imports from Germany tend to be of a higher purity and/or a calcined product that usually commands a higher price; as a result, according to the importer, there is interchangeability in only a few cases between imports from China and imports from Germany. Another importer said that imports from China can be used interchangeably with nonsubject imports, but said that China has a cost structure advantage over nonsubject imports.

Purchasers that are familiar with both imports from China and from nonsubject sources were asked whether the products are used in the same applications. One purchaser, said that barium carbonate from China, Mexico, and Germany can be used in the same applications. Another purchaser, said that barium carbonate from Germany and China can be used in the same applications.

When asked to compare imports from China and from nonsubject sources in the 15 selected characteristics, one purchaser, compared imports from China with imports from Germany. It ranked the two countries comparable in all characteristics.

ELASTICITY ESTIMATES

This section discusses the elasticity estimates for barium carbonate. Parties were encouraged to comment on these estimates in their briefs. The estimates were not discussed in the briefs, but CPC did comment on the substitution elasticity at the hearing as discussed below.

U.S. Supply Elasticity

The domestic supply elasticity for barium carbonate measures the sensitivity of the quantity supplied by U.S. producers to changes in the U.S. market price of this product. The elasticity of domestic supply depends on several factors including the level of excess capacity, the ease with which producers can alter capacity, producers' ability to shift to production of other products, the existence of inventories, and the availability of alternate markets for U.S.-produced barium carbonate. The earlier analysis of these factors indicates that CPC has some flexibility in adjusting supply in response to price changes. It may have flexibility in the case of barium carbonate than in barium carbonate. However, the elasticity for both the granular and powdered products is likely to be near the low end of the 5 to 10 range.

U.S. Demand Elasticity

The U.S. demand elasticity for barium carbonate measures the sensitivity of the overall quantity demanded to a change in the U.S. market price of this product. This estimate depends on factors discussed earlier such as the existence, availability, and commercial viability of substitute products, as well as the component share of barium carbonate in the production of any downstream products. Because of the lack of close substitutes for barium carbonate and the small share of barium carbonate in the total cost of products that use it as an input, it is likely that the aggregate demand is fairly inelastic; a value below -0.5 for both granular and powdered barium carbonate is likely.

---

15 ***.
Substitution Elasticity

The elasticity of substitution depends upon the extent of product differentiation between the domestic and imported products.\textsuperscript{16} Product differentiation, in turn, depends upon such factors as quality (e.g., chemistry, appearance, etc.) and conditions of sale (availability, sales terms/discounts/promotions, etc.). Based on available information, the elasticity of substitution between U.S.-produced and imported barium carbonate from China is likely to be in the range of 3 to 5. The elasticity for the granular barium carbonate is probably higher than for the powdered barium carbonate.

At the hearing, CPC argued that the estimated substitution elasticity should be higher but did not offer an alternative numerical estimate.\textsuperscript{17} The overall evidence indicates that there is no reason for increasing the estimate. In view of the importance that some major glass purchasers place on the qualification process, and indications that quality rather than price is the most important factor in purchasing decisions, it seems unlikely that small changes in CPC’s price relative to the price of imports from China would necessarily lead to major shifts in purchases of granular barium carbonate between the two sources, at least in the short run. In the case of powdered barium carbonate, the evidence that CPC’s main product, Micro-Flo\textsuperscript{TM}, lacks close substitutes also suggests that no increase in the elasticity of substitution would be justified.

\textsuperscript{16} The substitution elasticity measures the responsiveness of the relative U.S. consumption levels of the subject imports and the domestic like product to changes in their relative prices. This reflects how easily purchasers switch from the U.S. product to the subject products (or vice versa) when prices change.

\textsuperscript{17} Hearing transcript (Mr. Price), p. 112.
PART III: U.S. PRODUCERS' PRODUCTION, SHIPMENTS, AND EMPLOYMENT

The Commission analyzes a number of factors in making injury determinations (see 19 U.S.C. §§ 1677(7)(B) and 1677(7)(C)). Information on the margin of dumping was presented earlier in this report and information on the volume and pricing of imports of the subject merchandise is presented in Parts IV and V. Information on the other factors specified is presented in this section and/or Part VI and (except as noted) is based on the questionnaire response of two firms (CPC and Osram Sylvania) that accounted for all known U.S. production of barium carbonate during 2002.

U.S. PRODUCERS

Two firms, CPC and Osram Sylvania, currently produce barium carbonate in the United States.¹ CPC is a producer of barium and strontium chemicals in Cartersville, GA, and is by far the larger of the two producers.² CPC is a privately held corporation managed by the Dellinger family, which has produced barium carbonate at Cartersville, GA, since 1933. The principal feedstocks for its barium carbonate production are barite ore, petroleum coke, and carbon dioxide. New Riverside Ochre, a wholly owned Dellinger enterprise, mines barite ore (barium sulfate) near CPC, which, in turn, is upgraded and shipped to CPC by truck for processing into barium carbonate. CPC also imports chemical-grade barite ore from China, the world's largest producer of barite ore and barium carbonate, to supplement its domestic barite ore supply. According to BassTech, ***.³ ***.

Osram Sylvania is a *** subsidiary of Siemens AG, Munich, Germany, and is a U.S. producer of specialty lighting products headquartered in Towanda, PA. Osram Sylvania produces ***.⁴ Although this firm accounts for less than *** percent of total U.S. production volume, ***.⁵

Aggregate data provided by CPC and Osram Sylvania on their barium carbonate production operations are presented in table III-1. Each firm's production capacity was constant during calendar years 2000-02 and the interim periods (January-March) of 2002 and 2003. During the 2000-02 period, their combined capacity utilization cycled from a peak of *** percent in 2000 to a low of *** percent in 2001, then increased to *** percent in 2002 and remained at *** percent during interim 2003.⁶ Capacity utilization was *** percent during interim 2002, although the unit value of U.S. shipments, $*** per short ton, was higher than that of the calendar year as a whole ($***).⁷ The drop in production in interim 2002 was precipitated by a ***.⁸ CPC's U.S. shipment volume followed roughly the same trend as that of capacity utilization, although unit values peaked at $*** per short ton in 2001, the year in which the

¹ Three producers (CPC, FMC Corp., and Sherwin-Williams Co.) filed the 1980 petition on barium carbonate, and the 1983 barium carbonate petition was filed solely by CPC. Both FMC and Sherwin-Williams exited the barium carbonate market in the early 1980s. GTE Sylvania (now Osram Sylvania) was identified as a small captive producer during these previous investigations.

² In addition to barium carbonate, CPC produces barium chloride and ***. CPC producers' questionnaire response, June 12, 2003, and staff plant trip to CPC, Cartersville, GA, June 10, 2003.

³ Staff trip to BassTech, June 12, 2003.

⁴ Osram Sylvania's barium carbonate is ***. Staff contact with Osram Sylvania personnel, August 5, 2003.

⁵ ***.

⁶ In response to staff's question concerning potential ***. CPC's posthearing brief, p. Q-49.

⁷ CPC accounted for ***.

⁸ Staff e-mail correspondence from ***.
capacity utilization rate was lowest. Overall, CPC’s U.S. shipments displayed a *** downward trend in unit value, from $*** in 2000 to a floor of $*** in 2002, and about $*** in the interim periods of 2002 and 2003. The industry’s export shipments, while averaging only about *** percent of total shipment volume, commanded *** average unit values during the period examined. The end-of-period inventory volumes and ratios to production and shipments in general displayed *** downward trends during 2000-02. Average hours worked were constant during the period examined, and hourly wages increased steadily. The rise in unit labor costs during the period examined, expressed in dollars per ton, generally tracked wage trends.

Table III-1

* * * * * * * *

Data comparing U.S. shipments and exports by firm are presented in table III-2. CPC accounted for ***. CPC’s shipments to the domestic market declined by *** short tons (*** percent) between 2000 and 2002, and rose by *** percent in interim 2003 relative to interim 2002. Its unit values of U.S. shipments decreased *** during the period examined, while export unit values increased, albeit at *** lower volumes.

Table III-2

* * * * * * * *

CPC’s U.S. shipments of barium carbonate by type and end use in calendar year 2002 are presented in table III-3. A total of *** short tons of U.S. barium carbonate was shipped at a value of $*** million ($*** per ton). Shipments were *** calcined granular barium carbonate, which was sold *** to glass manufacturers, principally for use in TV glass. Calcined granular barium carbonate accounted for *** percent of the volume and *** percent of the value, and sold for ***. *** Powdered barium carbonate in all forms, including Micro-Flo™, represented *** percent of CPC’s U.S. shipments by volume and *** percent by value. Powdered forms were shipped predominately to the

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9 CPC’s commodity-grade barium carbonate export shipment unit value averaged $*** per ton; export shipments were to ***. Osram Sylvania’s *** export shipments averaged $**.*  
10 CPC’s inventory, production, and shipment questionnaire data ***. CPC’s questionnaire response.  
11 Osram Sylvania employed *** for the production of barium carbonate during the period examined. CPC’s employment and wage-related data are somewhat overstated because they include wages of engineers and production workers who spent only a portion of their time on barium carbonate (telephone message of ***).  
12 In June 2003, CPC’s board of directors announced the permanent layoff of 27 persons at its Cartersville, GA, plant, the first workforce reductions in its 70-year history. ***. Hearing transcript (Mr. Mauldin), pp. 23-24; CPC’s posthearing brief, p. 2; and e-mail correspondence from Joseph H. Price, counsel for CPC, August 19, 2003.  
13 About ***; CPC’s questionnaire response.  
14 Asian TV glass producers generally use the compacted granular barium carbonate, whereas U.S. TV glass producers generally use the calcined granular material. Hearing transcript (Mr. Chalup), p. 142.
brick and glass industries, which together accounted for *** percent of CPC's powdered forms' U.S. volume and *** percent of the value. Micro-Flo™ was *** percent of all powdered forms' volume, and commanded *** percent of the total value; this specialty spray-dried product sold at a *** price of $*** per ton, principally to brick manufacturers. Micro-Flo™ accounted for *** percent of CPC's total barium carbonate shipment volume and *** percent of its total value.15 Powdered forms of barium carbonate other than Micro-Flo™ were shipped primarily to ***. These powdered products accounted for *** percent of CPC's total U.S. shipment volume and *** percent of its total value.

