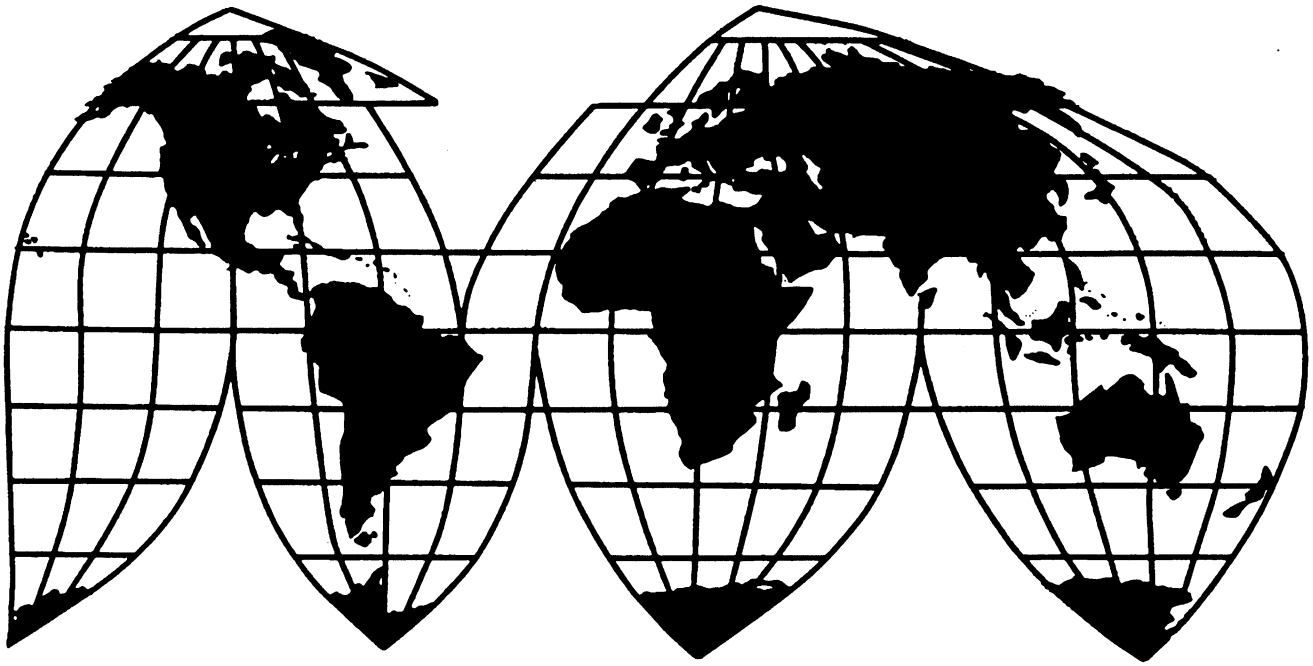
Ferrovanadium From China and South Africa

Investigations Nos. 731-TA-986 and 987 (Preliminary)

Publication 3484 **January 2002**

U.S. International Trade Commission



Washington, DC 20436

U.S. International Trade Commission

COMMISSIONERS

Stephen Koplan, Chairman
Deanna Tanner Okun, Vice Chairman
Lynn M. Bragg
Marcia E. Miller
Jennifer A. Hillman

Robert A. Rogowsky
Director of Operations

Staff assigned:

Fred Ruggles, *Investigator*
Karen Taylor, *Industry Analyst*
Mary Pedersen, *Economist*
Charles Yost, *Accountant*
Mary Jane Alves, *Attorney*
Irene Chen, *Attorney*

Vera Libeau, *Supervisory Investigator*

Address all communications to
Secretary to the Commission
United States International Trade Commission
Washington, DC 20436

U.S. International Trade Commission

Washington, DC 20436
www.usitc.gov

Ferrovanadium From China and South Africa

Investigations Nos. 731-TA-986 and 987 (Preliminary)

Publication 3484

January 2002

CONTENTS

i

CONTENTS

CONTENTS

Page

Tables--Continued

Note.--Information that would reveal confidential operations of individual concerns may not be published and therefore has been deleted from this report.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

iii

GLOSSARY OF ABBREVIATIONS

Aimeor	Applied Industrial Materials Corp.
ASTM	American Society for Testing and Materials
Bear	Bear Metallurgical Corp.
COGS	Cost of goods sold
Commerce	United States Department of Commerce
Commission/USITC	United States International Trade Commission
CRI	CRI Metal Products
CS Metals	CS Metals of Louisiana LLC
Customs	U.S. Customs Service
F.o.b.	Free on board
FR	*Federal Register*
Glencore	Glencore, Ltd.
Gulf	Gulf Chemical & Metallurgical Corp.
Highveld	Highveld Steel and Vanadium Corp., Ltd.
HSLA	High-strength low alloy
HTS	Harmonized Tariff Schedule of the United States
ISA	International Specialty Alloys
ISO	International Standards Organization
LTFV	Less than fair value
Metallurg	Metallurg Inc.
Panzhihua	Panzhihua Iron & Steel (Group)
R&D	Research and development
SG&A expenses	Selling, general, and administrative expenses
Shieldalloy	Shieldalloy Metallurgical Corp.
Stratcor	Strategic Minerals Corp.
USV	U.S. Vanadium Corp.
Vametco	Vametco Minerals Corp.
Xstrata	Xstrata South African (Pty) Ltd.

iv

UNITED STATES INTERNATIONAL TRADE COMMISSION

Investigations Nos. 731-TA-986 and 987 (Preliminary)

FERROVANADIUM FROM CHINA AND SOUTH AFRICA

DETERMINATIONS

On the basis of the record[1] developed in the subject investigations, the United States International Trade Commission determines, pursuant to section 733(a) of the Tariff Act of 1930 (19 U.S.C. § 1673b(a)) (the Act), that there is a reasonable indication that an industry in the United States is materially injured by reason of imports from China and South Africa of ferrovanadium, provided for in subheading 7202.92.00 of the Harmonized Tariff Schedule of the United States, that are alleged to be sold in the United States at less than fair value (LTFV).

COMMENCEMENT OF FINAL PHASE INVESTIGATIONS

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

BACKGROUND

These investigations are being instituted in response to a petition filed on November 26, 2001, by the Ferroalloys Association Vanadium Committee and its members Bear Metallurgical Co., Butler, PA, Shieldalloy Metallurgical Corp., Cambridge, OH, Gulf Chemical & Metallurgical Corp., Freeport, TX, U.S. Vanadium Corp., Danbury, CT, and CS Metals of Louisiana LLC, Convent, LA.

Notice of the institution of the Commission's investigations and of a public conference to be held in connection therewith was given by posting copies of the notice in the Office of the Secretary, U.S. International Trade Commission, Washington, DC, and by publishing the notice in the *Federal Register* of November 30, 2001 (66 FR 59815). The conference was held in Washington, DC, on December 17, 2001, and all persons who requested the opportunity were permitted to appear in person or by counsel.

---

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

VIEWS OF THE COMMISSION

Based on the record in these investigations, we find a reasonable indication that an industry in the United States is materially injured by reason of imports of ferrovanadium from China and South Africa that are allegedly sold in the United States at less than fair value.

I. THE LEGAL STANDARD FOR PRELIMINARY DETERMINATIONS

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

II. DOMESTIC LIKE PRODUCT

A. In General

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

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

---

[1] 19 U.S.C. §§ 1671b(a), 1673b(a); see also American Lamb Co. v. United States, 785 F.2d 994, 1001-04 (Fed. Cir. 1986); Aristech Chemical Corp. v. United States, 20 CIT 353, 354-55 (1996). We note that no party argued that the establishment of an industry is materially retarded by reason of the allegedly unfairly traded imports.

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

[3] 19 U.S.C. § 1677(4)(A).

[4] Id.

[5] 19 U.S.C. § 1677(10).

[6] See, e.g., NEC Corp. v. Department of Commerce, 36 F. Supp.2d 380, 383 (Ct. Int'l Trade 1998); Nippon Steel Corp. v. United States, 19 CIT 450, 455 (1995); Torrington Co. v. United States, 747 F. Supp. 744, 749, n.3 (Ct. Int'l Trade 1990), aff'd, 938 F.2d 1278 (Fed. Cir. 1991) ("every like product determination 'must be made on the particular record at issue' and the 'unique facts of each case'"). The Commission generally considers a number of factors including: (1) physical characteristics and uses; (2) interchangeability; (3) channels of distribution;

(continued...)

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

B. Product Description

The scope of these investigations as defined by Commerce in its notice of initiation covers the following imported merchandise:

> all ferrovanadium produced in the PRC and South Africa, regardless of grade, chemistry, form, shape or size. Ferrovanadium is an alloy of iron and vanadium that is used chiefly as an additive in the manufacture of steel. The merchandise is commercially and scientifically identified as ferrovanadium. The scope of this investigation specifically excludes vanadium additives other than ferrovanadium, such as nitrided vanadium, vanadium-aluminum master alloys, vanadium chemicals, vanadium oxides, vanadium waste and scrap, and vanadium-bearing raw materials such as slag, boiler residues and fly ash. Merchandise under the following Harmonized Tariff Schedule of the United States ("HTSUS") headings are specifically excluded:
>
> 2850.00.2000 Hydrides, nitrides, azides, silicides and borides, whether or not chemically defined, other than compounds which are also carbides of heading 2849: • • • Of vanadium
> 8112.40.3000 Beryllium, • • • vanadium • • •, and articles of these metals, including waste and scrap: • • • Vanadium: Waste and scrap
> 8112.40.6000 Beryllium, • • • vanadium • • •, and articles of these metals, including waste and scrap: • • • Vanadium: Other
>
> Ferrovanadium is classified under HTSUS heading 7202.92.00. Although the HTSUS subheading is provided for convenience and Customs purposes, the Department's written description of the scope of this investigation remains dispositive.[10]

---

[6] (...continued)
(4) customer and producer perceptions of the products; (5) common manufacturing facilities, production processes, and production employees; and, where appropriate, (6) price. See Nippon, 19 CIT at 455, n.4; Timken Co. v. United States, 913 F. Supp. 580, 584 (Ct. Int'l Trade 1996).

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

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

[9] Hosiden Corp. v. Advanced Display Mfrs., 85 F.3d 1561, 1568 (Fed. Cir. 1996) (Commission may find single domestic like product corresponding to several different classes or kinds defined by Commerce); Torrington, 747 F. Supp. at 748-52 (affirming Commission's determination of six domestic like products in investigations where Commerce found five classes or kinds).

[10] 66 FR 66398, 66398 (Dec. 26, 2001).

The scope specifically excludes nitrided vanadium, which was included in the scope of the 1995 investigation of imports of ferrovanadium and nitrided vanadium from Russia.[11] In the original investigation regarding Russia, the Commission found ferrovanadium and nitrided vanadium to be a single domestic like product and reached an affirmative determination.[12] However, in its five-year review of the antidumping duty order, the Commission determined that, because nitrided vanadium had not been produced in the United States since 1992 and there were no other significant changes in the nature, use and production of ferrovanadium and nitrided vanadium, the domestic like product consisted only of ferrovanadium.[13] [14]

C. Domestic Like Product

Petitioners[15] and respondents Xstrata South Africa Limited ("Xstrata") and its exclusive importer, Glencore Ltd ("Glencore"), advocated a single domestic like product consisting of all grades of ferrovanadium.[16] South African respondent Highveld Steel & Vanadium Corp., Ltd. ("Highveld") argued that the domestic like product should include nitrided vanadium, which, as indicated previously, is specifically excluded from Commerce's scope.[17]

Ferrovanadium is an alloying agent that is used principally in the production of steel and iron castings. Steel producers add ferrovanadium to steel to increase strength and wear resistance and to impart a fine grain size that increases ductility.[18] Ferrovanadium is sold in different grades depending on its vanadium content. The most common grades of ferrovanadium are 45 percent, 55 percent, and 80 percent grade vanadium.[19]

---

[11] Ferrovanadium and Nitrided Vanadium from Russia, Inv. No. 731-TA-702 (Final), USITC Pub. 2904 (June 1995) ("Original Russian Investigation").

[12] Original Russian Investigation, USITC Pub. 2904 at I-5 to I-8 & n.14.

[13] Ferrovanadium and Nitrided Vanadium from Russia, Inv. No. 731-TA-702 (Review), USITC Pub. 3420 at 5 (May 2001) ("Russian Five-Year Review"). The Commission also reached an affirmative determination in the five-year review. Ferrovanadium and nitrided vanadium also were discussed in the context of a Commission report, Advice Concerning Possible Modifications to the U.S. Generalized System of Preferences, Inv. No. 332-383, USITC Pub. 3079 at 83-88 (Dec. 1997).

[14] Commissioner Bragg defined the domestic like product in the Russian Five-Year Review consistent with the scope of that investigation – one like product encompassing ferrovanadium and nitrided vanadium as the Commission found in the original determination. Commissioner Bragg further noted that had she excluded nitrided vanadium from the definition of the domestic like product, she would nonetheless have reached an affirmative determination. See Russian Five-Year Review, USITC Pub. 3420 at 5 n.22.

[15] Petitioners are the Ferroalloys Association Vanadium Committee and its members: Bear Metallurgical Company ("Bear"), Shieldalloy Metallurgical Corporation ("Shieldalloy"), Gulf Chemical & Metallurgical Corporation ("Gulf"), U.S. Vanadium Corporation ("USV"), and CS Metals of Louisiana ("CS Metals").

[16] See, e.g., Petition at 16-19; Xstrata/Glencore's Postconference Brief at 12 n.25. However, Xstrata and Glencore requested that the Commission take into account the volume of nitrided vanadium being imported into the United States when analyzing the impact of subject imports on the domestic industry.

[17] See, e.g., Conference Tr. at 79 (Stras). Thus, Highveld argued that the domestic like product should be broadened beyond the merchandise described in the scope to include nitrided vanadium, a product not produced in the United States.

[18] See, e.g., CR at I-3; PR at I-3.

[19] See, e.g., CR at I-3; PR at I-2.

Steel producers use different grades of ferrovanadium based on their melting and rolling practices and their intended finished product.[20] However, steel producers have the technical capability to use different grades of ferrovanadium, and the user needs to know only the grade of ferrovanadium so that the steelmaking process and ingredients can be adjusted accordingly.[21] The majority of ferrovanadium is sold to steel mills and iron foundries in the United States with a small amount of ferrovanadium being sold to distributors who may repackage the product before reselling.[22] About *** percent of ferrovanadium produced domestically is sold to end users.[23] Ferrovanadium is usually bought and sold based on the weight of the contained vanadium and the price is generally the same "regardless of whether ferrovanadium is 80 percent or 40 percent grade."[24]

Nitrided vanadium, which shares many of the same uses as ferrovanadium, is a chemical compound of vanadium, carbon, and nitrogen. It contains about 80 percent vanadium but no iron. Although nitrided vanadium may be substituted for ferrovanadium, it has not been produced in the United States since 1992, and different production facilities and employees, but similar production processes, were used to produce ferrovanadium and nitrided vanadium at that time.[25]

Because nitrided vanadium was not produced in the United States during the period of investigation, we do not include it in the domestic like product.[26] Thus, we determine that there is one domestic like product comprised of all grades of ferrovanadium, consistent with Commerce's scope.[27]

---

[20] See, e.g., CR at I-4; PR at I-3.

[21] See, e.g., Original Russian Investigation, USITC Pub. 2904 at 9 & n.17.

[22] See, e.g., CR at I-5; PR at I-5.

[23] See, e.g., CR at II-1; PR at II-1.

[24] See, e.g., Conference Tr. at 16 (Jones).

[25] See, e.g., CR at I-7; PR at I-3; Original Russian Investigation, USITC Pub. 2904 at I-7 to I-8.

[26] See, e.g., Certain Cold-Rolled Steel Products from Argentina, Australia, Belgium, Brazil, China, France, Germany, India, Japan, Korea, the Netherlands, New Zealand, Russia, South Africa, Spain, Sweden, Taiwan, Thailand, Turkey, and Venezuela, Invs. Nos. 701-TA-422 to 425 (Prelim.) and 731-TA-964 to 983 (Prelim.), USITC Pub. 3471 at 5-6, n.21 (Nov. 2001); Silicomanganese from India, Kazakhstan, and Venezuela, Invs. Nos. 731-TA-929 to 931 (Prelim.), USITC Pub. 3427 at 4-5 & n.15 (May 2001); Extruded Rubber Thread from Malaysia, Inv. No. 753-TA-34 (Prelim.), USITC Pub. 3112 at 5 (June 1998) (Since domestic production of food-grade ERT product "d[id] not exist in any practical sense," the Commission concluded it could not be considered a domestic like product); Professional Electric Cutting and Sanding/Grinding Tools from Japan, Inv. No. 731-TA-571 (Prelim.), USITC Pub. 2536 at 17 (July 1992) ("The Commission has rejected 'the notion that a like product could be defined as a product not produced by a U.S. industry.' Such proposals ignore our obligation under the statute to determine which U.S.-made products are like or most similar to the imports under investigation.").

[27] Commissioner Bragg finds that the domestic like product in these preliminary investigations is distinguishable from her domestic like product finding in the Russian Five-Year Review for two reasons: (1) although nitrided vanadium was included in the scope of the original Russian investigation, it is specifically excluded from the scope of these investigations; and (2) nitrided vanadium has not been produced in the United States since 1992, which is well before the current period of investigation. In addition, Commissioner Bragg notes that consistent with a like product continuum approach employed by the Commission regarding related products, particular products, if included in the scope of the investigation, are often included in the like product even though there is no domestic production. See Extruded Rubber Thread from Malaysia, Inv. No. 753-TA-34 (Prelim.), USITC Pub. 3112 at 4-5 (June 1998) (although there was no domestic production of food-grade ERT, the Commission defined the domestic like product as all ERT).

III. DOMESTIC INDUSTRY AND RELATED PARTIES[28]

The domestic industry is defined as "the producers as a [w]hole of a domestic like product ...."[29] In defining the domestic industry, the Commission's general practice has been to include in the industry all domestic production of the domestic like product, whether toll-produced, captively consumed, or sold in the domestic merchant market.[30]

Based on our finding that the domestic like product consists of ferrovanadium, we find that the domestic industry consists of all domestic producers of ferrovanadium. None of the parties disputed that Shieldalloy and Bear are domestic producers.[31] Shieldalloy is an integrated producer of ferrovanadium, and Bear toll produces ferrovanadium for companies such as Glencore, Gulf, CS Metals, and USV.[32] The parties disagreed, however, whether tollees Gulf and USV should be included in the domestic industry.[33] Gulf and USV provide Bear with vanadium pentoxide, the primary production input for ferrovanadium, and Bear performs tolling operations for them. USV's ferrovanadium production facilities have been idle since 1994, and it has no plans to restart these facilities; Gulf does not have any facilities to produce ferrovanadium.[34] We therefore do not include Gulf and USV in the domestic industry. Gulf and USV produce vanadium pentoxide, an intermediate product, but they do not produce ferrovanadium, the domestic like product, and such production is required under the Act to be part of the domestic industry.[35] Accordingly, consistent with our definition of the domestic like product, we define a single domestic industry consisting of Shieldalloy and Bear.[36]

---

[28] Commissioner Miller does not join in this section of the opinion. See Separate Views of Commissioner Marcia E. Miller on Domestic Industry and Material Injury.

[29] 19 U.S.C. § 1677(4)(A).

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

[31] In any final phase investigations, we intend to explore the possibility that there may be other domestic firms that produce ferrovanadium. In particular, there is evidence indicating that International Specialty Alloys produces ferrovanadium in the United States, see, e.g., CR at III-4; PR at III-1; Conference Tr. at 71 (Young); Xstrata/Glencore's Postconference Brief at 8, but these facts were brought to our attention too late in the preliminary phase of these investigations to obtain probative information.

[32] See, e.g., CR at I-4 to I-5; PR at I-4.

[33] Compare, e.g., Petition at 4, 20-23; Conference Tr. at 37-40 (de Laurentiis), 43-44 (Ellsworth and de Laurentiis); Petitioners' Postconference Brief at 16-21, with Highveld's Postconference Brief at 2-3; Xstrata/Glencore's Postconference Brief at 14-15.

[34] See, e.g., CR at I-5, V-1; PR at I-4, V-1; Conference Tr. at 59 (Bunting).

[35] 19 U.S.C. § 1677(4)(A); see also, e.g., Russian Five-Year Review, USITC Pub. 3420 at 6-7. In previous cases, we found that merely supplying raw materials and paying a fabrication fee do not constitute sufficient production activities to include tollees in the domestic industry. See, e.g., Certain Welded Large Diameter Line Pipe from Japan, Inv. No. 731-TA-919 (Final), USITC Pub. 3464 at 10, n.53 (Nov. 2001) (while toll producers that engage in sufficient production-related activity are included in the domestic industry, tollees "that merely supply raw materials and pay a fabrication fee" are not); Furfuryl Alcohol from China and Thailand, Invs. Nos. 731-TA-703 and 705 (Review), USITC Pub. 3412 at 6 n.23 (Apr. 2001); Sweaters Wholly or in Chief Weight of Manmade Fibers from Hong Kong, the Republic of Korea and Taiwan, Invs. Nos. 731-TA-448 to 450 (Final), USITC Pub. 2312 at 24-26 & nn.68-69 (Sept. 1990).

[36] Having defined the domestic industry to include Bear and Shieldalloy, we find that there are no related party issues in these investigations. See 19 U.S.C. § 1677(4)(B).

