Ferrovanadium from China and South Africa
Investigation Nos. 731-TA-986 and 987 (Review)
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Note.—Information that would reveal confidential operations of individual concerns may not be published and has been replaced with asterisks in this report.
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 five-year reviews, we determine under section 751(c) of the Tariff Act of 1930, as amended (“the Tariff Act”), that revocation of the antidumping duty orders on ferrovanadium from the People’s Republic of China (“China”) and South Africa would be likely to lead to continuation or recurrence of material injury to an industry in the United States within a reasonably foreseeable time.

I. BACKGROUND

Original Determinations. In January 2003, the Commission determined that a domestic industry was materially injured by reason of less-than-fair-value imports of ferrovanadium from China and South Africa.¹ The U.S. Department of Commerce (“Commerce”) published an amended final determination regarding subject merchandise from China and antidumping duty orders on imports of ferrovanadium from both China and South Africa on January 28, 2003.²

Current Reviews. The Commission instituted these five-year reviews on December 3, 2007.³ On behalf of its members,⁴ the Vanadium Producers and Reclaimers Association (“VPR Association”) filed the only response to the notice instituting these reviews. The VPR Association is a trade association whose members produce and/or wholesale domestically produced ferrovanadium. Bear and Metvan are U.S. producers of ferrovanadium, and Bear, Metvan, Gulf, and Stratcor are wholesalers of domestically produced ferrovanadium.⁵ On March 7, 2008, the Commission determined that the domestic interested party group response to the notice of institution was adequate and that the respondent interested party group response was inadequate for both the review of the order on China and the review of the order on South Africa. Notwithstanding the Commission’s determination that the respondent interested party group response was inadequate with respect to each of the reviews, in light of information regarding possible changes in the conditions of competition related to developments in the subject countries, the Commission unanimously determined to conduct full reviews of the orders on ferrovanadium from China and South Africa.⁶

In these reviews, the VPR Association and its members filed pre-hearing and post-hearing briefs, and their representatives participated in the Commission’s hearing. No respondent interested parties participated in the Commission’s hearing or submitted briefs.

⁴ These members are: Gulf Chemical & Metallurgical Corp. (“Gulf”); Gulf’s wholly owned subsidiary Bear Metallurgical Company (“Bear”); Metallurg Vanadium Corp. (“Metvan”); and Strategic Minerals Corp. (on behalf of its wholly owned subsidiary, Stratcor, Inc. (“Stratcor”)).
⁵ See, e.g., Domestic Interested Parties’ Response to Notice of Institution at 3.
Data Coverage. In these reviews, the Commission received domestic producer questionnaire responses from two firms believed to have accounted for all U.S. production of ferrovanadium in 2007 (Bear and Metvan).\(^7\) Bear toll produces ferrovanadium from vanadium pentoxide provided by tollees Gulf, ***.\(^7\) Tollees Gulf and ***.\(^9\) Bear’s production of ferrovanadium that was shipped by *** represented *** percent of Bear’s total ferrovanadium production in 2007.\(^10\)

The Commission also received foreign producers’ questionnaire responses from two of the three producers of subject merchandise in South Africa (Xstrata South Africa Pty Ltd. (“Xstrata”) and Highveld Steel & Vanadium Corp. Ltd. (“Highveld” or “Highveld/Vanchem”)); these two producers estimated that they accounted for *** percent of total ferrovanadium production in South Africa.\(^11\) The third producer in South Africa (South Africa Japan Vanadium Products) submitted some information on its ferrovanadium operations, and the producers of subject merchandise in China did not submit foreign producer questionnaire responses.\(^12\) Official import statistics for ferrovanadium as revised by the Bureau of the Census were used to measure U.S. imports; after factoring in these revisions, responses to importers’ questionnaires accounted for 100 percent of subject imports in 2007 whereas responses to importers’ questionnaires accounted for 56 percent of non-subject imports in 2007.\(^13\)

Other Investigations and Reviews. An antidumping duty order has been in effect on ferrovanadium and nitrided vanadium from Russia since July 10, 1995.\(^14\) In May 2001 and September 2006, the Commission completed a full five-year review and then an expedited second five-year review regarding imports from Russia, respectively, and determined that revocation of that order would be likely to lead to continuation or recurrence of material injury to a domestic industry within the reasonably foreseeable future.\(^15\)

II. DOMESTIC LIKE PRODUCT

In making its determination under section 751(c) of the Tariff Act, the Commission defines “the domestic like product” and the “industry.”\(^16\) The Tariff Act defines “domestic like product” as “a product which is like, or in the absence of like, most similar in characteristics and uses with, the article subject to an investigation under this subtitle.”\(^17\) The Commission’s practice in five-year reviews is to