Table III-3
Barium carbonate: CPC's U.S. shipments in 2002, by type

* * * * * * *

CPC's shipments of barium carbonate to the primary domestic manufacturers of TV glass are presented in table III-4. Corning Asahi and American Video are joint ventures of Corning and Asahi Glass, and Corning and Sony Corp., respectively. Thomson is a subsidiary of Thomson Multimedia, which also has video glass plants in Poland and France. Techneglas is part of a company called NEG, Nippon Electric Glass. These firms are concentrated in Pennsylvania and Ohio, and are multinational in scope.16

Table III-4
Barium carbonate: CPC's shipments to TV glass manufacturers, by firms and by quarters, January 2000-March 2003

* * * * * * *

CPC supplied all four TV glass manufacturers during the period examined, ***.17 CPC's total shipment volume to the manufacturers declined from *** short tons in 2000 to *** short tons in 2001; stabilized at *** short tons in 2002; and was *** short tons in interim 2003 compared with *** short tons in interim 2002. CPC's market share of shipments to the four TV glass manufacturers, calculated from producers' and importers' questionnaire data, was ***. The average f.o.b. unit value of CPC's shipments to the TV glass manufacturers ***. Total U.S. demand for barium carbonate by the TV glass manufacturers (including imports) declined by approximately *** percent, from about *** tons in 2000 to about *** tons in 2002.18 19 Corning Asahi's volume of purchases *** by *** percent between 2000 and 2002, while those of Techneglas *** percent. Thomson's demand ***, while American Video's demand ***.20

15 Micro-Flo™ ***. E-mail correspondence from ***.
16 Conference transcript (Mr. Chalup), pp. 76-77.
17 ***.
18 CPC cited more vulnerability to injury as a result of several recent announcements from the TV glass industry, including the closing of Corning Asahi in June 2003 and the other TV glass producers being pressured mostly by imports of low-priced television sets from China. Hearing transcript (Mr. Wood), p. 47.
19 Red Star cites CPC's argument that ***. Red Star agrees that the ***. However, the demand conditions from ***. Red Star's posthearing brief, ***.
20 Red Star cited news articles detailing slumping demand in the U.S. TV glass manufacturing sector, including the closure of Corning Asahi's glass plant at State College, PA; reductions in force at Thomson's Marion, IN, base (continued...)

III-3
During the period examined, the share of CPC's domestic shipments for TV glass directed to Corning facilities (Corning Asahi and American Video) on an aggregate volume basis, from percent of the total in 2000 to percent in 2001, percent in 2002, and percent in interim 2003. Shipment volume to Corning Asahi, however, from percent in calendar year 2000 to percent in interim 2003, while that to American Video from percent in 2000 to percent in interim 2003.21 Although CPC's volume share to Thomson from percent to percent during the period examined, its absolute shipment volume.22 CPC's volume share to Techneglas from percent to percent during the period examined.24

Factoring in importers' tonnage as reported in Part IV of this report,25 CPC commanded percent of the total market volume to Corning Asahi in 2000; about percent in 2001; more than percent in 2002; and percent in interim 2003. CPC market share at Corning Asahi in 2001 through interim 2003 due to the . CPC's share of total shipments to American Video was percent in 2000 and percent thereafter due to . Thomson was percent by CPC's shipments in 2000 and 2001, percent in 2002, and percent in interim 2003. CPC's share of Techneglas' total market volume was percent in 2000, percent in 2001, percent in 2002, and percent in interim 2003. BassTech's Chinese tonnage displaced CMV's Mexican tonnage to Techneglas after CMV exited the market in 2002.26 Techneglas' demand between 2000 and 2002, and . The movements of CPC and importers' f.o.b. unit value trends were similar; average unit values peaked in 2001, and thereafter.

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20 (...)continued

21 CPC anticipates demand within the United States for granular barium carbonate to as Corning Asahi Video has announced the permanent closure of its State College, PA, facility. In 2002, Corning Asahi Video accounted for over percent of CPC's total sales volume of barium carbonate (CPC's questionnaire response). CPC believes that although total demand for cathode ray tube (CRT) television sets is projected to through 2007, "the impact of this trend on barium carbonate consumption is likely to be by anticipated shifts in consumption to larger screen (CRT) televisions and flat screen (CRT) televisions," both of which consume more barium carbonate. CPC's posthearing brief, p. Q-4.


23 Similar to American Video, Thomson's glass operations are for captive production to supply Thomson's cathode ray tube operations. CPC's posthearing brief, p. Q-2.

24 CPC's knowledge of the conditions of Techneglas' glass operations is "***." CPC is aware that the ***. CPC was reportedly **. CPC's posthearing brief, pp. Q-2, Q-7, and ***.

25 ***.

26 BassTech and CMV (Mexico) entered into a *** contract in *** wherein CMV would shut down its Mexican barium carbonate operations in return for a commission on sales of Chinese barium carbonate to CMV's U.S. customers. See details in Red Star's prehearing brief, exh. 2.
CPC's PURCHASES

***. However, CPC purchased barium carbonate produced in China. Data on CPC's purchases, by sources, are presented in the following tabulation. CPC's purchases of subject imports were equivalent to *** percent of its production in 2000, *** percent in 2001, and ***. With the exception of ***, all of its purchases of subject imports have consisted of ***.

* * * * * * * *

CPC stated that it purchased barium carbonate from China in order to test the quality of the Chinese product, to evaluate the reliability of the supply from China, and to explore the possibility of a longer-term business relationship with BassTech. CPC concluded that the quality of the Chinese barium carbonate was basically equivalent to CPC's own product, and that importers of Chinese barium carbonate were capable of consistently supplying significant quantities to the United States. CPC's purchases did not lead to a business relationship with BassTech because CPC concluded that BassTech and Red Star intended to use CPC's customer relationships to ultimately replace CPC's product with barium carbonate from China.

---

27 ***. According to BassTech, CPC was its largest single customer of barium carbonate in 1999 and 2000 (conference transcript (Mr. Gutmann), p. 73).

28 CPC's posthearing brief, p. Q-17.

29 CPC said *** in a November 12, 2002 conference call between members of the investigative team and Messrs. ***. When asked why it purchased the Chinese product, CPC said that ***.

CPC indicated that its purchased barium carbonate was *** used for *** reprocessed by CPC and used ***. Conference transcript (Mr. Mauldin, p. 49) and ***. ***. Staff field trip to CPC, June 10, 2003.
PART IV: U.S. IMPORTS, APPARENT U.S. CONSUMPTION, AND MARKET SHARES

U.S. IMPORTERS

The Commission sent questionnaires to 18 firms believed to import barium carbonate at some point between January 2000 and March 2003, and received responses from 12 firms, including all firms known to be major importers. 1 Nine of these firms imported barium carbonate from China during this period, 2 and accounted for virtually all known subject imports during this period.

The largest U.S. importer from China *** was BassTech. 3 Under a marketing agreement that BassTech reached with the Mexican producer CMV and signed in ***, CMV agreed to stop producing barium carbonate in return for a commission on sales of Red Star’s barium carbonate to CMV’s former U.S. customers. 4 A separate supply agreement among BassTech, CMV, and Technegas committed BassTech/CMV to supply approximately *** percent of Technegas’ annual requirements from *** using Red Star’s barium carbonate. 5

U.S. IMPORTS

Table IV-1 presents U.S. imports from China and nonsubject sources and shares of total imports. Data in the table are from responses to importers’ questionnaires. Staff elected to present import data from the importers’ questionnaires instead of official U.S. import statistics in this section of the report because the importer coverage was essentially complete and because in the preliminary phase of the investigation CPC questioned the accuracy of the landed, duty-paid values of official statistics (an analysis of official statistics showed that there were no cargo, insurance, and freight costs on some large shipments during January-June 2002). 6

Table IV-1

<p>| | | | | | | | |</p>
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<th></th>
<th></th>
</tr>
</thead>
</table>

During 2000-02, the quantity of U.S. imports of barium carbonate from China increased while the quantity of imports from nonsubject sources decreased. Total imports decreased from *** short tons in 2000 to *** short tons in 2002, or by *** percent. The decline was precipitated by a fall of about *** short tons (***) percent in nonsubject imports, principally from Mexico. These decreases were partially offset by a *** short ton increase (***) percent in imports from China, which peaked at *** short tons in

---

1 The petition identified six importers, and a more complete list of importers was derived from information provided by the Bureau of Customs and Border Protection (formerly the U.S. Customs Service).

2 Three firms reported importing barium carbonate from nonsubject sources.

3 ***.

4 Red Star/BassTech’s postconference brief, p. 5 and exhibit 2.

5 Conference transcript (Mr. Gutmann), pp. 74-75, and BassTech’s postconference brief, answers to staff questions, p. 2.

The volume of imports from China increased from *** percent of total U.S. imports in 2000 to *** percent in 2002. The unit value (landed, duty-paid) of both imports from China and nonsubject sources declined during 2000-02. In 2000, unit values of imports from China were $*** per ton (*** percent) below those of nonsubject imports; $*** per ton (*** percent) lower in 2001; and $*** per ton (*** percent) lower in 2002.

In January-March 2003, the volume of total U.S. imports of barium carbonate declined ***, by *** percent compared with the level in interim 2002. Imports from China were *** as ***.7 Imports from China declined by *** percent relative to those of interim 2002. Nonsubject import volume also declined, by *** percent during the same period. The unit values of both imports from China and nonsubject sources rose *** percent and *** percent, respectively, during interim 2003 compared to interim 2002.

