

REFINED ANTIMONY TRIOXIDE FROM THE PEOPLE'S REPUBLIC OF CHINA

Determination of the Commission in
Investigation No. 731-TA-517
(Preliminary) Under the Tariff
Act of 1930, Together With the
Information Obtained in the
Investigation



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**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Note.--Information that would reveal confidential operations of individual concerns may not be published and therefore has been deleted from this report.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-517 (Preliminary)

REFINED ANTIMONY TRIOXIDE FROM THE PEOPLE'S REPUBLIC OF CHINA

Determination

On the basis of the record¹ developed in the subject investigation, the Commission determines,² pursuant to section 733(a) of the Tariff Act of 1930 (19 U.S.C. § 1673b(a)), that there is a reasonable indication that an industry in the United States is threatened with material injury by reason of imports from the People's Republic of China of refined antimony trioxide, provided for in subheading 2825.80.00 of the Harmonized Tariff Schedule of the United States,³ that are alleged to be sold in the United States at less than fair value (LTFV).

Background

On April 25, 1991, a petition was filed with the Commission and the Department of Commerce by the Coalition for Fair Trade in Refined Antimony Trioxide,⁴ alleging that an industry in the United States is materially injured and is threatened with material injury by reason of LTFV imports of refined antimony trioxide from the People's Republic of China. Accordingly,

¹ The record is defined in sec. 207.2(f) of the Commission's Rules of Practice and Procedure (19 CFR § 207.2(f)) (as amended, 56 F.R. 11924 (March 21, 1991)).

² Acting Chairman Brunsdale determines that there is a reasonable indication that an industry in the United States is materially injured by reason of dumped imports of refined antimony trioxide from the People's Republic of China.

³ For purposes of this investigation, refined antimony trioxide (also known as antimony oxide) is a crystalline powder of the chemical formula (Sb₂O₃). The refined antimony trioxide which is the subject of this investigation includes blends with organic or inorganic additives comprising up to and including 20 percent of the blend by volume or weight.

⁴ The individual member firms comprising the coalition include: (1) Anzon, Inc., Philadelphia, PA; (2) Atochem North America, Inc., Philadelphia, PA; (3) Laurel Industries, Inc., Cleveland, OH; (4) United States Antimony Corp., Thompson Falls, MT; and (5) United States Antimony Sales Corp., Natick, MA.

effective April 25, 1991, the Commission instituted preliminary antidumping investigation No. 731-TA-517 (Preliminary).

Notice of the institution of the Commission's investigation and of a public conference to be held in connection therewith was given by posting copies of the notice in the Office of the Secretary, U.S. International Trade Commission, Washington, DC, and by publishing the notice in the Federal Register of May 3, 1991 (56 F.R. 20443). The conference was held in Washington, DC, on May 16, 1991, and all persons who requested the opportunity were permitted to appear in person or by counsel.

VIEWS OF THE COMMISSION

Based on the information obtained in this preliminary investigation, we determine that there is a reasonable indication that an industry in the United States is threatened with material injury by reason of imports from the People's Republic of China allegedly sold at less than fair value (LTFV).¹

I. Like product and domestic industry

In order to determine whether there is a reasonable indication that an industry in the United States is being materially injured, or threatened with material injury, we must define the 'industry'. The statute defines industry as the "domestic producers as a whole of a like product, or those producers whose collective output of the like product constitute a major portion of the total domestic production of the product."² "Like product" in turn is defined as a "product which is like, or in the absence of like, most similar in characteristics and uses with the articles subject to investigation."³ The Department of Commerce (Commerce) has defined the imported product subject to investigation as

refined antimony trioxide (also known as antimony oxide) from the PRC. Antimony trioxide is a crystalline powder of the chemical formula Sb_2O_3 , as provided for in subheading 2825.80.00 of the Harmonized Tariff Schedules of the United States (HTS). The

¹ Material retardation of an industry in the United States is not an issue in this investigation.

Acting Chairman Brunsdale's affirmative determination is based on a reasonable indication of present material injury. See Additional Views of Acting Chairman Brunsdale.

² 19 U.S.C. § 1677(4)(A).

³ 19 U.S.C. § 1677(10).

refined trioxide includes blends with organic or inorganic additives comprising up to and including 20 percent of the blend by volume or weight. Crude antimony trioxide (antimony trioxide having less than 98 percent Sb₂O₃) is excluded.

56 Fed. Reg. 23549 (May 22, 1991).

The Commission's determination of which domestically-produced product is "like, or in the absence of like, most similar in characteristics and uses with the articles subject to investigation" is an essentially factual determination made on a case-by-case basis.⁴ In analyzing like product issues, the Commission generally considers a number of factors including: (1) physical characteristics and uses, (2) interchangeability of the products, (3) channels of distribution, (4) customer and producer perceptions of the products, (5) the use of common manufacturing facilities and production employees, and (6) price.⁵ No single factor is dispositive, and the Commission may consider other factors it deems relevant based on the facts of a given investigation. The Commission has found minor variations to be an insufficient basis for finding separate like products. Rather, the Commission has looked for clear dividing lines among possible like products.⁶

⁴ Asociacion Colombiana de Exportadores de Flores v. United States, 693 F. Supp. 1165, 1168, n.4 (1988) (Asocoflores).

⁵ E.g., Fresh and Chilled Atlantic Salmon From Norway, Inv. No. 731-TA-454 (Final) USITC Pub. 2371 (April 1991) (Salmon); Certain All-Terrain Vehicles from Japan, Inv. No. 731-TA-388 (Final), USITC Pub. 2163 (March 1989).

⁶ Salmon, USITC Pub. 2371; Antifriction Bearings (Other than Tapered Roller Bearings) and Parts Thereof from the Federal Republic of Germany, France, Italy, Japan, Romania, Singapore, Sweden, Thailand, and the United Kingdom, Inv. Nos. 303-TA-19 and 20, 731-TA-391-399 (Final), USITC Pub. 2185 (May 1989).

Respondent argued that crude antimony trioxide should be included in the definition of like product, claiming that crude antimony trioxide can be substituted for refined antimony trioxide.⁷ Petitioners, however, asserted that the further purification necessary to produce refined antimony trioxide of greater than 98 percent purity results in a significantly different product.⁸ Crude antimony trioxide, petitioners stressed, is merely an intermediate product in the production of refined antimony trioxide and cannot be substituted for refined antimony trioxide in its primary application as a flame-retardant synergist.⁹ Petitioners further argued that there is no commerce in crude antimony trioxide except "for purposes of manufacturing refined antimony trioxide."¹⁰ Moreover, there is significant value added in processing crude antimony trioxide into refined antimony trioxide and the cost differential between crude and refined is very high.¹¹

Applying the Commission's traditional like product analysis

⁷ Post-Conference Brief on Behalf of China National Nonferrous Metals Imports and Export Corporation (Respondent's Brief) at 6-7.

⁸ Transcript of the Preliminary Conference, May 16, 1991 (Tr.) at 35 & 37.

⁹ Post Conference Brief on Behalf of the Coalition for Fair Trade in Antimony Trioxide (Petitioners' Brief) at 18-19. There was also reference to other substitutes for refined antimony trioxide as a flame-retardant, but a witness for the petitioner testified that aluminum trihydrate, the cheapest alternative, would require at least five times as much product to reach the same level of flame-retardancy as refined antimony trioxide. Tr. at 16. The area of product substitutability is one to be further explored by the Commission in the event of a final investigation in this matter.

¹⁰ Petitioners' Brief at 19.

¹¹ "We're taking a fundamentally different intermediate product and applying more than a dollar of capital for dollar of sales in order to transform it into the finished product using a series of specialized equipment that can't be used to produce anything else." Tr. at 39, testimony of Mr. Malashevich, Economic Consulting Service.

in this preliminary investigation, we determine that the evidence supports finding a single like product: refined antimony trioxide. Refined antimony trioxide has a higher level of purity and a more consistent particle size than the crude antimony trioxide.¹² Because of their differences in purity and particle size, refined antimony trioxide and crude antimony trioxide have different end-uses.¹³ Refined antimony trioxide's primary use is as a flame-retardant synergist, but is also used as a chemical intermediate, fining agent, and opacifying agent,¹⁴ for which purposes crude antimony trioxide can not generally be substituted.¹⁵

In addition, because commerce in crude antimony trioxide is generally for the production of refined antimony trioxide, the channels of distribution for the two products are different. Furthermore, crude antimony trioxide is produced directly from antimony ore by a roasting process, which process emits sulfur dioxide whereas refined antimony trioxide is produced from either crude antimony trioxide or antimony metal.¹⁶ Lastly, petitioners have submitted evidence of significant value-added in the

¹² Report at A-2; Industrial Phosphoric Acid from Belgium Inv. No. 701-TA-286, USITC Pub. 2000 (Aug. 1987) (different chemical specifications (purity and particle size) support not including the lower quality agricultural phosphoric acid).

¹³ Report at A-2.

¹⁴ Report at A-4.

¹⁵ A witness testified that if the price of refined antimony trioxide goes high enough, "customers might even substitute the raw crude antimony oxide for the refined product." Tr. at 86. The Commission has found that although crude may be substituted for the refined product, such substitution is rare. Report at A-2, n 7.

¹⁶ Report at A-4-A-5.

production of refined antimony trioxide, indicating a significant price differential in the two products.¹⁷

The question of the definition of like product in this investigation can also be approached as a semi-finished/finished product case. The limited information available to the Commission relevant to this issue indicates that crude antimony trioxide imparts the essential characteristics to the refined antimony trioxide and that crude antimony trioxide is dedicated to the production of refined antimony trioxide.¹⁸ The costs involved in transforming crude into refined antimony trioxide, however, appear to be high, militating against considering crude antimony trioxide as simply a semi-finished product.¹⁹ If this investigation proceeds to a final investigation, we will invite the parties to brief the Commission on this point and will further investigate this issue.

For the purposes of this preliminary investigation, we therefore determine the like product to be refined antimony trioxide.

As a consequence of determining refined antimony trioxide to be the like product, we define the domestic industry as the producers of refined antimony trioxide. Petitioners suggested that Amspec not be included in the domestic industry as a related

¹⁷ Petitioners' Brief at 20-21.

¹⁸ See Certain Forged Steel Crankshafts From the Federal Republic of Germany and the United Kingdom, Inv. Nos, 731-TA-351 and 353 (Final) USITC Pub. 2014 (September 1987); Certain Granite from Italy, Inv. No. 701-TA-289, 731-TA-381 (Final) USITC Pub. 2110 (Aug. 1988) at 10; Salmon, USITC Pub. 2272 at 9.

¹⁹ Cf. Generic Cephalexin Capsules from Canada, Inv. No. 731-TA-423 (Final) USITC Pub. 2211 (August 1989).

party.²⁰ Although Amspec imported refined antimony trioxide from the PRC during the period of investigation, its imports were not sufficient to warrant considering the company a related party and there is no indication that it benefitted from those imports.²¹ Thus, we determine that Amspec should not be excluded from the domestic industry under the related parties provision.

Respondent, in turn, alluded to foreign capital invested in some domestic producers.²² Although the Commission has considered foreign capital, inter alia, in determining what constitutes a "domestic producer,"²³ we do not believe that foreign capital alone is sufficient to exclude a producer from the domestic industry.

II. Condition of the domestic industry

In assessing the condition of the domestic industry, we

²⁰ Tr. at 9-10. The related parties provision, 19 U.S.C. § 1677(4)(B), provides that when a producer is related to exporters or importers of the product under investigation, or is itself an importer of that product, the Commission may exclude such producers from the domestic industry "in appropriate circumstances." Application of the related parties provision is within the Commission's discretion based upon the facts presented in each case. Empire Plow Co. v. United States, ___ CIT ___, 675 F. Supp. 1348, 1352 (1987). See e.g., Certain Telephone Systems and Subassemblies Thereof from Japan and Taiwan, Inv. Nos. 731-TA-426 & 428 (Final) USITC Pub. 2237 (Nov. 1989) (Telephones) at 16-17 (a company that imports significant amounts of LTFV imports and benefits from those imports should be excluded from the domestic industry); Granular Polytetrafluoroethylene Resin from Italy and Japan, Inv. Nos. 731-TA-385 & 386 (Final), USITC Pub. 2112 (Aug. 1988) at 15 (a domestic producer whose imports are negligible and who does not benefit from the LTFV imports will not be excluded if it is a major producer and exclusion of its information would skew the data).

²¹ See Report at A-23, table 11.

²² Tr. at 71-72.

²³ See e.g., Portable Electric Typewriters from Singapore, Inv. No. 731-TA-515 (Preliminary) (May 1991); Certain Personal Word Processors from Japan and Singapore, Inv. Nos. 731-TA-483 & 484 (Preliminary), USITC Pub. 2344 (Dec. 1990); Cephalexin, USITC Pub. 2211.

consider, among other factors, production, shipments, capacity, capacity utilization, inventories, employment, wages, financial performance, capital investments, and research and development expenditures.²⁴ No single factor is dispositive, and in each investigation we consider the particular nature of the industry involved and the economic factors which have a bearing on the state of the industry.²⁵ Before describing the condition of the industry, we note that some of the information on which we base our determination is confidential, and hence the portions following discussion of the condition of the domestic industry must be general in nature.

The capacity to produce refined antimony trioxide in the United States rose steadily from 1988 to 1990, increasing from 52.5 million pounds in 1988 to 64.5 million pounds in 1990.²⁶ The most recent trends, for the first quarter of 1990 compared to the first quarter of 1991, however, reveal a decline from 16.4 million pounds to 15.5 million pounds.²⁷ Domestic production likewise rose steadily from 1988 to 1990, from 42.8 million pounds to 50.4 million pounds in 1990, but fell from 13.7 million

²⁴ See, 19 U.S.C. § 1677(7)(C)(iii).

²⁵ See, 19 U.S.C. § 1677(7)(C)(iii), which requires us to consider the condition of the domestic industry in the context of the business cycle and conditions of competition that are distinctive to the domestic industry. See also, H.R. Rep. 317, 96th Cong., 1st Sess. at 46; S. Rep. 249, 96th Cong., 1st Sess. at 88.

²⁶ Report at A-12, table 3.

²⁷ Report at A-12, table 3. These figures for capacity do not include data from a domestic producer of a furnace that is not currently on-line because capacity is defined to include machinery in place and ready to operate. The Commission recognizes that, in fact, a sizable furnace remains idle and hence the capacity utilization figures are overstated. Report at A-18, n 20.

pounds in January-March, 1991 to 11.7 million pounds in January-March 1990.²⁸ Although both capacity and production rose, capacity rose slightly faster, resulting in fluctuating capacity utilization. Although remaining above 75 percent throughout the period of investigation, capacity utilization rates rose from 1988 to 1989, but then fell in 1990.²⁹ Capacity utilization continued to fall in interim 1991 (75.8 percent) from interim 1990 (83.6 percent).³⁰

Shipments data present a mixed picture for 1988 through 1990. Total shipments by quantity rose from 1988 (42.4 million pounds) to 1989 (47.3 million pounds) and then remained steady in 1990.³¹ Shipments fell, however, in the first quarter of 1991 compared with the first quarter of the previous year-- from 12.5 million pounds to 10.8 million pounds.³² The value of those shipments fluctuated, rising from \$57.6 million in 1988 to \$59.8 million in 1989, but then falling to \$53.0 million in 1990.³³ In interim 1991, the value of shipments fell to \$11.7 million from \$14.3 in interim 1990.³⁴ Unit value of shipments show yet a different trend, falling steadily from \$1.36 per pound in 1988 to \$1.12 in 1990, which trend continued into interim 1991, with a fall from \$1.14 in January-March, 1990 to \$1.08 in January-

²⁸ Report at A-12, table 3.

²⁹ Report at A-12, table 3.

³⁰ Report at A-12, table 3.

³¹ Report at A-14, table 4.

³² Report at A-14, table 4.

³³ Report at A-14, table 4.

³⁴ Report at A-14, table 4.

March, 1991.³⁵

Inventories, in turn, increased steadily over the period of investigation.³⁶ The ratio of inventories to shipments fluctuated over the period of investigation. From 1988 to 1990 the average ratios varied from 14.1 percent in 1988, 13.5 percent in 1989, and 16.8 percent in 1990.³⁷ The interim period, however, saw a significant increase from 14.2 percent in interim 1990 to 19.7 percent in interim 1991.³⁸

The employment data show a decline in the number of workers in the production of refined antimony trioxide over the period of investigation, from 116 workers in 1988 to 105 workers in 1990.³⁹ That trend continued, at a significantly faster pace, in the first quarter of 1991 when there were only 89 workers compared to 109 workers in the first quarter the previous year (an attrition rate of 18 percent as compared with 9 percent from 1988 to 1990.)⁴⁰ On the other hand, hours worked by those workers increased from 1988 to 1989, but then decreased in 1990, and again decreased from interim 1990 to interim 1991.⁴¹ Wages, as well as total compensation, increased steadily from 1988 to 1990, but then fell in January-March 1991 in comparison to the same period of the previous year.⁴² Hourly wages and hourly total

³⁵ Report at A-14, table 4.

³⁶ Report at A-16, table 6, amended by INV-0-108 (June 3, 1991).

³⁷ Report at A-16, table 6, amended by INV-0-108 (June 3, 1991).

³⁸ Report at A-16, table 6, amended by INV-0-108 (June 3, 1991).

³⁹ Report at A-19, table 8.