7

IV. CUMULATION[37]

A. In General

For purposes of evaluating the volume and price effects for a determination of material injury by reason of the subject imports, section 771(7)(G)(i) of the Act requires the Commission to cumulate subject imports from all countries as to which petitions were filed and/or investigations self-initiated by Commerce on the same day, if such imports compete with each other and with the domestic like product in the U.S. market.[38] In assessing whether subject imports compete with each other and with the domestic like product,[39] the Commission generally considers four factors, including:

(1) the degree of fungibility between the subject imports from different countries and between imports and the domestic like product, including consideration of specific customer requirements and other quality related questions;

(2) the presence of sales or offers to sell in the same geographic markets of subject imports from different countries and the domestic like product;

(3) the existence of common or similar channels of distribution for subject imports from different countries and the domestic like product; and

(4) whether the subject imports are simultaneously present in the market.[40]

While no single factor is necessarily determinative, and the list of factors is not exclusive, these factors are intended to provide the Commission with a framework for determining whether the subject imports compete with each other and with the domestic like product.[41] Only a "reasonable overlap" of competition is required.[42]

The antidumping duty petitions regarding ferrovanadium imports from China and South Africa were filed on the same day, and none of the four statutory exceptions to the general cumulation rule applies to these investigations.[43] For purposes of these preliminary determinations, we find that there is a

---

[37] The statutory provision for negligible imports, 19 U.S.C. § 1677(24), does not apply in these investigations because subject imports from China and South Africa comprised more than three percent of total ferrovanadium imports in the most recent twelve-month period for which data are available that precedes the filing of the petition. See, e.g., CR/PR at Table IV-2.

[38] 19 U.S.C. § 1677(7)(G)(i).

[39] The SAA (at 848) expressly states that "the new section will not affect current Commission practice under which the statutory requirement is satisfied if there is a reasonable overlap of competition." citing Fundicao Tupy, S.A. v. United States, 678 F. Supp. 898, 902 (Ct. Int'l Trade 1988), aff'd, 859 F.2d 915 (Fed. Cir. 1988).

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

[41] See, e.g., Wieland Werke, AG v. United States, 718 F. Supp. 50 (Ct. Int'l Trade 1989).

[42] See Goss Graphic System, Inc. v. United States, 33 F. Supp.2d 1082, 1087 (Ct. Int'l Trade 1998) ("cumulation does not require two products to be highly fungible"); Mukand Ltd., 937 F. Supp. at 916; Wieland Werke, AG, 718 F. Supp. at 52 ("Completely overlapping markets are not required.").

[43] These exceptions concern imports from countries as to which investigations have been terminated, imports

(continued...)

reasonable overlap of competition between the subject imports and between the subject imports and the domestic like product.

The parties agreed that subject imports from China and South Africa generally are fungible with one another and the domestic like product. Although there may be some differences in the grades of ferrovanadium imported from China and South Africa and shipped by domestic producers, and there are some differences in terms of the quality of ferrovanadium imported from China, the record in the preliminary phase of these investigations indicates that it is relatively easy and inexpensive for users to adjust the production process (particularly in the steel sector, where an overwhelming portion of ferrovanadium is sold) to accommodate different grades of ferrovanadium. We find that there is a high degree of substitutability among domestically produced ferrovanadium and subject imports from China and South Africa. Domestic toll producers and domestic tollees unanimously reported that differences other than price among subject imports and the domestic like product are never important, and of those importers with knowledge of the issue, only one reported that differences other than price among subject imports and the domestic like product are important, with the rest either reporting that non-price differences are only sometimes, or never, important. Domestic producers and domestic tollees reported that subject imports and the domestic like product are always interchangeable, and all but one responding importer reported that they are always or frequently interchangeable.[44]

The record indicates that during the period of investigation subject imports from China and South Africa and the domestic like product generally were sold throughout the United States.[45] Official import statistics and domestic producer questionnaire responses indicate that subject imports from China and South Africa and domestically produced ferrovanadium also were sold in the U.S. market each year of the period of investigation.[46] The record also indicates that both domestically produced and imported ferrovanadium sold in the United States is typically crushed to a nominal size that will fit through a two-inch mesh screen and is sold to end users (primarily steel companies and iron foundries) packaged in bags or cans that hold product with a contained weight of 10 to 25 pounds.[47]

Consideration of the four factors traditionally addressed in the Commission's cumulation analysis shows that there is a reasonable overlap of competition between the subject imports and between the subject imports and the domestic like product. Accordingly, we cumulate subject ferrovanadium imports from China and South Africa for purposes of our present material injury analysis.

V. REASONABLE INDICATION OF MATERIAL INJURY BY REASON OF ALLEGEDLY LESS THAN FAIR VALUE IMPORTS[48]

In the preliminary phase of antidumping or countervailing duty investigations, the Commission determines whether there is a reasonable indication that an industry in the United States is materially

---

(...continued)
from Israel, imports from countries as to which Commerce has made preliminary negative determinations, and imports from countries designated as beneficiaries under the Caribbean Basin Economic Recovery Act. See 19 U.S.C. § 1677(7)(G)(ii).

[44] See, e.g., Conference Tr. at 9 (Ellsworth), 13 (Jones), 15 (Jones), 20 (Carter), 83 (Young); Petitioners' Postconference Brief at 1-3; CR at II-3 to II-4; PR at II-3; CR/PR at Tables II-1, II-2.

[45] See, e.g., Petition at 13-14, Exhibit 4; CR at V-1; PR at V-1.

[46] See, e.g., CR/PR at Tables IV-2, V-1, V-2.

[47] See, e.g., Conference Tr. at 15 (Jones); CR at II-1, V-3; PR at II-1, V-3.

[48] Commissioner Miller does not join in this section of the opinion. See Separate Views of Commissioner Marcia E. Miller on Domestic Industry and Material Injury.

injured by reason of the imports under investigation.[49] In making this determination, the Commission must consider the volume of imports, their effect on prices for the domestic like product, and their impact on domestic producers of the domestic like product, but only in the context of U.S. production operations.[50] The statute defines "material injury" as "harm which is not inconsequential, immaterial, or unimportant."[51] In assessing whether there is a reasonable indication that the domestic industry is materially injured by reason of subject imports, we consider all relevant economic factors that bear on the state of the industry in the United States.[52] No single factor is dispositive, and all relevant factors are considered "within the context of the business cycle and conditions of competition that are distinctive to the affected industry."[53]

For the reasons discussed below, we determine that there is a reasonable indication that the domestic industry producing ferrovanadium is materially injured by reason of subject ferrovanadium imports from China and South Africa that are allegedly sold in the United States at less than fair value.

A. Conditions of Competition

The following conditions of competition are pertinent to our analysis in these investigations.

1. Commodity Nature of Product

Ferrovanadium is produced and sold in a variety of grades, as indicated earlier, and grades are defined by the percentage of vanadium present in the product, as measured by the contained weight; the decision to use a specific grade of ferrovanadium depends upon the steelmaker's melting and rolling practices and the intended finished product. Petitioners argued that different grades of ferrovanadium compete against each other for sales on a daily basis. While purchasers may resist frequent shifts in the grade or composition of ferrovanadium which they employ, petitioners argued that purchasers are generally indifferent as to which grade they use, have the technical capability to use any grade of ferrovanadium, and will adapt as necessary when the price gap between grades of ferrovanadium is wide enough and of sufficient duration to justify the short-term costs of switching.[54]

---

[49] 19 U.S.C. §§ 1671b(a), 1673b(a).

[50] 19 U.S.C. § 1677(7)(B)(i). The Commission "may consider such other economic factors as are relevant to the determination" but shall "identify each [such] factor . . . [a]nd explain in full its relevance to the determination." 19 U.S.C. § 1677(7)(B); see also Angus Chemical Co. v. United States, 140 F.3d 1478 (Fed. Cir. 1998).

[51] 19 U.S.C. § 1677(7)(A).

[52] 19 U.S.C. § 1677(7)(C)(iii).

[53] 19 U.S.C. § 1677(7)(C)(iii).

[54] See, e.g., Petition at 7-8, 17; Conference Tr. at 83-84 (Young); CR at I-6 n.17; PR at I-5 n.17. Bear and Chinese and South African producers produce primarily 80 percent grade ferrovanadium whereas Shieldalloy generally produces 45 percent grade ferrovanadium. See, e.g., Petition at 11-12, Exhibits 1, 6. Respondents argued that due to the lack of competition in the 45 percent grade ferrovanadium market with the departure of Russian 45 percent grade ferrovanadium imports, domestic purchasers were less willing to purchase 45 percent grade ferrovanadium. See, e.g., Xstrata/Glencore's Postconference Brief at 16; Conference Tr. at 68 (Young); Highveld's Postconference Brief at 8. We intend to examine this issue further in any final phase investigations.

2. Producers and Tollees

Ferrovanadium is produced from vanadium-bearing raw materials, such as vanadiferous slags and vanadium oxides and vanadium pentoxide and trioxide.[55] Bear and subject producers use vanadium pentoxide as their primary production input, but Shieldalloy's production process relies on vanadium-bearing iron slag and sometimes other vanadiferous materials such as petroleum residues and fly ash.[56] Whereas petitioners contended that raw material inputs are low-cost and plentiful and will remain so in the future, respondents argued that the United States is dependent on vanadium imports because it lacks primary vanadium ore mines, as evidenced by imports of vanadium slag from South Africa.[57] Raw material costs accounted for *** percent of the total cost of goods sold for domestic production of ferrovanadium in 2000.[58] The cost of goods sold for commercial sales by domestic producers Bear and Shieldalloy declined throughout the period of investigation, from *** in 1998 to *** in 1999 and *** in 2000, and from *** in interim 2000 to *** in interim 2001.[59]

As indicated earlier, Shieldalloy and Bear are domestic producers of ferrovanadium. Bear converts vanadium pentoxide provided by USV, CS Metals, Gulf, Glencore, *** into ferrovanadium on a toll basis. Tollees USV and Gulf retain title to the contained vanadium throughout this time, and they ship and market the resulting ferrovanadium. Since 1998, ***.[60] As a toll producer, Bear's financial condition is not directly affected by changes in market conditions, such as changes in vanadium raw material prices, or the impact of imports. Market conditions, however, directly affect USV and Gulf, and therefore impact Bear indirectly because of its dependence on USV and Gulf for products to convert, and thus revenues and profits. If market conditions cause USV and Gulf's production levels and sales to fall, Bear's production levels and sales also would fall. Furthermore, as ferrovanadium prices fall, there is increased pressure on Bear to reduce its conversion fee, and thus its revenues and profits.[61]

3. Demand

Approximately 90 percent of the ferrovanadium sold in the United States is for steelmaking, and demand for steel, therefore, drives demand for ferrovanadium. Information about ferrovanadium demand in the United States since January 1, 1998, was mixed. *** reported that demand grew during the period of investigation due in part to the development of thin slab casting, while tollees *** reported that demand peaked during this time frame but has since fallen. Among importers, *** reported that ferrovanadium demand has declined due to reduced domestic steel production. Apparent domestic consumption of ferrovanadium, by quantity, increased from *** million pounds in 1998 to *** million

---

[55] See, e.g., CR at V-1; PR at V-1.

[56] See, e.g., CR at I-4 to I-5; PR at I-3 to I-4.

[57] See, e.g., CR at V-1; PR at V-1; Conference Tr. at 67 (Young), 78 (Stras); Highveld's Postconference Brief at 9.

[58] Derived from domestic producers' questionnaire responses.

[59] See, e.g., CR/PR at Table D-3.

[60] See, e.g., CR at III-2; PR at III-1.

[61] See, e.g., Petition at 23; Petitioner's Postconference Brief at 18-21; Conference Tr. at 17 (Jones), 25-26 (Orr), 30 (Bunting); see also, e.g., Russian Five-Year Review, USITC Pub. 3420 at 11.

pounds in 2000, but declined from *** million pounds in interim 2000 to *** million pounds in interim 2001.[62]

4. Pricing and Distribution

As indicated earlier, ferrovanadium is typically bought and sold on the basis of the weight of contained vanadium, and the price is typically the same regardless of the grade. Petitioners estimated that *** percent or more of all ferrovanadium transactions in the U.S. market involve direct sales to steel producers, with spot sales and contracts accounting for approximately *** percent and *** percent, respectively, of domestic shipments. Importers' sales were also a mix of contract and spot sales, although more frequently spot transactions. The parties agreed that the key contract quoting season for ferrovanadium generally is in the fourth quarter of the year, although they acknowledged that spot purchases may be made throughout the year.[63] Published prices reported in Ryan's Notes Ferrous and Non-Ferrous News and Prices also may provide guidance for transactions in the marketplace.[64]

As noted earlier, ferrovanadium sold in the U.S. market generally is crushed to a nominal size that fits through two-inch mesh, referred to in the industry as 2" by down or 2" x D. A significant portion of ferrovanadium sold to end users in the U.S. market is packaged in bags or cans that hold product with a contained weight of 10 to 25 pounds of vanadium, and the remainder is sold in bulk drums that typically contain a net weight of 500 to 750 pounds of vanadium or in supersacks that hold up to 4,000 pounds of product. This type of packaging allows purchasers, particularly steelmakers, to add precise amounts of ferrovanadium to their production process without additional measuring. In virtually all cases, the packages are placed onto pallets or into pallet boxes to facilitate handling, storage, and distribution.[65]

5. Other Vanadium Products and Substitutes

Respondents argued that the prices of other vanadium products and substitute products influence the price of ferrovanadium in the U.S. market.[66] They argued that nitrided vanadium, ferromolybdenum, and ferroniobium directly compete with ferrovanadium, and that although it is somewhat more difficult to switch between nitrided vanadium and ferrovanadium than to switch between grades of ferrovanadium, steel producers can and have switched between ferrovanadium and nitrided vanadium. They also noted petitioners' acknowledgment in the five-year review of the antidumping duty order on Russia that the prices of vanadium pentoxide, ferrovanadium, and nitrided vanadium influence one another, and their concession that the decline in prices was generally attributable to the oversupply of

---

[62] See, e.g., Mem. INV-Z-007 (Jan. 9, 2002); CR/PR at Table IV-2; CR at II-2 to II-3; PR at II-2. These apparent domestic consumption figures were calculated by adding the volume of non-subject and subject imports reported in Table IV-2 and the volume of Bear and Shieldalloy's commercial shipments reported in Mem. INV-Z-007 (Jan. 9, 2002). Alternatively, including the shipments of tollees Gulf and USV, apparent domestic consumption increased from *** pounds in 1998 to *** pounds in 2000, while interim data show a decline in apparent domestic consumption from *** pounds to *** pounds. CR/PR at Table IV-3.

[63] See, e.g., CR at V-3; PR at V-3; Conference Tr. at 16 (Jones), 51-52 (Orr), 83-85 (Young); Petition at 13.

[64] See, e.g., Conference Tr. at 69 (Young), 75-77 (Stras); Highveld's Postconference Brief at 6; Xstrata/Glencore's Postconference Brief at 4-5.

[65] See, e.g., Petition at 13; Conference Tr. at 15-16 (Young).

[66] See, e.g., Conference Tr. at 62 (Weigel), 68 (Young), 78-79 (Stras), 85-86 (Young); Highveld's Postconference Brief at 4-5, 7, Exhibit 3; Xstrata/Glencore's Postconference Brief at 9, 12-13, Exhibit 7.

vanadium in the world market.[67] Two of six responding importers listed nitrided vanadium as a possible substitute for ferrovanadium. Responses from the domestic producers, two tollees, and six importers revealed several possible substitutes for ferrovanadium, but only in limited applications and only when ferrovanadium prices are relatively high. In general, questionnaire responses indicated that substitution away from ferrovanadium is rare.[68] We intend to examine further the role of substitute products in the U.S. market in any final phase investigations.

6. Non-subject imports

Non-subject ferrovanadium was imported from Austria, Belgium, Canada, and the Czech Republic during the period of investigation.[69] There appears to be a moderate to high degree of substitutability among subject imports, non-subject imports, and domestically produced ferrovanadium.[70] The level of non-subject imports declined from 3.5 million pounds in 1998 to 2.8 million pounds in 1999, and then increased to 4.2 million pounds in 2000; the level of non-subject imports declined from 3.4 million pounds in interim 2000 to 2.2 million pounds in interim 2001.[71]

7. End-of-Period Inventories

End-of-period inventories for domestically produced ferrovanadium decreased from *** pounds in 1998 to *** pounds in 1999, but then increased to *** pounds in 2000, and were higher in interim 2001 (*** pounds) than in interim 2000 (*** pounds).[72]

B. Volume

Section 771(C)(i) of the Act provides that the "Commission shall consider whether the volume of imports of the merchandise, or any increase in that volume, either in absolute terms or relative to production or consumption in the United States, is significant."[73]

The volume of cumulated subject imports increased steadily during the period of investigation, from 1.1 million pounds in 1998 to 2.9 million pounds in 1999 and 3.3 million pounds in 2000. The quantity of cumulated subject imports then increased to 3.2 million pounds in interim 2001, from 2.7 million pounds in interim 2000.[74]

On a quantity basis, the market share of domestic producers Bear and Shieldalloy declined from *** percent in 1998 to *** percent in 1999, and then to *** percent in 2000, while apparent domestic

---

[67] See, e.g., Conference Tr. at 62 (Weigel), 68 (Young), 79 (Stras), 85-86 (Young); Highveld's Postconference Brief at 4-5, 7, Exhibit 3; Xstrata/Glencore's Postconference Brief at 9, 12-13, Exhibit 7.

[68] See, e.g., CR at II-3 & n.2; PR at II-2 & n.3.

[69] See, e.g., Petition at Exhibit 23-A; Xstrata/Glencore's Postconference Brief at Exhibit 5. An antidumping duty order has been in place on ferrovanadium imports from Russia since 1995, and a recent five-year review of this order resulted in the continuation of the order. Current antidumping margins on imports of ferrovanadium and nitrided vanadium from Russia range from 10.10 percent to 108 percent ad valorem. There were no imports of ferrovanadium from Russia during the period of investigation. See, e.g., CR at I-2; PR at I-2.

[70] See, e.g., CR/PR at Tables II-1, II-2.

[71] See, e.g., CR/PR at Table IV-2.

[72] See, e.g., Mem. INV-Z-007 (Jan. 9, 2002); CR/PR at Table C-1.

[73] 19 U.S.C. § 1677(7)(C)(i).

[74] See, e.g., CR/PR at Table IV-2.

consumption increased from 1998 to 2000.[75] U.S. producers' market share dropped further to *** percent in interim 2001 from *** percent in interim 2000, when apparent domestic consumption began to decline. Cumulated subject imports' market share rose from *** percent in 1998 to *** percent in 1999. After experiencing a slight decrease to *** percent in 2000, cumulated subject imports captured *** percent of the U.S. market in interim 2001, up from *** percent in interim 2000; this increase between interim periods occurred as apparent domestic consumption fell from *** pounds in interim 2000 to *** pounds in interim 2001. While cumulated subject imports increased market share, non-subject imports' market share fell from a high of *** percent in 1998 to *** percent in 1999, and then increased to *** percent in 2000. Non-subject import market share was *** percent in interim 2000 and *** percent in interim 2001.[76]

Even if we include ferrovanadium shipments by U.S. tollees Gulf and USV in apparent domestic consumption,[77] cumulated subject imports still continued to outpace domestically produced ferrovanadium and non-subject imports in gaining market share. Cumulated subject imports captured *** percent of the total domestic market in 2000, up from *** percent in 1998 and *** percent in 1999. The market share of cumulated subject imports during interim 2001 increased to *** percent from *** percent in interim 2000. Cumulated subject imports captured market share at the expense of domestic producers and tollees whose combined market share fell from *** percent in 1998 to *** percent in 1999, and then to *** percent in 2000. The market share of U.S. producers and tollees decreased to *** percent in interim 2001 from *** percent in interim 2000. Non-subject imports also lost market share as the volume of cumulated subject imports increased, most notably during the period from interim 2000 to interim 2001.[78]

For purposes of these preliminary determinations, we find the volume of subject imports and the increase in the volume of subject imports to be significant, both in absolute terms and relative to apparent domestic consumption in the United States.

C. Price Effects of the Subject Imports

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

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

---

[75] This increase occurred despite the recent economic downturn experienced by steel producers, who are the primary end-users of ferrovanadium. Total apparent domestic consumption was *** pounds in 1998, *** pounds in 1999, *** pounds in 2000, *** pounds in interim 2000, and *** pounds in interim 2001. See, e.g., Mem. INV-Z-007 (Jan. 9, 2002); CR/PR at Table IV-2. As discussed in the conditions of competition section supra, these apparent domestic consumption figures were calculated by adding the volume of non-subject and subject imports reported in Table IV-2 and the volume of Bear and Shieldalloy's commercial shipments reported in Mem. INV-Z-007 (Jan. 9, 2002).

[76] See, e.g., Bear's and Shieldalloy's questionnaire responses; CR/PR at Table IV-2.

[77] The record indicates that apparent domestic consumption calculated in this fashion increased from *** pounds in 1998 to *** pounds in 2000, while interim data show a decline in apparent domestic consumption from *** pounds to *** pounds during the first nine months of 2000 and 2001, respectively. CR/PR at Table IV-3.

[78] See, e.g., CR/PR at Table IV-3.

(II) the effect of imports of such merchandise otherwise depresses prices to a significant degree or prevents price increases, which otherwise would have occurred, to a significant degree.[79]

The evidence gathered in the preliminary phase of these investigations indicates that there is a high degree of substitutability between the subject merchandise and the domestic like product, and that price is an important sales factor in this industry. Quality and conditions of sale are also relevant sales factors.[80]

Whether measured by average unit values or the direct pricing data collected in these investigations, ferrovanadium prices declined over the period of investigation.[81] The average unit value for subject imports declined dramatically from $8.24 in 1998 to $3.71 in 1999, then fell to $3.59 in 2000; the average unit value for subject imports continued to decline between interim periods, from $3.78 in interim 2000 to $3.09 in interim 2001.[82] The average unit values for domestic shipments of ferrovanadium were consistently higher than the average unit value for subject imports, whether measured in terms of Bear and Shieldalloy's shipments or in terms of all domestic ferrovanadium shipments by Bear, Shieldalloy, Gulf, and USV. The average unit values for Bear and Shieldalloy's ferrovanadium shipments declined from *** in 1998 to *** in 1999 and *** in 2000, and from *** in interim 2000 to *** in interim 2001;[83] the average unit values for Bear, Shieldalloy, USV, and Gulf's ferrovanadium shipments declined from *** in 1998 to *** in 1999 and *** in 2000, and from *** in interim 2000 to *** in interim 2001.[84] Thus, the average unit values suggest that subject imports caused price depression. Whereas the average unit value data suggest that subject imports consistently undersold the domestic like product, the pricing data collected in these investigations do not indicate such widespread underselling,[85] and we do not find significant underselling based on this data.[86]

---

[79] 19 U.S.C. § 1677(7)(C)(ii).