Table IV-2 provides a profile of U.S. imports of granular and powdered forms of barium carbonate from China and nonsubject countries. Granular forms dominated U.S. barium carbonate import tonnage during the period for which data were collected. Because of its large volume, granular barium carbonate also dominated the share of total value, although lower volume powdered forms generally commanded a higher unit value. Granular barium carbonate imports accounted for *** percent of the total by volume in 2000, *** percent in 2001, and *** percent in 2002. In interim 2003, this percentage fell to *** percent largely because of the ***.8 Calcined granular barium carbonate is the predominate product imported, largely for downstream consumption by U.S. manufacturers of TV glass. Powdered forms are consumed primarily in the brick, tile, and other ceramic sectors.9

Table IV-2

<table>
<thead>
<tr>
<th></th>
<th>2002</th>
<th>2003</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Granular</strong></td>
<td>$***</td>
<td>$***</td>
</tr>
<tr>
<td><strong>Powdered</strong></td>
<td>$***</td>
<td>$***</td>
</tr>
</tbody>
</table>

In 2002 there was a *** increase in imports of granular barium carbonate from China, principally due to BassTech’s increased imports of Red Star’s calcined granular product to supply Techneglas. The decline in granular volume from nonsubject sources, in turn, was due primarily to CMV’s exit of the market in deference to Red Star’s tonnage via its negotiated contract.10 11

China’s share of total U.S. barium carbonate import volume increased from *** percent in 2000 to a peak of *** percent in 2002 (*** percent granular and *** percent powdered). In interim 2003, China’s total volume share of all U.S. barium carbonate imports declined to *** percent. Nonsubject import volume was dominated by *** during the period examined, ***.

Table IV-3 presents a breakout of importers’ U.S. shipments of barium carbonate from China by various end-use products in 2002. Calcined granular barium carbonate was *** percent of the total volume in 2002, followed by powdered forms, *** percent, and compacted granular barium carbonate, *** percent. In terms of unit values (f.o.b. U.S. point(s) of shipment), powdered forms of barium carbonate were *** at $*** per short ton, with ***. The unit value spread was ***; the average unit value was $*** per short ton.

---

7 ***.

8 Red Star and Hebei Xinji, the two principal import sources in China, ***.

9 CPC states that powdered (as well as granular) barium carbonate imported from China have exerted downward pressure on pricing in the specialty glass market (CPC’s posthearing brief, p. Q-10). The data in table IV-2 show that volumes of powdered barium carbonate imported from China have ***.

10 Conference transcript (Mr. Gutmann), p. 74, and ***.

11 ***.
Table IV-3
Barium carbonate: U.S. importers' shipments of imports from China, by types and by end-use market segments, 2002

* * * * * * * * *

Calcined granular barium carbonate was used *** by glass manufacturers for TV glass production.\textsuperscript{12} Compacted granular product was used *** (*** percent) in glass (*** percent) manufacture,\textsuperscript{13} and brick manufacture (*** percent), while the remaining *** percent was used in miscellaneous applications. Powdered forms ***. There were ***.

Table IV-4 presents a breakout of importers’ U.S. shipments of nonsubject barium carbonate by various end-use products in 2002. *** were the nonsubject importers of record reported in questionnaire responses. As in the case of U.S. importers’ shipments of imports from China, shipments of imports from nonsubject sources consisted mostly of calcined granular barium carbonate to glass producers; *** percent of the total calcined granular product was shipped to TV glass manufacturers. ***.

Table IV-4
Barium carbonate: U.S. importers' shipments of imports from nonsubject sources, by types and by end-use market segments, 2002

* * * * * * * * *

Table IV-5 provides data on importers' shipments of U.S. imports from China of calcined granular barium carbonate to the major U.S. manufacturers of TV glass, and table IV-6 provides data on importers' shipments of U.S. imports from nonsubject countries of calcined granular barium carbonate to the major U.S. manufacturers of TV glass. The major import shipments were to ***. ***.\textsuperscript{14} ***.\textsuperscript{15} ***. ***.\textsuperscript{16} ***.

Table IV-5

* * * * * * * * *

\textsuperscript{12} CPC refers to prices for calcined granular barium carbonate (see Part V of this report) as being ***. CPC's posthearing brief, pp. 7-8. The record suggests that BassTech’s *** calcined granular barium carbonate shipments *** to the specialty glass industry have *** during the period investigated. Unit values ***. BassTech’s market share for calcined granular barium carbonate by volume relative to that of CPC ***. Questionnaire responses.

\textsuperscript{13} According to importers’ questionnaire responses, compacted granular product ***. This was verified during staff’s visit to BassTech, June 12, 2003.

\textsuperscript{14} BassTech personnel cited the *** as the primary reasons for *** in 2002 and interim 2003. Staff field trip to BassTech headquarters, June 12, 2003. It also reported a significant savings in the cost of freight by its decision to handle all the shipments of barium carbonate on charter vessels from China to the United States compared to buying the materials already delivered to the United States in containers (hearing transcript (Mr. Chalup), pp. 213-214).

\textsuperscript{15} ***.

\textsuperscript{16} In an August 16, 2003 fax in response to staff questions, Techneglas stated that "***."
Table IV-6

* * * * * * * * * * * *

*** barium carbonate from China was shipped *** to Technegas during the period examined. BassTech imported Red Star's barium carbonate and acted as the distributor to Technegas. During the period 2000 and 2001, shipment volumes, values, and unit values were ***. In 2002, however, the volume increased as BassTech's Chinese tonnage began to displace CMV's tonnage based on a *** contractual agreement.17 18 Shipment volumes continued at *** during interim 2003. Unit values *** when BassTech commenced ***.19

With regard to nonsubject import shipments of barium carbonate to the TV glass producers (table IV-6), Technegas accounted for *** and *** percent of the total nonsubject import shipment volume and value, respectively. Technegas was supplied by *** in 2000-02 until ***. *** supplied Technegas during the period examined. Shipment volumes by *** were *** those of *** in 2000-01, and *** in 2002.20 Corning Asahi ***. American Video and Thomson were ***. Nonsubject importers' share of ***. Nonsubject importers' share of ***. *** was supplied approximately *** percent by imports in 2002; all other years were *** percent; ***.21

Table IV-7 presents purchases of barium carbonate, as reported by the U.S. TV glass manufacturers, of CPC's product, the Chinese product, and nonsubject product. The data reported by the TV glass manufacturers differ somewhat from the data reported by CPC (table III-4) and by importers (tables IV-5 and IV-6). A major difference is due to the fact that the values (and unit values) reported by the TV glass manufacturers were requested on a delivered basis, whereas in the producers' and importers' tables the values and unit values were requested f.o.b. producers' and importers' U.S. points of shipment. A comparison of unit values between table III-4 (CPC's reported shipments) and tables IV-5 and IV-6 (importers' reported shipments) indicates that CPC's unit values are *** than those of the import shipments of Chinese and nonsubject products, whereas on a delivered basis (table IV-7), CPC's unit values are ***. Another, and unexplained, difference between table III-4 and table IV-7 is that in CPC's data (table III-4), its annual volume of shipments to ***.

Table IV-7

* * * * * * * * * * * *

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17 Red Star's prehearing brief, exh. 2. ***. Red Star's posthearing brief, pp. Q-19-20. ***. ***. ***. ***.

18 In 2002, shipments of barium carbonate to Technegas represented *** percent of BassTech's total U.S. commercial shipments of barium carbonate (BassTech's questionnaire response).

19 BassTech reported a significant savings in the cost of freight by its decision to handle all the shipments of the freight on charter vessels from China to the United States compared to buying the materials already delivered to the United States in containers (hearing transcript (Mr. Chalup), pp. 213-214).

20 ***.

21 BassTech stated that ***. BassTech's questionnaire response.
APPARENT U.S. CONSUMPTION AND RATIOS OF IMPORTS TO
CONSUMPTION AND PRODUCTION

Table IV-8 presents data on apparent U.S. consumption of barium carbonate, with apparent U.S. consumption being calculated from a summation of CPC's U.S. shipments and importers' U.S. shipments. The volume of apparent U.S. consumption of barium carbonate declined by *** percent between 2000 and 2002,23 and increased by *** percent between January-March 2002 and January-March 2003. The market share of CPC's volume of shipments increased from *** percent in 2000 to *** percent in 2002, and increased from *** percent in January-March 2002 to *** percent in January-March 2003. The market share of the volume of shipments of imports from China increased from *** percent in 2000 to *** percent in 2002, and increased from *** percent in January-March 2002 to *** percent in January-March 2003. The market share of the volume of shipments of imports from nonsubject sources decreased from *** percent in 2000 to *** percent in 2002, and decreased from *** percent in January-March 2002 to *** percent in January-March 2003. The market share of the volume of shipments of imports from all sources decreased from *** percent in 2000 to *** percent in 2002, and decreased from *** percent in January-March 2002 to *** percent in January-March 2003. Apparent U.S. consumption and market share trends by value were the same as those by volume.

Table IV-8

* * * * * * * *

U.S. shipments of imports from China in table IV-8 are ***.


Table IV-9

* * * * * * * *

---

22 Apparent U.S. consumption as presented in the table is ***. ***.

23 The decline would be ***.
PART V: PRICING AND RELATED INFORMATION

FACTORS AFFECTING PRICES

Raw Material Costs

CPC's raw material costs accounted for *** percent of its cost of goods sold in 2000, *** percent in 2001, and *** percent in 2002. Barite ore is the primary raw material in CPC's production of barium carbonate. Barite ore from all sources accounted for *** percent of total raw material costs in 2000, *** percent in 2001, and *** percent in 2002. *** the barite ore used in barium carbonate production was mined in the United States, ***.

Transportation Costs to the U.S. Market

Ocean transportation costs for barium carbonate shipped from China to the United States averaged 9.4 percent of the customs value of these imports during 2002. These estimates are derived from official import data and represent the transportation and other charges on imports.¹

U.S. Inland Transportation Costs

Transportation costs on shipments of barium carbonate are *** on average for CPC than for importers of barium carbonate from China. CPC estimated that these costs average *** to *** percent of the delivered price. For importers providing usable estimates, these costs range from 4 to 23 percent of the delivered price. BassTech, which accounted for the majority of all imports from China, estimated that they average *** percent of the delivered price.