⁴⁰ Report at A-19, table 8.

⁴¹ Report at A-19, table 8.

⁴² Report at A-19, table 8.

compensation, by contrast, fell from 1988 to 1989 but returned in 1990 to a level higher than that in 1988; the trends again reversed themselves with interim 1991 showing hourly wages and hourly total compensation levels lower than those in interim 1990.⁴³

Lastly, the Commission looks to the financial data of the industry to complete its analysis of the domestic industry. Financial data collected from firms representing virtually the entire industry indicate that net sales increased 3 percent from 1988 to 1989 but then declined by 15 percent in 1990; this downward trend continued into 1991 with net sales in January-March 1991 17 percent below those for January-March, 1990.⁴⁴ Operating income showed even more dramatic trends, rising 27 percent from 1988 to 1989, and then falling 28 percent in 1990, and falling by a further 49 percent in interim 1991 compared with interim 1990.⁴⁵ Most telling, however, are the operating income margins for the industry which show an increase from 13.5 percent to 16.7 percent from 1988 to 1989, but then a decrease to 14.1 percent in 1990.⁴⁶ While the data on operating income margins for the interim periods of 1990 and 1991 cannot be discussed because they are confidential, the evidence supports a finding of a reasonable indication of a threat of material injury.

Although the data for the interim periods trended downward

⁴³ Report at A-20, table 9.

⁴⁴ Report at A-23, table 11.

⁴⁵ Report at A-23, table 11.

⁴⁶ Report at A-23, table 11.

for most of the statutory indicators, we find no reasonable indication of present material injury to the domestic industry producing refined antimony trioxide.⁴⁷ Finding no reasonable indication of current material injury, we find it unnecessary to consider the issue of causation.⁴⁸

III. Reasonable indication of threat of material injury by reason of imports of refined antimony trioxide from the People's Republic of China that are allegedly sold at LTFV

If it finds no reasonable indication of present material injury, the Commission is directed to consider whether there is a reasonable indication of threat of material injury. The legal standard in preliminary countervailing duty and antidumping determinations is set forth in sections 703(a) and 733(a) of the Tariff Act of 1930, 19 U.S.C. §§ 1671b(a), 1673b(a), which require the Commission to determine whether, based on the best information available at the time of the preliminary determinations, there is a reasonable indication of material injury, or threat thereof to a domestic industry, or material retardation of the establishment of a domestic industry by reason of the imports under investigation.

In applying this standard, the Commission may weigh the evidence before it to determine whether "(1) the record as a

⁴⁷ Acting Chairman Brunsdale does not reach a separate legal conclusion concerning the presence or absence of material injury based on this information. While she does not believe an independent determination is either required by the statute or useful, she finds the discussion of the condition of the domestic industry helpful in determining whether any injury resulting from the allegedly dumped imports material.

⁴⁸ See e.g., American Spring Wire Corp. v. United States, 590 F. Supp. 1283 (CIT 1984), aff'd sub. nom Armco, Inc. v. United States, 760 F.2d 249 (Fed. Cir. 1985).

whole contains clear and convincing evidence that there is no material injury or threat of material injury; and (2) no likelihood exists that any contrary evidence will arise in a final investigation." American Lamb Co. v. United States, 785 F.2d 994, 1001-1004 (Fed. Cir. 1986). In American Lamb, the Federal Circuit stated that the purpose of preliminary investigations is to avoid the cost and disruption to trade caused by unnecessary investigations and the "reasonable indication" standard requires more than a finding that there is a possibility of such injury. Id. 1001-1004.

We are instructed by the statute to consider a number of economic factors in assessing whether a reasonable indication of threat of material injury exists.⁴⁹ The factors the Commission must consider in its threat analysis are:

(I) if a subsidy is involved, such information as may be presented to it by the administering authority as to the nature of the subsidy (particularly as to whether the subsidy is an export subsidy inconsistent with the Agreement),

(II) any increase in production capacity or existing unused capacity in the exporting country likely to result in a significant increase in imports of the merchandise to the United States,

(III) any rapid increase in United States market penetration and the likelihood that the penetration will increase to an injurious level,

(IV) the probability that imports of the merchandise will enter the United States at prices that will have a depressing or suppressing effect on domestic prices of the merchandise,

⁴⁹ 19 U.S.C. § 1677(7)(F).

(V) any substantial increase in inventories of the merchandise in the United States,

(VI) the presence of underutilized capacity for producing the merchandise in the exporting country,

(VII) any other demonstrable adverse trends that indicate probability that importation (or sale for importation) of the merchandise (whether or not it is actually being imported at the time) will be the cause of actual injury,

(VIII) the potential for product shifting if production facilities owned or controlled by the foreign manufacturers, which can be used to produce products subject to investigation(s) under section 1671 or 1673 of this title or to final orders under section 1671e or 1673e of this title, are also used to produce the merchandise under investigation,

(IX) in any investigation under this title which involves imports of both raw agricultural product (within the meaning of paragraph (4)(E)(iv)) and any product processed from such raw agricultural product. the likelihood there will be increased imports, by reason of product shifting, if there is an affirmative determination by the Commission under section 705(b)(1) or 735(b)(1) with respect to either the raw agricultural product or the processed agricultural product (but not both), and

(X) the actual and potential negative effects on the existing development and production efforts of the domestic industry, including efforts to develop a derivative or more advanced version of the like product.⁵⁰

The Commission is further required to consider the effect of dumping in third country markets.⁵¹ The statute also provides that any threat must be real and actual injury imminent and admonishes that the Commission's determination must not be made

⁵⁰ 19 U.S.C. § 1677(7)(F).

⁵¹ 19 U.S.C. § 1677(7)(F)(iii).

on the basis of mere conjecture or supposition.⁵² In considering whether there is a reasonable indication of a threat of material injury, we are cognizant of the most recent downward trends for the domestic industry in the interim periods. We consider the statutory factors in turn.

The first and ninth factors, concerning foreign subsidies and agricultural products respectively, do not apply to the facts of this case and therefore are not discussed.

In this preliminary determination, we have been unable to gather complete information concerning the production capacity in the PRC.⁵³ The best information available to the Commission indicates that the production capacity of the major producer of refined antimony trioxide in the PRC has remained steady over the period of investigation, and that capacity utilization was high from 1988 to 1990.⁵⁴ Capacity utilization fell in the first three months of 1990 compared with the first three months of 1991, creating excess capacity.⁵⁵ Moreover, China controls between 50 and 90 percent of the world's antimony deposits.⁵⁶

⁵² Id. See Citrosuco Paulista v. United States, 708 F. Supp. 1333 (CIT 1988) (Commission must consider each of the threat factors but not always necessary for Commission to discuss each threat of injury factor) citing Asociacion Colombiana de Exportadores de Flores v. United States, 704 F. Supp. 1068, 1071 n.4 (CIT 1988).

⁵³ If the Commission conducts a final investigation, we will attempt to obtain additional information on the Chinese industry.

⁵⁴ Report at A-31, table 16.

⁵⁵ Report at A-31, table 16. Petitioners testified that production of refined antimony trioxide in the PRC is not capital intensive as it is in the United States. See Tr. at 22. In any final investigation we intend to investigate further the facility with which China can increase its production ability in the future.

⁵⁶ Tr. at 21 & 73.

Therefore, in addition to its under-utilized and unused refinement capacity, the PRC has an ample and ready supply of the raw material, unlike domestic producers who must generally purchase the raw material from foreign countries.⁵⁷

The Commission must next consider whether there has been a rapid increase in market penetration and whether the level will reach an injurious level.⁵⁸ Although the quantity of imports of refined antimony trioxide from China fell overall from 7.4 million pounds in 1988 to 5.0 million pounds in 1990, they increased by 30 percent from 1.7 million pounds in the first quarter of 1990 to 2.2 million pounds in the first quarter of 1991.⁵⁹ Shipments of imports from the PRC showed similar trends, falling overall from 6.7 million pounds in 1988 to 6.0 million pounds in 1990, but increasing from 1.5 million pounds in interim 1990 to 2.4 million pounds in interim 1991, an increase of 58 percent.⁶⁰ Import penetration of the imports fell from 13.2

⁵⁷ Report at A-5.

⁵⁸ 19 U.S.C § 1677(7)(F)(i)(II).

Because crude and refined antimony trioxide enter the United States under the same Harmonized Tariff System number, there are no official import figures for refined antimony trioxide alone. Hence, the Commission has relied on import data based on questionnaire responses. Report at A-31-A-33, table 17. In the event we conduct a final investigation, the Commission will attempt to ameliorate the accuracy of the import statistics.

In addition, petitioner alleged that the PRC was transshipping some refined antimony trioxide through Hong Kong. Petition at 13. The authority to determine the country of origin of a product rests with the Customs Service. We therefore base this determination on the imports from the PRC and leave it to the Department of Commerce to define what imports are being sold at less than fair value. See e.g., Color Picture Tubes from Canada, Japan, the Republic of Korea and Singapore, Inv. Nos. 731-TA-367-370 (Preliminary) USITC Pub. 1937 (Jan. 1987) at 14 n.35; Nylon Impression Fabric from Japan, Inv. No. 731-TA-269 (Preliminary) USITC Pub. 1726 (July 1985).

⁵⁹ Report at A-33, table 17.

⁶⁰ Report at A-37, table 20.

percent in 1988 to 10.8 percent in 1990, but that downward trend sharply reversed itself in the first three months of 1991 when import penetration rose from 10.5 percent to 17.5 percent, an increase of 67 percent.⁶¹ Most importantly, the domestic producers' share of the market declined.⁶² Thus, the market share lost by the domestic producers was captured primarily by the Chinese.

The loss of market share by domestic producers coincided with a decline in domestic production, domestic shipments, employment and financial performance. The Commission concludes that this provides an indication that a continuation of the trend of increasing imports will lead to increased adverse effects on the domestic industry.

The Commission is further required to investigate the likelihood of imports entering the market at a price that will suppress or depress the domestic price.⁶³ A comparison of the prices to distributors for the lower-end product (product 1) shows that the imported product undersold the domestic product in

⁶¹ Report at A-37, table 20.

⁶² *Id.*

⁶³ 19 U.S.C. § 1677(7)(F)(i)(IV).

Respondent asserted that the refined antimony trioxide market in the United States is divided into two tiers with the domestic industry targeting the higher tier and the Chinese product selling primarily in the lower tier. Respondent's Brief at 13. A witness appearing in opposition to the petition testified however that the Chinese are beginning to manufacture the high end products. Tr. at 76. Notwithstanding these allegations, the Commission's pricing comparisons are between similar quality products evidencing competition between the products. In the event of a final investigation, the Commission will further examine the issue of a two-tiered market for refined antimony trioxide and the extent to which the domestic industry and Chinese imports participate in each tier.

every quarter during the period, and prices to end-users were lower for the imported product for every quarter except the first quarter of 1988.⁶⁴ Because the refined antimony trioxide is a fungible commodity, the imported product can generally be substituted for the domestic product, especially in the low end of the market. Pricing trends for the domestic product are confidential but support a finding that the lower-priced imports depressed prices, especially in interim 1991 compared to interim 1990.⁶⁵

The pricing information for the high-end products is likewise confidential but again underlines a finding that imported refined antimony trioxide depressed prices for domestically-produced refined antimony trioxide.⁶⁶ Consequently, we find that the persistent underselling by the imported product has depressed domestic prices for refined antimony trioxide, indicating a likelihood of a price depressive effect in the near future.

Factor V requires the Commission to consider any buildup of importers' inventories that might easily be released into the marketplace.⁶⁷ The data on importers' inventories reveals that consistent with the evidence that China is the principal source of imported refined antimony trioxide, importers have higher inventories of refined antimony trioxide from China than from

⁶⁴ Report at A-42, table 22.

⁶⁵ Report at A-42, table 22.

⁶⁶ Report at A-43 and A-45, tables 23 & 24.

⁶⁷ 19 U.S.C. § 1677(7)(F)(i)(V).

other countries.⁶⁸ The ratio of importers' inventories to imports or shipments, are inconclusive on the issue of threat of material injury. To reach an affirmative decision, however, the Commission is not required to make an affirmative finding on all the statutory factors.⁶⁹

The potential for product shifting, as defined by the statute, does not apply in this context because although the Chinese may easily shift from the raw antimony to refined antimony trioxide (or any intermediate stage in between, including crude antimony trioxide), those other products are not subject to this investigation or the subject of an outstanding countervailing or antidumping order.⁷⁰

The last statutory factor the Commission must consider concerns the actual and potential negative impact on development in the industry.⁷¹ Total capital expenditures, focused primarily on machinery, equipment and fixtures, increased from 1988 to 1989 but in 1990 declined to a level below that for 1988.⁷² In interim 1991, capital expenditures fell dramatically to less than one quarter of the amount spent in interim 1990.⁷³ Spending on research and development fluctuated throughout the period of investigation, falling slightly in interim 1991 compared to the

⁶⁸ Report at A-29, table 15.

⁶⁹ E.g., National Ass'n of Mirror Manufacturer v. United States, 696 F. Supp. 642, 645 (CIT 1988).

⁷⁰ See, 19 U.S.C. § 1677(7)(F)(i)(VIII). In any final investigation, the Commission may develop further information concerning the relationship between the mining and refinement operations in the PRC.

⁷¹ 19 U.S.C. § 1677(7)(F)(i)(X).

⁷² Report at A-26, table 14.

⁷³ Report at A-26, table 14.

previous interim period.⁷⁴ This evidence indicates that since 1989, the domestic producers of refined antimony trioxide have not invested large amounts of capital and hence their ability to produce is not likely to improve significantly in the immediate future.

Finally, the Commission has no knowledge of dumping of Chinese refined antimony trioxide in third country markets.

Based on the above-discussed factors, and in light of the downward trends for the domestic industry in interim 1991 compared with interim 1990, we determine that there is a reasonable indication that a domestic industry is threatened with material injury by reason of allegedly LTFV imports from the PRC.

⁷⁴ Report at A-25.

Additional Views of Chairman Anne E. Brunsdale
Refined Antimony Trioxide from the People's Republic of China
Inv. No. 731-TA-517 (Preliminary)

I determine that there is a reasonable indication that the domestic industry producing refined antimony trioxide (antimony) is materially injured by reason of allegedly dumped imports from the People's Republic of China (China).¹ I join my colleagues' discussion of like product and the condition of the domestic industry. Unlike the majority, however, my determination is based on a reasonable indication of present injury rather than the threat of future injury. In these views I will discuss the reasons for my affirmative determination.

Applicable Standard in Preliminary Determinations

My approach to preliminary determinations is derived from the decision in American Lamb v. United States.² The language employed by the court in American Lamb specifies that a negative determination is appropriate only when "(1) the record as a whole contains clear and convincing evidence that there is no material injury or threat of material injury; and (2) no likelihood exists that contrary evidence will arise in a final investigation."³

¹ Material retardation of the establishment of a domestic industry is not an issue in this investigation.

² 785 F.2d 994 (Fed. Cir. 1986).

³ Id., at 1001-04. "Clear and convincing" evidence supporting a negative determination must be "substantial," and more than a
(continued...)

This should not be interpreted to mean that all information be must collected in order to find in the negative. Clearly, given the short time period allowed in a preliminary investigation, that requirement would nearly preclude such a finding. Rather, I consider the relation of any missing information to the likely disposition of a final investigation. In cases where there is a question as to what the evidence would show in a final investigation, as instructed by the statute, I give all benefit of the doubt to petitioner.

The record in this case does not contain clear and convincing evidence that there is no material injury -- as I will discuss in more detail below. In addition, information gathered for a final investigation may support an affirmative finding. Particularly, the issue of like product will be more fully explored in the final investigation.⁴

Reasonable Indication of Material Injury By Reason of Allegedly Dumped Imports

Unlike the majority, I do not reach a separate legal conclusion

³(...continued)

preponderance of the evidence. Since the Commission is permitted to weigh the evidence in the record, however, a negative preliminary determination may be issued if some evidence supports an affirmative determination, and even if some reasonable doubt exists as to whether a negative determination is warranted. See, e.g., Buildex Inc. v. Kason Industries, Inc., 849 F.2d 1461, 1463 (Fed. Cir. 1988)

⁴ Additional information on crude antimony trioxide (crude) and the process of refining will be further explored. See Views of the Commission.

on the presence or absence of material injury upon reviewing the industry's condition. Such a conclusion is not required by the statute, nor does it serve any useful purpose. On the other hand, it is important to understand the condition of the industry before deciding whether any injury resulting from the allegedly dumped imports is material.⁵

In assessing the effect of dumped imports, it is necessary to compare the current condition of the domestic industry to that which would have existed had imports from China not been dumped into the U.S. market. Then it must be determined whether the resulting change of circumstances constitutes material injury. The statute requires that there must be a reasonable indication that material injury to the domestic industry is "by reason of" the allegedly dumped imports.

The statute instructs the Commission to consider, among other factors: (1) the volume of imports of the merchandise which is the subject of the investigation, (2) the effect of imports of that merchandise on prices in the United States for like products, and (3) the impact of imports of such merchandise on domestic producers of like products⁶

In considering the volume of imports, I take into account the volume both in absolute terms and in terms of their share of the relevant market. I also consider the dumping margin or in a

⁵ See Certain Light-Walled Rectangular Pipes and Tubes from Taiwan, Inv. No. 731-TA-410 (Final), USITC Pub. 2169 (March 1989) at 10-15 (Views of Chairman Brunsdale and Vice Chairman Cass).