[80] See, e.g., CR at II-3 to II-4; PR at II-3; CR/PR at Tables II-1, II-2.

[81] We view average unit values with some caution in this industry in light of arguments about the somewhat inferior quality of Chinese subject imports.

[82] See, e.g., CR/PR at Table IV-2. Average unit values for non-subject imports also declined during the period of investigation, but they were higher than average unit values for subject imports in 1998 and 1999. Non-subject imports' average unit values declined from $8.81 in 1998 to $3.75 in 1999, then to $3.44 in 2000, and from $3.57 in interim 2000 to $2.81 in interim 2001. See, e.g., id.

[83] See, e.g., Mem. INV-Z-007 (Jan. 9, 2002).

[84] See, e.g., CR/PR at Table III-1.

[85] For sales of pricing product one, the Chinese subject imports undersold the domestic like product in two of ten quarters for which there were comparisons, at margins of *** percent and *** percent when compared to the weighted-average delivered prices of Bear and Shieldalloy's shipments, or at margins of *** percent and *** percent when compared to the weighted-average delivered prices of Bear, Shieldalloy, USV, and Gulf's ferrovanadium shipments. See, e.g., questionnaire responses and CR/PR at Table V-1. For sales of pricing product two, the Chinese subject imports undersold the weighted-average delivered domestic like product prices in nine of ten quarters for which there were comparisons to Bear and Shieldalloy's shipments, at margins ranging from *** percent to *** percent, and undersold ferrovanadium shipments by Bear, Shieldalloy, USV, and Gulf in one out of eleven quarters for which there were comparisons at *** percent margins. See, e.g., questionnaire responses; CR/PR at Table V-2. For sales of pricing product two, the South African subject imports undersold the weighted-average delivered domestic like product price in four out of eleven quarters for which there were comparisons to Bear and Shieldalloy's shipments, at margins ranging from *** percent to *** percent, but oversold the ferrovanadium shipments by Bear, Shieldalloy, USV, and Gulf in each of the twelve quarters for which there were comparisons. See, e.g., questionnaire responses; CR/PR at Table V-2. In any final phase investigations we intend to explore this apparent discrepancy between average unit values and data on specific pricing products, and the level

(continued...)

In addition to the price depression suggested by the average unit value data, we also find evidence of price suppression by reason of subject imports. Bear and Shieldalloy's net sales value on their commercial shipments declined over the period of investigation, from *** in 1998 to *** in 1999 and *** in 2000, and from *** in interim 2000 to *** in interim 2001. Their cost of goods sold also declined, but at times exceeded net sales value.[87] When assessing whether the domestic industry has experienced price suppression, we generally consider the industry's cost of goods sold as a percentage of net sales.[88] In this instance, Bear and Shieldalloy's ratio of cost of goods sold to net sales was *** percent in 1998, *** percent in 1999, *** percent in 2000, *** percent in interim 2000, and *** percent in interim 2001.[89] Thus, the record also indicates that notwithstanding increasingly lower production costs, because of declining prices in the U.S. market due at least in part to low-priced subject imports, domestic producers were unable to sell at prices that covered their costs at various times during the period of investigation.

We acknowledge that other factors in the market may be influencing domestic ferrovanadium prices, including prices and supply of other vanadium products, prices and supply of substitute products, ferrovanadium prices in other markets including Europe, non-subject imports, arbitrage, long-term contracts, and demand trends.[90] We find, however, for purposes of the preliminary phase of these investigations, that the record indicates that subject imports themselves have depressed and suppressed prices to a significant degree. We intend to examine other factors further in any final phase investigations.

D. Impact

In examining the impact of the subject imports on the domestic industry, we consider all relevant economic factors that bear on the state of the industry in the United States.[91] These factors include output, sales, inventories, capacity utilization, market share, employment, wages, productivity, profits,

---

[85] (...continued)
of overselling and underselling margins, particularly in light of the apparent commodity nature of this product. We may also consider the use of bid data.

[86] We note that *** submitted several lost sales allegations ***. A lost sales allegation was confirmed involving a sale to *** of *** pounds of contained vanadium lost to subject imports from ***. See, e.g., CR at V-9 to V-10; PR at V-5; CR/PR at Table V-3. A lost sales allegation by *** involving *** pounds of contained vanadium sold to *** by importers of ferrovanadium from *** also was confirmed. See, e.g., CR/PR at Table V-3.

[87] Their cost of goods sold for commercial shipments declined from *** in 1998 to *** in 1999 and *** in 2000, and from *** in interim 2000 to *** in interim 2001. CR/PR at Table D-3. Similar trends exist when the cost of goods sold for Bear, Shieldalloy, USV and Gulf for these periods are compared to their net sales values. See, e.g., CR/PR at
Tables C-1, VI-1.

[88] See, e.g., Certain Ammonium Nitrate from Ukraine, Inv. No. 731-TA-894 (Prelim.), USITC Pub. 3374 at n.77 (Dec. 2000).

[89] See, e.g., CR/PR at Table D-3; see also, e.g., Table C-1 (showing similar trends for the combined data of Bear, Shieldalloy, USV, and Gulf).

[90] See, e.g., Conference Tr. at 61-65 (Weigel), 66-70 (Young), 72-74 (Becker), 75-78 (Stras); Highveld's Postconference Brief at 1, 5-9, Exhibit 1; Xstrata/Glencore's Postconference Brief at 1, 9-13.

[91] 19 U.S.C. § 1677(7)(C)(iii); see also SAA at 851 and 885 ("In material injury determinations, the Commission considers, in addition to imports, other factors that may be contributing to overall injury. While these factors, in some cases, may account for the injury to the domestic industry, they also may demonstrate that an industry is facing difficulties from a variety of sources and is vulnerable to dumped or subsidized imports.").

cash flow, return on investment, ability to raise capital, and research and development. No single factor is dispositive and all relevant factors are considered "within the context of the business cycle and conditions of competition that are distinctive to the affected industry."[92] [93] [94]

We find that the subject imports had an adverse impact on the domestic industry's performance.[95] As prices dropped and the volume of subject imports increased, the industry's condition worsened, as evidenced by declines in a number of performance indicators. Domestic producers' commercial shipments fell from *** pounds in 1998 to *** pounds in 1999 and *** pounds in 2000, and from *** pounds in interim 2000 to *** pounds in interim 2001.[96] Notwithstanding an increase in domestic production capacity from *** pounds in 1998 to *** pounds in 2000, to control inventories[97] in the face of declining prices in the U.S. market and declining domestic shipments (and correspondingly declining market share), domestic producers decreased production through rolling shutdowns from *** pounds in 1998 to *** pounds in 1999 and *** pounds in 2000, and from *** pounds in interim 2000 to *** pounds in interim 2001. Domestic producers' capacity utilization levels dropped from *** percent in 1998 to *** percent in 1999 and *** percent in 2000, and from *** percent in interim 2000 to *** percent in interim 2001. The average number of production-related workers declined throughout the period of investigation.[98]

Domestic producers' financial performance also declined throughout the period of investigation. In 1998, domestic producers' *** of *** in 1999, *** in 2000, *** in interim 2000, and *** in interim 2001.[99] Consistent with the statutory requirement to "evaluate all relevant economic factors ... within the context of the business cycle and conditions of competition that are distinctive to the affected industry," we also considered the consolidated performance indicators of the domestic producers and Bear's tollees Gulf and USV. As noted above, Bear is dependent on its tollees for raw materials and revenue, and poor performance by the tollees in turn injures Bear. The consolidated performance indicators show similar trends to the indicators for the domestic industry alone. Shipments, production, and capacity utilization fell each year of the period of investigation. While the number of production

---

[92] 19 U.S.C. § 1677(7)(C)(iii); see also SAA at 851, 885; Live Cattle from Canada and Mexico, Invs. Nos. 701-TA-386 and 731-TA-812 to 813 (Prelim.), USITC Pub. 3155 at 25, n.148 (Feb. 1999).

[93] The statute instructs the Commission to consider the "magnitude of the dumping margin" in an antidumping duty proceeding as part of its consideration of the impact of imports. See 19 U.S.C. § 1677(7)(C)(iii)(V). In its notice of initiation, Commerce estimated antidumping margins of 91.96 percent for China and 116 percent for South Africa. 66 Fed. Reg. 66398, 66399-402 (Dec. 26, 2001).

[94] Commissioner Bragg notes that she does not ordinarily consider the magnitude of the margin of dumping to be of particular significance in evaluating the effects of subject imports on domestic producers. See Separate and Dissenting Views of Commissioner Lynn M. Bragg in Bicycles from China, Inv. No. 731-TA-731 (Final), USITC Pub. 2968 (June 1996).

[95] In the Russian Five-Year Review, the Commission found the domestic ferrovanadium industry to be vulnerable. Russian Five-Year Review, USITC Pub. 3420 at 18.

[96] See, e.g., Mem. INV-Z-007 (Jan. 9, 2002).

[97] End-of-period inventories for domestically produced ferrovanadium decreased from *** pounds in 1998 to *** pounds in 1999, but then increased to *** pounds in 2000, and were higher in interim 2001 (*** pounds) than in interim 2000 (*** pounds). See, e.g., Mem. INV-Z-007 (Jan. 9, 2002); CR/PR at Table C-1.

[98] See, e.g., Mem. INV-Z-007 (Jan. 9, 2002).

[99] CR/PR at Table D-3. We note that capital expenditures increased from *** in 1998 to *** in 1999, then decreased to *** in 2000 before increasing from *** in interim 2000 to *** in interim 2001. CR/PR at Table VI-7.

workers rose from 1998 to 2000, it fell from 1999 to 2000 and between interim periods. The combined companies had an operating income loss in 1999, 2000, and both interim periods.[100]

We therefore find that the increased volume of subject imports from South Africa and China, both absolute and relative to apparent domestic consumption, had significant price depressing and suppressing effects and adversely impacted the domestic industry, as reflected in a number of declining performance indicators during the period of investigation.

CONCLUSION

For the reasons stated above, we determine that there is a reasonable indication that the domestic industry producing ferrovanadium is materially injured by reason of subject ferrovanadium imports from South Africa and China that are allegedly sold in the United States at less than fair value.

[100] CR/PR at Table C-1.

SEPARATE VIEWS OF COMMISSIONER MARCIA E. MILLER ON DOMESTIC INDUSTRY AND MATERIAL INJURY

I join in the majority's views with respect to the legal standard for preliminary determinations, the domestic like product, and cumulation. Although I concur with the majority's affirmative determination and with the majority's views that Shieldalloy and Bear are part of the domestic industry, I also determine, consistent with my views in the recent sunset review of ferrovanadium from Russia,[1] that tollees Gulf and USV[2] engage in sufficient production-related activity to be included in the domestic industry. I therefore write separately to express my views on the definition of the domestic industry and on reasonable indication of material injury by reason of the allegedly less than fair value ("LTFV") subject imports.

I. DOMESTIC INDUSTRY AND RELATED PARTIES

Section 771(4)(A) of the Act defines the relevant industry as the domestic "producers as a [w]hole of a domestic like product, or those producers whose collective output of a domestic like product constitutes a major proportion of the total domestic production of the product."[3] In defining the domestic industry, the Commission's general practice has been to include in the industry producers of all domestic production of the like product, whether toll-produced, captively consumed, or sold in the domestic merchant market, provided that adequate production-related activity is conducted in the United States.[4]

The petitioners argue that Shieldalloy and Bear, as well as tollees Gulf and USV, should all be included in the domestic industry and that this position would be consistent with the Commission's finding in the original determination on ferrovanadium from Russia.[5] The respondents urge the Commission not to include the tollees in the domestic industry.[6]

In deciding whether a firm qualifies as a domestic producer, the Commission generally analyzes the overall nature of a firm's production-related activities in the United States related to the production of the domestic like product. It generally considers six factors:

---

[1] *Ferrovanadium and Nitrided Vanadium From Russia*, Inv. No. 731-TA-702 (Review), USITC Pub. 3420 at 21-22 (May 2001) ("Separate Views of Commissioner Marcia E. Miller on the Definition of the Domestic Industry").

[2] USV, or U.S. Vanadium, is a U.S. subsidiary of Strategic Metals Corporation, or "Stratcor."

[3] 19 U.S.C. § 1677(4)(A).

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

[5] The petitioners argue that there is no question that Shieldalloy and Bear are part of the domestic industry and that tollees Gulf and USV engage in sufficient production-related activities in the United States to be included in the domestic industry as well. They note that Gulf has a significant ownership interest in toll producer Bear; Gulf and USV produce a substantial proportion of the vanadium pentoxide made into ferrovanadium by Bear on their behalf; approximately *** percent of Bear's total ferrovanadium production is produced on behalf of Gulf and USV; they retain title to the contained vanadium throughout the conversion process, and sell and assume the risk of selling the finished product, ferrovanadium; and both employ a significant number of production-related workers and have made substantial investments to produce vanadium pentoxide. Petitioners' Postconference Brief at 16-21.

[6] Highveld's Postconference Brief at 2-3; Xstrata/Glencore's Postconference Brief at 14.

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

No single factor is determinative and the Commission may consider any other factors it deems relevant.[7]

Gulf produces the raw material input and has a *** ferrovanadium production facilities.[8] Gulf has invested *** in fixed assets and recently has made other investments related to the production of vanadium pentoxide, the raw material.[9] Gulf continues to engage in *** with Bear.[10] Gulf's operations contribute approximately *** percent of the value-added of the cost of goods sold.[11] Gulf employs approximately *** production-related workers.[12] Gulf remains owner of the vanadium it supplies to toller Bear and assumes the financial risk of sale of the domestic like product.[13]

USV converted vanadium pentoxide into ferrovanadium until 1994 and is still capable of making ferrovanadium at its Niagara Falls facility, although it would take "a few months" to resume production.[14] It continues to produce vanadium pentoxide. The original cost of USV's ***, a significant investment in capital assets.[15] Additionally, USV invested ***.[16] USV supplies Bear with vanadium pentoxide it converts into ferrovanadium based on ***.[17] ***[18] USV's ratio of value-added relative to the cost of goods sold was approximately ***.[19] Approximately 200 people are employed in the production of vanadium pentoxide for USV.[20] USV, like Gulf, maintains title to the contained vanadium it supplies Bear and assumes the risk of sale of the ferrovanadium produced.[21]

Because both Gulf and USV have made *** investment in assets related to the production of vanadium pentoxide, the raw material input, maintain ownership of the processed subject product and consequently assume the risk of the commercial sale of the subject product, contribute technical expertise

---

[7] *Certain Pipe and Tube from Argentina, Brazil, Canada, India, Korea, Mexico, Singapore, Taiwan, Thailand, Turkey, and Venezuela*, Inv. Nos. 701-TA-253 (Review) and 731-TA-132, 252, 271, 273, 276, 277, 296, 409, 410, 532-534, 536, and 537 (Review), USITC Pub. 3316 (July 2000) at 16, n.77.

[8] CR/PR at II-1, n.1, VI-1.

[9] CR at III-3, PR at III-2, CR/PR at Table VI-7.

[10] CR/PR at VI-1, n.1.

[11] CR/PR at Table D-2.

[12] Gulf Domestic Producer Questionnaire Response at 5.

[13] CR/PR at VI-1; Petitioners' Postconference Brief at 18.

[14] CR at I-5, n.12, PR at I-4, n.12.

[15] CR/PR at Table VI-7.

[16] CR at II-1, n.1, III-3-4, VI-2, n.5, PR at II-1, n.1, III-2, VI-1, n.5.

[17] CR at VI-2, PR at VI-1; Petitioners' Postconference Brief at 19.

[18] CR/PR at Table VI-5.

[19] CR/PR at Table D-2.

[20] Tr. at 36.

[21] CR/PR at VI-1; Petitioners' Postconference Brief at 21.

and labor to the ultimate production of the like product, and contribute *** to the value added to the product, it is appropriate to include them in the domestic industry. While Bear, the toller for Gulf and USV, accounts for *** percent of the reported production of ferrovanadium in the United States and virtually *** of the production of ferrovanadium from vanadium pentoxide, Bear's commercial sales of ferrovanadium are less than *** percent of its production.[22] Because over *** percent of Bear's ferrovanadium production is on behalf of and sold commercially by Gulf and USV, not including them in the domestic industry would omit nearly *** of the commercial sales of ferrovanadium produced in the United States. I view the inclusion of Gulf and USV in the domestic industry in this investigation as consistent with the reasoning employed by the Commission in the original determination on ferrovanadium from Russia and with my domestic industry finding in the sunset review of that case.[23]

I also find that appropriate circumstances do not exist to exclude any of the four domestic producers as related parties under the statute.[24] The only domestic producer to fall within the related parties provision is USV, based on both the fact that its parent, Stratcor, also directly controls Vametco, a South African producer of ferrovanadium, and the fact that it imported subject merchandise during the period of investigation. Its imports were: in 1998, ***; in 1999, ***; in 2000, ***; and in January-September 2001, ***[25] Despite the imports, it does not appear appropriate to exclude USV as a related party. USV maintains that it ***[26] Its investments in vanadium pentoxide production and its allocation of approximately *** percent of its vanadium pentoxide for toll conversion into ferrovanadium indicate its primary interest lies in domestic production of ferrovanadium and its financial performance is *** to that of the other producers.[27] I take into consideration as a condition of competition, however, that USV

---

[22] CR at III-1, III-4, n.17, PR at III-1, III-2, n.17.

[23] *Ferrovanadium and Nitrided Vanadium From Russia*, Inv. No. 731-TA-712 (Final), USITC Pub. 2904 at 12 (June 1995); USITC Pub. 3420 at 21-22.

[24] Section 771(4)(B) of the Act allows the Commission, if appropriate circumstances exist, to exclude from the domestic industry producers that are related to an exporter or importer of subject merchandise or which are themselves importers. 19 U.S.C. § 1677(4)(B). The primary factors the Commission has examined in deciding whether appropriate circumstances exist to exclude a related party include: (1) the percentage of domestic production attributable to the importing producer; (2) the reason the U.S. producer has decided to import the product subject to investigation, *i.e.*, whether the firm benefits from the LTFV sales or subsidies or whether the firm must import in order to enable it to continue production and compete in the U.S. market; and (3) the position of the related producers vis-a-vis the rest of the industry, *i.e.*, whether inclusion or exclusion of the related party will skew the data for the rest of the industry. *See, e.g., Torrington Co. v. United States*, 780 F. Supp. 1161, 1168 (Ct. Int'l Trade 1992), *aff'd mem.*, 991 F.2d 809 (Fed. Cir. 1993). The Commission has also considered the ratio of import shipments to U.S. production for related producers and whether the primary interests of the related producers lie in domestic production or in importation. *See, e.g., Melamine Institutional Dinnerware from China, Indonesia, and Taiwan*, Inv. Nos. 731-TA-741-743 (Final), USITC Pub. 3016 at 14, n.81 (Feb. 1997). Exclusion of a producer under the related parties provision is within the Commission's discretion based upon the facts presented in each case. *Sandvik AB v. United States*, 721 F. Supp. 1322, 1331-32 (Ct. Int'l Trade 1989), *aff'd mem.*, 904 F.2d 46 (Fed. Cir. 1990).

[25] CR/PR at IV-1, n.2.

[26] Petitioners' Postconference Brief at 23.

[27] Tr. at 56-57 (Bunting); CR/PR at Tables VI-2-5.

imports subject merchandise, that these imports *** in the most recent interim period examined, and, in addition, that ***.[28]

For all the foregoing reasons, I find that the domestic industry consists of Shieldalloy, Bear, Gulf, and USV.

II. REASONABLE INDICATION OF MATERIAL INJURY BY REASON OF ALLEGEDLY LTFV IMPORTS

In the preliminary phase of antidumping or countervailing duty investigations, the Commission determines whether there is a reasonable indication that an industry in the United States is materially injured by reason of the imports under investigation.[29] In making this determination, the Commission must consider the volume of imports, their effect on prices for the domestic like product, and their impact on domestic producers of the domestic like product, but only in the context of U.S. production operations.[30] The statute defines "material injury" as "harm which is not inconsequential, immaterial, or unimportant."[31] In assessing whether there is a reasonable indication that the domestic industry is materially injured by reason of subject imports, I consider all relevant economic factors that bear on the state of the industry in the United States.[32] No single factor is dispositive, and all relevant factors are considered "within the context of the business cycle and conditions of competition that are distinctive to the affected industry."[33]

A. Conditions of Competition

I find the following conditions of competition relevant to my analysis.

Approximately 90 percent of ferrovanadium sold in the United States is for steel-making, and demand for steel therefore drives demand for ferrovanadium.[34] *** reported that demand grew during the period examined due in part to the development of thin slab casting, while *** reported that demand peaked during the period and then declined.[35] Certain importers reported that demand has declined due to reduced domestic steel production.[36] Apparent U.S. consumption increased by *** percent from 1998 to 2000, and then declined by *** percent between January-September 2000 and January-September 2001.[37]

---

[28] Petition at 4, n.4, Exhibit 1.

[29] 19 U.S.C. § 1671b(a) and 1673b(a).

[30] 19 U.S.C. § 1677(7)(B)(I). The Commission "may consider such other economic factors as are relevant to the determination" but shall "identify each [such] factor . . . [a]nd explain in full its relevance to the determination." 19 U.S.C. § 1677(7)(B). *See also Angus Chemical Co. v. United States*, 140 F.3d 1478 (Fed. Cir. 1998).