Exchange Rates

Nominal exchange rates are not presented since the Chinese currency, the yuan, has consistently been pegged to the U.S. dollar since January 1, 1994. Therefore, the U.S. and Chinese currencies were virtually constant in relation to each other throughout 2000-02.² Real exchange rates cannot be calculated since no producer price index for China is available.

PRICING PRACTICES

Pricing Methods

Since contract sales account for a large share of barium carbonate business, prices are generally determined through the process of contract negotiations. ***. Other importers of Chinese material *** reported that prices are determined by contracts. However, transaction-by-transaction negotiations and market competition were also mentioned.

Prices of barium carbonate are generally quoted *** by CPC, but importers of Chinese-produced barium carbonate commonly quote on an f.o.b. warehouse, an f.o.b. port of entry, or a delivered basis.

¹ The estimated cost was obtained by subtracting the customs value from the c.i.f. value of the imports for 2002 and then dividing by the customs value.

One importer stated that it quotes on an f.o.b. warehouse basis for distributors but quotes on a delivered basis for manufacturers.

For the most part, there are no regular discount policies in effect on sales of barium carbonate. One smaller importer reported that it offers a discount for a full truckload shipment. Another smaller importer says that it provides quantity discounts on a transaction-by-transaction basis.

CPC reported that *** percent of its sales are contract and *** percent are spot, while BassTech, the predominant importer of Chinese materials, reported that *** percent of sales are contract and *** percent are spot. Among other importers of Chinese material, six reported that contract sales ranged from 50 to 100 percent of their total sales.

Contract terms are *** for both CPC and the majority of importers of Chinese-produced barium carbonate. CPC’s contracts are for ***. CPC’s contracts ***, but do not have ***. Importers’ contracts are *** for one year with prices and quantities fixed during the year. They are *** renegotiated annually in the majority of cases, and usually don’t contain standard quantity requirements or charge a premium for sub-minimum shipments. However, ***, most of the importers’ contracts do not contain meet-or-release provisions, although one smaller importer has such a provision in its contract.

In addition to information requested in producer and importer questionnaires, purchasers were also asked to provide information on any contract currently in effect. They were asked to list the beginning and ending dates of the contracts, the names of the suppliers, the quantities of barium carbonate involved, and were also asked to state whether the contracts contained meet-or-release provisions. Ten purchasers reported that they have contracts currently in effect with *** that involve a total of more than *** short tons of barium carbonate. For most of *** contracts, the beginning date was ***.

Nearly *** percent of CPC’s contract volume involves its ***. *** of these companies reported contracts in effect with any other suppliers. The *** contract for *** of barium carbonate went into effect on ***. The *** contract for *** tons went into effect on ***. CPC’s other ***. ***.

Seven purchasers reported that they currently have contracts in effect with three importers (***). The *** contracts involve a total of about *** tons, the *** contracts involve about *** tons, and the *** contract involves *** tons. ***. This purchaser reported that it currently has a contract with *** to supply *** tons of barium carbonate. The contract is in effect from ***. *** also has a contract in effect for the same period with *** for *** tons.

**PRICE DATA**

The Commission asked U.S. producers and importers of barium carbonate to provide quarterly data for the total quantity and value of this product that was shipped to unrelated customers in the U.S. market during January 2000 through March 2003. The products for which pricing data were requested are as follows:

*Product 1.*—Granular barium carbonate, calcined, sold in any size packaging, with a total BaCO₃ + SrCO₃ content of at least 97 percent

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3 At the hearing and in its posthearing brief, CPC reported that it has had to lower its prices in some instances in response to competition from Chinese imports (hearing transcript, p. 33 and CPC’s posthearing brief, p. 6).

4 ***

5 All imports by *** are from nonsubject sources.
Product 2.—Granular barium carbonate, compacted (compressed), sold in any size packaging, with a total BaCO₃ + SrCO₃ content of at least 97 percent

Product 3.—Free-flowing powdered barium carbonate, similar to CPC’s Micro-Flo™, sold in any size packaging, with a total BaCO₃ + SrCO₃ content of at least 97 percent

Product 4.—Powdered barium carbonate other than free-flowing, sold in any size packaging, with a total BaCO₃ + SrCO₃ content of at least 97 percent

CPC and nine importers of Chinese-produced barium carbonate provided varying amounts of price data,***, but three importers reported sales of this ***. Pricing data reported by CPC accounted for approximately 100 percent of its total shipments in 2000, 2001, and 2002. Similarly, pricing data reported by importers accounted for virtually all shipments of imports from China during 2000-02.

Price Trends

Quarterly weighted-average prices of products, 1, 3, and 4 and shipment quantities for these products are presented in tables V-1 through V-3 and in figures V-1 through V-3 for January-March 2000 through January-March 2003. The data show that CPC’s price of product 1 decreased irregularly over the 13-quarter period, while its price for product 3 increased *** between the third and fourth quarters of 2000 and remained higher during the following quarters. No clear trend was evident for CPC’s price for product 4. For imports from China, the price of product 1 decreased over the 13-quarter period, while the price of product 4 increased over this period. The price for product 3 imported from China showed an overall decrease during the five quarters in which sales occurred.

Price Comparisons

Imported barium carbonate from China was priced lower than comparable domestic products in 25 out of 31 quarters where comparisons could be made. Margins of underselling ranged from 0.1 percent to 9.1 percent for product 1, from *** percent to *** percent for product 3,*** and from 10.7 to 36.0 percent for product 4. In the five instances in which Chinese imports of product 1 were priced higher than the domestic product, margins of overselling ranged from 0.6 to 8.8 percent. In one comparison for product 1, the U.S. and Chinese prices were virtually identical.

---

6 Weighted-average import prices of product 2, which were available in all quarters, ranged between $*** per ton and $*** per ton during the 13-quarter period. The price of this product generally decreased over the period.

7 In its posthearing brief, CPC broke out separate price data for sales of product 1 to specialty glass producers for the 13-quarter period. The data exhibited an irregular decline over the period (posthearing brief, p. 7).

8 CPC’s product 3 consists of Micro-Flo™, a specialized product not sold by importers (see discussion in Part II). Therefore, the difference between CPC’s price for this product and the import price may be due to differences in the products offered. There is conflicting information on the record regarding the extent to which barium carbonate from China includes a powdered product with enhanced flow properties but it appears that ***.
Purchaser Price Comparisons

Purchasers were asked to indicate, for country sources of barium carbonate with which they are familiar, whether prices of barium carbonate have generally been higher, lower, or about the same between sources. Nine purchasers (*** indicated that prices of U.S. produced barium carbonate were higher than those of barium carbonate from China; one purchaser indicated that prices of U.S. produced barium carbonate were the same as those of barium carbonate from China, and one purchaser indicated that prices of U.S. produced barium carbonate were lower than those of barium carbonate from China. Three purchasers (*** indicated that prices of U.S. produced barium carbonate were higher than those of barium carbonate from Germany and Mexico; one purchaser (*** indicated that prices of U.S. produced barium carbonate were the same as those of barium carbonate from Germany and Mexico, and no purchasers indicated that prices of U.S. produced barium carbonate were lower than those of barium carbonate from Germany. One purchaser indicated that prices of U.S. produced barium carbonate were lower than those of barium carbonate from Japan. Twelve purchasers did not answer the question.

Effects of Price Differences on Purchases

Purchasers that bought imported barium carbonate from China or other import sources during 2002 were asked to estimate how much higher the import price would have to have been before they would have bought U.S.-produced barium carbonate instead. Eight of 26 purchasers responded to this question with respect to China. Seven of the firms provided numerical estimates ranging between 1 percent and 50 percent, with an average of about 22 percent. An eighth purchaser said that if the U.S. price and prices of Chinese imports were equal it would buy from the U.S. producer. None of the major glass manufacturers responded to this question.

Table V-1
Barium carbonate: Weighted-average f.o.b. selling prices and quantities for product 1, and margins of underselling/(overselling), by quarters, January 2000-March 2003

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Table V-2
Barium carbonate: Weighted-average f.o.b. selling prices and quantities for product 3, and margins of underselling/(overselling), by quarters, January 2000-March 2003

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Table V-3
Barium carbonate: Weighted-average f.o.b. selling prices and quantities for product 4, and margins of underselling/(overselling), by quarters, January 2000-March 2003

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Figure V-1
Barium carbonate: Weighted average f.o.b. selling prices and shipment quantities for product 1, by quarters, January 2000-March 2003

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Figure V-2
Barium carbonate: Weighted-average f.o.b. selling prices and shipment quantities for product 3, by quarters, January 2000-March 2003

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Figure V-3
Barium carbonate: Weighted-average f.o.b. selling prices and shipment quantities for product 4, by quarters, January 2000-March 2003

*  *  *  *  *  *  *  *

LOST SALES AND LOST REVENUES

In its petition, CPC provided 7 lost sales allegations involving over *** short tons of barium carbonate valued at $*** million and 15 lost revenue allegations involving over *** short tons valued at $**.\(^9\)\(^10\) The Commission contacted the purchasers to investigate the allegations.\(^11\) The lost sales allegations are reported in table V-4 and the lost revenue allegations are reported in table V-5. Additional information provided by purchasers is presented below.

***. ***.\(^12\)

Table V-4
Barium carbonate: Lost sales allegations

*  *  *  *  *  *  *  *

Table V-5
Barium carbonate: Lost revenue allegations

*  *  *  *  *  *  *  *

***.
***.\(^13\)***.
***.
***.
***.
***.\(^14\)***.
***.
***.
***.
***.

\(^9\) No additional allegations were provided by CPC in the final phase of the investigation.

\(^10\) While there were specific allegations concerning ***.

\(^11\) Four companies named in the allegations, ***.

\(^12\) ***.

\(^13\) Thus, based on the information provided by ***, ***.