⁶ See 19 U.S.C. 1677 (7) (B).

preliminary investigation, the alleged dumping margin in order to determine the likely effect that dumping would have on the price and volume of subject imports. The higher the dumping margin the greater the difference between the dumped price of the imports and their price at fair value.⁷ This, in turn, affects the magnitude of the increased volume of unfair imports.

In the case of antimony, imports from China accounted for roughly 11 percent of the domestic market in 1990.⁸ There is conflicting information about imports from countries, other than China. Their market share ranges from 3.5 to 20 percent, depending on the data that are used.⁹

In a preliminary investigation, information about the dumping margin is based on the allegations of the petitioner. In this case, petitioner alleges dumping margins from 109.1 to 122.6 percent.¹⁰ The dumping margin indicates the maximum increase in the domestic price of imports if they were being sold at fair value. In other words, petitioner alleges that antimony imported from China would have been as much as 122.6 percent more expensive, if it had been sold at fair value.

In considering the impact of the subject imports on the

⁷ This assumes that any adjustment made by foreign producers would be in the price of imports, rather than in the home market price.

⁸ Report at A-37, table 20.

⁹ I assume that more complete information will be available in the final investigation. Report at A-31-35.

¹⁰ Report at A-2.

prices in the United States of the like product and on domestic producers, I look at the underlying economics of the market. First, I examine the relationship between the price of a product and the quantity demanded of that product. If a small decline in price leads to a large increase in purchases, then the effect of dumped imports on the domestic industry would be mitigated. When dumping ceased, the quantity demanded would contract, leaving the domestic producer in only a slightly better position.

Antimony is used as a flame retardant for plastics, paints, rubber and textiles. It is also used as a chemical intermediate and stabilizer. There do not appear to be any close substitutes for antimony that could be used without a substantial cost increase. Given the nature of the product, I do not believe a small change in price would alter the quantity demanded to any great extent.

Second, I examine the substitutability of the like product and the subject imports. If the domestic like product and the subject imports are quite different, then it is less likely that consumers of the domestic like product would switch to the import, given a small reduction in the import's price. If they are identical, one would expect consumers to switch quite readily.

For the purposes of this preliminary investigation, I determine that antimony from China is a reasonably good substitute for domestic antimony, particularly in its low-end applications. At this point, however, it is unclear just how

important end-users consider quality variations in antimony. It is also unclear whether producers would find it profitable to sell high-end antimony to users of the low-end product.

Finally, I consider how much the quantity of sales by domestic firms and foreign firms in the United States would change if the price of the product changed. This gives me an indication whether there would be a greater change in the price of the domestic like product or in the volume of output, as a result of the dumping.

There appears to be excess capacity in the antimony industry. This means that domestic producers could likely increase output in response to price changes. In addition, producers of fair imports would be likely to increase their sales in the U.S. market in response to a price increase. Therefore, I expect the alleged dumping in this case would have more effect on the quantity of domestic sales than on the price of antimony.

In conclusion, the dumping margins alleged in this case are particularly high -- so high in fact, that I doubt whether any Chinese antimony would be sold, at "fair value." The fact that the unfair imports and the domestic like product seem to be reasonably close substitutes and that much increased demand is unlikely to be generated from lower prices, leads me to believe that there is a reasonable indication that the domestic industry is materially injured by reason of allegedly dumped imports from China.

INFORMATION OBTAINED IN THE INVESTIGATION

INTRODUCTION

On April 25, 1991, a petition was filed with the U.S. International Trade Commission (Commission) and the U.S. Department of Commerce (Commerce) by the Coalition for Fair Trade in Refined Antimony Trioxide¹ alleging that an industry in the United States is being materially injured and is threatened with material injury by reason of imports from the People's Republic of China (China) of refined antimony trioxide,² provided for in subheading 2825.80.00 of the Harmonized Tariff Schedule of the United States (HTS), that are alleged to be sold in the United States at less than fair value (LTFV). Accordingly, effective April 25, 1991, the Commission instituted antidumping investigation No. 731-TA-517 (Preliminary) under section 733(a) of the Tariff Act of 1930 (19 U.S.C. § 1673b(a)) to determine whether there is a reasonable indication that an industry in the United States is materially injured or threatened with material injury, or the establishment of an industry in the United States is materially retarded, by reason of such imports.

Notice of the institution of this investigation and of a conference to be held in connection therewith was given by posting copies of the notice in the Office of the Secretary, U.S. International Trade Commission, Washington, DC, and by publishing the notice in the Federal Register of May 3, 1991 (56 F.R. 20443).³ The conference was held in Washington, DC, on May 16, 1991.⁴ Effective May 22, 1991, Commerce initiated an antidumping investigation to determine whether the subject imports are being sold or are likely to be sold in the United States at LTFV.⁵

PREVIOUS INVESTIGATIONS

Refined antimony trioxide and related antimony oxides have not been the subject of prior Commission investigations.

¹ The individual member firms comprising the coalition are: (1) Anzon, Inc., Philadelphia, PA; (2) Atochem North America, Inc., Philadelphia, PA; (3) Laurel Industries, Inc., Cleveland, OH; (4) United States Antimony Corp., Thompson Falls, MT; and (5) United States Antimony Sales Corp., Natick, MA. United States Antimony Sales Corp. is not a producer of refined antimony trioxide. Rather, it markets the product produced by United States Antimony Corp.

² A detailed description of this product is provided in the section of this report entitled "Description and Uses."

³ A copy of the Commission's Federal Register notice is presented in app. A.

⁴ A list of witnesses who appeared at the conference is presented in app. B.

⁵ A copy of Commerce's Federal Register notice is presented in app. C.

NATURE AND EXTENT OF ALLEGED SALES AT LTFV

The estimated dumping margin for refined antimony trioxide imported from China as contained in the petition is based on a comparison of the United States price (USP) of the imported product with the product's foreign market value (FMV). Two alternative methods for calculating USP are used by petitioners. First, petitioners calculated USP on the basis of the average c.i.f. unit value of imports as reported in the official statistics of the U.S. Department of Commerce, adjusting for movement charges. Alternatively, petitioners calculated USP on the basis of actual price quotes for the Chinese product, c.i.f. port of Hong Kong, adjusting for foreign inland freight charges. Petitioners' estimate of FMV is based on a constructed value of the factors of production in the United States. Bolivia is used as the surrogate country on which to value the factors of production.

Based on petitioners' comparison of USP and FMV, the estimated dumping margins alleged in the petition range between 109.1 percent and 122.6 percent.

THE PRODUCT

Description and Uses

Refined antimony trioxide (Sb_2O_3) is a fine, white, odorless, crystalline powder. Also known as antimony oxide, it includes blends with organic or inorganic additives comprising up to and including 20 percent of the blend by volume or weight.⁶

Crude antimony trioxide (antimony trioxide having less than 98 percent Sb_2O_3) is excluded from the scope of the investigation as defined by Commerce. Impurities that may be present in the crude grade that are present in only insignificant concentrations in the refined grade include slag, silica, iron, copper, lead, arsenic, and sulfur. Refined antimony trioxide also differs from crude antimony trioxide in that the particle size distribution of refined antimony trioxide (usually between 0.3 and 6 microns) is controlled to impart the desired tint to a finished product. In contrast with refined antimony trioxide, crude antimony trioxide is seldom sold directly to end users.⁷ The basic use of the crude antimony trioxide is as a raw material in the production of refined antimony trioxide and other antimony products.

⁶ Refined antimony trioxide is frequently blended with a wetting agent and plasticizer to impart flexibility and to prevent dusting.

⁷ *** of *** sales by *** of crude antimony trioxide to end users (respondent's confidential postconference brief, pp. 7-8 and Exhibit 2). However, these sales, which were made over a *** period, appear to be isolated instances. In a telephone interview with staff, *** indicated that the customers who purchased the crude grade ***. *** estimates that about *** percent of the market for antimony trioxide in such low-end applications as *** can use the crude grade.

The tinting strength of the antimony trioxide determines the whitening effect that it will impart to the final product relative to other pigments that may be present. In general, the tinting strength of antimony trioxide decreases when the average particle size is large, e.g., 2 microns or larger, or very small, e.g., 0.1 microns or smaller. Most of the antimony trioxide that is sold commercially is about 1 micron in size.

The grades of refined antimony trioxide that are sold commercially differ depending on the degree of purity and the particle-size distribution. Although there are no standardized industrywide grades, there appears to be general agreement that there are at least four grades that antimony trioxide consumers require: high-tint, low tint, ultra-fine, and ultra-pure grades. High-tint grades usually contain particles ranging between 1.0 and 1.8 microns in size whereas low-tint grades usually contain particles ranging between 2.5 and 5 microns in size. Ultra-fine grades, the smallest size available on the market, generally contain particles between 0.2 and 0.4 microns in size. Low purity grades of refined antimony trioxide that are sold commercially usually contain between 99.2 and 99.5 percent antimony trioxide. High-purity is used as a catalyst in electronics and thermoplastics. In addition to meeting stringent requirements for residual contaminants, antimony trioxide used in electronic applications must have an overall purity that is at least 99.8 percent, and the particle size must be very fine.

The refined grades of antimony trioxide that are sold commercially also differ in the type of additives that are blended in, resulting in grades that have differing mechanical properties and viscosities. The blending agents impart desirable mechanical properties to the antimony trioxide and prevent dusting. Dry antimony trioxide, i.e., not containing any blending agents, is also sold commercially and is believed to characterize most of the antimony trioxide imported from China. Commonly used blending agents include ethylene glycol, liquid chlorinated paraffin, mineral oil, or a liquid vinyl plasticizer.⁸

According to industry sources, the refined antimony trioxide imported from China is generally of satisfactory quality, although some concern has been expressed about the consistency of its quality and the lack of customer service capability. In general, it appears that most U.S. imports of refined antimony trioxide from China have been confined to the low-end of the market, although the Chinese are attempting to penetrate the high-end markets as well.^{9 10}

⁸ Petition, p. 8.

⁹ Although both the petitioners and the respondents agree that refined antimony trioxide imported from China is concentrated in low-end markets, the petitioners contend that the Chinese products are competitive in many of the end-use markets for refined antimony trioxide whereas the respondents contend that the market niches for which the Chinese are competitive are fairly small, amounting to no more than about *** percent of total domestic demand for refined antimony trioxide (respondent's postconference confidential brief, p.

(continued...)

Antimony trioxide is used principally as a flame retardant for plastics, paints, rubber, and textiles in association with a synergistic agent that is typically a chemical, usually an organic polymer, containing chlorine or bromine atoms. When antimony trioxide is on a substrate that contains the synergistic agent, it, in conjunction with the synergistic agent, will absorb heat from a flame, thereby making the material covered by the flame retardant difficult to ignite. Antimony trioxide flame retardants are used in a host of applications, including materials used in transportation, construction, and electrical applications. Many of these materials would be too flammable to be commercially useful if flame retardants such as antimony trioxide were not available.

Antimony trioxide is also used in many applications other than flame retardants. One of the most important of these other applications involves its use as a chemical intermediate. Antimony trioxide is used as a chemical intermediate to manufacture plastic stabilizers and catalysts, which are in turn used in the manufacture of plastics and in the refining of petroleum. Another important application of antimony trioxide is as a fining agent and opacifier for glass and ceramic applications. In colored lenses and optical fibers, antimony trioxide acts as a fining agent to intensify color, whereas in ceramic applications it is used as an opacifying pigment.

Production Processes

The production processes used to produce refined antimony trioxide are characterized by the variety of the routes used to produce the product.¹¹ Refined antimony trioxide can be made as a byproduct, usually from the smelting of lead and silver-copper ores, or it can be made using antimony ores (usually a sulfide) as the initial starting material. Refined antimony

⁹ (...continued)

13). The respondent further contends that because of stringent requirements, the Chinese material is not significantly competitive in the largest end-use application for refined antimony trioxide, as a flame retardant for plastic products (respondent's postconference confidential brief, pp. 19-20).

¹⁰ Based on a survey conducted by the Commission's staff of users of refined antimony trioxide, users concerned about meeting stringent specifications, especially particle size, generally asserted that they could not use the Chinese product because of consistency problems. There were, however, some high-end users of the Chinese material. Based on the responses to the staff survey, it appears that many of these high-end users purchased the Chinese material from ***. According to these users, *** acted as a guarantor of the Chinese material, ensuring and testing that the antimony trioxide purchased from the Chinese met the specifications required by their customers.

¹¹ The processes and materials discussed in this section are typical. Other processes and materials not cited in this section may also, however, be used.

trioxide is generally not made directly from the ores but instead is usually made from an intermediate--typically either antimony metal or crude antimony trioxide. In the United States, most producers of refined antimony trioxide purchase the starting material (either the metal or the crude trioxide or the antimony ore concentrates) from domestic or foreign suppliers rather than mining and processing the ore themselves. There is currently no significant production of mined antimony ore in the United States.

In the traditional method for producing antimony metal from low-grade ore, antimony ore, a sulfide, is converted into crude antimony trioxide by roasting and the crude trioxide may then be converted into a metal by reducing it using coke and a flux, typically soda ash. High-grade antimony ore can be converted directly into a metal after melting and solidification using iron scrap as a reducing agent. Antimony metal when first produced is often not pure enough to be used commercially, and it must be further refined to remove iron, copper, arsenic, and sulfur impurities. The iron and copper impurities are removed by treating it with a mixture of sodium sulfate and charcoal to form a matte, which is then skimmed from the surface of the molten metal. Antimony metal is then further treated with an oxidizing flux, usually consisting of an alkali such as caustic soda or soda ash and sodium nitrate, to remove the arsenic and sulfur impurities. Purification may also be accomplished at least in part using electrolytic processes.

If refined antimony trioxide is processed from the metal, the metal must be oxidized to obtain the trioxide. The antimony trioxide is then vaporized and air-cooled to obtain a precipitate of refined antimony trioxide of the desired particle size distribution. In general, the more rapid the cooling, the smaller the average size of the particles. ***.¹² ***.

According to the petitioners, the most widely used Chinese production process for refined antimony trioxide involves the conversion of antimony sulfide ores in a blast furnace to a crude trioxide, followed by the conversion of the crude trioxide to a metal that is then finally converted to refined antimony trioxide. Because this process requires the production of both the crude trioxide and the metal, whereas U.S. producers generally use either antimony metal or crude antimony trioxide but not both, the petitioners believe it is significantly less efficient than production processes employed in the United States.¹³ Other technological features of U.S. production facilities that the petitioner believes the Chinese lack include ***.

¹² ***.

¹³ Petition, pp. 23-24. ***. In contrast, the Chinese reportedly must produce both the crude trioxide and the metal in order to produce refined antimony trioxide.

Substitute Products

There are a number of inorganic and organic chemicals other than antimony trioxide that can be used as fire retardants, including alumina trihydrate, zinc borate, magnesium hydroxide, zinc stannate, zinc hydroxystannate, and a variety of chlorinated, brominated, and phosphorus compounds. Zinc borate, in particular, is both a fire retardant and a smoke suppressant, which antimony trioxide is not. Rather than using zinc borate alone, which is relatively expensive, it is more cost effective to use the zinc borate in conjunction with antimony trioxide since the two agents together act both as a flame retardant and as a smoke suppressant. Currently, it appears that no substitute for antimony trioxide will likely make major inroads into its major markets in the near future, because all the potential substitutes are significantly more expensive than antimony trioxide on a cost/performance basis or they have technical problems that must be overcome before they can be considered as a substitute. Antimony trioxide could, however, face increased competition from substitutes should incipient safety and environmental concerns about antimony trioxide (it is a suspected carcinogen) or its synergistic adjunct (concern is focused on possible adverse environmental effects that may occur when the synergistic adjunct is incinerated or degraded as a result of aging) come to the fore.

U.S. Tariff Treatment

Refined antimony trioxide is classified in Harmonized Tariff Schedule of the United States (HTS) subheading 2825.80.00. The product description for this subheading is "Antimony oxides." In addition to refined antimony trioxide, this subheading includes crude antimony trioxide as well as antimony pentoxide and antimony tetroxide. (Antimony pentoxide and antimony tetroxide are much less commercially important than the antimony trioxides.) The subheading does not include antimony ores but does cover antimony oxides containing inert additives or blending agents including antidusting agents, stabilizers, and inert solvents. Imports from countries eligible for most-favored nation (MFN) status, including China, that are classified under HTS subheading 2825.80.00 currently enter the United States duty-free. Should China, however, lose its eligibility for MFN status, imports from China classified under HTS subheading 2825.80.00 would be subject to a column 2 rate of duty of 4.4 cents per kilogram (2.6 percent ad valorem equivalent in 1990).

THE U.S. MARKET

Apparent U.S. Consumption

Based on data submitted in response to Commission questionnaires, apparent consumption of refined antimony trioxide rose irregularly from 51.0 million pounds (\$68.1 million) in 1988 to 55.2 million pounds (\$61.0 million) in 1990 and decreased from 14.5 million pounds (\$16.3 million) in January-March 1990 to 13.8 million pounds (\$14.7 million) in January-March 1991 (table 1).