[31] 19 U.S.C. § 1677(7)(A).

[32] 19 U.S.C. § 1677(7)(C)(iii).

[33] 19 U.S.C. § 1677(7)(C)(iii).

[34] CR/PR at I-3, n.9.

[35] CR at II-2-3, PR at II-2.

[36] CR at II-2-3, PR at II-2.

[37] CR/PR at Table C-1.

Ferrovanadium is a commodity product, and different grades compete against each other for sales. Petitioners argue that purchasers are generally indifferent as to which grade they use, have the technical capability to use any grade of ferrovanadium, and will switch grades when the price gap between grades is wide enough and of sufficient duration to justify switching.[38] There is a high degree of substitutability between the subject imports and the domestic like product, and price is an important factor in purchasing decisions.[39] *** percent of sales of U.S. product are by contract, and the remainder are spot sales. Sales by importers are also a mix of contract and spot sales, although more heavily weighted toward spot sales.[40] Most U.S. sales of both domestically produced and imported ferrovanadium are directly to end-users.[41]

Raw material costs accounted for *** percent of the total cost of goods sold ("COGS") of U.S. ferrovanadium production in 2000. Ferrovanadium is produced from vanadium-bearing raw materials, such as vanadium pentoxide. Raw material costs declined significantly from 1998 to 2000, and according to petitioners, raw material inputs are plentiful and inexpensive, and are expected to remain so in the near future.[42]

***, as noted previously, imports subject merchandise. *** imports nitrided vanadium, a substitute for ferrovanadium. The record indicates that, while there are several possible substitutes for ferrovanadium, including nitrided vanadium, substitution occurs only in limited applications and only when ferrovanadium prices are relatively high. Substitution away from ferrovanadium generally appears to be rare.[43]

U.S. producers' inventories increased toward the end of the period, from 1999 to 2000, and between the interim periods. ***[44]

Non-subject imports are from Austria, Belgium, Canada, and the Czech Republic, and increased their U.S. market share by quantity only slightly, from *** percent in 1998 to *** percent in 2000, before losing market share in interim 2001, to *** percent.[45] Imports from Russia virtually ceased after an antidumping duty order was imposed in July 1995, and there were no imports of ferrovanadium from Russia during the period of investigation.[46]

B. Volume

Section 771(C)(i) of the Act provides that the "Commission shall consider whether the volume of imports of the merchandise, or any increase in that volume, either in absolute terms or relative to production or consumption in the United States, is significant."[47]

The volume of cumulated subject imports increased dramatically, by 201.1 percent from 1998 to 2000, and showed an increase between the interim periods as well, even as apparent U.S. consumption began to decline. The volume of cumulated subject imports increased from 1.1 million pounds in 1998,

---

[38] *See, e.g.*, Petition at 7-8, 17; Conference Tr. at 83-84; CR at I-6, PR at I-4-5.

[39] CR at II-3-4, PR at II-3, CR/PR at Tables II-1, II-2.

[40] CR/PR at V-3.

[41] CR/PR at II-1.

[42] CR/PR at V-1, Table C-1..

[43] CR at II-3, PR at II-2.

[44] CR at III-3, n.8, PR at III-2, n.8, CR/PR at Table C-1.

[45] CR/PR at Table C-1.

[46] CR/PR at I-2.

[47] 19 U.S.C. § 1677(7)(C)(I).

to 2.9 million pounds in 1999, to 3.3 million pounds in 2000, and was 3.2 million pounds in interim 2001 (January-September), as compared to 2.7 million pounds in interim 2000. The volume of imports from non-subject countries increased by 19.0 percent from 1998 to 2000, and then showed a decline between the interim periods.[48]

Cumulated subject imports steadily gained U.S. market share over the period, from *** percent, by quantity, in 1998 to *** percent in 2000, and to *** percent in interim 2001, as U.S. producers' U.S. market share declined from *** percent in 1998 to *** percent in 2000, and to *** percent in interim 2001. Cumulated subject imports thus captured market share at the expense of domestic producers. Non-subject imports' U.S. market share, as noted, increased only slightly from 1998 to 2000, and then began to decline.[49]

For purposes of these preliminary determinations, I find that the volume of cumulated subject imports and the increase in that volume, both in absolute terms and relative to domestic consumption in the United States, are significant.

B. Price

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

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

(II) the effect of imports of such merchandise otherwise depresses prices to a significant degree or prevents price increases, which otherwise would have occurred, to a significant degree.[50]

The pricing data generally show dramatic declines in both U.S. prices and those of the subject imports from 1998 to 1999, and steady declines thereafter.[51] The average unit values ("AUVs") of the subject imports and of U.S. producers' U.S. sales showed similar trends, and the AUVs of the subject imports were lower than those of the U.S. product throughout the period.[52] While the use of AUVs in general may present product mix issues, that possibility is diminished in this case by the apparent substitutability and competition among different grades of ferrovanadium.

The pricing data show very few instances of underselling by subject imports,[53] and I do not find underselling to be significant in this preliminary phase.[54] However, given the commodity nature of the product and the importance of price in purchasing decisions, I do find an indication that imports depressed and suppressed U.S. prices during the period. As noted, U.S. prices and subject import prices declined throughout the period, and U.S. prices never returned to their levels at the beginning of the period. In addition, although U.S. producers' COGS declined significantly over the period as raw

---

[48] CR/PR at Table C-1.

[49] CR/PR at Table C-1.

[50] 19 U.S.C. § 1677(7)(C)(ii).

[51] CR/PR at Tables V-1, V-2.

[52] CR/PR at Table C-1.

[53] CR/PR at Tables V-1, V-2.

[54] I will explore in any final investigations the apparent discrepancy between AUVs and specific pricing data, particularly given the commodity nature of the product.

material costs dropped, U.S. producers' net sales values declined more steeply. From 1998 to 2000, unit COGS declined by 45.8 percentage points, while unit sales values declined by 58.4 percentage points.[55] U.S. producers were thus not able to sell at prices sufficient to recover their costs, and I attribute this cost-price squeeze in large part to the significant and growing presence in the U.S. market of low-priced subject imports.

Confirmed instances of sales lost by domestic producers to subject imports further indicate the adverse price effects of subject imports. Staff confirmed lost sales in the amount of $*** and *** pounds (out of $*** and *** pounds lost sales alleged by domestic producers).[56]

I intend to explore further in any final investigations the relationship between the increased volume of subject imports and any deterioration in U.S. prices over the period, as well as any other factors that may be contributing to adverse price effects in the U.S. market. Petitioners attribute the falling U.S. prices to unfairly traded subject imports, while respondents argue that an oversupply of vanadium and a downturn in demand from the steel industry are the cause of the current weakness in world ferrovanadium prices.[57]

For purposes of these preliminary determinations, I find that the increased volume of subject imports has depressed and suppressed U.S. prices to a significant degree.

D. Impact

In examining the impact of the subject imports on the domestic industry, I consider all relevant economic factors that bear on the state of the industry in the United States.[58] These factors include output, sales, inventories, capacity utilization, market share, employment, wages, productivity, profits, cash flow, return on investment, ability to raise capital, and research and development. No single factor is dispositive and all relevant factors are considered "within the context of the business cycle and conditions of competition that are distinctive to the affected industry."[59] [60]

Most financial and other performance indicators of the domestic industry declined over the period as subject import volumes surged and the unit values of subject imports declined. U.S. producers lost market share, and their production quantity, U.S. shipments, net sales, and capacity utilization all declined, as the quantity of inventories began to rise. U.S. producers' U.S. market share, by quantity, declined by 17 percent from 1998 to 2000; their U.S. production quantity declined by 22.9 percent, from *** pounds in 1998 to *** pounds in 2000; and their U.S. shipments, by quantity, fell by 20.2 percent,

---

[55] CR/PR at Table C-1.

[56] CR/PR at Table V-3.

[57] CR at V-5, PR at V-4.

[58] 19 U.S.C. § 1677(7)(C)(iii). *See also* SAA at 851 and 885 ("In material injury determinations, the Commission considers, in addition to imports, other factors that may be contributing to overall injury. While these factors, in some cases, may account for the injury to the domestic industry, they also may demonstrate that an industry is facing difficulties from a variety of sources and is vulnerable to dumped or subsidized imports." *Id.* at 885).

[59] 19 U.S.C. § 1677(7)(C)(iii). *See also* SAA at 851 and 885 and *Live Cattle from Canada and Mexico*, Inv. Nos. 701-TA-386 and 731-TA-812-813 (Preliminary), USITC Pub. 3155 at 25 (Feb. 1999), n.148.

[60] The statute instructs the Commission to consider the "magnitude of the dumping margin" in an antidumping proceeding as part of its consideration of the impact of imports. 19 U.S.C. § 1677(7)(C)(iii)(V). In its notice of initiation, Commerce estimated antidumping duty margins of 91.96 percent for China and 116 percent for South Africa. 66 Fed. Reg. 66398, 66399-402 (Dec. 26, 2001).

and, by value, by 66.9 percent from 1998 to 2000. U.S. producers' net sales also declined from 1998 to 2000, by 21.1 percent in terms of quantity and 67.1 percent in terms of value. U.S. producers' capacity utilization dropped from 68.7 percent in 1998 to 46.9 percent in 2000, and was 39.4 percent in interim 2001.[61]

By 2000, the U.S. producers' operating margin had fallen to (17.6) percent, from 13.0 percent in 1998, and was (39.6) percent in interim 2001.[62] The evidence shows that the decline in profitability largely resulted from the decline in unit sales values. Although COGS also declined over the period, particularly as a result of a drop in raw material costs, domestic prices fell more sharply, and producers were not able to make a profit. Given the commodity nature of the product and the price competition that exists between subject imports and the domestic product, the evidence indicates that declining subject import prices, although not always below U.S. prices, resulted in U.S. producers lowering and keeping their prices low to retain or regain market share.

I therefore find, for purposes of these preliminary determinations, that the increased volume of cumulated subject imports from China and South Africa, with their depressing and suppressing effects on U.S. prices, are having a significant adverse impact on the domestic industry.

CONCLUSION

For the reasons stated above, I determine that there is a reasonable indication that the domestic industry producing ferrovanadium is materially injured by reason of subject imports of ferrovanadium from China and South Africa that are allegedly sold in the United States at less than fair value.

[61] CR/PR at Table C-1.

[62] CR/PR at Table C-1.

PART I: INTRODUCTION

BACKGROUND

These investigations result from a petition filed by the Ferroalloys Association Vanadium Committee and its members Bear, Butler, PA; Shieldalloy, Cambridge, OH; Gulf, Freeport, TX; USV, Danbury, CT; and CS Metals, Convent, LA, on November 26, 2001, alleging that an industry in the United States is materially injured and threatened with material injury by reason of LTFV imports of ferrovanadium[1] from China and South Africa. Information relating to the background of the investigations is provided below.[2]

Date	*Action*
November 26, 2001 .	Petition filed with Commerce and the Commission;[3] institution of Commission investigation (66 FR 59815, November 30, 2001)
December 17	Commission's conference[4]
December 26	Commerce's notice of initiation (66 FR 66398, December 26, 2001)
January 10, 2002 ...	Date of the Commission's vote
January 10	Commission determinations transmitted to Commerce

[1] For purposes of these investigations ferrovanadium is defined as an alloy of iron and vanadium, regardless of grade, chemistry, form, shape, or size, that is used chiefly as an additive in the manufacture of steel. The scope of the investigations (see Commerce's notice in app. A) specifically excludes vanadium additives other than ferrovanadium, such as nitrided vanadium, vanadium-aluminum master alloys, vanadium chemicals, vanadium oxides, vanadium waste and scrap, and vanadium-bearing raw materials such as slag, boiler residues, and fly ash. Products imported under the following HTS subheadings are specifically excluded:

2850.00.20	Hydrides, nitrides, azides, silicides and borides, whether or not chemically defined, other than compounds which are also carbides of heading 2849: ... Of vanadium.;
8112.40.30	Beryllium, ... vanadium ..., and articles of these metals, including waste and scrap: ... Vanadium: Waste and scrap; and
8112.40.60	Beryllium, ... vanadium ..., and articles of these metals, including waste and scrap: ... Vanadium: Other.

Ferrovanadium is classified under HTS subheading 7202.92.00. Although the HTS subheading is provided for convenience and Customs purposes, Commerce's written description of the scope of the investigations is dispositive. Imports of ferrovanadium have a normal trade relations tariff rate of 4.2 percent *ad valorem*, which is applicable to imports from China and South Africa.

[2] *Federal Register* notices cited in the tabulation are presented in app. A.

[3] The petition alleged LTFV margins to be as follows: 49 percent and 51 percent for sales in the United States of ferrovanadium from China; and ranging from 66 percent to 85 percent for sales in the United States of ferrovanadium from South Africa.

[4] A list of witnesses appearing at the conference is presented in app. B.

I-1

SUMMARY DATA

A summary of data collected in the investigations is presented in appendix C, table C-1. Except as noted, U.S. industry data are based on questionnaire responses of two firms that accounted for 100 percent of U.S. production of ferrovanadium during 2000. U.S. imports are based on official statistics.

PREVIOUS INVESTIGATIONS

The Ferroalloys Association Vanadium Committee and its members have not filed for relief under sections 337 or 702 of the Tariff Act of 1930 (19 U.S.C. §§ 1337 or 1671a), sections 201 or 301 of the Trade Act of 1974 (19 U.S.C. §§ 2251 or 2411), or section 232 of the Trade Expansion Act of 1962 (19 U.S.C. § 1862) with respect to imports of ferrovanadium.

In 1994, Shieldalloy filed a petition seeking the imposition of antidumping duties on ferrovanadium and nitrided vanadium from Russia pursuant to section 731 of the Tariff Act of 1930. Shieldalloy's petition led to affirmative dumping and injury determinations by Commerce and the Commission, respectively, and the issuance of an antidumping duty order on *Ferrovanadium and Nitrided Vanadium From the Russian Federation*.[5] Commerce and the Commission recently conducted a sunset review of that order, which resulted in affirmative determinations by both agencies.[6] Current antidumping margins on imports of ferrovanadium and nitrided vanadium from Russia range from 10.10 percent to 108 percent *ad valorem*.

DESCRIPTION AND USES

Ferrovanadium is an alloy of iron and vanadium that is used primarily by steel producers and iron casters. Although the product subject to these investigations contains a vanadium content ranging from about 40 percent to about 80 percent (by weight), in practice the product is sold with a few set ranges of vanadium content. The most common ferrovanadium grades contain approximately 45 to 55 percent and 80 percent vanadium. These grades together accounted for most of industry production and shipments in the original investigation on Russia; ferrovanadium 80[7] (which contains 80 percent

---

[5] *Notice of Antidumping Order: Ferrovanadium and Nitrided Vanadium From the Russian Federation*, 60 FR 35550 (July 10, 1995).

[6] *See Final Results of Expedited Sunset Review: Ferrovanadium and Nitrided Vanadium From Russia*, 65 FR 60168 (October 10, 2001) and *Ferrovanadium and Nitrided Vanadium From Russia*, 66 FR 28540 (May 23, 2001). *See also Continuation of Antidumping Duty Order: Ferrovanadium and Nitrided Vanadium From Russia*, 66 FR 30694 (June 7, 2001).

[7] ASTM designation A102-93, the current *Standard Specification for Ferrovanadium*, covers only one grade of ferrovanadium with a vanadium content of 75 to 85 percent by weight (ferrovanadium 80) and specified limits on other elements and impurities; the ASTM specification for ferrovanadium has been changed to eliminate other grades since the original investigation on Russia. ASTM, *Annual Book of ASTM Standards*, 2000. Ferrovanadium grades typically specify certain maximum levels of impurities, which are considered limits. Purchasers may specify stricter tolerances when placing orders with suppliers. Shieldalloy produces ferrovanadium in the grades containing 42 to 48 percent vanadium according to information on its website at *http://www.shieldalloy.com*; Bear's production consists mostly of the grade containing 80 percent vanadium (testimony of Kevin Jones, President of Bear, conference transcript, p. 14).

vanadium, by weight) may account for an increasing share of industry production and shipments currently.[8]

The principal use of ferrovanadium is as an alloying agent in the production of steel and iron castings.[9] The contained vanadium often accounts for about 0.02 to 0.10 percent of the steel, by weight, in the case of microalloyed HSLA steels, and up to about 5 percent, by weight, in the case of vanadium-chromium tool steels; vanadium also is used in stainless steels. Vanadium forms a stable carbide and a stable nitride at the temperatures associated with the casting, rolling, and heat treatment of steels; the solubility, precipitation, and growth of carbides and nitrides enhance steel properties, particularly hardness and strength. Hence, vanadium additions to steel improve the finished steel product's wear resistance and impart a fine grain size that increases ductility.[10] Nitrogen combined with vanadium aids in grain refining and case hardening; the steel's yield strength is raised and the strength of low-carbon steels may be raised inexpensively. Vanadium is added to HSLA steels used in high-strength long-distance oil and gas pipelines, railway lines, building construction, and automobiles. Vanadium additions to tool steels enable such alloy steels to maintain their hardness at elevated temperatures generated during high speed machining (these are called tungsten-vanadium or chromium-vanadium tool steels). Ferrovanadium is also used in the production of cast iron. A common phenomenon in cast iron production is the creation, after solidification of the casting, of tiny flakes of graphite distributed throughout the metal. Ferrovanadium helps prevent the creation of these flakes.

The use of ferrovanadium depends on the steelmaking practices of a given steel producer. The decision to use a specific grade, say 42 percent or 80 percent ferrovanadium, for example, depends upon the steelmaker's melting and rolling practices and intended finished product. According to information obtained in the original investigation on Russia, steelmakers that pour their steel at lower temperatures tend to use the 42 percent material, whereas some steel grades that specify low residual chemistry or higher vanadium content may require the use of the higher grade (or 80 percent) ferrovanadium.

Production Process

The processes that are more commonly used are aluminothermic and/or silicothermic, described below. Shieldalloy uses a modified silicothermic reduction process that starts with vanadium-bearing iron slag alone or in combination with other vanadiferous materials (such as petroleum residues and fly ash) in combination with aluminum, silicon, and carbon at its Cambridge, OH plant. These vanadium-bearing materials, used instead of vanadium pentoxide, are melted first in one submerged electric arc furnace in a silicothermic process to raise the material's vanadium content and extract certain elements. The resulting alloy is further refined in another electric arc furnace to produce ferrovanadium containing about 42 to 48 percent vanadium by weight. Molten ferrovanadium that results from this process is poured into molds, crushed to size, and packaged.

---

[8] None of the U.S. firms reported producing nitrided vanadium during the period of the review investigation (USV manufactured nitrided vanadium until 1994; thereafter it began to import this product from its affiliated company in South Africa and to sell it under the trade name, Nitrovan).

[9] About 90 percent of domestic consumption of vanadium is accounted for by the use of ferrovanadium in iron and steel, according to Mineral Industry Surveys of the U.S. Geological Survey.

[10] Vanadium also can lead to product and yield improvements because it increases hot ductility and reduces the incidence of transverse cracking during the continuous casting of steel. Vanadium additions to steel may ameliorate the deleterious effects of nitrogen that reduce the steel's cold-formability; the processing advantages that stem from this include less cracking and fewer surface defects. For descriptions of use of vanadium in steel, see P.S. Mitchell, "Supply and Use of Vanadium," Vanadium International Technical Committee, found at Internet site *http://www.vanitec.org*, and Michael Korchynsky, "Raw Materials Choices: Pitfalls of Substitution," presentation at Ryan's Notes Conference, New York, NY, 1997.

Bear is a toll converter that processes vanadium pentoxide into ferrovanadium using an aluminothermic process at its plant in Butler, PA for several U.S. companies including Glencore, Gulf, USV, and CS Metals.[11] A mixture of vanadium pentoxide, aluminum, iron scrap, and flux is charged into a magnesite-lined vessel and the reactants are ignited electrically. This results in a ferrovanadium with a vanadium content that may be adjusted between 42 and 80 percent, although ***.[12] The process requires a short amount of time to be complete although cooling of the ferrovanadium slab may require several hours. Following cooling, the slab is removed from its vessel, the layer of ferrovanadium metal is separated from the layer of slag, and the ferrovanadium is conveyed to a separate part of the facility for crushing, sizing, and packaging.

The majority of production is sold directly to steel mills and iron foundries in the United States. To a lesser extent, some is sold to distributors who may repackage the material; alternatively these distributors may blend ferrovanadium from different lots. Ferrovanadium is sold on a basis of pounds of contained vanadium. It is usually packed in bags or small drums containing 10 to 25 pounds of contained vanadium, although a limited number of consumers accept ferrovanadium packed in 500-pound drums. Most ferrovanadium is sold in lumps with an upper size range of approximately 2 inches. These lumps are commonly added to the molten steel after it has been poured from the steelmaking furnace into a ladle.

DOMESTIC LIKE PRODUCT ISSUES

This section presents information related to the Commission's "domestic like product" determination.[13] Petitioners argue that the Commission should find one domestic like product consisting of ferrovanadium.[14] Virtually all ferrovanadium is used as an alloying agent in the production of steel.[15] The report in the original investigation of *Ferrovanadium and Nitrided Vanadium From Russia* notes that there is a "general indifference" as to what grade of ferrovanadium is used but that "the user must know what grade it is so that proportions of steelmaking ingredients can be adjusted accordingly."[16] That

---

[11] Conference transcript, pp. 14-15.

[12] This production method was used by Shieldalloy at that company's Newfield, NJ facility (production ceased in November 1992) and by USV at its plant in Niagara Falls, NY, where production ceased in October 1993. USV can still produce ferrovanadium at its Niagara Falls plant, although it would take "a few months" to resume such production. Robert M. Bunting, Vice President, USV, transcript of the Commission's hearing during the review investigation on Russia, pp. 24 and 78-79, and conference transcript, pp. 29-30.