\(^14\) ***.
PART VI: FINANCIAL EXPERIENCE OF CPC

BACKGROUND

CPC provided usable financial data.\(^1\) CPC manufactures barium carbonate from barite ore mined locally in Georgia\(^3\) as well as from ***. Besides barium carbonate, it produces barium chloride and barium sulfide; these are grouped together within the firm’s Barium Division, where net sales of barium carbonate (all types) comprised about *** percent of the division’s sales in 2002. CPC also manufactures strontium chemicals, sulfur chemicals, and soluble silicates, which are outside of the Barium Division but share manufacturing and other overhead costs.\(^4\) Overall, the Barium Division accounted for approximately *** percent of CPC’s total manufacturing operations’ net sales in 2002.\(^5\)

OPERATIONS ON BARIUM CARBONATE

CPC reported *** sales of barium carbonate in two forms, powdered (including spray-dried) and granular. Results of CPC’s total operations are shown in table VI-1. The results of its operations broken out by type of barium carbonate are presented in appendix D.

Table VI-1
Barium carbonate: Results of operations of CPC, fiscal years 2000-02, November 2001-April 2002, and November 2002-April 2003

* * * * * * * *

Total sales quantities of CPC fell between fiscal years 2000 and 2002, but increased between November 2001-April 2002 and the same period ending in April 2003. Sales values followed a similar pattern. Commercial sales unit values irregularly fell between 2000 and 2002, and fell between the two interim periods November-April 2002-03. Operating income and margins decreased from $*** to $***, and from *** percent to *** percent, respectively, between 2000 and 2002. These two indicators

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\(^1\) CPC has a fiscal year end of ***. The company provided fiscal year data for ***. It provided interim period data for ***.

\(^2\) Another U.S. firm, Osram Sylvania, Inc., provided limited financial data in the preliminary phase of the investigation; its production accounted for approximately ***. It reported data for ***. The firm provided only *** in the final phase of the investigation and did not respond to a request from staff for complete data.

\(^3\) According to the company’s website, CPC was founded in 1933 with the “primary purpose of processing locally mined barite ore into various barium compounds.” It further states that it mines and beneficiates barite from one of the world’s richest reserves of barite ore which lies in the Cartersville, GA area. The mining operation is conducted by CPC’s related company, New Riverside Ochre. See http://www.ceramics.com/cpc/cpc.html, retrieved on October 3, 2002. Nonetheless, CPC imported Chinese barite ore, ***. The profit or loss on CPC’s purchases from New Riverside Ochre has been eliminated from CPC’s profit and loss data. This adjustment resulted in ***.

\(^4\) Ibid.

\(^5\) Calculated from CPC’s “Unit Cost, Barium 6 Month Average Report for April 30, 2002, October 31, 2002, and April 30, 2003,” and from CPC’s “Y-T-D Profit and Loss Statement, October 31, 2002,” that the firm filed with staff through its attorneys. The questionnaire response, as revised, reconciled to these reports and statements. Although certain items are shown on the firm’s audited profit and loss statements, these other items are reportedly not relevant to barium carbonate, including ***. In addition, CPC has a ***. CPC also supplied spreadsheets that provide the backup support for the firm’s calculations on granular and powdered forms of barium carbonate. The unit cost and calculations on these two forms can be tied to and reconciled with the firm’s fiscal year profit-and-loss statements. Allocations of total manufacturing costs to barium products and to barium carbonate appear reasonable.
decreased *** from *** of $***, respectively, between November 2001-April 2002 and the same period ending in April 2003. The cost of goods sold (COGS) of CPC decreased between 2000 and 2002, but increased between the two interim fiscal periods. While many of these changes appear to be volume-driven, there were increases in the cost of *** used as a raw material input as well as in the cost categories of direct labor, natural gas and utilities (processing costs that are included in “other factory costs”), and manufacturing fixed costs. These changes also are shown in the breakdown of the components of raw materials and other factory costs in table VI-2.

Table VI-2

|            | * | * | * | * | * | * | * | * |

Changes in CPC’s operating income are further evidenced by the variance analysis that shows the effects of prices and volume on net sales and of costs and volume on their total costs (table VI-3). This analysis shows that the decrease in operating income between fiscal 1999 and 2001 of $*** was attributable to combined unfavorable variances of $*** on price, $*** on net cost/expense, and $*** on volume. The decrease in operating income between interims 2002 and interim 2003 was attributable to the same three unfavorable variances. The variances shifted between periods investigated; unfavorable variances on price and volume were greater than a favorable variance on net cost/expense in 2001-02, for example. Variance analyses separately for CPC’s granular and powdered operations are presented in tables D-3 and D-4.

Table VI-3
Barium carbonate: Variance analysis on results of operations of CPC, fiscal years 2000-02, and November 2001/02-April 2002/03

|            | * | * | * | * | * | * | * | * |

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

Capital expenditures, research and development (R&D) expenses, and the value of CPC’s property, plant, and equipment are shown in table VI-4.

Table VI-4

|            | * | * | * | * | * | * | * | * |

CAPITAL AND INVESTMENT

The Commission requested the firms to describe any actual or potential negative effects of imports of barium carbonate from China on their growth, investment, and ability to raise capital or

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6 The variance analysis may have been affected by changes in the mix of the various grades of barium carbonate.
development and production efforts (including efforts to develop a derivative or more advanced version of the product).

With respect to whether there were actual negative effects, CPC's response is "***." With respect to potential negative effects, CPC's response is "***."
PART VII: THREAT CONSIDERATIONS

The Commission analyzes a number of factors in making threat determinations (see 19 U.S.C. § 1677(7)(F)(i)). Information on the volume and pricing of imports of the subject merchandise is presented in Parts IV and V, and information on the effects of imports of the subject merchandise on U.S. producers' existing development and production efforts is presented in Part VI. Information on inventories of the subject merchandise; foreign producers' operations, including the potential for "product-shifting;" any other threat indicators, if applicable; and any dumping in third-country markets, follows.

THE WORLD MARKET FOR BARIUM CARBONATE

According to CPC, the global supply capability for barium carbonate in 2003 is estimated to be *** metric tons (*** short tons) and the global demand *** metric tons (*** short tons). Global market shares for end uses of barium carbonate in 2003 are estimated as follows: TV glass, *** percent; brick and tile, *** percent; hard ferrite, *** percent; and miscellaneous barium chemicals, *** percent. Global growth in the demand for barium carbonate between 2003 and 2006 is estimated to be *** to *** percent annually. China is believed to be by far the world's largest producer of barium carbonate.

THE INDUSTRY IN CHINA

The Commission sent questionnaires to 21 firms in China believed to be producers and/or exporters of barium carbonate. The two major producers in China (Red Star and Hebei Xinji Chemical Group ("Hebei Xinji")) provided data in response to the Commission's questionnaire. Red Star is a public company traded on the Shanghai stock market. Red Star stated in its questionnaire response that it accounted for *** percent of China's total production of barium carbonate.

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1 Information on the world market was provided by CPC ***.

2 Questionnaires were sent by fax and/or e-mail to the following firms in China listed in the petition as being producers and/or exporters of barium carbonate: (1) Changsha Industrial Products & Minerals Import & Export Co., Ltd.; (2) China Yan Xing National Co.; (3) Chong Qing Xiang Feng Chemical Co., Ltd.; (4) Dalian Dyestuffs & Chemicals Corp./Dalian DyeChem International Corp.; (5) Dalian FTZ Lucky Wealth Industry & Trade Co., Ltd.; (6) Guizhou Zhenning Red Butterfly Barium Company (Red Star Chemical Group); (7) Hebei Xinji Chemical Group Co., Ltd.; (8) Hengnan Foreign Economic Relations & Trade Corp.; (9) Hengyang Hong Xiang Chemical Co., Ltd.; (10) Hubei Jiangshan Chutian Barium Salts Corp.; (11) Hunan Darong Chemical & Pesticide Co., Ltd.; (12) Hunan Microsky Trading Co., Ltd.; (13) Hunan Tati International Development Co., Ltd.; (14) ISKY Chemicals Co., Ltd.; (15) Nantong Feiyu Fine Chemical Factory; (16) Qingdao Donwen Xing Trading Co., Ltd.; (17) Qingdao Meihle International Trading Co., Ltd.; (18) Qingdao Red Star Chemical Group Import & Export Co., Ltd. ("Red Star"); (19) Shandong Boshan Huanyu Industry Co.; (20) Shandong Zhucheng Zhongtai Chemical Co., Ltd.; and (21) Shijiazhuang Chemicals Medicines & Health Products Import & Export Corp. Staff did not attempt to contact a 22nd firm, Luzhou Jiangyang Strontiam (sic) Carbonate Plant, because no fax number or e-mail address was available. After the June 12, 2003 due-back date, which was not met by any of the firms in China, including Red Star, firms were again sent questionnaires by fax and/or e-mail. Red Star subsequently filed a completed questionnaire response, and Hebei Xinji submitted a questionnaire response on the day before the due date of this staff report to the Commission. Dalian Dyestuffs & Chemicals Corp. responded by e-mail that it ***. Hengnan Foreign Economic Relations & Trade Corp. responded by e-mail that it ***.
in 2002. Barium carbonate accounted for *** percent of its total sales in its most recent fiscal year. Red Star ***. ***. ***. 

In 2002, Red Star produced *** short tons of barium carbonate (*** short tons of granular and *** short tons of powdered). Of its granular barium carbonate, *** percent of its capacity and approximately *** percent of its production in 2002 were for ***. It does not produce, ***, a powdered, free-flowing barium carbonate similar to CPC’s Micro-Flo\textsuperscript{TM}. Red Star indicated that ***. ***. ***.

Hebei Xinji stated in its questionnaire response that it accounted for *** percent of China’s total production of barium carbonate in 2002. Barium carbonate accounted for *** percent of its total sales in its most recent fiscal year. Hebei Xinji ***.

In 2002, Hebei Xinji produced *** short tons of barium carbonate (*** short tons of granular and *** short tons of powdered). ***. It does not produce, ***, a powdered, free-flowing barium carbonate similar to CPC’s Micro-Flo\textsuperscript{TM}. Hebei Xinji indicated that ***. ***. ***.