Table 1

Refined antimony trioxide: U.S. producers' U.S. shipments, U.S. shipments of imports, and apparent consumption, 1988-90, January-March 1990, and January-March 1991

Item	1988	1989	1990	January-March--	
				1990	1991
	<u>Quantity (1,000 pounds)</u>				
Producers' domestic shipments.....	42,352	47,295	47,294	12,530	10,819
U.S. shipments of imports from--					
China.....	6,707	7,361	5,982	1,530	2,422
Hong Kong.....	***	***	***	***	***
Subtotal.....	***	***	***	***	***
All other sources.....	***	***	***	***	***
Total.....	***	***	***	***	***
Apparent consumption.....	50,963	57,100	55,193	14,550	13,844
	<u>Value (1,000 dollars)</u>				
Producers' domestic shipments.....	57,627	59,811	53,066	14,260	11,715
U.S. shipments of imports from--					
China.....	7,735	8,066	5,309	1,378	2,118
Hong Kong.....	***	***	***	***	***
Subtotal.....	***	***	***	***	***
All other sources.....	***	***	***	***	***
Total.....	***	***	***	***	***
Apparent consumption.....	68,088	71,727	61,050	16,257	14,686

Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission.

U.S. Producers

The petition lists eight firms, the five petitioners included, which are believed to have produced refined antimony trioxide during the period of investigation (POI). Questionnaires were sent to an additional nine firms that the Commission also had reason to believe produced the subject product during the POI. Six of the nine firms responded to the questionnaire by indicating that they did not produce refined antimony trioxide during the POI. The remaining three firms did not respond to the questionnaire.

Two of the five petitioning firms, Atochem North America, Inc., and United States Antimony Sales Corp., had little or no production of refined antimony trioxide during the POI. Atochem participates in the refined antimony trioxide industry through its subsidiary M & T Harshaw, formerly

M & T Chemicals. In April 1988, M & T Chemicals stopped producing refined antimony trioxide and disassembled its production equipment. However, the firm did not entirely disengage from the industry as it has become a major buyer/distributor of product produced by ***, ***.

United States Antimony Sales Corp. was formed in December 1989. As a subsidiary of United States Antimony Corp., it was created solely for the purpose of marketing refined antimony trioxide produced by its parent firm.

Based on Commission questionnaire responses, the U.S. industry producing refined antimony trioxide consists of a small number of mostly nonintegrated firms. With one exception, these firms are significantly dependent on foreign-sourced raw materials or feedstocks for use in their refinery operations. The information that follows relates to the known U.S. producers.¹⁴

Amspec Chemical Corp. (Amspec) is a wholly owned subsidiary of Antimony Products of America, which also owns Antimony Products of Mexico and Antimony Products of Canada. Amspec produces refined antimony trioxide at its facility in Gloucester, NJ. The firm uses feedstock that it either buys from U.S. importers or imports directly from China. Amspec is one of the three largest U.S. producers of refined antimony trioxide. Its share of total U.S. production in 1990 was about *** percent (table 2).

Table 2

Refined antimony trioxide: U.S. producers and their plant locations, shares of reported production, and position on the petition

<u>Firm</u>	<u>Plant location</u>	<u>Share of reported production in 1990</u>	<u>Position on the petition</u>
Amspec Chemical Corp....	Gloucester, NJ ¹ ...	***	Opposes
Anzon, Inc.....	Laredo, TX.....	***	Supports
Asarco, Inc.....	Omaha, NE ²	***	***
Chemet Co.....	Moscow, TN ³	***	***
Laurel Industries, Inc..	La Porte, TX ⁴	***	Supports
United States Antimony Corp.....	Thompson Falls, MT.....	***	Supports

¹ Plant acquired from the Harshaw Chemical Co. in 1983.

² Operations at this facility began in the early 1900s.

³ Operations at this facility began in 1978.

⁴ This facility first started operations in 1977 when owned by Chemetron Corp. Laurel purchased the facility in 1983.

Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission.

¹⁴ Additional information concerning these firms is presented in app. D, table D-1.

Anzon, Inc. (Anzon) produces and markets a wide range of antimony-based products, including refined antimony trioxide. All of these products are produced at its production facility in Laredo, TX. In the early part of 1988, Anzon purchased the production equipment of McGean-Rohco, Inc. (Cleveland, OH), a company that had decided to exit the refined antimony trioxide industry. Anzon was the *** U.S. producer of refined antimony trioxide in 1990, accounting for *** percent of total U.S. production in that year.

Asarco, Inc. (Asarco) is the *** U.S. producer of refined antimony trioxide, accounting for *** percent of total U.S. production in 1990. However, aside from its small antimony output, Asarco is a major world producer of nonferrous metals, specialty chemicals, minerals, and other industrial products. Asarco owns a substantial interest in three of the world's major mining companies and has mining properties throughout the United States and abroad. The bulk of Asarco's feedstock comes from ***. From there it is shipped to its refinery in Omaha, NE, where it is converted into refined antimony trioxide. The firm also ***.

Perhaps *** of the known producers of refined antimony trioxide is the Chemet Co. (Chemet). Because of prevailing price levels, both for antimony feedstocks and the refined product, and its inability to compete with lower priced imports, Chemet stopped producing from mid-1987 to the latter part of 1989. Since restarting production in 1989, Chemet has produced refined antimony trioxide on a toll basis for ***.¹⁵

Laurel Industries, Inc. (Laurel) maintains its corporate offices in Cleveland, OH, and manufactures refined antimony trioxide at its La Porte, TX, facility. It also manufactures and markets a broad range of antimony-based products. Laurel's share of total U.S. production of refined antimony trioxide in 1990 was *** percent.

United States Antimony Corp. (USAC) is one of two U.S. producers that owns a U.S. mine from which it can mine antimony ore and concentrates. However, due to market conditions, the firm suspended mining operation in 1983 and now sources its antimony feedstock from U.S. importers of foreign material. USAC's refinery operations are located in Thompson Falls, MT. USAC accounted for under *** percent of total U.S. production of refined antimony trioxide in 1990.

Based on information contained in the petition, at least two firms are known to have produced refined antimony trioxide during the early part of the POI but have since withdrawn from the industry. One such firm was McGean-Rohco, Inc., of Cleveland, OH. In response to the Commission's producer questionnaire, McGean-Rohco filed with the Commission a letter stating that it sold its antimony trioxide business to Anzon on January 22, 1988.¹⁶ According to a joint press release issued by McGean and Anzon, the business transfer

¹⁵ ***.

¹⁶ McGean-Rohco, Inc., letter to the Commission, May 14, 1991.

involved not only production equipment but also included the transfer of research technology, customer lists, trademarks, and several key personnel. McGean-Rohco's current activities include producing and marketing nickel and chrome inorganic chemicals, electroplating, proprietary chemicals, and specialized transportation and industrial cleaners.¹⁷

M & T Chemicals (now M & T Harshaw) of Baltimore, MD, produced refined antimony trioxide until April 1988. For economic reasons, compounded by lower priced imports, the company dismantled most of its production equipment and withdrew from the production side of the refined antimony trioxide business. However, following this action, the company entered into a long-term supply agreement with ***, making it a major purchaser of *** refined antimony trioxide.¹⁸ M & T's current operations consist of blending or wetting purchased refined antimony trioxide and producing other antimony-based products.

U.S. Importers

The Commission sent importers' questionnaires to 29 firms that it had reason to believe imported refined antimony trioxide from China during the POI. U.S. producers were also sent importers' questionnaires. Usable data were provided by 15 firms, and 7 firms indicated that they did not import the subject product during the POI. Two U.S. producers also reported data on their U.S. imports of refined antimony trioxide.

U.S. importers of refined antimony trioxide are generally large U.S. trading companies that import a broad range of minerals, metals, and chemical products. The larger importers, such as ***, tend to be owned indirectly by offshore companies through U.S. holding companies. U.S. importers that have an affiliation with producers or exporters in China include Metaland International, Inc. of Houston, TX; Minmetals, Inc., of Fort Lee, NJ; and Nonferrous Metals (U.S.A.), Inc., of New York, NY. Two U.S. producers, Amspec and ***, imported refined antimony trioxide during the POI.

Channels of Distribution

Refined antimony trioxide has no commercially viable end use function by itself. However, when used with other compounds, it is used as a flame-retardant synergist or catalyst in the manufacture of plastics, rubber, automobiles, electronics, and paints. Sales of U.S.-produced refined antimony trioxide generally take place directly between the U.S. producer and the manufacturer end user. Toll agreements with end users are not uncommon in the industry. Both *** and *** have such agreements with several large U.S.

¹⁷ Petitioners' postconference brief, exhibit 3.

¹⁸ Effective Jan. 1, 1991, Atochem's M & T Chemicals and Engelhard Corp.'s Harshaw Chemicals were merged to form M & T Harshaw. Atochem owns *** percent of the surviving entity and ***. Petitioners' postconference brief, p. 24.

manufacturers, notably ***. Sales of the U.S. product to distributors accounted for only about *** percent of U.S. producers' total sales in 1990.

Refined antimony trioxide imported from China has a higher percentage of product reaching end users through distributors.

CONSIDERATION OF ALLEGED MATERIAL INJURY

Commission questionnaires were sent to 17 firms that it had reason to believe produced refined antimony trioxide during the POI. A total of 14 firms responded in some way to the questionnaire. Six of those 14 firms indicated that they did not produce refined antimony trioxide during the POI. Two of the remaining eight firms ceased production very early in the POI and were able to provide only limited data.¹⁹ The information that follows is based on the responses of the remaining six firms that were able to provide usable data. Those six firms are Amspec, Anzon, Asarco, Chemet, Laurel, and USAC.

U.S. Producers' Capacity, Production, and Capacity Utilization

U.S. producers' refined antimony trioxide capacity and production increased by about 23 percent and 18 percent, respectively, from 1988 to 1990. U.S. producers' capacity increased from 52.5 million pounds in 1988 to 64.5 million pounds in 1990 (table 3).²⁰ Production rose from 42.8 million pounds in 1988 to 50.4 million pounds in 1990. U.S. producers' capacity utilization rose from 81.6 percent in 1988 to 84.1 percent in 1989 as production increased faster than capacity did. However, from 1989 to 1990, U.S. producers' capacity utilization declined markedly, to 78.1 percent, as the increase in production failed to keep pace with the increase in capacity. Capacity utilization fell sharply from January-March 1990 to January-March 1991 as production declined by nearly three times more than capacity did. Contributing to the drop in production from January-March 1990 to January-March 1991 were ***.

As the data in table 3 show, Anzon, Amspec, and Laurel account for the major share of the industry's output. From 1988 to 1990, the combined production of these three firms increased by *** percent, a slightly higher increase than the 17.7-percent increase for all U.S. producers. Production for these firms declined by *** percent from January-March 1990 to January-March 1991, compared with a decrease of 14.1 percent for all U.S. producers.

¹⁹ M & T Chemical (Atochem) shut down production in April 1988. It began the year with *** pounds of refined antimony trioxide in inventory, and it produced *** pounds during January-April. McGean-Rohco sold its antimony business to Anzon, Inc., in January 1988. Its annual capacity at the time of the sale totaled about *** pounds.

²⁰ Based on late information received from Amspec, Amspec neglected to report *** pounds of unused refined antimony trioxide capacity in its producers' questionnaire response. Therefore, U.S. producers' total capacity is understated by the amount of Amspec's underreporting.

Table 3
 Refined antimony trioxide: U.S. producers' average-of-period capacity, production, and capacity utilization, by firms, 1988-90, January-March 1990, and January-March 1991

Firm	1988	1989	1990	January-March--	
				1990	1991
<u>Average-of-period capacity (1,000 pounds)</u>					
Amspec ¹	***	***	***	***	***
Anzon ²	***	***	***	***	***
Asarco ³	***	***	***	***	***
Chemet ⁴	***	***	***	***	***
Laurel ⁵	***	***	***	***	***
USAC ⁶	***	***	***	***	***
Total.....	52,512	57,011	64,537	16,362	15,494
<u>Production (1,000 pounds)</u>					
Amspec.....	***	***	***	***	***
Anzon.....	***	***	***	***	***
Asarco.....	***	***	***	***	***
Chemet.....	***	***	***	***	***
Laurel.....	***	***	***	***	***
USAC.....	***	***	***	***	***
Total.....	42,834	47,939	50,412	13,679	11,749
<u>Capacity utilization (percent)</u>					
Amspec.....	***	***	***	***	***
Anzon.....	***	***	***	***	***
Asarco.....	***	***	***	***	***
Chemet.....	***	***	***	***	***
Laurel.....	***	***	***	***	***
USAC.....	***	***	***	***	***
Average.....	81.6	84.1	78.1	83.6	75.8

¹ Based on facility operating *** hours per week, *** weeks per year.

² Based on facility operating *** hours per week, *** weeks per year.

³ Based on facility operating *** hours per week, *** weeks per year.

⁴ Based on facility operating *** hours per week, *** weeks per year.

⁵ Based on facility operating *** hours per week, *** weeks per year.

⁶ Based on facility operating *** hours per week, *** weeks per year.

Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission.

The combined average capacity utilization for the these firms fell below the average for all U.S. producers in three of the five periods covered by the investigation.

Petitioners have argued that Amspec is a "related party" and should be excluded from the domestic industry for purposes of the injury analysis.²¹ Amspec accounts for nearly *** of U.S. producers' total capacity and for about *** of total production. A comparison of industry trends in capacity and production with and without Amspec would show a close parallel. With Amspec's data excluded, U.S. production increased by *** percent from 1988 to 1990, *** than the 17.7 percent when Amspec is included, and decreased by *** percent from January-March 1990 to January-March 1991, compared with a decrease of 14.1 percent with Amspec included. U.S. producers' capacity utilization averaged 81.3 percent during 1988-90 with Amspec included compared with *** percent with Amspec excluded. Capacity utilization for all U.S. producers excluding Amspec was *** percent in January-March 1990 and *** percent in January-March 1991, operating rates that are *** than if Amspec were included.

Of the six firms for which data are reported in the table, five toll-produce refined antimony trioxide either for affiliated firms or for end users. Anzon toll-produces for ***; Amspec toll-produces product for ***; Laurel toll-produces for ***; and Chemet and USAC each toll-produce for ***.²² The volume of toll production by these firms that toll-produced during the POI increased as a share of their total production throughout the period, as shown in the following tabulation (in thousands of pounds, except as noted):

* * * * *

U.S. Producers' Shipments

U.S. Shipments

U.S. producers' U.S. shipments (including company transfers and toll shipments) of refined antimony trioxide increased from 42.4 million pounds, valued at \$57.6 million, in 1988 to 47.3 million pounds, valued at \$59.8 million in 1989 (table 4). The value of U.S. producers' shipments declined by 11.3 percent from 1989 to 1990, dropping from \$59.8 million to \$53.1 million, and the volume of such shipments remained essentially unchanged at 47.3 million pounds. The quantity and value of such shipments declined by 13.7 percent and 17.8 percent, respectively, from January-March 1990 to January-March 1991. The average unit value of U.S. producers' U.S. shipments declined steadily throughout the POI, from \$1.36 per pound in 1988 to \$1.12 per pound in 1990, or by 17.6 percent. This downward trend was continued in the interim

²¹ Petition, p. 6, and petitioners' postconference brief, p. 9.

²² General Plastics & Chemicals *** refined antimony trioxide in 1988-89. It shares an equity interest *** in *** together with ***, which owns the other *** percent.

Table 4

Refined antimony trioxide: U.S. producers' U.S. shipments,¹ by firms, 1988-90, January-March 1990, and January-March 1991

Firm	1988	1989	1990	January-March--	
				1990	1991
Quantity (1,000 pounds)					
Amspec.....	***	***	***	***	***
Anzon.....	***	***	***	***	***
Asarco.....	***	***	***	***	***
Chemet.....	***	***	***	***	***
Laurel.....	***	***	***	***	***
USAC.....	***	***	***	***	***
Total.....	42,352	47,295	47,294	12,530	10,819
Value (1,000 dollars)					
Amspec.....	***	***	***	***	***
Anzon.....	***	***	***	***	***
Asarco.....	***	***	***	***	***
Chemet.....	***	***	***	***	***
Laurel.....	***	***	***	***	***
USAC.....	***	***	***	***	***
Total.....	57,627	59,811	53,066	14,260	11,715
Unit value (per pound)					
Amspec.....	***	***	***	***	***
Anzon.....	***	***	***	***	***
Asarco.....	***	***	***	***	***
Chemet ²	***	***	***	***	***
Laurel.....	***	***	***	***	***
USAC.....	***	***	***	***	***
Average.....	\$1.36	\$1.26	\$1.12	\$1.14	\$1.08

¹ Company transfers and toll shipments are included.

² Unit values in all periods represents Chemet's flat *** cents per pound toll charge to ***.

Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission.

period, as the average unit value declined from \$1.14 per pound in January-March 1990 to \$1.08 per pound in January-March 1991, representing a decrease of 5.3 percent.

The quantity of U.S. shipments by Amspec, Anzon, and USAC *** from 1988 to 1990, the quantity of Laurel's U.S. shipments *** over the same period and those by Asarco ***. All six firms reported *** in the quantity of their U.S. shipments from January-March 1990 to January-March 1991. Whereas the total value of U.S. producers' U.S. shipments declined unevenly from 1988 to 1990, the decrease for Amspec, Anzon, and Asarco was ***.

With Amspec excluded from the data, the quantity of U.S. producers' U.S. shipments rose by *** percent from 1988 to 1990 and fell by *** percent from January-March 1990 to January-March 1991. The value of such shipments fell by *** percent from 1988 to 1990 and by *** from January-March 1990 to January-March 1991. The average unit value of U.S. producers' shipments fell by about 18 percent from 1988 to 1990 ***. Rather than a 5.3-percent decrease from January-March 1990 to January-March 1991, the average unit value of U.S. producers' U.S. shipments with Amspec excluded ***, at \$*** per pound.