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\(^7\) See, e.g., CR at I-3, I-16 to I-17; PR at I-13; CR/PR at Table I-4.
\(^8\) See, e.g., CR at I-17; PR at I-14.
\(^9\) See, e.g., CR at III-4 n.6; PR at III-2 n.6; CR/PR at Table III-11.
\(^10\) See, e.g., CR at I-17 n.27; PR at I-13 n.27; CR/PR at Table III-2.
\(^11\) See, e.g., CR at IV-11; PR at IV-7.
\(^12\) See, e.g., CR at IV-6, IV-11; PR at IV-4, IV-7; CR/PR at Table IV-7.
\(^13\) See, e.g., CR at I-4; PR at I-3; importer questionnaire responses.
\(^14\) See, e.g., Ferrovanadium and Nitrided Vanadium from Russia, Inv. No. 731-TA-702 (Final), USITC Pub. 2904 (Jun. 1995).
\(^15\) See, e.g., Ferrovanadium and Nitrided Vanadium from Russia, Inv. No. 731-TA-702 (Review), USITC Pub. 3420 (May 2001); Ferrovanadium and Nitrided Vanadium from Russia, Inv. No. 731-TA-702 (Second Review), USITC Pub. 3887 (Sept. 2006).
look to the like product definition from the original determination and any previous reviews and consider whether the record indicates any reason to revisit that definition.\(^\text{18}\)

### A. Scope of These Reviews

Commerce has defined the scope of the orders under review as follows:

all ferrovanadium 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 vanadium. The scope 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.\(^\text{19}\)

Ferrovanadium is used in high-strength low-alloy steels (also known as micro-alloy steels) that are used for high-performance long-distance oil and gas pipelines, concrete reinforcing bars, structural building construction, and automobile components.\(^\text{20}\) Ferrovanadium is usually packed in containers of a specified vanadium content, typically 25 pounds.\(^\text{21}\) Most ferrovanadium is sold in lumps with an upper size range of approximately 2 inches.\(^\text{22}\) These lumps are commonly added to molten steel after it has been poured from a steelmaking furnace into a ladle.\(^\text{23}\) When vanadium combines with carbon and nitrogen in steel, it creates stable carbides and nitrides that improve the finished product’s wear resistance, strength, and hardness; the addition of ferrovanadium promotes fine grain size, increases ductility, and improves the weldability and heat-resistance of steel.\(^\text{24}\) The vanadium content of steel by weight is extremely small, and ferrovanadium accounts for a small share of the total steel cost.\(^\text{25}\)

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17 \(...\text{continued}\)


19 73 Fed. Reg. 19192 (Apr. 9, 2008). Merchandise imported under Harmonized Tariff Schedule of the United States (“HTSUS”) subheadings 2850.00.20, 8112.92.06, 8112.92.70, and 8112.99.20 is specifically excluded. Ferrovanadium is classified under HTSUS subheading 7202.92.00, with a normal trade relations import duty (applicable to both China and South Africa) of 4.2 percent ad valorem. See, e.g., CR at I-12; PR at I-10. The scope of these reviews is narrower than the scope of the review on the order on imports from Russia that included ferrovanadium as well as nitrided vanadium.

20 See, e.g., CR at I-12; PR at I-10.

21 See, e.g., CR at I-13; PR at I-10.

22 USITC Pub. 3570 at 7.

23 USITC Pub. 3570 at 7.

24 USITC Pub. 3570 at 7; Hearing Tr. at 14-15 (Pakozdi-Luffy) (Bear).

25 USITC Pub. 3570 at 7; Hearing Tr. at 15 (Pakozdi-Luffy) (Bear).
Two methods are currently used to produce ferrovanadium in the United States. Bear toll converts vanadium pentoxide supplied by Gulf, *** into ferrovanadium. Bear uses an aluminothermic process whereby a mixture of vanadium pentoxide, aluminum, steel scrap, and flux is charged into a conversion vessel, the reactants are ignited, and molten ferrovanadium and an aluminum oxide-rich slag are produced.26 In contrast, Metvan produces ferrovanadium from *** that it ***.27 Whereas Bear primarily produces ferrovanadium containing 80 percent vanadium, Metvan produces ferrovanadium containing roughly *** percent vanadium.28