Aggregate data provided in response to Red Star and Hebei Xinji’s questionnaires are presented in table VII-1. The combined firms’ barium carbonate operations experienced increases in capacity, production, and shipments in each year and period for which data were collected. Also of note is the *** aggregate capacity utilization ratio, which ***. ***. *** of Red Star’s barium carbonate capacity and approximately *** percent of its production of barium carbonate in 2002 were for ***. 

Table VII-1

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\textbf{U.S. IMPORTERS’ INVENTORIES}

Table VII-2 presents data on U.S. importers’ end-of-period inventories of imported barium carbonate from China and all other sources. End-of-period inventories of product from China increased *** in 2002, both absolutely and as a ratio to imports and to importers’ U.S. shipments. Inventories of product from China as of March 31, 2003 were *** annualized imports during January-March 2003,

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\begin{itemize}
\item[3] ***.
\item[4] Red Star provided data to the Commission not only for its total barium carbonate operations but also for its granular and its powdered barium carbonate operations (in response to the Commission’s questionnaire) and for its calcined granular and its compacted granular barium carbonate operations (exhibit 6 of its posthearing brief, with revisions by e-mail on August 18, 2003). Hebei Xinji also provided data breakouts. However, because of some data discrepancies, separate data for calcined granular, compacted granular, and powdered barium carbonate are not presented herein.
\item[5] ***.
\item[6] Red Star projects ***.
\end{itemize}
which were ***. BassTech has stated that its inventories are committed to Techneglas and other customers pursuant to long-term contracts.

Table VII-2

* * * * * * * *

U.S. IMPORTERS' CURRENT ORDERS

Importers were asked to report the quantity of barium carbonate from China that they imported (or arranged for the delivery of) after March 31, 2003. Only two importers from China indicated that they had such imports: ***. Other importers from China (***

Purchasers' Potential Future Purchases

Purchasers were asked to what extent, if any, might imports of barium carbonate from China displace some or all of their purchases of domestically produced barium carbonate. Other than the U.S. TV glass producers, seven purchasers responded “None” or “No planned changes,” one purchaser responded “Not sure,” seven purchasers responded that some or even all of their purchases could shift to China if specified conditions were met (e.g., quality, price, service), two purchasers responded that they had already switched purchases to the Chinese product, and one purchaser indicated “Yes.” In addition, the TV glass producers responded as follows:

Corning (Corning Asahi plus American Video)—“***”
Techneglas—“***. ***.”
Thomson—“***. ***.”

Antidumping Duty Orders in Third-Country Markets

There is one known antidumping duty order concerning barium carbonate produced in China. India imposed a provisional antidumping duty order on November 17, 1999, and a definitive antidumping duty order on May 15, 2000.

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7 According to BassTech in the preliminary phase of this investigation, ***. BassTech noted that its inventory buildup in the first half of 2002 was related to its efforts to prepare for deliveries to Techneglas pursuant to its annual 2002 contract requirements, and that its inventories were committed to Techneglas and other customers under long-term contracts. Conference transcript (Mr. Chalup), p. 93, and BassTech/Red Star's postconference brief, pp. 32-33.

8 Conference transcript (Mr. Chalup), p. 93.

9 Corning *** “***.” *** “***.” Corning’s questionnaire response. ***.

10 Thomson ***. ***. *** “***.” Thomson’s questionnaire response.

11 CPC’s postconference brief, exh. 14, and BassTech/Red Star’s postconference brief, exh. 22, in the preliminary phase of the investigation. *** in the final phase of the investigation confirms that since 2000 India has had an antidumping duty order on barium carbonate from China.
APPENDIX A

FEDERAL REGISTER NOTICES
of the Harmonized Tariff Schedule of the United States.\footnote{For purposes of this investigation, the Department of Commerce has defined the subject merchandise as “barium carbonate, regardless of form or grade.”}

For further information concerning the conduct of this phase of the investigation, hearing procedures, and rules of general application, consult the Commission’s rules of practice and procedure, part 201, subparts A through E (19 CFR part 201), and part 207, subparts A and C (19 CFR part 207).


FOR FURTHER INFORMATION CONTACT: George Deyman (202) 205–3197, Office of Investigations, U.S. International Trade Commission, 500 E Street SW., Washington, DC 20436. Hearing-impaired persons can obtain information on this matter by contacting the Commission’s TDD terminal on (202) 205–1810. Persons with mobility impairments who will need special assistance in gaining access to the Commission should contact the Office of the Secretary at (202) 205–2000. General information concerning the Commission may also be obtained by accessing its Internet server (http://www.usitc.gov). The public record for this investigation may be viewed on the Commission’s electronic docket (EDIS) at http://edis.usitc.gov.

SUPPLEMENTARY INFORMATION:

Background.—The final phase of this investigation is being scheduled as a result of an affirmative preliminary determination by the Department of Commerce that imports of barium carbonate from China are being sold in the United States at less than fair value within the meaning of section 733 of the Act (19 U.S.C. 1673b). The investigation was requested in a petition filed on September 30, 2002, by Chemical Products Corp., Cartersville, GA.

Participation in the investigation and public service list.—Persons, including industrial users of the subject merchandise and, if the merchandise is sold at the retail level, representative consumer organizations, wishing to participate in the final phase of this investigation as parties must file an entry of appearance with the Secretary to the Commission, as provided in § 201.11 of the Commission’s rules, no later than 21 days prior to the hearing date specified in this notice. A party that filed a notice of appearance during the preliminary phase of the investigation need not file an additional notice of appearance during this final phase. The Secretary will maintain a public service list containing the names and addresses of all persons, or their

INTERNATIONAL TRADE COMMISSION
[Investigation No. 731–TA–1020 (Final)]

Barium Carbonate From China


ACTION: Scheduling of the final phase of an antidumping investigation.

SUMMARY: The Commission hereby gives notice of the scheduling of the final phase of antidumping investigation No. 731–TA–1020 (Final) under section 735(b) of the Tariff Act of 1930 (19 U.S.C. 1673d(b)) (the Act) to determine whether an industry in the United States is materially injured or threatened with material injury, or the establishment of an industry in the United States is materially retarded, by reason of less-than-fair-value imports from China of barium carbonate, provided for in subheading 2838.60.00...
representatives, who are parties to the investigation.

Limited disclosure of business proprietary information (BPI) under an administrative protective order (APO) and BPI service list—Pursuant to §207.7(a) of the Commission’s rules, the Secretary will make BPI gathered in the final phase of this investigation available to authorized applicants under the APO issued in the investigation, provided that the application is made no later than 21 days prior to the hearing date specified in this notice. Authorized applicants must represent interested parties, as defined by 19 U.S.C. 1677(9), who are parties to the investigation. A party granted access to BPI in the preliminary phase of the investigation need not reapply for such access. A separate service list will be maintained by the Secretary for those parties authorized to receive BPI under the APO.

Staff report—The prehearing staff report in the final phase of this investigation will be placed in the nonpublic record on July 16, 2003, and a public version will be issued thereafter, pursuant to §207.22 of the Commission’s rules.

Hearing.—The Commission will hold a hearing in connection with the final phase of this investigation beginning at 9:30 a.m. on July 31, 2003, at the U.S. International Trade Commission Building. Requests to appear at the hearing should be filed in writing with the Secretary to the Commission on or before July 24, 2003. A nonparty who has testimony that may aid the Commission’s deliberations may request permission to present a short statement at the hearing. All parties and nonparties desiring to appear at the hearing and make oral presentations should attend a prehearing conference to be held at 9:30 a.m. on July 28, 2003, at the U.S. International Trade Commission Building. Oral testimony and written materials to be submitted at the public hearing are governed by §§201.6(b)(2), 201.13(f), and 207.24 of the Commission’s rules. Parties must submit any request to present a portion of their hearing testimony in camera no later than 7 days prior to the date of the hearing.

Written submissions.—Each party who is an interested party shall submit a prehearing brief to the Commission. Prehearing briefs must conform with the provisions of §207.23 of the Commission’s rules; the deadline for filing is July 25, 2003. Parties may also file written testimony in connection with their presentation at the hearing, as provided in §207.24 of the Commission’s rules, and posthearing briefs, which must conform with the provisions of §207.25 of the Commission’s rules. The deadline for filing posthearing briefs is August 7, 2003; witness testimony must be filed no later than three days before the hearing. In addition, any person who has not entered an appearance as a party to the investigation may submit a written statement of information pertinent to the subject of the investigation on or before August 7, 2003. On August 26, 2003, the Commission will make available to parties all information on which they have not had an opportunity to comment. Parties may submit final comments on this information on or before August 28, 2003, but such final comments must not contain new factual information and must otherwise comply with §207.30 of the Commission’s rules. All written submissions must conform with the provisions of §201.8 of the Commission’s rules; any submissions that contain BPI must also conform with the requirements of §§201.6, 207.3, and 207.7 of the Commission’s rules. The Commission’s rules do not authorize filing of submissions with the Secretary by facsimile or electronic means, except to the extent permitted by §201.6 of the Commission’s rules, as amended, 67 FR 68036 (November 8, 2002).

In accordance with §§201.16(c) and 207.3 of the Commission’s rules, each document filed by a party to the investigation must be served on all other parties to the investigation (as identified by either the public or BPI service list), and a certificate of service must be timely filed. The Secretary will not accept a document for filing without a certificate of service.

Authority: This investigation is being conducted under authority of title VII of the Tariff Act of 1930; this notice is published pursuant to §207.21 of the Commission’s rules.


By order of the Commission.

Marilyn R. Abbott,
Secretary to the Commission.

[FR Doc. 03–6336 Filed 4–15–03; 8:45 am]

BILLING CODE 7220–02–P
DEPARTMENT OF COMMERCE
International Trade Administration
[A-570–880]

Notice of Final Determination of Sales at Less Than Fair Value: Barium Carbonate From the People's Republic of China

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

ACTION: Notice of final determination of sales at less than fair value.