Export Shipments

As shown in the tabulation below, the quantity and value of U.S. producers' exports of refined antimony trioxide increased steadily throughout the period of investigation but continued to account for only a small share of U.S. producers' total shipments:

* * * * * * *

U.S. producers' principal export markets include Mexico, Canada, Venezuela, India, Turkey, the United Kingdom, Singapore, Hong Kong, Taiwan, Japan, Israel, Spain, and Germany.

U.S. Producers' Purchases

U.S. producers' purchases of refined antimony trioxide are presented in table 5. Only two producers reported purchases of refined antimony trioxide during the POI. In 1988, ***.²³ ***. Total purchases of refined antimony trioxide by these two producers *** throughout the POI, both in absolute terms and relative to production.

Table 5

Refined antimony trioxide: Domestic and import purchases by ***, 1988-90, January-March 1990, and January-March 1991

* * * * *

Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission.

U.S. Producers' Inventories

U.S. producers' end-of-period inventories of refined antimony trioxide increased from 6.0 million pounds at yearend 1988 to 8.0 million pounds at yearend 1990 (table 6). Such inventories rose from 7.1 million pounds as of March 31, 1990, to 8.5 million pounds as of March 31, 1991. The ratio of U.S. producers' inventories to shipments fluctuated upward from yearend 1988 to yearend 1990 and increased from March 31, 1990, to March 31, 1991.

Table 6

Refined antimony trioxide: U.S. producers' end-of-period inventories, by firms, as of Dec. 31, 1988-90, and as of Mar. 31, 1990-91

Firm	As of Dec. 31--			As of Mar. 31--	
	1988	1989	1990	1990	1991
	Quantity (1,000 pounds)				
Amspec.....	***	***	***	***	***
Anzon.....	***	***	***	***	***
Asarco.....	***	***	***	***	***
Chemet.....	***	***	***	***	***
Laurel.....	***	***	***	***	***
USAC.....	***	***	***	***	***
Total.....	5,970	6,369	7,969	7,110	8,533
	Ratio to U.S. shipments (percent) ¹				
Amspec.....	***	***	***	***	***
Anzon.....	***	***	***	***	***
Asarco.....	***	***	***	***	***
Chemet.....	***	***	***	***	***
Laurel.....	***	***	***	***	***
USAC.....	***	***	***	***	***
Average.....	14.1	13.5	16.8	14.2	19.7

¹ Partial-year ratios are calculated using annualized shipments.

Note.--Average ratios are calculated using data from firms supplying both numerator and denominator information.

Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission.

The volume of inventories held by Amspec *** from 1988 to 1989, *** from 1989 to 1990, and *** from March 31, 1990, to March 31, 1991. Anzon's end-of-period inventories *** from 1988 to 1990 and *** from interim 1990 to interim 1991. Laurel's end-of-period inventories *** from 1988 to 1989 ***. Its volume of inventories *** from 1989 to 1990, as did its ***.

In examining the ratio of U.S. producers' end-of-period inventories to U.S. shipments excluding Amspec, the data show *** ratios: *** percent in 1988, *** percent in 1989, *** percent in 1990, and *** percent in interim 1991.

Employment, Wages, and Productivity

U.S. producers' overall establishment employment data are presented in table 7. The data show that the average number of all persons employed by U.S. producers in their establishments in which refined antimony trioxide is produced rose irregularly from 1988 to 1990 and declined from January-March 1990 to January-March 1991. The data also show that while the total number of production and related workers declined steadily from 1988 to 1990, the number of hours worked by such workers increased steadily. The wages and total compensation paid to those production and related workers also increased without interruption from 1988 to 1990. There was a downward trend in all indicators of establishment employment from January-March 1990 to January-March 1991. U.S. producers' overall establishment employment trends would *** if Amspec's data were excluded.

Table 7

Overall establishment employment: Average number employed, average number of production and related workers, hours worked,¹ and wages and total compensation paid to such workers, 1988-90, January-March 1990, and January-March 1991²

Item	1988	1989	1990	January-March--	
				1990	1991
Average number of all employed.....	398	421	401	420	375
Number of production and related workers (PRWs).....	318	307	300	306	275
Hours worked by PRWs (1,000 hours).....	650	709	714	182	154
Wages paid to PRWs (1,000 dollars).....	6,566	7,408	7,942	2,131	1,837
Total compensation paid to PRWs (1,000 dollars).....	9,044	10,216	10,920	2,956	2,550

¹ Includes hours worked plus hours of paid leave time.

² Firms providing employment data accounted for 100 percent of reported total U.S. shipments (based on quantity) in 1990.

Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission.

U.S. producers' employment data on their refined antimony trioxide operations are shown in tables 8 and 9. Each U.S. producer produces refined antimony trioxide at a single location. Although other antimony-based products may also be produced at these locations, U.S. producers reported that production and related workers producing refined antimony trioxide at these plants are not shared in producing any other products of the firm. Therefore, these workers are likely to be laid off for indefinite periods if U.S. producers experience economic downturns in their refined antimony trioxide business. U.S. producers such as Chemet, which produces no other products, ***. In addressing this question in their questionnaire responses, *** reported permanent or indefinite layoffs of a total of *** production and related workers during the POI. *** reported that it had no reductions in the number of production and related workers employed during the POI. The reason cited by *** for its *** reductions of *** workers were its high inventory levels and declining sales resulting from the presence of Chinese imports. *** reduction of *** workers in *** was in line with its overall business strategy of curtailing its refined antimony trioxide operations. *** cited reduced sales as its reason for reducing its number of production and related workers in May 1990 and again in April 1991. *** permanently dropped 1 worker from its workforce in January 1990 as a result of decreased production. Only production and related workers employed by *** and *** are represented by unions. *** workers are represented by the ***, and *** workers are represented by the ***.

The number of production and related workers employed by U.S. producers in their refined antimony trioxide operations declined steadily throughout the POI, decreasing by 11 workers from 1988 to 1990 and by 20 workers from January-March 1990 to January-March 1991. The number of hours worked by such production and related workers, however, rose irregularly from 1988 to 1990 and declined from January-March 1990 to January-March 1991. Wages and total compensation paid to production and related workers by U.S. producers increased significantly from 1988 to 1990 but then declined sharply from January-March 1990 to January-March 1991.

Hourly wages and hourly total compensation paid to U.S. producers' production and related workers increased irregularly from 1988 to 1990. Both decreased by about 7 percent from January-March 1990 to January-March 1991. U.S. producers' unit labor costs remained constant at 7 cents per pound from 1988 to 1990 and decreased by 1 cent per pound in January-March 1991. Productivity of production and related workers declined from 174.8 pounds per worker hour in 1988 to 160.7 pounds per worker hour in 1989 and increased to 170.3 pounds per worker hour in 1990.

Hourly wages, hourly total compensation, and productivity of production and related workers varied significantly among U.S. producers. For example, *** in 1990 paid its production and related workers the second-lowest hourly wage of all U.S. producers. *** production and related workers were paid the highest hourly wage, \$***, in the same period. In terms of productivity, production and related workers employed by *** had the highest output per worker hour throughout the POI, averaging *** pounds per worker hour during 1988-90 and *** pounds per worker hour in January-March 1991. In contrast, *** production and related workers' productivity remained *** pounds per worker hour from 1988 to 1990 and in January-March 1991.

Table 8

Refined antimony trioxide: Average number of production and related workers, hours worked,¹ wages paid, and total compensation paid, 1988-90, January-March 1990, and January-March 1991

Item	1988	1989	1990	January-March--	
				1990	1991
Number of production and related workers (PRWs)					
Amspec.....	***	***	***	***	***
Anzon.....	***	***	***	***	***
Asarco.....	***	***	***	***	***
Chemet.....	***	***	***	***	***
Laurel.....	***	***	***	***	***
USAC.....	***	***	***	***	***
Total.....	116	109	105	109	89
Hours worked by PRWs (1,000 hours)					
Amspec.....	***	***	***	***	***
Anzon.....	***	***	***	***	***
Asarco.....	***	***	***	***	***
Chemet.....	***	***	***	***	***
Laurel.....	***	***	***	***	***
USAC.....	***	***	***	***	***
Total.....	245	298	296	73	63
Wages paid to PRWs (1,000 dollars)					
Amspec.....	***	***	***	***	***
Anzon.....	***	***	***	***	***
Asarco.....	***	***	***	***	***
Chemet.....	***	***	***	***	***
Laurel.....	***	***	***	***	***
USAC.....	***	***	***	***	***
Total.....	2,186	2,514	2,704	843	673
Total compensation paid to PRWs (1,000 dollars)					
Amspec.....	***	***	***	***	***
Anzon.....	***	***	***	***	***
Asarco.....	***	***	***	***	***
Chemet.....	***	***	***	***	***
Laurel.....	***	***	***	***	***
USAC.....	***	***	***	***	***
Total.....	3,031	3,495	3,722	1,187	949

¹ Includes hours worked plus hours of paid leave.

Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission.

Table 9

Refined antimony trioxide: Hourly wages of production and related workers, hourly total compensation, productivity,¹ and unit labor costs,² 1988-90, January-March 1990, and January-March 1991

Item	1988	1989	1990	January-March--	
				1990	1991
<u>Hourly wages paid to production and related workers</u>					
Amspec.....	***	***	***	***	***
Anzon.....	***	***	***	***	***
Asarco.....	***	***	***	***	***
Chemet.....	***	***	***	***	***
Laurel.....	***	***	***	***	***
USAC.....	***	***	***	***	***
Average.....	\$8.92	\$8.44	\$9.14	\$11.55	\$10.68
<u>Hourly total compensation paid to PRWs</u>					
Amspec.....	***	***	***	***	***
Anzon.....	***	***	***	***	***
Asarco.....	***	***	***	***	***
Chemet.....	***	***	***	***	***
Laurel.....	***	***	***	***	***
USAC.....	***	***	***	***	***
Average.....	\$12.37	\$11.73	\$12.57	\$16.26	\$15.06
<u>Productivity (pounds per hour)</u>					
Amspec.....	***	***	***	***	***
Anzon.....	***	***	***	***	***
Asarco.....	***	***	***	***	***
Chemet.....	***	***	***	***	***
Laurel.....	***	***	***	***	***
USAC.....	***	***	***	***	***
Average.....	174.8	160.7	170.3	187.4	186.5
<u>Unit labor costs (per pound)</u>					
Amspec.....	***	***	***	***	***
Anzon.....	***	***	***	***	***
Asarco.....	***	***	***	***	***
Chemet.....	***	***	***	***	***
Laurel.....	***	***	***	***	***
USAC.....	***	***	***	***	***
Average.....	\$.07	\$.07	\$.07	\$.09	\$.08

¹ Calculated using data from firms that provided information on both employment and production.

² On the basis of total compensation paid.

Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission.

Financial Experience of U.S. Producers

Five producers (***) , accounting for nearly all of 1990 U.S. production of refined antimony trioxide, furnished usable financial data. Some of these companies included their toll operations on refined antimony trioxide in their income-and-loss submissions.²⁴ Refined antimony trioxide constitutes the largest establishment product for the major producers (***) .

The income-and-loss experience of the U.S producers on their operations producing refined antimony trioxide is presented in table 10. Net sales increased by 3.3 percent from \$62.0 million in 1988 to \$64.1 million in 1989. In 1990, sales were \$54.2 million, representing a decline of 15.3 percent from 1989 sales. Operating income was \$8.4 million in 1988, \$10.7 million in 1989, and \$7.7 million in 1990. Operating income margins, as a ratio to net sales, were 13.5 percent in 1988, 16.7 percent in 1989, and 14.1 percent in 1990. One company (***) incurred an operating loss in 1990.

In interim 1991, sales were \$***, down by *** percent from interim 1990 sales of \$***. Operating income was \$*** in interim 1990 and \$*** in interim 1991. Operating income margins were *** percent in interim 1990 and *** percent in interim 1991. *** also incurred operating losses in both of the interim periods.

Selected income-and-loss data of the U.S. producers on their operations producing refined antimony trioxide, by producer, are presented in table 11. The income-and-loss experience, on a dollars-per-pound basis, by producer, is shown in table 12. As indicated in tables 10 and 11, sales increased between 1988 and 1989, but then declined markedly in 1990. However, the effect on profit margins was restrained because the percentage decline between 1989 and 1990 (table 10) in the cost of goods sold (16.5) was more than the percentage decline (15.3) in sales. Rising selling, general, and administrative (SG&A) expenses affected the profitability trends. These expenses increased by 25.6 percent between 1988 and 1990 and *** percent between the two interim periods. *** reported ***, *** indicated that its SG&A expenses ***, and *** attributed its SG&A ***.²⁵

²⁴ Toll operations accounted for approximately *** percent of total sales dollars and approximately *** percent of total sales volume in 1990.

²⁵ Telephone conversations with *** of *** (***) , *** of *** (***) , and *** of *** (***) .

Table 10

Income-and-loss experience of U.S. producers¹ on their operations producing refined antimony trioxide, fiscal years 1988-90, January-March 1990, and January-March 1991

Item	1988	1989	1990 ²	January-March--	
				1990	1991
Value (1,000 dollars)					
Net sales.....	62,037	64,070	54,238	***	***
Cost of goods sold.....	47,743	46,919	39,156	***	***
Gross profit.....	14,294	17,151	15,082	***	***
Selling, general, and administrative expenses...	5,906	6,473	7,420	***	***
Operating income.....	8,388	10,678	7,662	***	***
Interest expense ³	2,612	3,274	3,867	***	***
Other income or (expense), net ³	(515)	(726)	(348)	***	***
Net income or (loss) before income taxes.....	5,261	6,678	3,447	***	***
Depreciation and amorti- zation included above.....	1,685	1,558	1,564	***	***
Cash-flow ⁴	6,946	8,236	5,011	***	***
Share of net sales (percent)					
Cost of goods sold.....	77.0	73.2	72.2	***	***
Gross profit.....	23.0	26.8	27.8	***	***
Selling, general and administrative expenses...	9.5	10.1	13.7	***	***
Operating income.....	13.5	16.7	14.1	***	***
Net income or (loss) before income taxes.....	8.5	10.4	6.4	***	***
Number of firms reporting					
Operating losses.....	0	0	1	***	***
Net losses.....	0	0	2	***	***
Data.....	5	5	5	***	***

¹ The producers and their fiscal years are ***.

² ***.

³ One producer (***) reported most of the interest expense and other expense.

⁴ Cash-flow is defined as net income or loss plus depreciation and amortization.

Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission.

Table 11

Income-and-loss experience of U.S. producers on their operations producing refined antimony trioxide, by firms, fiscal years 1988-90, January-March 1990, and January-March 1991

Item	1988	1989	1990	January-March--	
				1990	1991
Value (1,000 dollars)					
Net sales:					
Amspec.....	***	***	***	***	***
Anzon.....	***	***	***	***	***
Asarco.....	***	***	***	***	***
Laurel.....	***	***	***	***	***
USAC.....	***	***	***	***	***
Total.....	62,037	64,070	54,238	***	***
Operating income:					
Amspec.....	***	***	***	***	***
Anzon.....	***	***	***	***	***
Asarco.....	***	***	***	***	***
Laurel.....	***	***	***	***	***
USAC.....	***	***	***	***	***
Total.....	8,388	10,678	7,662	***	***
Net income or (loss) before income taxes:					
Amspec.....	***	***	***	***	***
Anzon.....	***	***	***	***	***
Asarco.....	***	***	***	***	***
Laurel.....	***	***	***	***	***
USAC.....	***	***	***	***	***
Total.....	5,261	6,678	3,447	***	***
Ratio to net sales (percent)					
Operating income:					
Amspec.....	***	***	***	***	***
Anzon.....	***	***	***	***	***
Asarco.....	***	***	***	***	***
Laurel.....	***	***	***	***	***
USAC.....	***	***	***	***	***
Average.....	13.5	16.7	14.1	***	***
Net income or (loss) before income taxes:					
Amspec.....	***	***	***	***	***
Anzon.....	***	***	***	***	***
Asarco.....	***	***	***	***	***
Laurel.....	***	***	***	***	***
USAC.....	***	***	***	***	***
Average.....	8.5	10.4	6.4	***	***

¹ Not available.

Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission.

Table 12

Selected income-and-loss experience (on a per-pound basis) of U.S. producers on their operations producing refined antimony trioxide, by firms, fiscal years 1988-90

(Per pound)			
Item	1988	1989	1990
Net sales:			
Amspec.....	***	***	***
Anzon.....	***	***	***
Asarco.....	***	***	***
Laurel.....	***	***	***
USAC.....	***	***	***
Average.....	\$1.41	\$1.37	\$1.16
Cost of goods sold:			
Amspec.....	***	***	***
Anzon.....	***	***	***
Asarco.....	***	***	***
Laurel.....	***	***	***
USAC.....	***	***	***
Average.....	1.09	1.01	.84
Operating income:			
Amspec.....	***	***	***
Anzon.....	***	***	***
Asarco.....	***	***	***
Laurel.....	***	***	***
USAC.....	***	***	***
Average.....	.19	.23	.16

Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission.