[13] The Commission's decision regarding the appropriate domestic products that are "like" the subject imported products is based on a number of factors including (1) physical characteristics and uses; (2) common manufacturing facilities and production employees; (3) interchangeability; (4) customer and producer perceptions; (5) channels of distribution; and, where appropriate, (6) price.

[14] In the sunset review of ferrovanadium and nitrided vanadium from Russia, the Commission found that ferrovanadium, without distinction as to grade, constitutes a single domestic like product. Sunset Review Commission Views, p. 5. In the underlying original investigation, the Commission also included nitrided vanadium within the domestic like product. The petition for the subject investigations specifically excludes nitrided vanadium from the scope of covered merchandise. Currently, there is no U.S. production of nitrided vanadium.

[15] "The principal use of ferrovanadium is as an alloying agent in the production of steel and iron castings" and "90 percent of domestic consumption of vanadium is accounted for by the use of ferrovanadium in iron and steel, according to mineral industry surveys of the U.S. Geological Survey," USITC pub. 3420, p. I-6, fn. 9.

[16] USITC pub. 3420, p. I-9, fn. 17.

report also points out that "{s}teel producers have the technical capability to use any grade of ferrovanadium interchangeably."[17]

South African producer Xstrata argues that nitrided vanadium should not be included in the domestic like product, but that it does compete with ferrovandium. On the other hand, another South African producer, Highveld, argues that the Commission should also include nitrated vanadium in the domestic like product in this investigation because–

> "Even though domestic production of nitrivan appears to have ceased in 1992, nitrivan continues to be the most similar in characteristics and uses to ferrovanadium and should be included in the like product definition of this case.
>
> It is produced and imported by one of the Petitioners, Stratcor, the parent company of the South African producer Vametco.
>
> We wish to point out that Stratcor's web site and the testimony of Mr. Bunting at the hearing in the sunset review in the Russian case confirmed that nitrivan continues to be a direct substitute to ferrovanadium. Therefore, nitrivan should also be included in this investigation."[18]

Nitrided vanadium is a chemical compound of vanadium, carbon, and nitrogen, but contains no iron, and shares many of the same uses as ferrovanadium. It contains approximately 80 percent vanadium and at least 5 percent nitrogen by weight (product literature indicates two grades, containing 12 percent and 16 percent nitrogen, respectively).[19] The addition of nitrogen in steelmaking is beneficial only in certain applications (some grades of steel and certain processing conditions).[20] One such steel is a structural plate grade, ASTM A633-E, which is used in welded, bolted, or riveted constructions in low-temperature applications; here the nitrogen content is specified as a minimum and vanadium is specified as well.[21]

Respondents also argue that ferromolybdenum competes with ferrovanadium in steelmaking applications.[22] Molybdenum is added to steel to impart greater hardness. It retards softening at elevated temperatures and is therefore used in boiler and pressure vessel steels, as well as several grades of high speed and other tool steels. Molybdenum improves the corrosion resistance of stainless steels. Although molybdenum can be supplied as ferromolybdenum (a compound consisting of iron and molybdenum), the trend in the United States has been toward the use of molybdic oxide (a compound consisting of molybdenum and oxygen). While molybdenum may be used instead of vanadium in some applications, in many instances the properties it imparts are unique. While both molybdenum and vanadium can be

---

[17] USITC pub. 3420, p. I-9, fn. 17.

[18] Testimony of Marcela Stras, counsel for Highveld, conference transcript, p. 79; Highveld's postconference brief, pp. 4-5, exhibit 4; and Xstrata/Glencore's postconference brief, p. 12, fn. 25.

[19] *Http://www.stratcor.com/products/nitrovan.*

[20] Nitrogen is usually considered an undesirable element in steelmaking because it may promote transverse cracking in hot-rolled steels and aging of carbon steels, which is the tendency of the steel to become harder with increased brittleness during storage and in the absence of heat treatment. Hence, the content of nitrogen is typically specified as a maximum in steel grades, and steelmakers take measures to ensure that nitrogen is not absorbed during refining and casting operations. There are methods other than using nitrided vanadium by which nitrogen could be added to liquid steel. USITC pub. 3420, p. I-6, fn. 11.

[21] Id.

[22] Testimony of Greg Young, Manager of Ferroalloys, Glencore, conference transcript, p. 68.

I-5

added to steel to impart greater hardness, vanadium steel differs from molybdenum steel in several respects. The vanadium steel is subject to becoming brittle after temper rolling (a type of rolling used to impart certain surface characteristics) and therefore requires higher tempering temperatures.[23] According to an industry metallurgist, niobium and vanadium "are very different and not interchangeable." He discusses them in terms of steel chemistry (vanadium is used over the range of carbon content in steel, while niobium is only effective in low carbon steels); continuous casting (niobium is more sensitive to transverse cracking); hot-rolling temperatures (niobium steels would need relatively lower finishing temperatures, while vanadium steels are relatively insensitive to a range of hot-rolling temperatures); and the effect of nitrogen (vanadium scavenges and locks up nitrogen, whereas niobium is poisoned by nitrogen, necessitating additions of titanium).[24]

[23] Michael Korchynsky, "Raw Materials Choices: Pitfalls of Substitution," presentation at Ryan's Notes Conference, New York, NY, 1997.

[24] Id.

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

CHANNELS OF DISTRIBUTION AND MARKET CHARACTERISTICS

In the U.S. market, ferrovanadium is sold primarily to end users, namely steel companies and iron foundries. Approximately *** percent of U.S.-produced ferrovanadium is sold to end users.

Only two firms, Bear and Shieldalloy, produce ferrovanadium in the United States. Several other firms produce the intermediate product vanadium pentoxide, which is toll converted by Bear into ferrovanadium.[1] For a more detailed explanation of U.S. producers and tollees in the U.S. market, please see Part III of this report.

SUPPLY AND DEMAND CONSIDERATIONS

U.S. Supply

Based on available information, U.S. producers have the ability to respond to changes in demand with moderate to large changes in the quantity of shipments of U.S.-produced ferrovanadium to the U.S. market. The main factors contributing to this degree of responsiveness are general increases in excess capacity and end-of-period inventories. These factors are detailed next.

Industry Capacity

Data reported by U.S. producers indicate that there is excess capacity with which to expand production in the event of price changes. Domestic capacity utilization declined from *** percent in 1998 to *** percent in 2000 as capacity expanded. Interim data reveal that capacity utilization was *** percent in the first nine months of 2000 and was *** percent in the first nine months of 2001.

Inventory Levels

Inventories of domestically-produced ferrovanadium, as a ratio to total shipments, remained essentially unchanged at *** percent in 1998 compared to *** percent in 2000, after declining to *** percent in 1999. Interim data reveal increasing annualized ratios of *** and *** percent during the first nine months of 2000 and 2001, respectively. These data indicate that there may be some ability to use inventories as a means of increasing shipments to the U.S. market.

---

[1] Among tollees, Gulf owns *** percent of the common stock of Bear, and Gulf retains title and bears all risks when it has Bear toll convert vanadium pentoxide into ferrovanadium for Gulf to sell in the U.S. market. USV stopped ferrovanadium production in 1994, and it is a wholly-owned subsidiary of Stratcor, which is a *** percent joint-venture partner in a new $*** million start-up facility for vanadium pentoxide production in the United States (petitioners' postconference brief, pp. 19-20). Respondents argue that several other producers of vanadium pentoxide ceased such production during the period of these investigations, with the curtailment by Kerr McGee of production of a primary product that generated about three million pounds of vanadium pentoxide by-products each year; the closure of CRI's plant that produced approximately four million pounds of vanadium pentoxide annually; and the cessation by International Uranium Corporation of production of a primary product that generated about two million pounds of vanadium pentoxide annually (conference transcript, pp. 66-67, and Xstrata/Glencore's postconference brief, p. 11, fn. 24).

II-1

Export Markets

While exports represented *** percent of total shipments in 1998, they declined to *** and *** percent in 1999 and 2000, respectively, and decreased further to *** percent in interim 2001. These numbers suggest that there may be a limited ability to divert shipments to or from alternate markets in response to changes in the price of ferrovanadium.

U.S. Demand

Based on available information, the overall demand for ferrovanadium is unlikely to change significantly in response to changes in price. The main factor contributing to the low degree of price sensitivity is the limited availability of substitute products.

Demand Characteristics

Ferrovanadium is primarily used by the steel industry to improve the strength-to-weight ratio and other properties of steel products. Thus, ferrovanadium consumption tends to correlate with steel production.

Responding firms had mixed comments on ferrovanadium demand in the United States since January 1, 1998. *** reported that demand grew during the period of investigation due in part to the development of thin slab casting, while tollees *** reported that demand peaked during this time frame but has since fallen.[2] Among importers, *** and *** reported that ferrovanadium demand has declined due to reduced domestic steel production. Available information indicates that U.S. consumption of ferrovanadium increased from *** pounds in 1998 to *** pounds in 2000, while interim data reveal a decrease in consumption from *** pounds to *** pounds during the first nine months of 2000 and 2001, respectively.

Substitute Products

Questionnaire responses reveal that there are several possible substitutes for ferrovanadium, but only in limited applications and only when ferrovanadium prices are relatively high. In general, questionnaire responses indicate that substitution away from ferrovanadium is rare.[3]

Cost Share

Questionnaire responses reveal that the ferrovanadium sold in the U.S. market is used to make steel for products such as appliances and automobiles, and in applications such as construction and energy transmission. Several firms estimated the percentage of total end-use cost accounted for by ferrovanadium to be minimal.

---

[2] ***. At the conference, James Carter of Shieldalloy stated that he is not optimistic about future demand for ferrovanadium due to ongoing weakness in the U.S. steel industry (conference transcript, p. 52).

[3] At the conference, Greg Young of Glencore stated that nitrided vanadium competes with ferrovanadium for use in steel production (conference transcript, pp. 68 and 85). Two of six importers listed nitrided vanadium as a possible substitute for ferrovanadium. See the discussion of nitrided vanadium in Part I of this report.

II-2

SUBSTITUTABILITY ISSUES

The degree of substitution between domestic and imported ferrovanadium depends upon such factors as relative prices, quality, and conditions of sale. Based on available data at this preliminary phase of the investigations, staff believes that there is a high degree of substitution between domestic ferrovanadium and subject imports from China and South Africa.

Factors Affecting Sales

Questionnaire responses reveal that U.S. producers and tollees believe differences other than price between products from various supplying countries are "never" important in the sale of ferrovanadium in the U.S. market, while responding importers who had knowledge of the requested country combinations reported that differences other than price are "sometimes" or "never" important in the sale of ferrovanadium in the U.S. market (table II-1).[4]

Table II-1
Ferrovanadium: Perceived importance of differences in factors other than price between ferrovanadium produced in the United States and in other countries in sales of ferrovanadium in the U.S. market

	Number of U.S. producers reporting[1]					Number of U.S. importers reporting				
Country pair	A	F	S	N	O	A	F	S	N	O
U.S. vs. China	---	---	---	4	---	---	---	2	3	2
U.S. vs. S. Africa	---	---	---	4	---	---	---	2	3	1
U.S. vs. other	---	---	---	4	---	1	---	1	3	1
China vs. S. Africa	---	---	---	4	---	---	---	1	3	2
China vs. other	---	---	---	4	---	---	---	1	3	2
S. Africa vs. other	---	---	---	4	---	---	---	2	3	1

[1] Includes responses from ***, ***, ***, and ***.

A = Always, F = Frequently, S = Sometimes, N = Never, O = No familiarity.

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

Comparison of Domestic and Imported Ferrovanadium

Questionnaire responses reveal general agreement on the issue of interchangeability between U.S.-produced and subject ferrovanadium. U.S. producers and tollees reported that ferrovanadium from different countries is "always" interchangeable, while importers reported that ferrovanadium from different countries is "always" or "frequently" interchangeable (table II-2).[5]

---

[4] At the conference, both petitioners and respondents appeared to agree that price is a dominant factor in sales of ferrovanadium in the U.S. market (conference transcript, pp. 34 and 87).

[5] At the conference, Greg Young of Glencore stated that U.S.-produced, Chinese, and South African ferrovanadium compete with each other in the U.S. market, and that it is relatively easy for end users to switch between different grades of ferrovanadium (conference transcript, p. 83).

II-3

Table II-2
Ferrovanadium: Perceived degree of interchangeability of ferrovanadium produced in the United States and in other countries

	Number of U.S. producers reporting[1]					Number of U.S. importers reporting				
Country pair	A	F	S	N	O	A	F	S	N	O
U.S. vs. China	4	---	---	---	---	2	4	---	---	1
U.S. vs. S. Africa	4	---	---	---	---	2	3	---	---	1
U.S. vs. other	4	---	---	---	---	2	3	---	1	---
China vs. S. Africa	4	---	---	---	---	2	3	---	---	1
China vs. other	4	---	---	---	---	2	3	---	---	1
S. Africa vs. other	4	---	---	---	---	2	3	---	---	1

[1] Includes responses from ***, ***, ***, and ***.

A = Always, F = Frequently, S = Sometimes, N = Never, O = No familiarity.

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

II-4

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

The Commission analyzes a number of factors in making injury determinations (see 19 U.S.C. §§ 1677(7)(B) and 1677(7)(C)). Information on the alleged margins of dumping was presented earlier in this report and information on the volume and pricing of imports of the subject merchandise is presented in Parts IV and V. Information on the other factors specified is presented in this section and/or Part VI and (except as noted) is based on the questionnaire responses of 4 firms that accounted for 100 percent of U.S. production and shipments of ferrovanadium during 2000. Responding firms, with their plant locations and shares of reported 2000 U.S. production and shipments, are shown in the tabulation below:

Firm	Position on petition	Plant location(s)	Percent of reported	
			Production	Shipments
Producers				
Bear	Support	Butler, PA	***	***
Shieldalloy	Support	Cambridge, OH	***	***
Tollees				
Gulf	Support	Freeport, TX	***	***
USV	Support	Danbury, CT	***	***

U.S. PRODUCERS

Bear[1] produces ferrovanadium at its plant in Butler, PA. Bear toll coverts raw materials (principally vanadium pentoxide) that are provided to it by ***,[2] Glencore, Gulf, ***,[3] ***,[4] Stratcor, and USV. Since 1998, ***. It also produced ***.

Glencore imported vandium pentoxide from South Africa that it then had ISA[5] toll-produce into *** pounds of ferrovanadium during April through July 2001.[6]

---

[1] Bear produces ferrovanadium in grades containing from 40 percent to 80 percent vanadium; typical sizing is 2.00" x 18 mesh. It also produces ferromolybdenum, molybdic oxide briquettes, and calcium aluminate that is produced as a co-product of its ferrovanadium production (*http://www.bearmet.com*). "***." (*http://www.bearmet.com*)

[2] ***.

[3] ***. Ferro-Alloy Directory and Databook, 5th edition, 1998.

[4] ***.

[5] *** (phone conversation with Laura Fraedrich, counsel to Glencore). While ISA has the capability to toll convert vandium pentoxide, it concentrates in the "higher-end" market of master alloys for aerospace applications. ISA has two production sites in Western PA, north of Pittsburgh. Currently they produce molybdenum, niobium, tantalum, and chromium in addition to the ferrovanadium they toll-produced for Glencore. They have third party quality system accreditation in compliance with ISO 9002 and Aerospace Standard AS 9000 (*http://www.specialtyalloys.com*).

[6] Phone conversation with Laura Fraedrich, counsel to Glencore, and conference transcript, p. 71.

III-1

Shieldalloy[7] produces ***[8] facility. Shieldalloy ***.
Gulf[9] indicated in its questionnaire response that ***.[10]
USV ***[11] and ***.[12] ***.

U.S. PRODUCTION, CAPACITY, CAPACITY UTILIZATION, SHIPMENTS, EMPLOYMENT, WAGES, AND PRODUCTIVITY

Salient aggregate data for the U.S. producers[13] of ferrovanadium are presented in table III-1. As Bear[14] and Shieldalloy[15] are the only domestic producers of ferrovanadium identified in the petition and ISA[16] was not identified in time to get salient data for 2001, the U.S. production, capacity, and capacity utilization data reflect only Bear's and Shieldalloy's operations. Shipments, inventories, employment, wages, and productivity reflect the operations of Bear,[17] CS Metals, Gulf, and Shieldalloy.

Table III-1
Ferrovanadium: U.S. production capacity, production, capacity utilization, shipments, end-of-period inventories, and employment-related indicators, 1998-2000, January-September 2000, and January-September 2001

* * * * * * *

[7] Shieldalloy and its parent, Metallurg, produce a wide spectrum of ferroalloys, metals, alloys, additives, and powders for the carbon steel, stainless steel, superalloy, welding rod, hard facing, titanium, and related industries. It produces ferrovanadium, vanadium chemicals, calcium aluminate slag, and ferronickelmolybdenum slabs. The latter two products are by-products of Shieldalloy's ferrovanadium production. Metallurg companies outside the United States produce vanadium aluminum, high purity ferrocolumbium used for the production of superalloys, aluminothermic chromium metal, low-carbon ferrochrome, ferromanganese, ferrosilicon, and other important ferroalloys. Shieldalloy's Metals, Alloys and Powders Division is headquartered in Newfield, NJ and its Vanadium Division is based in Cambridge, OH (*www.shieldalloy.com*).

[8] ***. Shieldalloy's response to the Commission's questionnaire.

[9] Gulf is a recycler of spent catalysts that is ***.

[10] Gulf's response to the Commission's questionnaire.

[11] Stratcor is one of the world's leading vanadium producers. Through its USV and Vametco subsidiaries, the company provides the vanadium that helps the steel, titanium, and chemical industries improve their products and processes. Stratcor obtains much of its own vanadium feedstocks from recycled materials. USV produces vanadium pentoxide, ammonium vanadates, and vanadium halides in the United States. Stratcor also owns ***. USV's response to the Commission's questionnaire.

[12] CS Metals is a recycler of spent catalysts. Its parent company is Criterion Catalyst Co., which was formed in 1988 by combining the international catalyst businesses of American Cyanamid Co., Shell Oil Co., and Shell International Chemical Co., and is now wholly owned by CRI International with facilities worldwide (*www.criterioncatalyst.com.*).

[13] Bear ***, Shieldalloy (producer and shipper), Gulf ***, and USV *** comprise the data base for the statistical information presented in this section.

[14] ***.

[15] Shieldalloy ***.

[16] ISA toll produced *** pounds of ferrovanadium for Glencore in 2000.

[17] Bear had ***.

III-2

PART IV: U.S. IMPORTS,[1] APPARENT CONSUMPTION, AND MARKET SHARES

In these investigations the Commission sent importers' questionnaires to 21 firms identified in the petition and in a review of Customs data, the 5 firms identified as producers in the petition, and 2 additional firms identified as possible producers by staff. The Commission received usable data on imports of ferrovanadium from 7 companies; 3 firms reported that they did not import ferrovanadium, 16 firms did not respond, and 2 firms were "not in business."

***, U.S. tollees of ferrovanadium, reported imports during the period examined.[2] *** reported imports of subject product from China and ***[3] reported imports of subject product from South Africa. In addition, *** reported nonsubject imports from Austria and Canada. These firms, and their related companies, are presented in table IV-1.

Table IV-1
Ferrovanadium: Selected importers and their parent companies

Firm	Source	Parent company	Percent ownership/affiliation
*** [1]	***	***	***
***	***	***	***
Glencore	***	***	***
Gulf	***	*** [2]	***
***	***	***	***
***	***	***	***
USV	***	*** [3]	***

[1] ***.
[2] ***.
[3] ***.

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

U.S. IMPORTS AND CONSUMPTION

Data in this section regarding the quantity and value of U.S. imports of ferrovanadium are based on official U.S. import statistics. These data are shown in table IV-2.

[1] Imports are compiled from official Commerce statistics.

[2] ***. ***'s response to the Commission's questionnaires. ***. ***'s response to the Commission's questionnaires.

[3] ***.

IV-1

Table IV-2
Ferrovanadium: U.S. imports, by sources, 1998-2000, January-September 2000, and January-September 2001

Source	Calendar year			January-September	
	1998	1999	2000	2000	2001
			Quantity (*1,000 pounds*)		
China	581	1,102	1,989	1,497	1,192
South Africa	512	1,822	1,303	1,171	2,021
Subtotal	1,093	2,924	3,292	2,667	3,213
Other sources	3,512	2,841	4,180	3,421	2,209
Total	4,605	5,766	7,472	6,088	5,422
			Value (*1,000 dollars*)[1]		
China	4,449	3,861	6,270	5,003	3,465
South Africa	4,560	6,991	5,536	5,085	6,474
Subtotal	9,008	10,852	11,806	10,088	9,939
Other sources	30,952	10,657	14,399	12,212	6,202
Total	39,960	21,509	26,205	22,300	16,141
			Unit value (*per pound*)[1]		
China	$7.66	$3.50	$3.15	$3.34	$2.91
South Africa	8.90	3.84	4.25	4.34	3.20
Average	8.24	3.71	3.59	3.78	3.09
Other sources	8.81	3.75	3.44	3.57	2.81
Average	8.68	3.73	3.51	3.66	2.98
			Share of quantity (*percent*)		
China	12.6	19.1	26.6	24.6	22.0
South Africa	11.1	31.6	17.4	19.2	37.3
Subtotal	23.7	50.7	44.1	43.8	59.3
Other sources	76.3	49.3	55.9	56.2	40.7
Total	100.0	100.0	100.0	100.0	100.0
			Share of value (*percent*)		
China	11.1	18.0	23.9	22.4	21.5
South Africa	11.4	32.5	21.1	22.8	40.1
Subtotal	22.5	50.5	45.1	45.2	61.6
Other sources	77.5	49.5	54.9	54.8	38.4
Total	100.0	100.0	100.0	100.0	100.0

[1] Landed, duty-paid.