SUMMARY: We determine that barium carbonate from the People's Republic of China (PRC) is being sold, or is likely to be sold, in the United States at less than fair value (LTFV), as provided in section 735 of the Tariff Act of 1930, as amended the Act. The estimated margins of sales at LTFV are shown in the Final Determination of Investigation section of this notice.

FOR FURTHER INFORMATION CONTACT:
David Layton or Tisha Loofer-Vith at (202) 482–0371 or (202) 482–7425, respectively; AD/CVD Enforcement, Office 5, Group II, Import Administration, Room 1870, International Trade Administration, U.S. Department of Commerce, 14th Street and Constitution Avenue, NW., Washington, DC 20230.

SUPPLEMENTARY INFORMATION:

Case History

The preliminary determination in this investigation was published on March 17, 2003. See Notice of Preliminary Determination of Sales at Less Than Fair Value and Postponement of Final Determination: Barium Carbonate from the People's Republic of China, 68 FR 12664 (March 17, 2003) [Preliminary Determination]. Since the preliminary determination, the following events have occurred.

We conducted verification of the questionnaire responses of Qingdao Red Star Chemical Import & Export Co., Ltd. (Qingdao Red Star)\(^1\) from June 25 through June 30, 2003. Qingdao Red Star filed surrogate value information and data on April 23 and 28, 2003, and the petitioner\(^2\) filed surrogate value information and data on April 28, 2003. Because of the unique circumstances surrounding this investigation, which led to a delay in the scheduling of verification,\(^3\) and because both parties also suggested surrogate information after the regulatory deadline for filing such information, we have accepted the information for consideration in this final determination.


Scope of Investigation

The merchandise covered by this investigation is barium carbonate, regardless of form or grade. The product under investigation is currently classifiable under subheading 2836.60.0000 of the Harmonized Tariff Schedule of the United States (HTSUS). Although the HTSUS subheading is provided for convenience and customs purposes, the written description of the scope of this proceeding is dispositive.

Period of Investigation (POI)

The POI is January 1, 2002, through June 30, 2002.

Analysis of Comments Received

All issues raised in the case and rebuttal briefs by parties to this proceeding and to which we have responded are listed in the Appendix to this notice and addressed in the Issues and Decision Memorandum, which is hereby adopted by this notice. Parties can find a complete discussion of the issues raised in this investigation and the corresponding recommendations in this public memorandum which is on file in the Central Records Unit (CRU), room B-099 of the main Department building. In addition, a complete version of the Issues and Decision Memorandum can be accessed directly on the Internet at http://ita.doc.gov. The paper copy and electronic version of the issues and Decision Memorandum are identical in content.

Non-Market Economy

The Department has treated the PRC as a non-market economy (NME) country in all its past antidumping investigations. See e.g., Notice of Final Determination of Sales at Less Than Fair Value: Ferrovanadium from the

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\(^1\) Guizhou Red Star Development Co., Ltd. (Guizhou Red Star), was the producer of the subject merchandise sold by Qingdao Red Star during the period of investigation (POI).

\(^2\) The petitioner is Chemical Products Corporation.

\(^3\) There was a delay in conducting the verification due to the SARS epidemic in the PRC.
People's Republic of China, 67 FR 71137, 71138 (Nov. 29, 2002); and Notice of Final Determination of Sales at Less Than Fair Value: Certain Circular Welded Carbon-Quality Steel Pipe from the People's Republic of China, 67 FR 36570, 36571 (May 24, 2002). An NME country designation remains in effect until it is revoked by the Department. See section 771(18)(C) of the Act. The respondent in this investigation has not requested revocation of the PRC's NME status. Therefore, we have continued to treat the PRC as an NME country in this investigation. For further details, see the Preliminary Determination.

Separate Rates

In our Preliminary Determination, we found that Qingdao Red Star met the criteria for the application of a separate, company-specific antidumping duty rate. We have not received any other information since the preliminary determination which would warrant reconsideration of our separates rates determination with respect to this company. For a complete discussion of the Department's determination that the respondent is entitled to a separate rate, see the Preliminary Determination.

The PRC-Wide Rate

In the preliminary determination, we found that the use of the PRC-wide rate was appropriate for other exporters in the PRC based on our presumption that those respondents who failed to demonstrate entitlement to a separate rate constitute a single enterprise under common control by the Chinese government. We applied facts otherwise available in calculating the PRC-wide rate because no other Chinese producer or exporter responded to our requests for information. We found that the failure of parties at issue to respond significantly impedes this proceeding because the Department cannot accurately determine a margin for these parties and causes the Department to find that these parties failed to cooperate by not acting to the best of their ability to comply with a request for information. Therefore, in applying facts otherwise available for the calculation of the PRC-rate, pursuant to section 776(b) of the Act we have used "information that is adverse to the interests of that party as facts otherwise available." Adverse inferences are appropriate "to ensure that the party does not obtain a more favorable result by failing to cooperate than if it had cooperated fully." See Statement of Administrative Action (SAA) accompanying the URRAA, H.R. Doc. No. 103-316, at 870 (1994). The PRC-wide rate applies to all entries of the merchandise under investigation except for entries from Qingdao Red Star.

When analyzing the petition for purposes of the initiation, the Department reviewed all of the data upon which the petitioners relied in calculating the estimated dumping margin and determined that the margin in the petition was appropriately calculated and supported by adequate evidence in accordance with the statutory requirements for initiation. In order to corroborate the petition margin for purposes of using it as adverse facts available, we examined the price and cost information provided in the petition in the context of our preliminary determination. For further details, see Memorandum to Gary Taverman, Director, Office 5, from David Layton, Tisha Loeper-Viti and Kristina Boughton, Case Analysts, Re: Corroboration of Secondary Information, dated March 10, 2003, (Corroboration Memorandum). We received no comments on this decision and continue to find in this final determination that the rate contained in the petition, as recalculated, has probative value. With one adjustment for a clerical error, and additional adjustments to the petition information noted below, we have continued to apply this rate in the final determination. For further discussion, see the Preliminary Determination.

Since the preliminary determination, we have obtained new information regarding several surrogate values and factors applied in Chinese production. In order to take into account the more recent information, we recalculated the petition margin using, where possible, revised surrogate values and revised factors to value the petitioner's consumption rates. As a result of this recalculation, the PRC-wide rate is, for the final determination, 81.30 percent. See Corroboration Memorandum, and Memorandum to Gary Taverman, Director, Office 5, from David Layton, Case Analyst, Re: Recalculated PRC-Wide Rate, dated July 30, 2003, (Final PRC-Wide Rate Memo).

Surrogate Country

For purposes of the final determination, we continue to find that India remains the appropriate primary surrogate country for the PRC. For further discussion and analysis regarding this country selection for the PRC, see the Preliminary Determination. Consistent with the preliminary determination, where we were unable to value factor inputs using surrogate values in India, we have relied on Indonesia as the secondary surrogate country.

Verification

As provided in section 782(l) of the Act, we verified the information submitted by the respondents for use in our final determination. We used standard verification procedures including examination of relevant accounting and production records, and original source documents provided by the respondents. For changes from the Preliminary Determination as a result of verification, see the Changes Since the Preliminary Determination section below. See also Memorandum from Scott Lindsay and Kristina Boughton, International Trade Compliance Analysts to Gary Taverman, Office Director: Verification of Sales and Factors of Production Data Submitted by Qingdao Red Star Chemical Import & Export Co., Ltd., dated July 11, 2003.

Changes Since the Preliminary Determination

Based on our findings at verification and on our analysis of the comments received, we have made the following adjustments to the calculation methodologies used in the preliminary determination. These adjustments are discussed in detail in the Issues and Decision Memorandum and in the Memorandum to Gary Taverman, Director, Office 5, from Tisha Loeper-Viti, International Trade Compliance Analyst, Re: Factors of Production Valuation for Final Determination, dated July 30, 2003, (Factors of Production Memorandum).

1. We have valued carbon dioxide as a direct input of Qingdao Red Star's barium carbonate production, instead of the upstream inputs used in Qingdao Red Star's self-produced carbon dioxide. See Issues and Decision Memorandum at Comment 3.

2. We valued an additional raw material input that was not valued in the preliminary determination. See id. at Comment 4.

3. We updated the financial ratios on the basis of a single Indian producer of barium carbonate for a fiscal year more contemporaneous with the POI. See id. at Comment 6.

4. We used recalculated consumption ratios for all factors based on the total production of barium carbonate during the POI including "off-grade" barium carbonate. See id. at Comment 5.

5. We updated the calculation of rail freight charges using a different source for rail rates. See id. at Comment 7.

6. We updated the valuation of truck freight rates. See id. at Comment 8.

7. We deducted from U.S. price an amount for brokerage and handling charges. See id. at Comment 9.
8. We deducted from U.S. price an amount for seaport charges. See Factors of Production Memorandum.

9. We updated all surrogate values based on the Monthly Statistics of the Foreign Trade of India. See id.

10. As a result of verification findings, we adjusted the reported direct labor hours to account for contract labor. See the Factors of Production Memorandum.

11. We corrected our calculation of electricity. See the Factors of Production Memorandum.

12. We corrected a ministerial error from the preliminary determination, where we inadvertently failed to weight-average U.S. prices in the margin calculation. See Issues and Decision Memorandum at Comment 10.

Continuation of Suspension of Liquidation

In accordance with section 735(c)(1)(B)(ii) of the Act, we are directing the U.S. Bureau of Customs and Border Protection (CBBP) to continue the suspension of liquidation of entries of subject merchandise from the PRC, that are entered, or withdrawn from warehouse, for consumption on or after March 17, 2003 (the date of publication of the Preliminary Determination in the Federal Register). We will instruct the CBBP to require a cash deposit or the posting of a bond equal to the weighted-average amount by which normal value exceeds the U.S. price, as indicated in the chart below. These suspension of liquidation instructions will remain in effect until further notice.