In contrast to ***,²⁶ the three major producers (Amspec, Anzon and Laurel) reported *** in their costs (primarily raw materials) between 1988 and 1990. According to the petitioners, China is the world's largest supplier of the raw materials and the Chinese are depressing raw material prices and have "progressively eliminated the alternative sources through price competition."²⁷ In their questionnaire responses, the producers also cited ***, ***, ***, and *** as other countries from which they purchase raw materials. Both *** and *** purchase some of their raw materials from related parties. *** purchases antimony ore concentrates (at cost) from ***. *** purchases crude antimony trioxide (**) from ***.²⁸

²⁶ ***. Telephone conversation with *** of ***.

²⁷ Transcript of conference, p. 24.

²⁸ Telephone conversation with ***.

The decline in raw material costs and stable toll-processing fees (calculated by dividing toll sales dollars by toll sales volume) results in declining costs for a company that purchases its own raw materials and sends them to a producer for toll processing. Toll-processing fees for each producer are shown in the tabulation below (per pound):

* * * * *

Research and Development

Research and development expenses for refined antimony trioxide amounted to \$*** in 1988, \$*** in 1989, \$*** in 1990, \$*** in interim 1990, and \$*** in interim 1991.

Investment in Productive Facilities

U.S. producers' investment in property, plant, and equipment and return on investment are shown in table 13.

Capital Expenditures

Capital expenditures by U.S. producers are shown in table 14.

Capital and Investment

The Commission requested U.S. producers to describe any actual or potential negative effects of imports of refined antimony trioxide from China on their firm's growth, investment, ability to raise capital, or existing development and production efforts (including efforts to develop a derivative or improved version of refined antimony trioxide). The producers' responses are presented in appendix E.

Table 13

Refined antimony trioxide: Value of assets and return on assets of U.S. producers,¹ fiscal years 1988-90, January-March 1990, and January-March 1991

Item	1988	1989	1990	January-March--	
				1990	1991
Value (1,000 dollars)					
Fixed assets:					
Original cost.....	17,709	18,168	18,997	***	***
Book value.....	11,062	10,981	10,853	***	***
Total assets ²	27,612	29,735	31,306	***	***
Return on book value of fixed assets (percent)					
Operating return ³	75.8	97.2	70.6	(⁵)	(⁵)
Net return ⁴	47.6	60.8	31.8	(⁵)	(⁵)
Return on total assets (percent)					
Operating return ³	30.4	35.9	24.5	(⁵)	(⁵)
Net return ⁴	19.1	22.5	11.0	(⁵)	(⁵)

¹ The producers that reported data are ***.

² Defined as book value of fixed assets plus current and noncurrent assets.

³ Defined as operating income or loss divided by asset value.

⁴ Defined as net income or loss divided by asset value.

⁵ Not available.

Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission.

Table 14

Refined antimony trioxide: Capital expenditures by U.S. producers,¹ fiscal years 1988-90, January-March 1990, and January-March 1991

Item	(In thousands of dollars)				
	1988	1989	1990	January-March--	
				1990	1991
Land and land improvements...	0	0	0	***	***
Building and leasehold improvements.....	751	271	101	***	***
Machinery, equipment, and fixtures.....	700	2,139	1,064	***	***
Total.....	1,451	2,410	1,165	***	***

¹ The producers that reported data are ***.

Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission.

CONSIDERATION OF THE QUESTION OF
THREAT OF MATERIAL INJURY

Section 771(7)(F)(i) of the Tariff Act of 1930 (19 U.S.C. § 1677(7)(F)(i)) provides that--

In determining whether an industry in the United States is threatened with material injury by reason of imports (or sales for importation) of any merchandise, the Commission shall consider, among other relevant factors²⁹--

(I) If a subsidy is involved, such information as may be presented to it by the administering authority as to the nature of the subsidy (particularly as to whether the subsidy is an export subsidy inconsistent with the Agreement),

(II) any increase in production capacity or existing unused capacity in the exporting country likely to result in a significant increase in imports of the merchandise to the United States,

(III) any rapid increase in United States market penetration and the likelihood that the penetration will increase to an injurious level,

(IV) the probability that imports of the merchandise will enter the United States at prices that will have a depressing or suppressing effect on domestic prices of the merchandise,

(V) any substantial increase in inventories of the merchandise in the United States,

(VI) the presence of underutilized capacity for producing the merchandise in the exporting country,

(VII) any other demonstrable adverse trends that indicate the probability that the importation (or sale for importation) of the merchandise (whether or not it is actually being imported at the time) will be the cause of actual injury,

²⁹ Sec. 771(7)(F)(ii) of the act (19 U.S.C. § 1677(7)(F)(ii)) provides that "Any determination by the Commission under this title that an industry in the United States is threatened with material injury shall be made on the basis of evidence that the threat of material injury is real and that actual injury is imminent. Such a determination may not be made on the basis of mere conjecture or supposition."

(VIII) the potential for product-shifting if production facilities owned or controlled by the foreign manufacturers, which can be used to produce products subject to investigation(s) under section 701 or 731 or to final orders under section 736, are also used to produce the merchandise under investigation,

(IX) in any investigation under this title which involves imports of both a raw agricultural product (within the meaning of paragraph (4)(E)(iv)) and any product processed from such raw agricultural product, the likelihood that there will be increased imports, by reason of product shifting, if there is an affirmative determination by the Commission under section 705(b)(1) or 735(b)(1) with respect to either the raw agricultural product or the processed agricultural product (but not both), and

(X) the actual and potential negative effects on the existing development and production efforts of the domestic industry, including efforts to develop a derivative or more advanced version of the like product.³⁰

Items (I) and (IX) are not relevant in this investigation. The available information on foreign producers' operations (items (II) and (VI) and the potential for "product-shifting" (item VIII) are presented in the section of this report entitled "The Refined Antimony Trioxide Industry in China and Its Ability to Generate Exports," and information on the volume, U.S. market penetration, and pricing of imports of the subject merchandise (items (III) and (IV)), and any other threat indicators, if applicable (item VII)), is presented in the section entitled "Consideration of the Causal Relationship Between Imports of the Subject Merchandise and the Alleged Material Injury." Information on the effects of imports of the subject merchandise on U.S. producers' existing development and production efforts (item (X)) is presented in the section entitled "Consideration of Alleged Material Injury." Petitioner is unaware of any dumping findings in third countries concerning refined antimony trioxide from China. Available information on U.S. inventories of refined antimony trioxide (item (V)) from China follows.

³⁰ Sec. 771(7)(F)(iii) of the act (19 U.S.C. § 1677(7)(F)(iii)) further provides that, in antidumping investigations, ". . . the Commission shall consider whether dumping in the markets of foreign countries (as evidenced by dumping findings or antidumping remedies in other GATT member markets against the same class or kind of merchandise manufactured or exported by the same party as under investigation) suggests a threat of material injury to the domestic industry."

U.S. Importers' Inventories

Based on data provided in U.S. importers' questionnaire responses, U.S. inventories of refined antimony trioxide imported from all sources increased irregularly from yearend 1988 to yearend 1990 and declined from March 31, 1990, to March 31, 1991 (table 15). The ratio of inventories to imports and the ratio of inventories to U.S. shipments of imports fluctuated upward during the POI. The bulk of reported U.S. importers' inventories consisted of Chinese refined antimony trioxide. The ratio of inventories to imports from China tended to be lower than the average ratio of inventories to imports from all sources in 1988 and higher in subsequent periods.

Table 15

Refined antimony trioxide: U.S. importers' inventories of imports from China and all other sources, as of Dec. 31, 1988-90, and as of Mar. 31, 1990-91

Source	As of Dec. 31--			As of Mar. 31--	
	1988	1989	1990	1990	1991
<u>Quantity (1,000 pounds)</u>					
China.....	1,122	2,231	2,010	2,321	1,793
Hong Kong.....	***	***	***	***	***
Subtotal.....	***	***	***	***	***
All other sources.....	***	***	***	***	***
Total.....	1,629	2,753	2,356	2,819	2,280
<u>Ratio to imports (percent)¹</u>					
China.....	15.1	35.3	39.9	35.0 ²	18.4 ²
Hong Kong.....	***	***	***	***	***
Average.....	***	***	***	***	***
All other sources.....	***	***	***	***	***
Average.....	17.8	31.4	34.8	33.2 ²	17.8 ²
<u>Ratio to U.S. shipments of imports (percent)¹</u>					
China.....	16.7	36.8	33.6	34.3 ²	18.5 ²
Hong Kong.....	***	***	***	***	***
Average.....	***	***	***	***	***
All other sources.....	***	***	***	***	***
Average.....	18.9	32.3	29.8	32.2 ²	18.8 ²

¹ Ratios are calculated using data of firms supplying both import/shipment and inventory information.

² Based on annualized shipments.

Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission.

U.S. Importers' Current Orders

Orders for Chinese refined antimony trioxide that U.S. importers have placed for delivery after March 31, 1991, total 2.4 million pounds. These orders were placed by 8 of the 19 U.S. importers that provided import data in response to the Commission's questionnaire. Deliveries on these orders are scheduled through July 1991.

The Refined Antimony Trioxide Industry in China and Its Ability to Generate Exports

China is the world's leading supplier of antimony, holding an estimated 2.4 million short tons of the world's reserves.³¹ Because of the reluctance of Western oxide and metal producers to accept Chinese concentrates, China began converting antimony concentrates into antimony metal, which is higher in antimony purity and has fewer contaminants. This gave China the incentive to start producing antimony oxides, including antimony trioxide.

It is difficult to ascertain the exact number of factories in China that produce refined antimony trioxide. Also not known is the level of integration between Chinese companies that mine antimony and the factories that produce antimony metal or refined antimony trioxide. It is generally believed, however, that much of the production of refined antimony trioxide occurs in Hunan Province, where several smelters are located.

The petition identified the numerous branches of the China National Nonferrous Metals Import and Export Corporation (CNIEC) as the major producers/exporters of the Chinese-produced refined antimony trioxide that is exported to the United States. As CNIEC is represented by counsel in this proceeding, the Commission requested counsel to provide data on its client's capacity, production, shipments, and inventories of refined antimony trioxide.³² The data supplied are shown in table 16. CNIEC's refined antimony trioxide capacity totaled *** pounds annually from 1988 to 1990 and is projected to remain at that level through 1991. Its production increased irregularly from *** pounds in 1988 to *** pounds in 1990 and is projected to equal that in 1991. CNIEC's reported capacity utilization was *** percent in 1988, *** percent in 1989, and *** percent in 1990 and 1991 (projected). Capacity utilization in January-March 1991 was *** percent, compared with *** percent in the corresponding period of 1990. CNIEC's exports of refined antimony trioxide to the United States as a share of its total exports fell from *** percent in 1988 to *** percent in 1990. The ratio fell further, to *** percent, in interim 1991.

³¹ U.S. Bureau of Mines, Antimony, 1989.

³² Minmetals International Nonferrous Metals Trading Co. ("Minmetals"), another Chinese exporter of refined antimony trioxide, provided information on its exports of refined antimony trioxide to the United States to counsel under the condition that ***. Counsel, in providing the information to the Commission, made clear that it does not have a client-counsel relationship with Minmetals. Minmetals indicated that its exports to the United States *** from about *** pounds in 1988 to *** pounds in 1990.

Table 16

Refined antimony trioxide: Production capacity, production, shipments, and inventories of CNIEC, 1988-90, January-March 1990, January-March 1991, and projections for 1991-92

* * * * *

Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission.

**CONSIDERATION OF THE CAUSAL RELATIONSHIP BETWEEN IMPORTS OF THE SUBJECT
MERCHANDISE AND THE ALLEGED MATERIAL INJURY**

U.S. Imports

Merchandise entered into the United States under HTS subheading 2825.80.00 includes crude and refined antimony trioxide. Crude antimony trioxide is an intermediate product used as feed in producing refined antimony trioxide. By itself, it has no known end use function.³³ Crude antimony trioxide is believed to be imported into the United States by, or on behalf of, the industry producing refined antimony trioxide.³⁴

Two sets of import data are reported herein, each of which has its own set of limitations. The first set consists of import data (quantity and value) as reported by 19 U.S. importers (including 2 producers that import) in response to the Commission's questionnaire. The second set consists of import data (quantity only) reported in official statistics of the U.S. Department of Commerce. With regard to the questionnaire data, the coverage is less than complete. Importers accounting for approximately 45 percent of the quantity of 1990 imports from China (including crude antimony trioxide) as reported by Commerce, and importers accounting for approximately 8 percent of the quantity of 1990 imports (including crude antimony trioxide) from all other sources as reported by Commerce, provided data in response to the questionnaire. With regard to the official statistics, imports include an undetermined amount of crude antimony trioxide, a product that is not included in the scope of the investigation. If, however, as petitioners allege, imports of crude antimony trioxide are only imported by or on behalf of U.S. producers of the refined product, a reasonable estimate can be made of the actual imports of the refined product by deducting U.S. producers' imports of crude (as reported in a supplemental page to the Commission's questionnaire) from the official statistics. This calculation, however, presents an additional drawback. After deducting from the official import statistics the quantity of U.S.

³³ Petition, exhibit 9, but see footnote 7 and accompanying text.

³⁴ Petition, p. 13 and petitioners' postconference brief, pp. 18-19, but see footnote 7 and accompanying text.

producers' reported imports of crude antimony, the quantity that remains for China falls below the quantity of refined antimony as reported by U.S. importers in the Commission questionnaires for years 1988-89. With these inherent limitations in mind, the two sets of import data follow.

Based on Questionnaire Responses

Based on data provided in response to Commission questionnaires, U.S. imports of refined antimony trioxide from all sources declined unevenly from 1988 to 1990 and increased from January-March 1990 to January-March 1991. U.S. imports increased from 9.1 million pounds, valued at \$10.4 million, in 1988 to 10.1 million pounds, valued at \$11.0 million, in 1989, and decreased to 6.8 million pounds, valued at \$6.6 million, in 1990 (table 17). U.S. imports increased from 2.1 million pounds, valued at \$2.0 million, in January-March 1990 to 2.9 million pounds, valued at \$2.6 million, in January-March 1991. The average unit value of total U.S. imports declined steadily, from \$1.14 per pound in 1988 to \$0.91 per pound in January-March 1991.

The quantity of U.S. imports from China fluctuated downward from 1988 to 1990 and increased from interim 1990 to interim 1991. The value of such imports, however, declined significantly from 1988 to 1990 and then increased from interim 1990 to interim 1991. The average unit value of U.S. imports from China declined steadily throughout the POI, decreasing from \$1.07 per pound in 1988 to \$0.81 per pound in interim 1991, representing a decline of 16.5 percent from 1988 to 1990 and a decline of 9.7 percent from January-March 1990 to January-March 1991.

Two U.S. producers imported refined antimony trioxide during the POI. Amspec imported product from China and *** imported product from ***.³⁵ As shown below, these two producers' share of total U.S. imports of refined antimony trioxide was not insignificant during most of the POI:

* * * * * * *

Table 17

Refined antimony trioxide: U.S. imports from China, Hong Kong,¹ and all other sources, based on questionnaire responses, 1988-90, January-March 1990, and January-March 1991

Item	1988	1989	1990	January-March--	
				1990	1991
<u>Quantity (1,000 pounds)</u>					
China.....	7,435	7,663	5,037	1,657	2,162
Hong Kong.....	***	***	***	***	***
Subtotal.....	***	***	***	***	***
All other sources.....	***	***	***	***	***
Total.....	9,145	10,122	6,778	2,124	2,906
<u>Value (1,000 dollars)²</u>					
China.....	7,980	7,639	4,514	1,478	1,741
Hong Kong.....	***	***	***	***	***
Subtotal.....	***	***	***	***	***
All other sources.....	***	***	***	***	***
Total.....	10,381	11,010	6,581	2,037	2,631
<u>Unit value (per pound)</u>					
China.....	\$1.07	\$1.00	\$0.90	\$0.89	\$0.81
Hong Kong.....	***	***	***	***	***
Average.....	***	***	***	***	***
All other sources.....	***	***	***	***	***
Average.....	1.14	1.09	.97	.96	.91

¹ Data for Hong Kong are presented separately in the table because petitioners claim that such imports are in fact produced in China. *** confirmed with the Commission staff that the refined antimony trioxide that *** imports from Hong Kong originate in China.

² Landed, duty-paid value.

Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission.