Source: Compiled from official Commerce statistics.

IV-2

APPARENT U.S. CONSUMPTION AND MARKET SHARES

Table IV-3 present data on apparent U.S. consumption and market shares of ferrovanadium.

Table IV-3
Ferrovanadium: Apparent U.S. consumption and market shares, 1998-2000, January-September 2000, and January-September 2001

* * * * * * *

IV-3

PART V: PRICING AND RELATED INFORMATION

FACTORS AFFECTING PRICES

Raw Material Costs

Ferrovanadium is produced from vanadium-bearing raw materials, such as vanadiferous slags, and vanadium oxides, such as vanadium pentoxide and trioxide. Raw material costs accounted for *** percent of the total 2000 COGS for U.S. production of ferrovanadium. According to petitioners, raw material inputs are plentiful and of low cost, and are expected to remain so into the near future.[1]

U.S. Inland Transportation Costs and Geographic Markets

Transportation costs of ferrovanadium for delivery within the United States vary from firm to firm but tend to account for a relatively small percentage of the total cost of the product. For the one U.S. producer and two tollees who responded to this question, these costs accounted for between *** and *** percent of the total cost of ferrovanadium, with an average of 2.7 percent. For the three importers who provided usable responses to this question, these costs accounted for between *** and *** percent of the total cost of the product, with an average of 1.7 percent.

All four responding U.S. producers and tollees, as well as two of four responding importers, reported geographic market areas encompassing the entire United States. The importers *** and *** reported smaller market areas consisting of the eastern and midwestern states.

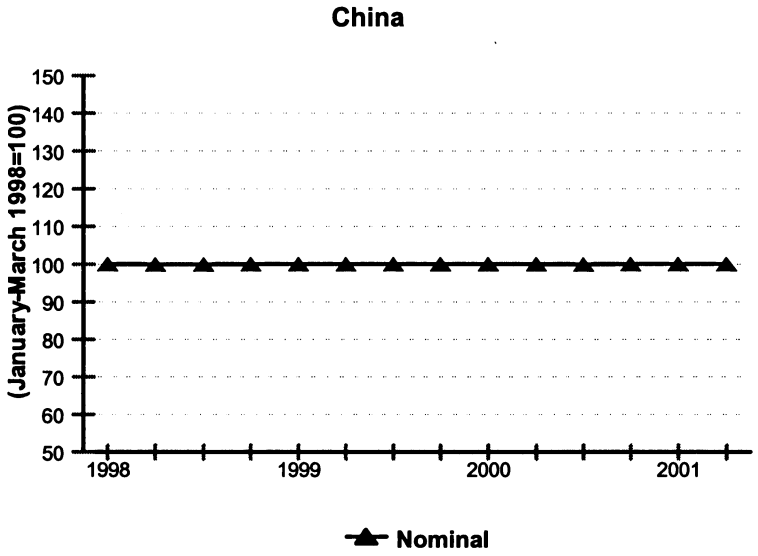
Firms were also requested to provide estimates of the percentages of their shipments that were made within specified distance ranges. Two U.S. producers and two tollees reported that *** percent occurred within 100 miles, *** percent occurred within 101 to 1,000 miles, and *** percent occurred at distances over 1,000 miles. For the four importers that provided usable responses to this question, an average of *** percent of shipments occurred within 100 miles, *** percent occurred within 101 to 1,000 miles, and *** percent occurred at distances over 1,000 miles.

Exchange Rates

Quarterly data reported by the International Monetary Fund indicate that the nominal value of the Chinese yuan remained essentially unchanged and the South African rand depreciated nearly 40 percentage points relative to the U.S. dollar from January 1998 through June 2001. Real values for the Chinese yuan cannot be calculated due to the unavailability of the relevant Chinese producer price information. Similarly, real values for the South African rand are not available after the third quarter of 2000 (figures V-1 and V-2).

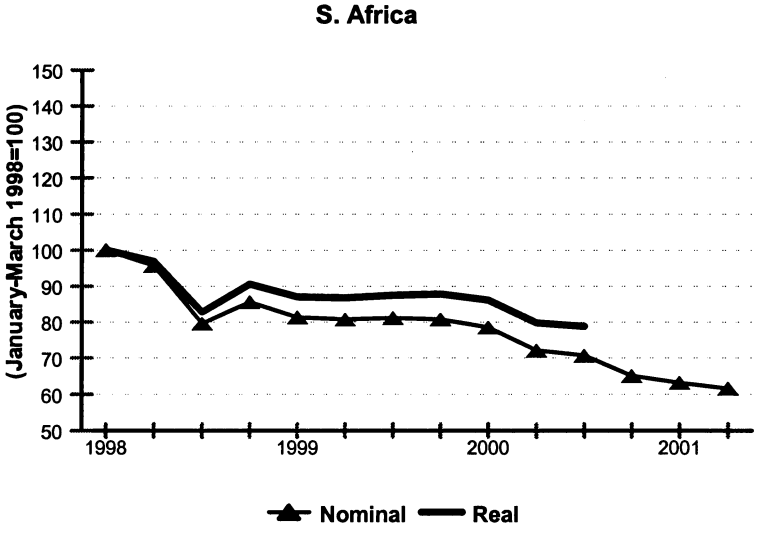
[1] Conference transcript, p. 20.

Figure V-1
Exchange rates: Index of the nominal values of the Chinese yuan relative to the U.S. dollar, by quarters, January 1998-June 2001



Source: International Monetary Fund, *International Financial Statistics*, October 2001.

Figure V-2
Exchange rates: Indices of the nominal and real values of the South African rand relative to the U.S. dollar, by quarters, January 1998-June 2001



Source: International Monetary Fund, *International Financial Statistics*, October 2001.

V-2

PRICING PRACTICES

Pricing Methods

Available information from the petition and questionnaires reveals that approximately *** percent of sales of U.S.-produced ferrovanadium in the United States involve contracts, with spot transactions accounting for the remaining sales. Importers also reported a mix of spot and contract sales; however, their sales appear to be more heavily weighted toward spot transactions.[2]

In those instances where contractual sales were reported, U.S. producers and tollees reported that contracts last on average one year, with price generally fixed for the duration of the agreement, and quantity sometimes fixed for the duration of the agreement.[3] U.S. producers and tollees reported no standard quantity requirements. Importers reported that contracts last on average three months to one year, with price generally fixed for the duration of the agreement, and quantity sometimes fixed for the duration of the agreement.

Sales Terms and Discounts

All responding firms reported that prices are determined either via contracts for multiple shipments or transaction by transaction negotiations.[4] The majority of firms did not report the existence of fixed discount policies. However, three firms reported the existence of volume-based price discounts. Both U.S. producers and importers provided mixed responses regarding how ferrovanadium prices are typically quoted, with approximately half of the responding firms stating that prices are typically quoted on an f.o.b. basis, and the other half reporting that prices are typically quoted on a delivered basis. All responding firms reported that payment is required within 30 days.

PRICE DATA

The Commission requested quarterly data for the total quantity and value of two ferrovanadium products. Data were requested for the period January 1998 through September 2001. The products for which pricing data were requested are as follows:

Product 1. **– Grade 40-60 percent ferrovanadium, 2" by down**
Product 2. **– Grade 78-82 percent ferrovanadium, 2" by down**

Two U.S. producers, two U.S. tollees, and four importers provided usable pricing data for sales of the requested products in the U.S. market, although not all firms reported pricing data for all products for all quarters. The reported price data accounted for *** of the 2000 value of domestically-produced commercial shipments of ferrovanadium, as well as *** percent of the 2000 landed, duty-paid value of imports of ferrovanadium from China and *** percent of the 2000 value of imports of ferrovanadium from South Africa. Data on reported weighted-average prices and quantities for products 1 and 2 are

---

[2] Annual contracts are typically negotiated in the fourth quarter (conference transcript, p. 51).

[3] *** reported that neither price nor quantity are fixed.

[4] At the conference, Greg Young of Glencore stated that ferrovanadium is a commodity product that is bought and sold based on world market prices. The industry journal *Ryan's Notes* publishes prices bi-weekly based on the gathering of global market information, and these prices are used as a benchmark for transactions in the marketplace (conference transcript, pp. 68-69).

presented in tables V-1 and V-2, and figures V-3 and V-4. As is evident from the tables and figures, ferrovanadium prices have fallen sharply during the period of these investigations.[5]

While petitioners allege that unfairly priced imports from the subject countries are a significant factor in the steep decline in ferrovanadium prices, respondents argue that an oversupply of ferrovanadium, due primarily to a downturn in demand from the steel industry, is the cause of the current weakness in world ferrovanadium prices.[6]

As shown in table V-1 and figure V-3, price comparisons for product 1 between the United States and China were possible in 10 quarters. In eight quarters, the Chinese product was priced above the U.S. product, with margins ranging from *** to *** percent and averaging 8.6 percent. In the other two quarters, the Chinese product was priced below the U.S. product, with margins of *** and *** percent. Price comparisons for product 1 between the United States and South Africa were not possible.

As shown in table V-2 and figure V-4, price comparisons for product 2 between the United States and China were possible in 11 quarters. In nine quarters, the Chinese product was priced above the U.S. product, with margins of *** to *** percent and averaging 9.5 percent. In the other two quarters, the Chinese product was priced below the U.S. product, with margins of *** and *** percent. Price comparisons for product 2 between the United States and South Africa were possible in 12 quarters. In all quarters, the South African product was priced above the U.S. product, with margins ranging from *** to *** percent and averaging 18.2 percent.[7]

Table V-1
Ferrovanadium: Weighted-average delivered selling prices and quantities for product 1, and margins of underselling/(overselling), by quarters, January 1998-September 2001

* * * * * * *

Table V-2
Ferrovanadium: Weighted-average delivered selling prices and quantities for product 2, and margins of underselling/(overselling), by quarters, January 1998-September 2001

* * * * * * *

Figure V-3
Weighted-average delivered prices for product 1, by quarters, January 1998-September 2001

* * * * * * *

Figure V-4
Weighted-average delivered prices for product 2, by quarters, January 1998- September 2001

* * * * * * *

---

[5] ***.

[6] Conference transcript, pp. 75-76. In addition, respondents allege that the significant number of traders in the world ferrovanadium market plays a significant role in setting world market prices through arbitrage (conference transcript, pp. 87-88).

[7] Regarding product 2 from South Africa, *** (e-mail response from Laura Fraedrich, counsel for Glencore, January 2, 2002).

V-4

LOST SALES

*** and *** provided information on allegations of lost sales due to imports of ferrovanadium from China and South Africa.[8] Of the six specific lost sales allegations,[9] two were confirmed by purchasers and four were denied by purchasers. The reported allegations of lost sales total nearly $*** and involve just over *** pounds contained vanadium, of which $*** and *** pounds were confirmed by purchasers. The lost sales allegations are reported in table V-3. Additional information provided by purchasers follows.

* * * * * * *

Table V-3
Ferrovanadium: Lost sales allegations

* * * * * * *

[8] No lost revenues allegations were reported by U.S. producers.

[9] Petitioners submitted seven lost sales allegations, however one allegation involves a situation in which *** alleges that it was not given the opportunity to bid on a sale to *** which ultimately was supplied by material from China. While there is no reported value for this allegation, *** stated that the material purchased was not from China.

PART VI: FINANCIAL EXPERIENCE OF U.S. PRODUCERS

BACKGROUND

Four companies provided usable financial data. As noted earlier in this report, Shieldalloy produces ferrovanadium at its plant in Cambridge, OH, while Bear primarily provides toll processing services to Gulf and USV. Gulf and USV provide the raw material input (fused flake vanadium pentoxide) to Bear for tolling and receive back ferrovanadium for sale to end users without relinquishing title to the contained vanadium, and account for *** the commercial sales of ferrovanadium of the four companies. Of the four companies, only ***; the other companies reported on a calendar year basis.

Bear is owned *** and reportedly is the largest independent processor of ferroalloys in the United States. Its commercial shipments accounted for a *** on ferrovanadium, which are oriented toward tolling for other parties,[1] primarily Gulf and USV.[2] Its production process at Butler, PA combines the vanadium pentoxide that is supplied to it by its tolling partners together with raw materials that it purchases (aluminum, lime, silicon, and calcium) to produce ferrovanadium. Bear also produces ferromolybdenum, which accounted for ***.

Gulf produces vanadium pentoxide at its plant in Freeport, TX, chiefly from processing spent catalysts from petroleum hydrocracking for other chemical companies. It recovers molybdenum as well, which it reuses as catalyst. Because Gulf has no facilities for converting vanadium pentoxide to ferrovanadium, which would enable the vanadium to be commercially usable, it has entered into the tolling arrangement with Bear, and the vast majority of its vanadium pentoxide is sent to Bear.

Shieldalloy uses a modified 2-stage reduction process to produce ferrovanadium at its plant in Cambridge, OH from various vanadium-containing raw materials. These include iron slag, residues from the refining of petrochemical products, and ash from the burning of fuel oil by electric utilities. Shieldalloy's production process differs from Bear's in that it does not use vanadium pentoxide as its raw material input.[3]

USV has contracted for Bear[4] to toll-process the vanadium pentoxide it produces at Hot Springs, AR and Convent, LA (which recycles spent catalysts) into ferrovanadium.[5] According to a company spokesman, USV is the sole company that receives vanadium pentoxide from CS Metals, which was commissioned and began producing vanadium pentoxide in 2000.[6]

---

[1] In its questionnaire response, Bear described ***. Bear's response to the Commission's questionnaire, p. 7.

[2] Conference transcript, p. 11 (Mr. Jones). Bear provided data on its tolling for each of its partners during the periods investigated. There are differences of up to ***.

[3] Conference transcript, p. 19 (Mr. Carter).

[4] A spokesman for USV stated that the company ceased producing ferrovanadium at its plant in Niagara Falls, NY because it could not be as cost efficient as Bear's toll conversion. Likewise, a spokesman for Gulf stated that using Bear's conversion services *** is part of Gulf's business model to have an outlet to recycle spent hazardous waste. Bear's president also stated that his company's business model is to do conversion for others. Conference transcript, pp. 57 (Mr. Jones for Bear), 58 (Mr. Orr for Gulf), and 59 (Mr. Bunting for USV).

[5] In 1999, USV and CRI (a wholly-owned member of the Royal Dutch/Shell Group) entered into a joint venture to construct a spent catalyst recovery plant, known as CS Metals, located at Convent, LA. The plant began operations in 2000 and supplements the production of vanadium pentoxide at USV's plant in Hot Springs, AR. See CRI press release, June 29, 1998.

[6] Conference transcript, p. 30 (Mr. Bunting).

VI-1

FERROVANADIUM OPERATIONS

The fully-consolidated results of operations of these four U.S. companies are presented in table VI-1. Bear's own commercial sales to independent parties, primarily foundries around Pittsburgh, PA, are included in the consolidated totals for the four companies; likewise, Bear's tolling costs relating to its processing on behalf of Gulf and USV are reflected in the consolidated results. Complete individual firm data are shown in order to allow for the disaggregation of any firms from the full consolidated industry group. Information regarding Bear's tolling operations is in appendix D, as are consolidations of Bear with Shieldalloy, and Bear with Gulf and Shieldalloy.

Table VI-1
Results of operations of U.S. producers in the production of ferrovanadium, fiscal years 1998-2000, January-September 2000, and January-September 2001

Item	Fiscal year[1]			January-September[1]	
	1998	1999	2000	2000	2001
	Quantity (*1,000 pounds of contained vanadium*)				
Net sales	9,864	9,075	7,784	6,056	4,992
	Value (*$1,000*)				
Net sales	114,454	46,367	37,612	30,384	19,581
COGS[2]	92,936	54,784	39,766	30,053	24,764
Gross profit	21,518	(8,417)	(2,154)	331	(5,183)
SG&A expenses	6,600	4,755	4,463	3,567	2,575
Operating income or (loss)	14,918	(13,172)	(6,617)	(3,236)	(7,758)
Interest expense	1,974	914	632	474	435
Other expense	1,688	324	268	200	298
Other income items	241	294	16	13	106
Net income or (loss)	11,497	(14,116)	(7,501)	(3,897)	(8,385)
Depreciation/amortization	1,628	1,733	1,752	1,312	1,278
Cash flow	13,125	(12,383)	(5,749)	(2,585)	(7,107)
	Ratio to net sales (*percent*)				
Cost of goods sold	81.2	118.2	105.7	98.9	126.5
Gross profit	18.8	(18.2)	(5.7)	1.1	(26.5)
SG&A expenses	5.8	10.3	11.9	11.7	13.2
Operating income or (loss)	13.0	(28.4)	(17.6)	(10.6)	(39.6)
Net income or (loss)	10.0	(30.4)	(19.9)	(12.8)	(42.8)

Footnotes on following page.

VI-2

Table VI-1--Continued
Results of operations of U.S. producers in the production of ferrovanadium, fiscal years 1998-2000, January-September 2000, and January-September 2001

Item	Fiscal year[1]			January-September[1]	
	1998	1999	2000	2000	2001
			Unit value		
Total sales	$11.60	$5.11	$4.83	$5.02	$3.92
COGS	9.42	6.04	5.11	4.96	4.96
Gross profit	2.18	(0.93)	(0.28)	0.05	(1.04)
SG&A expenses	0.67	0.52	0.57	0.59	0.52
Operating income or (loss)	1.51	(1.45)	(0.85)	(0.53)	(1.55)
Net income or (loss)	1.17	(1.56)	(0.96)	(0.64)	(1.68)
			Number of firms reporting		
Operating losses	0	3	3	3	3
Data	4	4	4	4	4

[1] Bear's fiscal year ends November 30 ***.
[2] In consolidating the toller with the other companies, Bear's ***.

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

The data in table VI-1 indicate that the quantity and value of sales as well as operating and net income fell between 1998 and 2000, primarily attributable to decreasing unit values of sales. The COGS also decreased during this period because of the lower quantity of sales and decreased unit costs of raw materials, but could not compensate for the greater fall in unit sales value.

Tables VI-2 through VI-5 present the results of operations by firm. These data are consistent with those in table VI-1.

Table VI-2
Results of operations of Bear in the production of ferrovanadium, fiscal years 1998-2000, December 1999-August 2000, and December 2000-August 2001

* * * * * * *

Table VI-3
Results of operations of Gulf in the production of ferrovanadium, fiscal years 1998-2000, January-September 2000, and January-September 2001

* * * * * * *

Table VI-4
Results of operations of Shieldalloy in the production of ferrovanadium, fiscal years 1998-2000, January-September 2000, and January-September 2001

* * * * * * *

VI-3

Table VI-5
Results of operations of USV in the production of ferrovanadium, fiscal years 1998-2000, January-September 2000, and January-September 2001

* * * * * * *

Changes in the companies' operating income are further evidenced by the variance analysis that shows the effects of price and volume changes on their net sales of ferrovanadium, and of costs and volume changes on their total costs (table VI-6). This analysis shows that the decline in operating income of $20.8 million between 1998 and 2000 was due predominantly to an unfavorable price variance (and secondly to an unfavorable volume variance) that offset a favorable expense variance. Between January-September 2000 and the same period in 2001, an unfavorable price variance offset favorable volume and net cost/expense variances.

Table VI-6
Variance analysis for ferrovanadium operations, fiscal years 1998-2000 and January-September 2000-01

Item	1998-2000	1998-99	1999-2000	January-September 2000-2001
			Value (*$1,000*)	
Total net sales:				
Price variance	(52,707)	(58,932)	(2,159)	(5,465)
Volume variance	(24,135)	(9,155)	(6,596)	(5,338)
Total net sales variance	(76,842)	(68,087)	(8,755)	(10,803)
Cost of sales:				
Cost variance	33,573	30,718	7,225	8
Volume variance	19,597	7,434	7,794	5,280
Total cost variance	53,170	38,151	15,019	5,288
Gross profit variance	(23,672)	(29,936)	6,264	(5,515)
SG&A expenses:				
Expense variance	745	1,317	(384)	365
Volume variance	1,392	528	676	627
Total SG&A variance	2,137	1,845	292	992
Operating income variance	(21,535)	(28,091)	6,556	(4,523)
Summarized as:				
Price variance	(52,707)	(58,932)	(2,159)	(5,465)
Net cost/expense variance	34,318	32,035	6,841	374
Net volume variance	(3,146)	(1,193)	1,874	568

Note.--Unfavorable variances are shown in parentheses; all others are favorable.

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

VI-4

INVESTMENT IN PRODUCTIVE FACILITIES, CAPITAL EXPENDITURES, AND R&D EXPENSES

Capital expenditures and the value of fixed assets, by firm, are shown in table VI-7, as is the value of total R&D expenses. U.S. producers have invested in plant and equipment, as they testified at the conference, allowing them to utilize lower-cost raw materials.[7]

Table VI-7
Value of assets, capital expenditures, and R&D expenses of U.S. producers of ferrovanadium, fiscal years 1998-2000, January-September 2000, and January-September 2001

* * * * * * *

CAPITAL AND INVESTMENT

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

[7] For example, conference transcript, p. 22 (Mr. Carter, Shieldalloy). Shieldalloy also provided a summary of its capital projects since July 1995 through the third quarter 2001 in its questionnaire response.

PART VII: THREAT CONSIDERATIONS

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

THE INDUSTRY IN CHINA

Two Chinese producers of ferrovanadium responded to the Commission questionnaire request: Chengde Iron and Steel Group Co., Ltd.[1] and Panzhihua.[2] The data obtained are presented in table VII-1. The responding producer accounted for *** percent of the volume of U.S. imports of ferrovanadium from China in 2000.

Table VII-1
Ferrovanadium: China's production capacity, production, shipments, and inventories, 1998-2000, January-September 2000, January-September 2001, and projected 2001-02

* * * * * * *

THE INDUSTRY IN SOUTH AFRICA

Two South African producers (Highveld[3] and Xstrata[4]) of ferrovanadium responded to the Commission's questionnaire request; Vametco did not. The data obtained are presented in table VII-2.