Final Determination of Investigation

We determine that the following weighted-average percentage margins exist for the period January 1, 2002 through June 30, 2002:

<table>
<thead>
<tr>
<th>Manufacturer/exporter</th>
<th>Weighted-average margin (percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Qingdao Red Star Chemical Import &amp; Export Co</td>
<td>34.44</td>
</tr>
<tr>
<td>PRC-Wide Rate</td>
<td>81.30</td>
</tr>
</tbody>
</table>

The PRC-wide rate applies to all entries of the merchandise under investigation except for entries from Qingdao Red Star.

International Trade Commission Notification

In accordance with section 735(d) of the Act, we have notified the International Trade Commission (ITC) of our determination. As our final determination is affirmative, the ITC will determine, within 45 days, whether these imports are materially injuring, or threaten material injury to, the U.S. industry. If the ITC determines that material injury, or threat of material injury does not exist, the proceeding will be terminated and all securities posted will be refunded or cancelled. If the ITC determines that such injury does exist, the Department will issue an antidumping duty order directing BCBP officials to assess antidumping duties on all imports of subject merchandise entered for consumption on or after the effective date of the suspension of liquidation.

Notification Regarding Administrative Protective Order (APO)

This notice also serves as a reminder to parties subject to APO of their responsibility concerning the disposition of proprietary information disclosed under APO in accordance with 19 CFR 351.305. Timely notification of return/destruction of APO materials or conversion to judicial protective order is hereby requested. Failure to comply with the regulations and the terms of an APO is a sanctionable violation.

This determination is issued and published in accordance with sections 735(d) and 777(i)(1) of the Act.

Joseph A. Spetrini,
Acting Assistant Secretary for Grant Aldonas, Under Secretary.

Appendix—Decision Memorandum

Comment 1: Surrogate Value of Barite Ore
Comment 2: Surrogate Values of Two Types of Coal
Comment 3: Valuation of Carbon Dioxide
Comment 4: Valuation of a Minor Input
Comment 5: Granting Offsets for Byproducts
Comment 6: Calculation of Financial Ratios
Comment 7: Valuation of Rail Freight
Comment 8: Valuation of Truck Freight
Comment 9: Deduction of Brokerage and Handling
Comment 10: Use of Weighted-Average U.S. Prices in Margin Calculation
Comment 11: Reported Consumption of Coal
Comment 12: Consumption Quantity Questions

[FR Doc. 03-20044 Filed 8–5–03; 8:45 am]
BILLING CODE 3510–05–P
APPENDIX B

HEARING WITNESSES
CALENDAR OF PUBLIC HEARING

Those listed below appeared as witnesses at the United States International Trade Commission’s hearing:

Subject: Barium Carbonate from China
Inv. No.: 731-TA-1020 (Final)
Date and Time: July 31, 2003 - 9:30 a.m.

Sessions were held in connection with this investigation in the Main Hearing Room (room 101), 500 E Street, SW, Washington, DC.

In Support of the Imposition of Antidumping Duties:

Gibson, Dunn & Crutcher LLP
Washington, DC
on behalf of

Chemical Products Corporation ("CPC")

L. Ballard Mauldin, President, CPC
Raymond L. McCain, Vice President, Marketing and Sales, CPC
Thomas S. Bourdon, Manager, Sales and Marketing, CPC
William F. Emberson, Product Manager, Barium Carbonate, CPC
Gary D. Graves, Product Manager, Barium Division, CPC

Joseph H. Price – OF COUNSEL
J. Christopher Wood

In Opposition to the Imposition of Antidumping Duties:

White & Case LLP
Washington, DC
on behalf of

Qingdao Red Star Chemical Group Import & Export Co., Ltd. ("Red Star")

Ben Gutmann, CEO and Managing Director, BassTech International
Alan Chalup, Vice President, BassTech International

Adams C. Lee – OF COUNSEL
APPENDIX C

SUMMARY DATA
Table C-1

* * * * * * *

Table C-2

* * * * * * *

Table C-3

* * * * * * *

Table C-4

* * * * * * *
Table C-5
(Quantity=short tons; value=1,000 dollars; unit values are per short ton; period changes=percent, except where noted)

<table>
<thead>
<tr>
<th>Item</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>January-March</th>
<th>Period changes</th>
</tr>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>China</td>
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<td>5,028</td>
<td>14,360</td>
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<td>87</td>
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<td>Germany</td>
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<td>4,863</td>
<td>3,434</td>
<td>130</td>
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<td>Japan</td>
<td>341</td>
<td>128</td>
<td>341</td>
<td>1</td>
<td>84</td>
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<tr>
<td>Mexico</td>
<td>14,158</td>
<td>10,105</td>
<td>2,159</td>
<td>1,962</td>
<td>547</td>
</tr>
<tr>
<td>All other</td>
<td>328</td>
<td>192</td>
<td>180</td>
<td>97</td>
<td>456</td>
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<tr>
<td>Total</td>
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<td>20,252</td>
<td>5,573</td>
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<tr>
<td>Value($1,000) (1):</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td>1,478</td>
<td>3,321</td>
<td>794</td>
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<tr>
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<td>2,781</td>
<td>2,300</td>
<td>1,374</td>
<td>54</td>
<td>300</td>
</tr>
<tr>
<td>Japan</td>
<td>2,258</td>
<td>419</td>
<td>212</td>
<td>9</td>
<td>129</td>
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<tr>
<td>Mexico</td>
<td>5,876</td>
<td>4,812</td>
<td>996</td>
<td>917</td>
<td>190</td>
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<tr>
<td>All other</td>
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<td>278</td>
<td>226</td>
<td>113</td>
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<td>Total</td>
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<td>6,130</td>
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<td>Unit value ($ per short ton):</td>
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<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>China</td>
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<td>$231.45</td>
<td>$234.61</td>
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<td>Germany</td>
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<td>473.00</td>
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<td>Japan</td>
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<td>1,227.97</td>
<td>1,653.93</td>
<td>8,446.23</td>
<td>1,538.07</td>
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<tr>
<td>Mexico</td>
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<td>476.23</td>
<td>461.07</td>
<td>467.28</td>
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<td>All other</td>
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<td>1,452.20</td>
<td>1,257.83</td>
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<td>494.77</td>
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<td>Average</td>
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<td>452.42</td>
<td>302.67</td>
<td>338.52</td>
<td>481.76</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td>24.5</td>
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<td>60.7</td>
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<td>Germany</td>
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<td>23.7</td>
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<td>2.3</td>
<td>34.6</td>
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<td>10.7</td>
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</tr>
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<td>0.9</td>
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<tr>
<td>Total</td>
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<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
</tr>
<tr>
<td>Value, share of imports (percent):</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>China</td>
<td>14.6</td>
<td>15.9</td>
<td>54.2</td>
<td>42.1</td>
<td>2.7</td>
</tr>
<tr>
<td>Germany</td>
<td>19.2</td>
<td>24.8</td>
<td>22.4</td>
<td>2.9</td>
<td>34.6</td>
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<tr>
<td>Japan</td>
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<td>4.5</td>
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<td>16.2</td>
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<td>3.7</td>
<td>6.0</td>
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<td>Total</td>
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<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

(1) Landed, duty-paid.

Source: Compiled from official trade statistics of the U.S. Department of Commerce.
APPENDIX D

RESULTS OF CPC’S OPERATIONS ON GRANULAR AND POWDERED BARIUM CARBONATE
This appendix provides information on CPC’s operations on granular and powdered barium carbonate in tables D-1 and D-2, respectively. These data are consistent with the data for CPC’s total operations on barium carbonate that are shown in table VI-1. This appendix also presents variance analyses on CPC’s operations on these two forms of barium carbonate in tables D-3 and D-4 for granular and powdered barium carbonate, respectively.

Sales of granular barium carbonate fell between fiscal year 2000 and 2002, but rose between the half-year fiscal periods November 2001-April 2002 and the same period ending April 2003. Unit sales values of granular barium carbonate irregularly fell during 2000-02 and between the two fiscal interim periods, and the trend of sales revenue was similar to that of sales quantity. Per-short-ton values of the *** during the full fiscal years and between the two interim fiscal periods. Operating income, which was *** in fiscal 2000, was *** in each of the periods investigated thereafter, reflected in absolute amounts as well as on the ratio of net sales and on a per-unit basis.

Powdered barium carbonate operations at CPC include its specialized Micro-Flo™ product, which generally is sold at ***. Sales quantities of powdered barium carbonate changed *** during the three full fiscal years 2000-02, and increased *** between the interim fiscal periods November 2001-April 2002 and the same period in the following year. Unit sales values increased irregularly between 2000 and 2002 and decreased between the two interim periods. Changes in unit costs were similar to those of granular barium carbonate, but the firm *** in each of the periods investigated. Despite the *** on sales of granular barium carbonate.

**Table D-1**

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**Table D-2**
Powdered barium carbonate: Results of operations of CPC, fiscal years 2000-02, November 2001-April 2002, and November 2002-April 2003

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Changes in the operating income of CPC are further evidenced by the variance analysis that shows the effects of prices and volume on net sales and of costs and volume on its total costs for granular and powdered barium carbonate separately (tables D-3 and D-4, respectively).

**Table D-3**
Granular barium carbonate: Variance analysis on results of operations of CPC, fiscal years 2000-02, and November 2001/02-April 2002/03

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**Table D-4**
Powdered barium carbonate: Variance analysis on results of operations of CPC, fiscal years 2000-02, and November 2001/02-April 2002/03

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The variance analysis shows that the decrease in granular barium carbonate operating income between fiscal 2000 and 2002 of $*** was attributable to a combination of unfavorable variances of $*** on price, $*** on net cost/expense, and $*** on volume. Each of the three variances also was
unfavorable between the two interim fiscal periods November-April. These variances shifted during the periods investigated; ***.

With respect to powdered barium carbonate, operating income increased *** between fiscal 2000 and 2002, attributable to a favorable variance of $*** on price that was greater than the unfavorable variances of $*** on net cost/expense and $*** on volume. Operating income also increased *** between 2001 and 2002 as favorable variances on net cost/expense and volume were greater than an unfavorable variance on price. Operating income fell by $*** between the interim periods, attributable to *** variances on price and net cost/expense.