Based on Official Statistics

Based on official statistics of the Department of Commerce, total U.S. imports of antimony trioxide (crude and refined) increased from 25.5 million pounds, valued at \$21.5 million, in 1988 to 32.0 million pounds, valued at \$20.8 million, in 1990 (table 18). Such imports increased from 8.9 million pounds, valued at \$6.1 million, in January-March 1990 to 10.4 million pounds, valued at \$6.4 million, in January-March 1991. The average unit value of total U.S. imports eroded steadily over the POI, decreasing from 84 cents per

Table 18

Antimony trioxide: U.S. imports for consumption, by selected sources, based on official U.S. import statistics, 1988-90, January-March 1990, and January-March 1991,

Source	1988	1989	1990	January-March--	
				1990	1991
<u>Quantity (1,000 pounds)</u>					
China.....	8,150	11,252	11,159	4,262	4,257
Hong Kong.....	1,102	977	1,130	80	119
Subtotal.....	9,252	12,229	12,289	4,342	4,376
Bolivia.....	1,204	1,611	1,454	455	904
Mexico.....	1,045	2,052	9,236	1,881	2,862
South Africa.....	8,665	6,865	5,872	1,624	1,595
All other sources.....	5,292	3,852	3,132	631	698
Total.....	25,459	26,610	31,983	8,933	10,435
<u>Value (1,000 dollars)¹</u>					
China.....	8,256	10,380	8,408	3,524	2,790
Hong Kong.....	1,191	952	857	55	93
Subtotal.....	9,447	11,332	9,265	3,579	2,883
Bolivia.....	1,123	1,455	1,230	354	786
Mexico.....	508	1,078	4,235	852	1,286
South Africa.....	3,225	1,418	1,228	340	345
All other sources.....	7,191	5,796	4,832	1,004	1,131
Total.....	21,495	21,080	20,789	6,129	6,431
<u>Unit value (per pound)</u>					
China.....	\$1.01	\$0.92	\$0.75	\$0.83	\$0.65
Hong Kong.....	1.08	.97	.76	.69	.78
Average.....	1.02	.93	.75	.82	.66
Bolivia.....	.93	.90	.84	1.32	.87
Mexico.....	.49	.52	.46	.45	.45
South Africa.....	.37	.21	.21	.21	.22
All other sources.....	1.36	1.54	1.48	1.23	1.62
Average.....	.84	.79	.65	.69	.62

¹ Landed, duty-paid value.

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

pound in 1988 to 65 cents per pound in 1990, and dropping further to 62 cents per pound in January-March 1991. The low unit values for U.S. imports from Mexico and South Africa can reasonably be assumed to reflect U.S. imports of products other than refined antimony trioxide. These low unit values most probably reflect U.S. imports of crude antimony trioxide imported by or on behalf of two firms, ***. ***. ***. It is not an unusual circumstance for *** to purchase raw material from a South African mine, have that material converted or processed into crude antimony by a South African smelter under a toll agreement, and then have the crude antimony exported to its *** plant, where it is converted into refined antimony trioxide.

The quantity of U.S. imports from China increased by 36.9 percent from 1988 to 1990 and decreased by less than 1 percent from January-March 1990 to January-March 1991. The value of such imports, however, rose by only 1.8 percent from 1988 to 1990 and decreased by 20.8 percent from January-March 1990 to January-March 1991. The average unit value of U.S. imports from China fell by 25.7 percent from 1988 to 1990 and decreased by 20.7 percent from January-March 1990 to January-March 1991.

In table 19, U.S. producers' imports of crude antimony trioxide (as reported in the Commission's questionnaire) have been subtracted from the official statistics on all antimony trioxide in order to provide an estimate of U.S. imports of refined antimony trioxide. What is noteworthy about the table is that it shows a significant increase in U.S. imports of refined antimony trioxide from China, whereas data received in response to the Commission's questionnaires show a significant decrease.

Market Penetration of Imports

If the quantity of apparent U.S. consumption is calculated using import data obtained in response to Commission questionnaires, U.S. imports from China of refined antimony trioxide as a share of U.S. consumption by quantity declined from 13.2 percent in 1988 to 10.8 percent in 1990 and increased from 10.5 percent in January-March 1990 to 17.5 percent in January-March 1991 (table 20).

Data on estimated apparent consumption based on official import statistics minus U.S. producers' reported imports of crude antimony trioxide are presented in table 21. Using this set of data, U.S. imports from China of refined antimony trioxide as a share of apparent U.S. consumption by quantity increased steadily from 1988 to 1990 and decreased from interim 1990 to interim 1991.

Table 19

Refined antimony trioxide: Estimated U.S. imports for consumption from China and all other sources,¹ 1988-90, January-March 1990, and January-March 1991

Item	1988	1989	1990	January-March--	
				1990	1991
<u>Quantity (1,000 pounds)</u>					
China.....	4,439	5,107	7,157	3,425	2,222
All other sources.....	8,910	6,964	14,042	3,047	4,346
Total.....	13,349	12,071	21,199	6,472	6,568
<u>Value (1,000 dollars)²</u>					
China.....	4,593	5,994	5,559	2,884	1,466
All other sources.....	4,973	2,478	5,268	955	2,214
Total.....	9,566	8,472	10,827	3,839	3,680
<u>Unit value (per pound)</u>					
China.....	\$1.03	\$1.17	\$0.78	\$0.84	\$0.66
All other sources.....	.56	.36	.38	.31	.51
Average.....	.72	.70	.51	.59	.56

¹ U.S. imports of antimony trioxide as compiled in the official statistics of the U.S. Department of Commerce minus U.S. producers' imports of crude antimony trioxide as reported by U.S. producers in the Commission's questionnaire.

² Landed, duty-paid value.

Source: Compiled from official statistics of the U.S. Department of Commerce and from data submitted in response to questionnaires of the U.S. International Trade Commission.

Table 20

Refined antimony trioxide: U.S. producers' U.S. shipments, U.S. shipments of imports from China and from all other sources based on questionnaire responses, and apparent consumption, 1988-90, January-March 1990, and January-March 1991

Item	1988	1989	1990	January-March--	
				1990	1991
	<u>Quantity (1,000 pounds)</u>				
U.S. producers' domestic shipments.....	42,352	47,295	47,294	12,530	10,819
Shipments of imports from--					
China.....	6,707	7,361	5,982	1,530	2,422
Hong Kong.....	***	***	***	***	***
Subtotal.....	***	***	***	***	***
All other sources.....	***	***	***	***	***
Total.....	***	***	***	***	***
Apparent consumption....	50,963	57,100	55,193	14,550	13,844
	<u>As a share of apparent consumption (percent)</u>				
U.S. producers' domestic shipments.....	83.1	82.8	85.7	86.1	78.1
Shipments of imports from--					
China.....	13.2	12.9	10.8	10.5	17.5
Hong Kong.....	***	***	***	***	***
Subtotal.....	***	***	***	***	***
All other sources.....	***	***	***	***	***
Total.....	***	***	***	***	***
Apparent consumption....	100.0	100.0	100.0	100.0	100.0

Note.--Because of rounding, shares may not add to the totals shown.

Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission.

Table 21

Refined antimony trioxide: U.S. producers' U.S. shipments, estimated U.S. imports from China and from all other sources, and apparent consumption, 1988-90, January-March 1990, and January-March 1991

Item	1988	1989	1990	January-March--	
				1990	1991
	<u>Quantity (1,000 pounds)</u>				
U.S. producers' U.S. shipments.....	42,352	47,295	47,294	12,530	10,819
Estimated imports from--					
China ¹	4,439	5,107	7,157	3,425	2,222
All other sources ¹	8,910	6,964	14,042	3,047	4,346
Total.....	<u>13,349</u>	<u>12,071</u>	<u>21,199</u>	<u>6,472</u>	<u>6,568</u>
Apparent consumption....	<u>55,701</u>	<u>59,366</u>	<u>68,493</u>	<u>19,002</u>	<u>17,387</u>
	<u>As a share of apparent consumption (percent)</u>				
U.S. producers' U.S. shipments.....	76.0	79.7	69.0	65.9	62.2
Estimated imports from--					
China.....	8.0	8.6	10.4	18.0	12.8
All other sources.....	<u>16.0</u>	<u>11.7</u>	<u>20.5</u>	<u>16.0</u>	<u>25.0</u>
Total.....	<u>24.0</u>	<u>20.3</u>	<u>31.0</u>	<u>34.1</u>	<u>37.8</u>
Apparent consumption.....	100.0	100.0	100.0	100.0	100.0

¹ Calculated from official import statistics and from data provided in response to the Commission's questionnaire (see accompanying text).

Source: U.S. producers' shipments compiled from data submitted in response to questionnaires of the U.S. International Trade Commission; U.S. imports based on the official statistics of the Department of Commerce and data submitted in response to questionnaires of the U.S. International Trade Commission.

Prices

Market Characteristics

Refined antimony trioxide products are distinguished by levels of impurities, average particle size, and tinting strength. U.S. refiners and importers of Chinese-produced antimony trioxide market a variety of grades according to the customers' specifications and end uses. Though there are no clearly defined universal grades,³⁶ questionnaire responses indicate three major products, commonly known as "high tint," "low tint," "pure," and "fine," all containing at least 99.5 percent antimony trioxide, but varying in average particle size and percentage of impurities.

U.S. producers sell refined antimony trioxide predominantly to end users, according to questionnaire responses and conference testimony.³⁷ U.S. producers quote selling prices to end users on both a delivered and net f.o.b. plant/warehouse basis. In instances where shipments are less than a full truckload, prices are often quoted f.o.b.³⁸ Importers have typically sold to distributors but also sell to end users.³⁹ ⁴⁰ U.S. importers typically quote selling prices f.o.b. their U.S. warehouse or U.S. port. Imported Chinese antimony trioxide is generally shipped in its original nonreusable polywoven bag with a net weight of 25 kilograms,⁴¹ whereas U.S. producers typically ship antimony trioxide in nonreusable and non-returnable paper bags with a net weight of 50 pounds.⁴² Both U.S. producers and importers generally transport refined antimony trioxide by truck. *** reported *** to supply refined antimony trioxide to a customer or potential customer in a timely manner.⁴³

³⁶ Mr. Little, spokesperson for Anzon, stated that there are no industry-wide grades. Conference transcript, p. 15.

³⁷ Ibid., p. 16.

³⁸ ***, spokesperson for ***, stated that shipments of less than *** pounds were quoted f.o.b. warehouse to the firm's customers.

³⁹ Some importers also reported sales of Chinese refined antimony trioxide to U.S. producers.

⁴⁰ Eleven importers reported shipments to distributors and six reported shipments to end users during the period of investigation.

⁴¹ ***, an importer, reported that antimony trioxide from China is originally shipped in 25-kilogram (55-pound) polyethylene-lined polypropylene bags that are not returnable. Forty such bags stacked on a wooden pallet constitute a 1-metric-ton shipment.

⁴² Petitioners *** and *** reported some sales of 1,000-, 2,000-, and 2,500-pound super sacks.

⁴³ ***, spokesperson for ***, stated that on occasion reliable shipments of Chinese refined antimony trioxide were ***.

Most U.S. producers and importers do not publish price lists but frequently offer discounts from previous purchase prices or competitors' prices, depending on quantities ordered.⁴⁴ The majority of antimony sales by importers are on a spot-sale basis to both end users and distributors. Most U.S. producers sell refined antimony trioxide predominantly on a spot basis, but some also sell on a contract. In addition, a number of U.S. producers process refined antimony trioxide under toll arrangements (***) ships all its production of refined antimony trioxide to *** under a toll agreement; ***, a ***, produces refined antimony trioxide under a toll agreement for ***; and ***, also ***, reported increasing production under toll agreements during 1990).^{45 46}

The petitioners and respondent disagree as to whether substitute products currently exist for refined antimony trioxide.⁴⁷ Petitioners stated that product substitutes are prohibitively expensive and not readily substitutable.⁴⁸ The respondent stated that substitute products currently exist in the market and reported that substitutes for antimony oxide fire retardant applications are readily available in the market.⁴⁹

Five of 11 importers responding to product quality questions reported that domestically refined antimony trioxide was generally higher in quality with respect to impurity levels, particle size, and consistency of specifications.⁵⁰ ***, an importer, reported that the firm's refined antimony trioxide customers do not demand the higher quality in terms of consistent particle size that U.S. producers supply. ***, ***, another importer, stated that the lower quality of the Chinese product precludes its use in some applications by customers.

⁴⁴ *** reported that price lists are generally published as a benchmark for small consumers but that most pricing is off list and set to meet competition.

⁴⁵ Conference transcript, p. 60.

⁴⁶ *** reported producing *** pounds, *** percent of its total production, of refined antimony trioxide ***.

⁴⁷ Conference transcript, pp. 79-80.

⁴⁸ Mr. Little stated that a substitute, aluminum trihydrate, is significantly more expensive and requires five times the amount of antimony trioxide to achieve comparative performance levels. Ibid., pp. 16 and 91-92.

⁴⁹ *** stated that ***. Postconference brief, app. 2.

⁵⁰ One importer, ***, reported that *** antimony trioxide was *** quality based on uniformity in quality and particle size. The remaining five importers responded that there are no significant differences in quality.

Price Data

The Commission requested net U.S. f.o.b. and delivered selling prices of four classifications of refined antimony trioxide:

- PRODUCT 1: Refined antimony trioxide with Sb_2O_3 greater than or equal to 99.5 percent, As_2O_3 (arsenic oxide) less than or equal to 0.12 percent, and average particle size 0.8 to 2.4 microns.
- PRODUCT 2: Refined antimony trioxide with Sb_2O_3 greater than or equal to 99.5 percent, As_2O_3 (arsenic oxide) less than or equal to 0.12 percent, and average particle size 2.5 to 3.5 microns.
- PRODUCT 3: Refined antimony trioxide with Sb_2O_3 greater than or equal to 99.5 percent and average particle size less than 0.8 microns.
- PRODUCT 4: Refined antimony trioxide with Sb_2O_3 greater than or equal to 99.0 percent but less than 99.5 percent, As_2O_3 (arsenic oxide) less than or equal to 0.12 percent.

The price data were requested on a net f.o.b and net delivered basis⁵¹ for the largest sales, and total sales for the specified products to end users and distributors, by quarters, during January 1988-March 1991.

Five U.S. producers and 13 U.S. importers of refined antimony trioxide provided useable data in the questionnaire, but not necessarily for every product or period.⁵² Limited price data were furnished for refined antimony trioxide products 3 and 4.⁵³

Weighted-average prices to distributors of domestic product 1 fluctuated between \$*** per pound and \$*** per pound during 1988-90, but a \$*** per pound decrease (**% percent) occurred between October-December 1990 and January-March 1991 (table 22). Weighted-average prices of imported product 1 from China generally fluctuated between \$*** and \$*** per pound through the fourth quarter of 1988 but decreased thereafter. During January-March 1991, a \$*** increase occurred. A comparison of weighted-average prices of product 1

⁵¹ Responses were predominantly reported and are presented in this report on a net f.o.b. basis.

⁵² ***.

⁵³ A single U.S. producer and a single importer provided price data for product 3. Data for product 4 were insufficient for comparison.

Table 22

Refined antimony trioxide: Weighted-average prices, f.o.b. U.S. point of shipment, reported by domestic producers and importers for sales of product 1 to distributors and end users, and margins of underselling (overselling), by quarters, January 1988-March 1991

* * * * *

Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission.

supplied by U.S. producers and imports to distributors shows that imports undersold domestic producers in every quarter during January 1988-March 1991 (fig. 1). Margins of underselling ranged from \$*** per pound to \$*** in October-December 1990, *** and *** percent, respectively. During 1988-89 the margins of underselling were relatively consistent, but they then increased in 1990. During January-March 1991, as the average U.S. price declined, the margin of underselling decreased to *** percent.

Figure 1

Weighted-average prices reported by domestic producers and importers for sales of refined antimony trioxide product 1 to distributors, by quarters, January 1988-March 1991

* * * * *

Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission.

Weighted-average prices of U.S.-produced refined antimony trioxide product 1 sold to end users fluctuated between a high of \$*** per pound during October-December 1989 and \$*** per pound during January-March 1991, but generally decreased, particularly in 1990 and early 1991. Prices of Chinese-produced product 1 uniformly declined from a high of \$*** per pound during January-March 1988 to \$*** per pound during January-March 1991, or by *** percent. Margins of underselling for refined antimony trioxide product 1 sold to end users during 12 of the 13 quarters fluctuated from \$*** in October-December 1989 to \$*** in January-March 1990, *** percent and *** percent, respectively (fig. 2). During one quarter, an overselling margin of *** was reported. Margins of underselling were generally higher in the latter part of the investigation period.

Figure 2

Weighted-average prices reported by domestic producers and importers for sales of refined antimony trioxide product 1 to end users, by quarters, January 1988-March 1991

* * * * *

Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission.

Weighted-average prices of domestic product 2 sold to distributors fluctuated between a low of \$*** per pound during 2 quarters of 1989 and a high of \$*** during April-June 1990 (table 23). Weighted-average prices of Chinese antimony trioxide sold to U.S. distributors, reported for only selected quarters,⁵⁴ generally declined from \$*** during October-December 1988 to \$*** during January-March 1991. Imports of Chinese antimony trioxide product 2 sold to distributors undersold the domestic product in every quarter for which data were provided by both importers and U.S. producers. Margins of underselling ranged from *** percent in October-December 1988 to *** percent in January-March 1991 (fig. 3). The average margin of underselling was \$***.

Table 23

Refined antimony trioxide: Weighted-average prices, f.o.b. U.S. point of shipment, reported by domestic producers and importers for sales of product 2 to distributors and end users, and margins of underselling, by quarters, January 1988-March 1991

* * * * *

Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission.

⁵⁴ Chinese prices of antimony trioxide product 2 sold to distributors were provided in 5 of the 13 quarters under investigation.

Figure 3

Weighted-average prices reported by domestic producers and importers for sales of refined antimony trioxide product 2 to distributors, by quarters, January 1988-March 1991

* * * * *

Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission.

Weighted-average prices of domestically produced product 2 sold to end users fluctuated, ranging from \$*** in January-March 1988 to \$*** in January-March 1991. Chinese weighted-average prices to end users remained unchanged at \$*** per pound in the two quarters for which data were reported. Margins of underselling in those two quarters were *** and *** percent, respectively (fig. 4).

Figure 4

Weighted-average prices reported by domestic producers and importers for sales of refined antimony trioxide product 2 to end users, by quarters, January 1988-March 1991

* * * * *

Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission.