Table VII-2
Ferrovanadium: South Africa's production capacity, production, shipments, and inventories, 1998-2000, January-September 2000, January-September 2001, and projected 2001-02

* * * * * * *

[1] Chengde Iron and Steel Group Co., Ltd. sent a fax stating that "***."

[2] Ferrovanadium accounted for ***. Panzhihua's response to the Commission's questionnaire.

[3] Highveld sent an e-mail containing its questionnaire response. It stated that ***. At the Commission's conference regarding this case, Highveld stated that *** is the sole importer of Highveld's exports to the United States. In addition to the United States, Highveld exports to Europe and the Far East. In its questionnaire response, it stated that ***.

[4] Xstrata states that ***. In addition to ***. "***." Xstrata's response to the Commission's questionnaire.

VII-1

U.S. IMPORTER'S INVENTORIES

U.S. importers' inventories of subject ferrovanadium are reported in table VII-3.

Table VII-3
Ferrovanadium: U.S. importers' end-of-period inventories of imports from China, South Africa, and all other sources, 1998-2000, January-September 2000, and January-September 2001

* * * * * * *

U.S. IMPORTERS' CURRENT ORDERS

Two firms (***) reported imports of *** pounds of ferrovanadium from China after September 30, 2001. One firm (***) reported imports totaling *** pounds of ferrovanadium from South Africa after September 30, 2001

ANTIDUMPING DUTY ORDERS IN THIRD-COUNTRY MARKETS

There is no indication that ferrovanadium from China or South Africa has been subject to any other import relief investigations in any other countries.

VII-2

APPENDIX A

FEDERAL REGISTER NOTICES

A-1

INTERNATIONAL TRADE COMMISSION

[Investigations Nos. 731–TA–986 and 987 (Preliminary)]

Ferrovanadium From China and South Africa

AGENCY: United States International Trade Commission.

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

SUMMARY: The Commission hereby gives notice of the institution of investigations and commencement of preliminary phase antidumping investigations Nos. 731–TA–986 and 987 (Preliminary) under section 733(a) of the Tariff Act of 1930 (19 U.S.C. 1673b(a)) (the Act) to determine whether there is a reasonable indication that an industry in the United States is materially injured or threatened with material injury, or the establishment of an industry in the United States is materially retarded, by reason of imports from China and South Africa of ferrovanadium, provided for in subheading 7202.92.00 of the Harmonized Tariff Schedule of the United States, that are alleged to be sold in the United States at less than fair value. Unless the Department of Commerce extends the time for initiation pursuant to section 732(c)(1)(B) of the Act (19 U.S.C. 1673a(c)(1)(B)), the Commission must reach a preliminary determination in the antidumping investigations in 45 days, or in these cases by January 10, 2002. The Commission's views are due at Commerce within five business days thereafter, or by January 17, 2002.

For further information concerning the conduct of these investigations and rules of general application, consult the Commission's rules of practice and procedure, part 201, subparts A through E (19 CFR part 201), and part 207, subparts A and B (19 CFR part 207).

EFFECTIVE DATE: November 26, 2001.

FOR FURTHER INFORMATION CONTACT: Fred Ruggles (202–205–3187), Office of Investigations, U.S. International Trade Commission, 500 E Street SW., Washington, DC 20436. Hearing-impaired persons can obtain information on this matter by contacting the Commission's TDD terminal on 202–205–1810. Persons with mobility impairments who will need special assistance in gaining access to the Commission should contact the Office of the Secretary at 202–205–2000. General information concerning the Commission may also be obtained by accessing its internet server (*http://www.usitc.gov*). The public record for these investigations may be viewed on the Commission's electronic docket (EDIS–ON–LINE) at *http://dockets.usitc.gov/eol/public.*

SUPPLEMENTARY INFORMATION:

Background.—These investigations are being instituted in response to a petition filed on November 26, 2001, by the Ferroalloys Association Vanadium Committee and its members Bear Metallurgical Co., Butler, PA, Shieldalloy Metallurgical Corp., Cambridge, OH, Gulf Chemical & Metallurgical Corp., Freeport, TX, U.S. Vanadium Corp., Danbury, CT, and CS Metals of Louisiana LLC, Convent, LA.

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

Limited disclosure of business proprietary information *(BPI) under an administrative protective order (APO) and BPI service list.*—Pursuant to section 207.7(a) of the Commission's rules, the Secretary will make BPI gathered in these investigations available to authorized applicants representing interested parties (as defined in 19 U.S.C. 1677(9)) who are parties to the investigations under the APO issued in the investigations, provided that the application is made not later than seven days after the publication of this notice in the **Federal Register**. A separate service list will be maintained by the Secretary for those parties authorized to receive BPI under the APO.

Conference.—The Commission's Director of Operations has scheduled a conference in connection with these investigations for 9:30 a.m. on December 17, 2001, at the U.S. International Trade Commission Building, 500 E Street SW., Washington, DC. Parties wishing to participate in the conference should contact Fred Ruggles (202–205–3187) not later than December 13, 2001, to arrange for their appearance. Parties in support of the imposition of antidumping duties in these investigations and parties in opposition to the imposition of such duties will each be collectively allocated one hour within which to make an oral presentation at the conference. A nonparty who has testimony that may aid the Commission's deliberations may request permission to present a short statement at the conference.

Written submissions.—As provided in sections 201.8 and 207.15 of the Commission's rules, any person may submit to the Commission on or before December 20, 2001, a written brief containing information and arguments pertinent to the subject matter of the investigations. Parties may file written testimony in connection with their presentation at the conference no later than three days before the conference. If briefs or written testimony contain BPI, they must conform with the requirements of sections 201.6, 207.3, and 207.7 of the Commission's rules. The Commission's rules do not authorize filing of submissions with the Secretary by facsimile or electronic means.

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

Authority: These investigations are being conducted under authority of title VII of the Tariff Act of 1930; this notice is published pursuant to section 207.12 of the Commission's rules.

Issued: November 27, 2001.

By order of the Commission.

Donna R. Koehnke,

Secretary.

[FR Doc. 01–29799 Filed 11–29–01; 8:45 am]

BILLING CODE 7020–02–P

DEPARTMENT OF COMMERCE

International Trade Administration

[A–570–873 and A–791–815]

Notice of Initiation of Antidumping Duty Investigations: Ferrovanadium From the People's Republic of China and the Republic of South Africa

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

ACTION: Initiation of Antidumping Duty Investigations.

EFFECTIVE DATE: December 26, 2001.

FOR FURTHER INFORMATION CONTACT: Mark Manning or Chris Brady at (202) 482–5253 and (202) 482–4406, respectively; Import Administration, International Trade Administration, U.S. Department of Commerce, 14th Street and Constitution Avenue, NW., Washington, DC 20230.

SUPPLEMENTARY INFORMATION:

Initiation of Investigations

The Applicable Statute and Regulations

Unless otherwise indicated, all citations to the statute are references to the provisions effective January 1, 1995, the effective date of the amendments made to the Tariff Act of 1930, as amended (the Act), by the Uruguay Round Agreements Act (URAA). In addition, unless otherwise indicated, all citations to the Department of Commerce's (the Department's) regulations are references to the provisions codified at 19 CFR Part 351 (2000).

The Petition

On November 26, 2001, the Department received a petition filed in proper form by the Ferroalloys Association Vanadium Committee and its members: Bear Metallurgical Company, Shieldalloy Metallurgical Corporation, Gulf Chemical & Metallurgical Corporation, U.S. Vanadium Corporation, and CS Metals of Louisiana LLC (collectively, the petitioners). The Department received information supplementing the petition on December 7, 2001.

In accordance with section 732(b) of the Act, the petitioners allege that imports of ferrovanadium from the People's Republic of China (PRC) and the Republic of South Africa (South Africa) 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 Act, and that such imports are materially injuring, or are threatening to materially injure, an industry in the United States.

The Department finds that the petitioners filed this petition on behalf of the domestic industry because they are interested parties as defined in sections 771(9)(C) and 771(9)(D) of the Act and have demonstrated sufficient industry support with respect to each of the antidumping investigations that they are requesting the Department to initiate (*see the Determination of Industry Support for the Petition* section below).

Scope of Investigations

The scope of these investigations covers all ferrovanadium produced in the PRC and South Africa, regardless of grade, chemistry, form, shape or size. Ferrovanadium is an alloy of iron and vanadium that is used chiefly as an additive in the manufacture of steel. The merchandise is commercially and scientifically identified as ferrovanadium. The scope of this investigation specifically excludes vanadium additives other than ferrovanadium, such as nitrided vanadium, vanadium-aluminum master alloys, vanadium chemicals, vanadium oxides, vanadium waste and scrap, and vanadium-bearing raw materials such as slag, boiler residues and fly ash. Merchandise under the following Harmonized Tariff Schedule of the United States (HTSUS) headings are specifically excluded:

- 2850.00.2000 Hydrides, nitrides, azides, silicides and borides, whether or not chemically defined, other than compounds which are also carbides of heading 2849: * * * Of vanadium.
- 8112.40.3000 Beryllium, * * * vanadium * * *, and articles of these metals, including waste and scrap: * * * Vanadium: Waste and scrap
- 8112.40.6000 Beryllium, * * * vanadium * * *, and articles of these metals, including waste and scrap: * * * Vanadium: Other

Ferrovanadium is classified under HTSUS heading 7202.92.00. Although the HTSUS subheading is provided for convenience and Customs purposes, the Department's written description of the scope of this investigation remains dispositive.

During our review of the petitions, we discussed the scope with the petitioners to ensure that it accurately reflects the product for which the domestic industry is seeking relief. Moreover, as discussed in the preamble to the Department's regulations (62 FR 27323), we are setting aside a period for parties to raise issues regarding product coverage. The Department encourages all parties to submit such comments by January 7, 2002. Comments should be addressed to Import Administration's Central Records Unit at Room 1870, U.S. Department of Commerce, 14th Street and Constitution Avenue, NW., Washington, DC 20230. The period of scope consultations is intended to provide the Department with ample opportunity to consider all comments and consult with parties prior to the issuance of the preliminary determinations.

Determination of Industry Support for the Petition

Section 771(4)(A) of the Act defines the "industry" as the producers of a domestic like product. Thus, to determine whether the petition has the requisite industry support, the statute directs the Department to look to producers and workers who produce the domestic like product. The United States International Trade Commission (ITC), which is responsible for determining whether "the domestic industry" has been injured, must also determine what constitutes a domestic like product in order to define the industry. While both the Department and the ITC must apply the same statutory definition regarding domestic like product (*see* section 771(10) of the Act), they do so for different purposes and pursuant to their separate and distinct authority. In addition, the Department's determination is subject to limitations of time and information. Although this may result in different definitions of the like product, such differences do not render the decision of either agency contrary to the law.[1]

[1] *See Algoma Steel Corp. Ltd.*, v. *United States*, 688 F. Supp. 639, 642–44 (CIT 1988); *High*

Section 771(10) of the Act defines the domestic like product as "a product which is like, or in the absence of like, most similar in characteristics and uses with, the article subject to an investigation under this title." Thus, the reference point from which the domestic like product analysis begins is "the article subject to an investigation," *i.e.*, the class or kind of merchandise to be investigated, which normally will be the scope as defined in the petition.

In this petition, petitioners do not offer a definition of domestic like product distinct from the scope of these investigations. Thus, based on our analysis of the information presented to the Department by petitioners, and the information obtained and received independently by the Department, we have determined that there is a single domestic like product, which is defined in the *Scope of Investigations* section above, and have analyzed industry support in terms of this domestic like product.

Section 732(b)(1) of the Act requires that a petition be filed on behalf of domestic industry. Section 732(c)(4)(A) of the Act provides that a petition meets this requirement if the domestic producers or workers who support the petition account for: (1) at least 25 percent of the total production of the domestic like product; and (2) more than 50 percent of the production of the domestic like product produced by that portion of the industry expressing support for, or opposition to, the petition. Information contained in the petition demonstrates that the domestic producers or workers who support the petition account for over 50 percent of total production of the domestic like product. Therefore, the domestic producers or workers who support the petitions account for at least 25 percent of the total production of the domestic like product, and the requirements of section 732(c)(4)(A)(i) are met. *See* the *Import Administration AD Investigation Checklist*, dated December 17, 2001 (*Initiation Checklist*) (public version on file in the Central Records Unit of the Department of Commerce, Room B–099). Furthermore, because the Department received no opposition to the petitions, the domestic producers or workers who support the petitions account for more than 50 percent of the production of the domestic like product produced by that portion of the industry expressing support for or opposition to the petitions. *See Initiation Checklist.*

Information Content Flat Panel Displays and Display Glass Therefore from Japan: Final Determination; Rescission of Investigation and Partial Dismissal of Petition, 56 FR 32376, 32380–81 (July 16, 1991).

Thus, the requirements of section 732(c)(4)(A)(i)(ii) are met.

Accordingly, the Department determines that the petition was filed on behalf of the domestic industry within the meaning of section 732(b)(1) of the Act. *See Initiation Checklist.*

Export Price and Normal Value

The following are descriptions of the allegations of sales at less than fair value upon which the Department has based its decision to initiate these investigations. The sources of data for the deductions and adjustments relating to home market price, U.S. price, constructed value (CV) and factors of production (FOP) are detailed in the *Initiation Checklist.*

The anticipated period of investigation (POI) for the PRC, a non-market economy (NME) country is April 1, 2001 through September 30, 2001, while the anticipated POI for South Africa, a market economy country, is October 1, 2000 through September 30, 2001. The petitioners requested that the Department, pursuant to section 351.204(b)(1) of the Department's regulations, extend the POI for South Africa to include October 2001, thus creating a thirteen-month POI. According to the petitioners, the Department should grant this extension because of "particularly aggressive pricing" by South African producers during October 2001.

We have denied the petitioners request for a thirteen-month POI. Although the petitioners are correct that section 351.204(b)(1) does provide the Department the authority to examine any period it considers appropriate, in practice we have departed from the normal POI in relatively few instances either before or after the passage of the URAA.[2] The Department's regulations provide for a twelve-month POI in market economy cases, and without sufficient demonstration that the Department's analysis would be improved by expanding the POI, we analyze sales made during this period. For purposes of this initiation, we find that the petitioners have not sufficiently demonstrated that use of the extended POI would improve the Department's analysis. Indeed, upon examination of the three U.S. price quotes from October 2001, we note that one of the quotes is actually higher than the price quote from within the POI. Furthermore, although the other two prices are below the price quote from within the POI, we do not find this level of pricing by South African producers to be significantly more aggressive than the level of pricing experienced during the POI. Because there is no evidence in the petition to demonstrate that expanding the POI would otherwise improve our analysis, thereby warranting an extension of the POI, we will utilize the normal POI of October 1, 2000, through September 30, 2001, for this investigation.

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

People's Republic of China

Export Price

The petitioners identified the following three companies as producers and/or exporters of ferrovanadium from the PRC: Chengde Xinghua Vanadium Chemical Company Ltd., Jinzhou Ferroalloy (Group) Company Ltd., and Panzhihua Iron & Steel Group. To calculate export price (EP), petitioners provided (1) Price quotes from U.S. importers and/or distributors to unaffiliated U.S. customers for sales of Chinese ferrovanadium, and (2) the average unit value (AUV) calculated from import statistics released by the

[2] In *EMD from Ireland*, the Department explained the circumstances in which it would alter the normal POI. Specifically, the Department explained that expansion of the POI may be warranted in cases where the normal POI does not reflect the sales practices of the firms subject to investigation, including the following situations: (1) Where sales were made pursuant to long-term contracts; (2) where distortions would have occurred as a result of "seasonally-affected sales;" (3) where there are special order or customized sales; and (4) where sales activity was unusually depressed resulting in too few sales for an adequate investigation. *See Electrolytic Manganese Dioxide From Ireland: Final Determination of No Sales at Less Than Fair Value*, 54 FR 8776 (Mar. 2, 1989). Additionally, in *Pure Magnesium from the Russian Federation*, certain respondents requested that the Department extend the POI to cover shipments of pure magnesium made pursuant to long-term contracts signed prior to the POI. However, based on the arguments and evidence presented on this issue, the Department believed it was not appropriate to extend the POI in this investigation and continued to use the six-month period defined by 19 CFR 351.204(b)(1) for proceedings involving non-market economies. *See Notice of Preliminary Determination of Sales at Not Less Than Fair Value: Pure Magnesium From the Russian Federation*, 66 FR 21319, 21321 (Apr. 30, 2001), followed in *Notice of Final Determination of Sales at Not Less Than Fair Value: Pure Magnesium From the Russian Federation*, 66 FR 49347, 49348 (Sept. 27, 2001).

Census Bureau. Petitioners calculated the AUV using the quantity and value of imports during the POI of ferrovanadium from the PRC, entered under HTSUS 7202.92.00.

The price quotes provided by the petitioners are from a time period prior to the POI for the PRC. Because it is the Department's preference to use U.S. price data originating during the POI, we did not consider these price quotes as a basis for EP.

Based on information contained in the petition, the Department believes that HTSUS 7202.92.00 is the category under which all imports of ferrovanadium likely enter and the possibility of a misclassification by the U.S. Customs Service is minimal because non-subject merchandise is entered the United States under different HTSUS subheadings. *See* supplement to the petition (supplemental petition), dated December 7, 2001, at 3–6. Moreover, the Department believes that the AUV provides a better basis for initiation because the AUV is an average price covering the entire POI, while the reported price quotes are from a period of time before the POI for the PRC. As a result, we relied on the AUV to calculate EP. The petitioners used the "customs value" of the merchandise and the contained weight of vanadium in its AUV calculation. According to the definition provided by the ITC's Trade Data Web, the "customs value" does not include international freight or marine insurance.

The petitioners calculated a net U.S. price by deducting from the AUV foreign inland freight and foreign brokerage and handling. *See Initiation Checklist.*

Normal Value

The petitioners assert that the PRC is an NME country and no determination to the contrary has yet been made by the Department. In previous investigations, the Department has determined that the PRC is an NME. *See Steel Concrete Reinforcing Bars from the People's Republic of China; Notice of Final Determination of Sales at Less Than Fair Value (Re-Bars from China)*, 66 FR 33522 (June 22, 2001), and *Notice of Final Determination of Sales at Less Than Fair Value: Foundry Coke Products from the People's Republic of China (Foundry Coke from China)*, 66 FR 39487 (July 31, 2001). In accordance with section 771(18)(C)(i) of the Act, the presumption of NME status remains in effect until revoked by the Department. The presumption of NME status for the PRC has not been revoked by the Department and, therefore, remains in effect for purposes of the initiation of this investigation. Pursuant to section 771(18)(C)(i) of the Act, because the PRC's status as an NME remains in effect, the petitioners determined the dumping margin using an FOP analysis.

For normal value (NV), the petitioners based the FOP, as defined by section 773(c)(3) of the Act, on the consumption rates of one U.S. ferrovanadium producer, adjusted for known differences in production efficiencies on the basis of available information. The petitioners assert that information regarding the Chinese producers' consumption rates is not available, and have therefore assumed, for purposes of the petition, that producers in the PRC use the same inputs in the same quantities as the petitioners use, except where a variance from the petitioners' cost model can be justified on the basis of available information. Based on the information provided by the petitioners, we believe that the petitioners' FOP methodology represents information reasonably available to the petitioners and is appropriate for purposes of initiating this investigation.

Pursuant to section 773(c) of the Act, the petitioners assert that South Africa is the most appropriate surrogate country for the PRC, claiming that South Africa is: (1) A market economy; (2) a significant producer of comparable merchandise; and (3) at a level of economic development comparable to the PRC in terms of per capita gross national product (GNP). The Department's regulations state that it will place primary emphasis on per capita GNP in determining whether a given market economy is at a level of economic development comparable to the NME country. In recent antidumping cases involving the PRC, the Department identified a group of countries at a level of economic development comparable to the PRC based primarily on per capita GNP. This group includes India, Pakistan, Indonesia, Sri Lanka, the Philippines, and Egypt. None of these countries are significant producers of ferrovanadium. The petitioners assert that there is no other product that can be considered "comparable" with ferrovanaduim. *See* supplemental petition, at 6–10. Based on information reasonably available to the Department, we have accepted this claim for purposes of initiation. Since the recent surrogate countries for the PRC do not produce ferrovanadium or products comparable to ferrovanadium, another surrogate country must be chosen.

Where the countries normally considered at a level of economic development similar to that of the country in question do not produce comparable merchandise, the Department's practice is to find the most comparable surrogate country that is a significant producer of comparable merchandise. The petitioners submit that South Africa is the most appropriate surrogate market economy for purposes of this investigation because it is a significant producer of ferrovanadium and, among the countries that produce ferrovanadium, it is at a level of economic development closest to the PRC.

Based on the information provided by the petitioners, we believe that the petitioners' use of South Africa as a surrogate country is appropriate for purposes of initiating this investigation.

In accordance with section 773(c)(4) of the Act, petitioners valued FOP, where possible, on reasonably available, public surrogate data from South Africa. Materials were valued based on South African import values, as published by *World Trade Atlas.* With respect to vanadium pentoxide, however, the petitioners asserted that South African import data are problematic because these data are dominated by imports into South Africa from Australia. The petitioners provided evidence indicating that one of the South African producers, Xstrata, imports large quantities of vanadium pentoxide from a related party in Australia. The petitioners argue that the per-unit price derived from South African import data is unreliable because these data include transfer prices between Xstrata and its affiliate. To support this claim, the petitioners calculated the per-unit price for vanadium pentoxide based upon South African import data and Australian export data, and found that the unit price from South African import data is approximately 40 percent lower than the unit price from Australian export data.

Although this price difference could result from several factors, such as differences in the value basis of the data reported by the governments of South Africa and Australia or the time lag between export from Australia and entry into South Africa, we find that, for purposes of initiation, the existence of transfer prices accounting for a large portion of the data from which the per-unit price is calculated is a valid reason to exclude Australian imports from the surrogate value.

To avoid this possible distortion, the petitioners recommend that the Department exclude imports of vanadium pentoxide from Australia when calculating the surrogate value for this input. We agree with this recommendation. However, because only a very small quantity of vanadium

pentoxide entered from non-Australian countries during the months of the anticipated POI of the PRC case, the unit value resulting from these data, for this time period, is aberrational. In contrast, during the longer POI for the South Africa case, there are enough imports from countries other than Australia to calculate a non-aberrational per-unit value. Therefore, we used the per-unit price derived from South African import statistics, excluding imports from Australia and covering the period October 2000 through September 2001, as the surrogate value to be used for this input.

Labor was valued using the Department's regression-based wage rate for the PRC, in accordance with 19 CFR 351.408(c)(3). Electricity was valued using South African electricity prices for industrial consumers published by the U.S. Department of Energy. For overhead, selling, general and administrative (SG&A) expenses and profit, the petitioners applied rates derived from the public fiscal year 2000 financial statements of a South African ferrovanadium producer that petitioners believe to be representative of ferrovanadium producers in South Africa. All surrogate values which fell outside the POI were adjusted for inflation through the use of an inflation adjustment factor that was calculated using South African price data, as published by the International Monetary Fund's *International Financial Statistics*. Based on the information provided by the petitioners, we believe that the surrogate values represent information reasonably available to the petitioners and are acceptable for purposes of initiating this investigation.

Based upon the comparison of EP to NV, the petitioners calculated an estimated dumping margin of 91.64 percent.

South Africa

Export Price

The petitioners identified the following three companies as producers and/or exporters of ferrovanadium from South Africa: Highveld Steel & Vanadium Corporation Ltd., Vametco Minerals Corporation, and Xstrata SA (Pty) Ltd. To calculate EP, the petitioners provided (1) four price quotes from U.S. importers and/or distributors to unaffiliated U.S. customers for sales of South African ferrovanadium, and (2) the AUV calculated from import statistics released by the Census Bureau. Petitioners calculated the AUV using the quantity and value of imports during the POI of ferrovanadium from the South Africa, entered under HTSUS 7202.92.00.

In the petitioners' discussion concerning the AUV it calculated for imports of South African ferrovanadium, the petitioners noted that a large portion of imports from South Africa are shipments made by Xstrata to its related U.S. importer. Consequently, the petitioners state that the prices serving as the foundation of the AUV do not accurately reflect arm's length prices to unaffiliated purchasers. The petitioners supported this assertion by calculating the AUV of imports into the United States from South Africa and comparing the result to the AUV calculated from South African export data for exports of subject merchandise to the United States. The petitioners found that the AUV calculated from U.S. import data is approximately one-third higher than the AUV calculated from South African export data. According to the petitioners, this large price differential indicates the existence of transfer price manipulation by Xstrata and its related U.S. importer.

Although this price differential could result from several factors, such as differences in the value basis of the data reported by the Census Bureau and the South African government or the time lag between export from South Africa and entry into the United States, we find that the existence of transfer prices accounting for a large portion of the data from which the AUV is calculated is a valid reason to reject the AUV as the basis of EP.

The petitioners also provided four price quotes for sales of South African ferrovanadium from U.S. importers and/or distributors to unaffiliated customers in the United States. We note that one of the price quotes is from within the POI, while the three other price quotes are from after the POI for South Africa. Because it is the Department's preference to use U.S. price data originating during the POI, we did not consider the price quotes from outside the POI. For purposes of initiation, we relied upon the price quote from within the POI. This price quote was for a sale of South African ferrovanadium, from a U.S. distributor to an unaffiliated U.S. customer, on a packed and delivered basis.

The petitioners calculated a net U.S. price by deducting from the starting price foreign inland freight, foreign brokerage and handling, ocean freight, U.S. customs duty and fees, unloading and handling fees, repackaging costs, U.S. inland freight, and a U.S. distributor mark-up. *See Initiation Checklist.*

Normal Value

The petitioners were unable to obtain specific sales or offers for sale of ferrovanadium in South Africa. However, the petitioners provided an affidavit from a source familiar with the ferrovanadium market in South Africa that states that South African producers typically set their home market sales prices no higher than the published London Metal Bulletin (LMB) low price for ferrovanadium. Because the home market price charged by these companies is no higher than this benchmark, the petitioners claim that the LMB low price is a conservative number as a reasonable approximation of home market prices.

Although the petitioners provided information that the LMB prices are a reasonable approximation of home market prices, they also provided information demonstrating reasonable grounds to believe or suspect that sales of ferrovanadium in the home market were made at prices below the fully absorbed cost of production (COP), within the meaning of section 773(b) of the Act, and requested that the Department conduct a country-wide sales-below-cost investigation.

Pursuant to section 773(b)(3) of the Act, COP consists of the cost of manufacture (COM), SG&A expenses, and packing. The petitioners calculated COM based on their own production experience, adjusted for known differences between costs incurred to produce ferrovanadium in the United States and South Africa using publicly available data. To determine depreciation and SG&A expenses, the petitioners used the public unconsolidated fiscal year 2000 financial statements of a South African ferrovanadium producer that the petitioners believe to be representative of ferrovanadium producers in South Africa. To determine interest expenses, the petitioners relied upon amounts reported in the public consolidated fiscal year 2000 financial statements of the same South African ferrovanadium producer. Based upon the comparison of the published LMB low prices to the calculated COP of the product, we find reasonable grounds to believe or suspect that sales of the foreign like product were made at prices below the COP, within the meaning of section 773(b)(2)(A)(i) of the Act. Accordingly, the Department is initiating a country-wide cost investigation. *See Initiation of Cost Investigation* section below. *See Initiation Checklist.*

Based on the cost data discussed above, petitioners found that the published LMB low prices were below

COP. Therefore, pursuant to sections 773(a)(4), 773(b) and 773(e) of the Act, the petitioners based NV for sales in South Africa on constructed value (CV). The petitioners calculated CV using the same COM, SG&A, interest, and packing expenses used to compute South African home market COP. Consistent with section 773(e)(2) of the Act, the petitioners included in CV an amount for profit. The petitioners relied upon amounts reported in the same South African ferrovanadium producer's public unconsolidated fiscal year 2000 financial statements to determine the amount for profit.

Based upon the comparison of EP to CV, the petitioners calculated an estimated dumping margin of 116 percent.

Initiation of Cost Investigation

As noted above, pursuant to section 773(b) of the Act, the petitioners provided information demonstrating reasonable grounds to believe or suspect that sales in the home market of South Africa were made at prices below the fully absorbed COP and, accordingly, requested that the Department conduct a country-wide sales-below-COP investigation in connection with the requested antidumping investigations for this country. The Statement of Administrative Action (SAA), submitted to the U.S. Congress in connection with the interpretation and application of the URAA, states that an allegation of sales below COP need not be specific to individual exporters or producers. SAA, H. Doc. 103–316, Vol. 1, 103d Cong., 2d Session, at 833(1994). The SAA, at 833, states that "Commerce will consider allegations of below-cost sales in the aggregate for a foreign country, just as Commerce currently considers allegations of sales at less than fair value on a country-wide basis for purposes of initiating an antidumping investigation."

Further, the SAA provides that "new section 773(b)(2)(A) retains the current requirement that Commerce have 'reasonable grounds to believe or suspect' that below cost sales have occurred before initiating such an investigation. 'Reasonable grounds' * * * exist when an interested party provides specific factual information on costs and prices, observed or constructed, indicating that sales in the foreign market in question are at below-cost prices." *Id.* Based upon the comparison of the LMB low prices for ferrovanadium to the COP for South African producers, we find the existence of "reasonable grounds to believe or suspect" that sales of foreign like product in South Africa were made at prices below their respective COPs within the meaning of section 773(b)(2)(A)(i) of the Act. Accordingly, the Department is initiating the requested country-wide cost investigation.

Fair Value Comparisons

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

Allegations and Evidence of Material Injury and Causation

The petitioners allege that the U.S. industry producing the domestic like product is being materially injured, or is threatened with material injury, by reason of the individual and cumulated imports of the subject merchandise sold at less than NV. Individually, the volume of imports from the PRC and South Africa, using the latest available data, exceeded the statutory threshold of seven percent for a negligibility exclusion. Therefore, when cumulated, the volumes for these two countries also exceed the threshold. *See* section 771(24)(A)(ii) of the Act. Petitioners contend that the industry's injured condition is evidenced in the declining trends in operating profits, decreased U.S. market share, and price suppression and depression. The allegations of injury and causation are supported by relevant evidence including U.S. Customs import data, domestic consumption, and pricing information. We have assessed the allegations and supporting evidence regarding material injury and causation, and have determined that these allegations are properly supported by accurate and adequate evidence and meet the statutory requirements for initiation. See Initiation Checklist.

Initiation of Antidumping Investigations

Based on our examination of the petition on ferrovanadium, and the petitioners' response to our supplemental questionnaire clarifying the petition, we find that the petition meets the requirements of section 732 of the Act. See Initiation Checklist. Therefore, we are initiating antidumping duty investigations to determine whether imports of ferrovanadium from the PRC and South Africa are being, or are likely to be, sold in the United States at less than fair value. Unless this deadline is extended, we will make our preliminary determinations no later than 140 days after the date of this initiation.

Distribution of Copies of the Petitions

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

International Trade Commission Notification

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

Preliminary Determinations by the ITC

The ITC will determine, no later than January 10, 2002 whether there is a reasonable indication that imports of ferrovanadium from the PRC and South Africa are causing material injury, or threatening to cause material injury, to a U.S. industry. A negative ITC determination for any country will result in the investigation being terminated with respect to that country; otherwise, these investigations will proceed according to statutory and regulatory time limits.

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

Dated: December 17, 2001.

Bernard T. Carreau,

Acting Assistant Secretary for Import Administration.

[FR Doc. 01–31643 Filed 12–21–01; 8:45 am]

BILLING CODE 3510–DS–P

APPENDIX B

CONFERENCE WITNESSES

B-1

CALENDAR OF THE PUBLIC CONFERENCE

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

FERROVANADIUM FROM CHINA AND SOUTH AFRICA

Investigations Nos. 731-TA-986 and 987 (Preliminary)

December 17, 2001 - 9:30 am

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

IN SUPPORT OF THE IMPOSITION OF ANTIDUMPING DUTIES:

Harris, Ellsworth & Levin
Washington, DC
on behalf of

PETITIONERS

Kevin H. Jones, President, Bear Metallurgical Corporation
R. James Carter, Director, Sales & Marketing, Shieldalloy Metallurgical Corporation
Allan R. Orr, Vice President of Sales & Marketing, Gulf Chemical & Metallurgical Corporation
Robert M. Bunting, Vice President, U.S. Vanadium Corporation

Cheryl Ellsworth, Esq.)--OF COUNSEL
Jennifer de Laurentiis, Esq.

B-3

IN OPPOSITION TO THE IMPOSITION OF ANTIDUMPING DUTIES:

Kirkland & Ellis
Washington, DC
on behalf of

Glencore, Ltd.
Greg Young, Manager of Ferro Alloys, Glencore, Ltd.

Brian Becker, Precision Economics

Kenneth Weigel, Esq.)
Laura Fraedrich, Esq.)--OF COUNSEL
Robert Irish, Esq.)

Thompson Coburn
Washington, DC
on behalf of

Highveld Steel and Vanadium Corporation, Ltd.

Marcela B. Stras, Esq.)--OF COUNSEL

B-4

APPENDIX C

SUMMARY DATA

C-1

Table C-1
Ferrovanadium: Summary data concerning the U.S. market, 1998-2000, January-September 2000, and January-September 2001

(Quantity=*1,000 pounds contained vanadium*; value=*1,000 dollars*; unit values, unit labor costs, and unit expenses are *per pound*; and period changes=*percent*, except where noted)

Item	Calendar year			January-September		Period changes			
	1998	1999	2000	2000	2001	1998-2000	1998-99	1999-2000	Jan.-Sept. 2000-Jan.-Sept. 2001
U.S. consumption quantity: Amount	***	***	***	***	***	7.0	3.8	3.1	-13.5
Producers' share[1]	***	***	***	***	***	-17.0	-6.8	-10.2	-1.5
Importers' share:[1]									
China	***	***	***	***	***	9.1	3.4	5.7	-1.0
South Africa	***	***	***	***	***	5.0	8.9	-3.8	9.8
Subtotal	***	***	***	***	***	14.2	12.3	1.9	8.8
Other sources	***	***	***	***	***	2.8	-5.5	8.4	-7.2
Total	***	***	***	***	***	17.0	6.8	10.2	1.5
U.S. consumption value: Amount	***	***	***	***	***	-58.2	-55.8	-5.4	-31.6
Producers' share[1]	***	***	***	***	***	-15.3	-5.9	-9.4	-2.5
Importers' share:[1]									
China	***	***	***	***	***	7.1	2.9	4.2	0.1
South Africa	***	***	***	***	***	5.8	7.6	-1.7	8.5
Subtotal	***	***	***	***	***	12.9	10.5	2.5	8.6
Other sources	***	***	***	***	***	2.3	-4.6	7.0	-6.1
Total	***	***	***	***	***	15.3	5.9	9.4	2.5
U.S. imports from-- China:									
Quantity	581	1,102	1,989	1,497	1,192	242.3	89.7	80.4	-20.3
Value	4,449	3,861	6,270	5,003	3,465	40.9	-13.2	62.4	-30.7
Unit value	$7.66	$3.50	$3.15	$3.34	$2.91	-58.8	-54.3	-10.0	-13.1
Ending inventory	***	***	***	***	***	(2)	(2)	177.9	100.7
South Africa:									
Quantity	512	1,822	1,303	1,171	2,021	154.4	255.7	-28.5	72.6
Value	4,560	6,991	5,536	5,085	6,474	21.4	53.3	-20.8	27.3
Unit value	$8.90	$3.84	$4.25	$4.34	$3.20	-52.3	-56.9	10.7	-26.2
Ending inventory	***	***	***	***	***	252.0	1642.0	-79.8	115.4
Subtotal:									
Quantity	1,093	2,924	3,292	2,667	3,213	201.1	167.5	12.6	20.5
Value	9,008	10,852	11,806	10,088	9,939	31.1	20.5	8.8	-1.5
Unit value	$8.24	$3.71	$3.59	$3.78	$3.09	-56.5	-55.0	-3.4	-18.2
Ending inventory	***	***	***	***	***	2,840.0	2,573.0	10.0	107.1
Other sources:									
Quantity	3,512	2,841	4,180	3,421	2,209	19.0	-19.1	47.1	-35.4
Value	30,952	10,657	14,399	12,212	6,202	-53.5	-65.6	35.1	-49.2
Unit value	$8.81	$3.75	$3.44	$3.57	$2.81	-60.9	-57.4	-8.2	-21.3
Ending inventory	***	***	***	***	***	-91.5	-58.0	-79.7	-41.2

Table continued on next page.

C-3

(Quantity=*1,000 pounds contained vanadium*; value=*1,000 dollars*; unit values, unit labor costs, and unit expenses are *per pound*; and period changes=*percent*, except where noted)

Item	Calendar year			January-September		Period changes			
	1998	1999	2000	2000	2001	1998-2000	1998-99	1999-2000	Jan.-Sept. 2000-Jan.-Sept. 2001
U.S. imports from-- All sources Quantity	4,605	5,766	7,472	6,088	5,422	62.3	25.2	29.6	-10.9
Value	39,960	21,509	26,205	22,300	16,141	-34.4	-46.2	21.8	-27.6
Unit value	$8.68	$3.73	$3.51	$3.66	$2.98	-59.6	-57.0	-6.0	-18.7
Ending inventory	***	***	***	***	***	138.4	148.4	-4.0	93.7
U.S. producers'-- Capacity quantity	***	***	***	***	***	13.0	6.5	6.1	0.0
Production quantity	***	***	***	***	***	-22.9	-17.4	-6.6	-20.2
Capacity utilization[1]	***	***	***	***	***	-21.8	-15.4	-6.4	-10.0
U.S. shipments: Quantity	***	***	***	***	***	-20.2	-6.7	-14.4	-16.2
Value	***	***	***	***	***	-66.9	-59.3	-18.7	-34.6
Unit value	***	***	***	***	***	-58.6	-56.4	-4.9	-21.9
Export shipments: Quantity	***	***	***	***	***	-39.6	-28.8	-15.2	-66.5
Value	***	***	***	***	***	-74.3	-65.0	-26.7	-73.5
Unit value	***	***	***	***	***	-57.5	-50.8	-13.6	-20.8
Ending inventory quantity	***	***	***	***	***	-22.3	-50.6	57.4	77.9
Inventories/total shipments[1]	***	***	***	***	***	0.0	-1.5	1.4	3.9
Production workers	***	***	***	***	***	12.1	-4.2	17.0	-7.0
Hours worked (*1,000 hours*)	***	***	***	***	***	-12.8	-9.1	-4.1	-20.5
Wages paid (*1,000 dollars*)	***	***	***	***	***	-9.7	-5.1	-4.9	-19.9
Hourly wages	***	***	***	***	***	3.6	4.4	-0.7	0.8
Productivity (*lbs. per hour*)	***	***	***	***	***	-11.5	-9.2	-2.6	0.4
Unit labor costs	***	***	***	***	***	17.1	15.0	1.9	0.3
Net sales: Quantity	9,864	9,075	7,784	6,056	4,992	-21.1	-8.0	-14.2	-17.6
Value	114,454	46,367	37,612	30,384	19,581	-67.1	-59.5	-18.9	-35.6
Unit value	$11.60	$5.11	$4.83	$5.02	$3.92	-58.4	-56.0	-5.4	-21.8
COGS	92,936	54,783	39,765	30,052	24,764	-57.2	-41.1	-27.4	-17.6
Gross profit or (loss)	21,518	(8,416)	(2,153)	332	(5,183)	-110.0	-139.1	-74.4	-1,661.7
SG&A expenses	6,600	4,755	4,463	3,567	2,575	-32.4	-28.0	-6.1	-27.8
Operating income	14,918	(13,171)	(6,616)	(3,235)	(7,758)	-144.4	-188.3	-49.8	139.8
Capital expenditures	3,575	10,240	7,972	4,801	5,075	123.0	186.4	-22.1	5.7
Unit COGS	$9.42	$6.04	$5.11	$4.96	$4.96	-45.8	-35.9	-15.4	0.0
Unit SG&A expenses	$0.67	$0.52	$0.57	$0.59	$0.52	-14.3	-21.7	9.4	-12.4
Unit operating income	$1.51	$(1.45)	$(0.85)	$(0.53)	$(1.55)	-156.2	-196.0	-41.4	190.9
COGS/sales[1]	81.2	118.2	105.7	98.9	126.5	24.5	37.0	-12.4	27.6
Operating income or (loss)/sales[1]	13.0	-28.4	(17.6)	(10.6)	(39.6)	-30.6	-41.4	10.8	-29.0

[1] Period changes are in percentage points.
[2] Not applicable.

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

C-4

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

APPENDIX D

INFORMATION ON BEAR'S TOLLING OPERATIONS AND VALUE-ADDED CALCULATIONS

D-1

Table D-1 presents information on Bear's ferrovanadium tolling operations.

Table D-1
Results of Bear's tolling operations on ferrovanadium, fiscal years 1998-2000, December 1999-August 2000, and December 2000-August 2001

* * * * * * *

As stated at the conference, Bear's business model does not envision competing with its suppliers of vanadium pentoxide for sales of ferrovanadium to downstream customers. Its own commercial sales account for a *** of its overall production and tolling of ferrovanadium, and its ***. There are several reasons for this, including the ***.

As noted earlier, Bear receives vanadium pentoxide from its tolling partners and returns a ***. It does not take title to the vanadium contained within the vanadium pentoxide provided to it by its tolling partners. However, if ***, including packing the ferrovanadium in bags marked with the company names of its tolling partners (such bags were shown at the conference). The tolling partners, who actually sell the ferrovanadium in the commercial market, arrange for sales, shipment, and billing of the customers.

Table D-2 presents value-added ratios for each of the four firms separately and for Bear's tolling operations on behalf of Gulf and USV. The Commission has examined value added by firms and the value-added calculation shows two ratios: (1) the sum of direct factory labor and factory overhead costs (conversion costs) to COGS; and (2) conversion costs plus SG&A expenses to the sum of COGS and SG&A expenses. These two ratios are shown separately in the following tabes for each of the four individual firms, and the consolidations of *** (tables D-3 and D-4).

Table D-2
Ferrovanadium: Value-added ratios, by firm, 2000

* * * * * * *

Table D-3
Consolidation of results of operations of Bear and Shieldalloy in the production of ferrovanadium, fiscal years 1998-2000, January-September 2000, and January-September 2001

* * * * * * *

Table D-4
Consolidation of results of operations of Bear, Gulf, and Shieldalloy in the production of ferrovanadium, fiscal years 1998-2000, January-September 2000, and January-September 2001

* * * * * * *

D-3

APPENDIX E

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

E-1

Responses of U.S. producers of ferrovanadium to the following question: Since January 1, 1998, has your firm experienced any actual negative effects on its return on investment or its growth, investment, ability to raise capital, existing development and production efforts (including efforts to develop a derivative or more advanced version of the product), or the scale of capital investments as a result of imports of ferrovanadium from China and South Africa?

Bear, Butler, PA

* * * * * * *

Gulf, Freeport, TX

* * * * * * *

Shieldalloy, Cambridge, OH

* * * * * * *

USV, Danbury, CT

* * * * * * *

Responses of U.S. producers of ferrovanadium to the following question: Does your firm anticipate any negative impact of imports of ferrovanadium from China and South Africa?

Bear, Butler, PA

* * * * * * *

Gulf, Freeport, TX

* * * * * * *

Shieldalloy, Cambridge, OH

* * * * * * *

USV, Danbury, CT

* * * * * * *

E-3