Only one U.S. producer, ***, and one importer provided data concerning antimony trioxide product 3 sold to distributors. Insufficient data for product 3 sold to end users were provided. *** prices for product 3 to distributors *** at \$*** per pound for *** of the *** quarters under investigation (table 24).⁵⁵ The prices of the imported product generally *** from \$*** per pound during July-September to \$*** per pound in late 1990. Margins of *** ranged from *** percent to *** percent. During 1990, margins of *** than in 1988 due to a \$*** in the Chinese price between October-December 1989 and January-March 1990.

⁵⁵ Prices reported by ***.

Table 24

Refined antimony trioxide: Weighted-average prices, f.o.b. U.S. point of shipment, reported by domestic producers and importers for sales of product 3 to distributors, and margins of underselling/(overselling), by types and by quarters, January 1988-March 1991

* * * * *

Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission.

Lost Sales

The petitioners provided specific information concerning alleged lost sales and revenues as a result of imports of refined antimony trioxide from China.⁵⁶ *** alleged lost sales of \$***, *** \$***, and *** \$***, totaling \$*** during ***-***. *** provided *** separate lost-sales allegations for the period. Commission staff attempted to contact customers named in the *** largest lost-sales allegations of each U.S. producer providing data.

*** alleged lost sales of \$*** on a sale of *** pounds of refined antimony trioxide to ***, an ***, on ***. ***, spokesperson for ***, stated that every quote received for this order, with the exception of ***, was less than \$*** per pound and that the sale was awarded to another U.S. producer.

On a potential sale of *** pounds to *** on ***, *** alleged lost sales valued at \$***. *** allegedly quoted \$*** per pound, \$*** more than the accepted quote. ***, spokesperson for ***, stated that price differences of \$***-*** between the domestic and Chinese product are common. *** also stated that *** refined antimony trioxide purchases in *** were half imports from China and half from another U.S. producer.

*** alleged a \$*** (\$*** per pound) lost sale for *** pounds during *** to ***.⁵⁷ ***, spokesperson for ***, stated that *** has purchased only imported antimony trioxide from U.S. distributors during the last seven years, but provided no additional information.⁵⁸

⁵⁶ ***.

⁵⁷ *** alleged lost revenues of \$*** to imports from China for a sale to *** during ***.

⁵⁸ *** U.S. distributors quote only for imported refined antimony trioxide.

Lost Revenues

*** alleged lost revenues of \$*** in *** on a sale to *** of *** pounds secured at \$***, and \$*** in *** on a sale of *** pounds secured at \$***. ***, spokesperson for ***, stated that the information was correct to the best of his knowledge. *** further stated that *** uses *** refined antimony trioxide and that the Chinese product often varies in quality.

*** allegedly accepted an offer from *** in *** for *** pounds of refined antimony trioxide at \$*** per pound, \$*** less than the initial quote, for a reduction in revenues of \$***. ***, spokesperson for ***, could not recall this sale, stating that *** did not purchase any antimony trioxide in quantities as large as *** pounds during the period in question. *** also stated that the market is highly competitive, especially among those suppliers vying for annual supply contracts.

Exchange Rates

The value of the Chinese currency is determined by the Government of China rather than the free market. Therefore, an accurate description of movements in the Chinese exchange rate cannot be presented.

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APPENDIX A

U.S. INTERNATIONAL TRADE COMMISSION'S
FEDERAL REGISTER NOTICE

provided for in subheading 2825.80.00 of the Harmonized Tariff Schedule of the United States, that are alleged to be sold in the United States at less than fair value. The Commission must complete preliminary antidumping investigations in 45 days, or in this case by June 10, 1991.

For further information concerning the conduct of this investigation and rules of general application, consult the Commission's Rules of Practice and Procedure, part 201, subparts A through E (19 CFR part 201, as amended by 56 FR 11918, Mar. 21, 1991), and part 207, subparts A and B (19 CFR part 207, as amended by 56 FR 11918, Mar. 21, 1991).

EFFECTIVE DATE: April 25, 1991.

FOR FURTHER INFORMATION CONTACT: Woodley Timberlake (202-252-1188), 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 202-252-1810. Persons with mobility impairments who will need special assistance in gaining access to the Commission should contact the Office of the Secretary at 202-252-1000.

SUPPLEMENTARY INFORMATION:

Background.—This investigation is being instituted in response to a petition filed on April 25, 1991, by The Coalition for Fair Trade in Antimony Trioxide.²

Participation in the investigation and public service list.—Persons (other than petitioners) wishing to participate in the investigation as parties must file an entry of appearance with the Secretary to the Commission, as provided in §§ 201.11 and 207.10 of the Commission's rules, not later than seven (7) days after publication of this notice in the *Federal Register*. The Secretary will prepare a public service list containing the names and addresses of all persons, or their representatives, who are parties to this investigation upon the expiration of the period for filing entries of appearance.

Limited disclosure of business proprietary information (BPI) under an administrative protective order (APO) and BPI service list.—Pursuant to

(Sb₂O₃). The refined antimony trioxide which is the subject of this investigation includes blends with organic or inorganic additives comprising up to and including 20 percent of the blend by volume or weight.

² The Coalition for Fair Trade in Antimony Trioxide is composed of the following individual member firms: (1) Anzon, Inc., Philadelphia, PA; (2) Atochem North America, Inc., Philadelphia, PA; (3) Laurel Industries, Inc., Cleveland, OH; (4) United States Antimony Corporation, Thompson Falls, MT; and (5) United States Antimony Sales Corporation, Natick, MA.

§ 207.7(a) of the Commission's rules, the Secretary will make BPI gathered in this preliminary investigation available to authorized applicants under the APO issued in the investigation, provided that the application is made not later than seven (7) days after the publication of this notice in the *Federal Register*. A separate service list will be maintained by the Secretary for those parties authorized to receive BPI under the APO.

Conference.—The Commission's Director of Operations has scheduled a conference in connection with this investigation for 9:30 a.m. on May 18, 1991, at the U.S. International Trade Commission Building, 500 E Street SW., Washington, DC. Parties wishing to participate in the conference should contact Woodley Timberlake (202-252-1188) not later than May 14, 1991, to arrange for their appearance. Parties in support of the imposition of antidumping duties in this investigation and parties in opposition to the imposition of such duties will each be collectively allocated one hour within which to make an oral presentation at the conference. A nonparty who has testimony that may aid the Commission's deliberations may request permission to present a short statement at the conference.

Written submissions.—As provided in §§ 201.8 and 207.15 of the Commission's rules, any person may submit to the Commission on or before May 21, 1991, a written brief containing information and arguments pertinent to the subject matter of the investigation. Parties may file written testimony in connection with their presentation at the conference no later than three (3) days before the conference. If briefs or written testimony contain BPI, they must conform with the requirements of §§ 201.6, 207.3, and 207.7 of the Commission's rules.

In accordance with §§ 201.16(c) and 207.3 of the 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 the Tariff Act of 1930, title VII. This notice is published pursuant to § 207.12 of the Commission's rules.

Issued: April 29, 1991.

INTERNATIONAL TRADE COMMISSION

[Investigation No. 731-TA-517 (Preliminary)]

Refined Antimony Trioxide from the People's Republic of China

AGENCY: United States International Trade Commission.

ACTION: Institution and scheduling of a preliminary antidumping investigation.

SUMMARY: The Commission hereby gives notice of the institution of preliminary antidumping investigation No. 731-TA-517 (Preliminary) under section 733(a) of the Tariff Act of 1930 (19 U.S.C. 1673b(a)) to determine whether there is a reasonable indication that an industry in the United States is materially injured, or is threatened with material injury, or the establishment of an industry in the United States is materially retarded, by reason of imports from the People's Republic of China of refined antimony trioxide.¹

¹ For purposes of this investigation, refined antimony trioxide (also known as antimony oxide) is a crystalline powder of the chemical formula

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By order of the Commission.

Kenneth R. Mason,

Secretary.

[FR Doc. 91-10453 Filed 5-2-91; 8:45 am]

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APPENDIX B

LIST OF PARTICIPANTS IN THE PUBLIC CONFERENCE

CALENDAR OF PUBLIC CONFERENCE

Investigation No. 731-TA-517 (Preliminary)

REFINED ANTIMONY TRIOXIDE FROM THE PEOPLE'S REPUBLIC OF CHINA

Those listed below appeared at the United States International Trade Commission's conference held in connection with the subject investigation on May 16, 1991, in the Hearing Room of the USITC Building, 500 E Street, SW, Washington, DC:

In support of the imposition of antidumping duties

Winthrop, Stimson, Putnam & Roberts--Counsel
Washington, DC
on behalf of--

The Coalition for Fair Trade in Refined Antimony Trioxide:

Anzon, Inc. (Anzon); Atochem North America, Inc.; Laurel Industries, Inc. (Laurel); United States Antimony Corp.; and United States Antimony Sales Corp.

John Little, Vice President, Anzon
Carlos Tejada, Vice President for Operations, Laurel

Bruce Malashevich, President, Economic Consulting Services
Vincent Honnold, Director of Statistical Services, Economic Consulting Services

Paul Bousquet--OF COUNSEL
Kenneth Berlin--OF COUNSEL

In opposition to the imposition of antidumping duties

Miller, Canfield, Paddock and Stone--Counsel
Washington, DC
on behalf of--

China National Nonferrous Metals Import and Export Corporation

Kay Bernal, Co-owner, Amspec Chemical Corp. and Antimony Products of America
Tom Jelinski, Vice President of Sales, Amspec Chemical Corp.

William Perry--OF COUNSEL
Terry Gao--OF COUNSEL
Charles Johnston, Jr.--OF COUNSEL

APPENDIX C

U.S. DEPARTMENT OF COMMERCE'S
FEDERAL REGISTER NOTICE

refined antimony trioxide from the PRC are materially injuring, or threaten material injury to, a U.S. industry. The ITC will make its preliminary determination on or before June 10, 1991. If that determination is affirmative, we will make a preliminary determination on or before October 2, 1991.

EFFECTIVE DATE: May 22, 1991.

FOR FURTHER INFORMATION CONTACT: Vincent Kane or Carole Showers, Office of Countervailing Investigations, Import Administration, International Trade Administration, U.S. Department of Commerce, 14th Street and Constitution Avenue, NW., Washington, DC 20230; telephone (202) 377-2815 or (202) 377-3217.

SUPPLEMENTARY INFORMATION:

The Petition

On April 25, 1991, we received a petition filed in proper form by the Coalition for Fair Trade in Antimony Trioxide and its individual members, Anzon, Inc. and Atochem North America, Inc. of Philadelphia, PA, Laurel Industries, Inc. of Cleveland, OH, U.S. Antimony Corporation of Thompson Falls, MT and U.S. Antimony Sales Corporation of Natick, MA. In compliance with the filing requirements of the Department's regulations (19 CFR 353.12), petitioners allege that imports of refined antimony trioxide from the PRC are being, or are likely to be sold in the United States at less than fair value within the meaning of section 731 of the Tariff Act of 1930, as amended (the Act), and that these imports are materially injuring, or threaten material injury to, U.S. industry.

Petitioners have stated that they have standing to file the petition because they are interested parties, as defined under section 771(9)(C) of the Act, and because they have filed the petition on behalf of the U.S. industry producing the product that is subject to this investigation. Any interested party, as described under paragraphs (C), (D), (E), or (F) of section 771(9) of the Act, who wishes to register support for, or opposition to, this petition, should file written notification with the Assistant Secretary for Import Administration.

Under the Department's regulations, any producer or reseller seeking exclusion from a potential antidumping duty order must submit its request for exclusion within 30 days of the date of the publication of this notice. The procedures and requirements regarding the filing of such requests are contained in 19 CFR 353.14.

United States Price and Foreign Market Value

Petitioners have calculated United States price (USP) based on two methods. The first uses an estimated average c.i.f. unit value of imports of the subject merchandise from the PRC, as reported in the U.S. Census Bureau statistics for July through December 1990, with deductions for ocean freight and insurance. The second method calculates USP based on documented c.i.f. Hong Kong price quotes from a Hong Kong distributor of the subject merchandise with a deduction for foreign inland freight.

Petitioners allege that the PRC is a nonmarket economy country within the meaning of section 777(c) of the Act. Accordingly, petitioners based foreign market value (FMV) on constructed value using one of the petitioning firm's factors of production for refined antimony trioxide. In valuing the factors of production, petitioners used Bolivia, a third country that produces a comparable product, and whose economy is market driven and which petitioners contend is comparable to the PRC.

Based on a comparison of USP and FMV, petitioners allege dumping margins ranging from 109.1 to 122.6 percent. We have accepted this comparison.

Initiation of Investigation

Under section 732(c) of the Act, the Department must determine, within 20 days after a petition is filed, whether the petition sets forth the allegations necessary for the initiation of an antidumping duty investigation, and whether the petition contains information reasonably available to the petitioner supporting the allegations.

We have examined the petition on refined antimony trioxide from the PRC and found that the petition meets the requirements of section 732(b) of the Act. Therefore, in accordance with section 732 of the Act, we are initiating an antidumping duty investigation to determine whether imports of refined antimony trioxide from the PRC are being, or are likely to be, sold in the United States at less than fair value. If our investigation proceeds normally, we will make our preliminary determination by October 2, 1991.

Pursuant to section 771(18) of the Act and based on prior investigations, the PRC is an NME. Parties will have the opportunity to comment on this issue and whether foreign market value should be based on prices or costs in the NME in the course of this investigation.

[A-570-813]

Initiation of Antidumping Duty Investigation: Refined Antimony Trioxide From the People's Republic of China

AGENCY: Import Administration, International Trade Administration, Commerce.

ACTION: Notice.

SUMMARY: On the basis of a petition filed in proper form with the U.S. Department of Commerce (the Department), we are initiating an antidumping duty investigation to determine whether imports of refined antimony trioxide from the People's Republic of China (PRC) are being, or are likely to be, sold in the United States at less than fair value. We are notifying the U.S. International Trade Commission (ITC) of this action so that it may determine whether imports of

The Department further presumes, based on the extent of central control in the NME, that a single antidumping duty margin is appropriate for all exporters. Only if NME exporters can demonstrate an absence of central government control with respect to the pricing of exports, both in law and in fact, will they be entitled to separate, company-specific margins. (See, Final Determination of Sales at Less Than Fair Value: Sparklers from the People's Republic of China [56 FR 20588, May 6, 1991] for a discussion of the information the Department considers in this regard.)

In accordance with section 773(c), FMV in NME cases is based on NME producers' factors of production (valued in a market economy country). Absent evidence that the PRC government has selected which factories produce for the United States, for purposes of the investigation we intend to base FMV only on those factories in the PRC which produce refined antimony trioxide for export to the United States.

Scope of Investigation

The product covered by this investigation is refined antimony trioxide (also known as antimony oxide) from the PRC. Antimony trioxide is a crystalline powder of the chemical formula Sb₂O₃, as provided for in subheading 2825.80.00 of the *Harmonized Tariff Schedule of the United States* (HTS). The refined trioxide includes blends with organic or inorganic additives comprising up to and including 20 percent of the blend by volume or weight. Crude antimony trioxide (antimony trioxide having less than 98 percent Sb₂O₃) is excluded. The HTS item number is provided for convenience and customs purposes. The written description remains dispositive.

Section 732(d) of the Act requires us to notify the ITC of this action and to provide it with the information we used to arrive at this determination. We will notify the ITC and make available to it all nonprivileged and nonproprietary information. We will allow the ITC access to all privileged and business proprietary information on the Department's files, provided the ITC confirms in writing that it will not disclose such information either publicly or under administrative protective order without the written consent of the Deputy Assistant Secretary for Investigations, Import Administration.

Preliminary Determination by ITC

The ITC will determine by June 10, 1991, whether there is a reasonable indication that imports of refined antimony trioxide from the PRC are

materially injuring, or threaten material injury to, a U.S. industry. If its determination is negative, the investigation will be terminated; otherwise, the investigation will proceed according to statutory and regulatory time limits.

This notice is published pursuant to section 732(c)(2) of the Act.

Dated: May 15, 1991.

Eric I. Garfinkel,
*Assistant Secretary for Import
Administration.*

[FR Doc. 91-12183 Filed 5-21-91; 8:45 am]

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APPENDIX D
PROFILE OF U.S. PRODUCERS OF REFINED
ANTIMONY TRIOXIDE

Table D-1
Refined antimony trioxide: Profile of U.S. producers

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Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission.

APPENDIX E

COMMENTS RECEIVED FROM U.S. PRODUCERS ON THE IMPACT OF IMPORTS OF
REFINED ANTIMONY TRIOXIDE FROM THE PEOPLE'S REPUBLIC OF CHINA
ON THEIR GROWTH, INVESTMENT, ABILITY TO RAISE CAPITAL, AND
EXISTING DEVELOPMENT AND PRODUCTION EFFORTS

The Commission requested U.S. producers to describe and explain the actual and anticipated negative effects, if any, of imports of refined antimony trioxide from China on their investment, ability to raise capital, or existing development and production efforts (including efforts to develop a derivative or improved version of refined antimony trioxide). Producers were also asked whether the scale of capital investments undertaken has been influenced by the presence of imports of refined antimony trioxide from China. Responses are presented below:

Amspec

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Anzon

* * * * *

Asarco

* * * * *

Laurel

* * * * *

U.S. Antimony

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