B. Original Determinations

In the original investigations, respondents asked the Commission to define two domestic like products consisting of 45-percent and 80-percent grade ferrovanadium, respectively, although the scope included products with a vanadium content ranging from about 40 percent to about 80 percent by weight.29 The record in the original investigations indicated that in practice ferrovanadium was sold in two grades, one containing approximately 45 to 55 percent vanadium and the other containing 78 to 82 percent vanadium.30 The Commission found that all grades of ferrovanadium shared similar physical characteristics and were used principally as an alloying agent in the production of steel and iron castings.31 To obtain the same vanadium content, some purchasers preferred 80-percent grade ferrovanadium because it was easier to handle and cheaper to transport and store 31-pound bags of this product than 55.5-pound bags of 45-percent grade ferrovanadium.32 Tool steel producers preferred 80-percent grade ferrovanadium whereas some mini-mills that continuously cast their products through small nozzles preferred 45-percent grade ferrovanadium.33 Nevertheless, the Commission found that many steel producers had the technical capability to use different grades of ferrovanadium and simply adjusted their steelmaking process based on the grade of the ferrovanadium.34

At the time of the original investigations, the two major domestic producers used different production processes, with one manufacturing primarily 45-percent and the other manufacturing primarily 80-percent grade ferrovanadium, but they did have some ability to vary the vanadium content.35 Regardless of grade, the Commission found that the majority of ferrovanadium was sold through the same channels of distribution – directly to steel mills and iron foundries in the United States and to a

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26 See, e.g., CR at I-14; PR at I-11.
27 See, e.g., CR at I-15; PR at I-11.
28 See, e.g., Domestic Interested Parties’ Prehearing Br. at 2.
29 Rather than include this request in comments on the draft questionnaires, they raised this issue for the first time in their prehearing briefs, as the Commission noted in its original determinations. USITC Pub. 3570 at 5 & nn.17, 45.
30 USITC Pub. 3570 at 5-6.
31 USITC Pub. 3570 at 5.
32 USITC Pub. 3570 at 7.
33 USITC Pub. 3570 at 6.
34 USITC Pub. 3570 at 6-7. Six purchasers reported purchasing both 45-percent and 80-percent grade ferrovanadium. *** purchasers reported being able to switch between the two grades with no adjustments to their melting processes, and one purchaser reported that it could use either grade if it made appropriate adjustments for ***. USITC Pub. 3570 at 7.
35 USITC Pub. 3570 at 8.
C. Analysis and Conclusion

No party argued that the Commission should depart from the domestic like product definition—
all grades of ferrovanadium—it adopted in the original investigations. Additionally, the record in these
reviews indicates no material changes in pertinent facts from the original investigations. Consequently,
we define the domestic like product to encompass all ferrovanadium regardless of grade and coextensive
with the scope of these reviews.

III. DOMESTIC INDUSTRY

Section 771(4)(A) of the Act defines the relevant industry as the domestic “producers as a
whole of a domestic like product, or those producers whose collective output of a domestic like
product constitutes a major proportion of the total domestic production of the product.”

A. Whether to Include Tollees in the Domestic Industry

1. Analysis in the Original Determinations

In the original determinations, the Commission defined the domestic industry to encompass Bear,
Shieldalloy Metallurgical Corp. (“Shieldalloy”) (now known as Metvan), and International Specialty
Alloys (“ISA”). Bear and International Specialty Alloys toll-produced ferrovanadium for other firms,
and Shieldalloy produced ferrovanadium for sale to its unrelated third-party customers.

36 USITC Pub. 3570 at 7.
37 USITC Pub. 3570 at 8, 9.
38 USITC Pub. 3570 at 8-9.
39 See, e.g., Domestic Interested Parties’ Prehearing Br. at 2-3; Domestic Interested Parties’ Posthearing Br. at 2-3.
40 See, e.g., Domestic Interested Parties’ Prehearing Br. at 2-3; CR at I-12 to I-15; PR at I-10 to I-12; Hearing Tr. at 15-16 (Pakozdi-Luffy) (Bear), 20 (Carter) (Metvan).
41 19 U.S.C. § 1677(4)(A). The definitions in 19 U.S.C. § 1677 are applicable to the entire subtitle containing the
42 USITC Pub. 3570 at 9. ISA had *** toll production of ferrovanadium for Glencore in the original
investigations, namely *** pounds of ferrovanadium in ***. See, e.g., CR at I-16 n.24; PR at I-13 n.24; USITC Pub.
3570 at n.50. The Commission did not include ISA’s data in the aggregate domestic industry data in the original
investigations because its data were limited. See, e.g., USITC Pub. 3570 at VI-I at n.2. ISA no longer produces any
ferrovanadium. See, e.g., CR at I-16 n.24; PR at I-13 n.24.
43 USITC Pub. 3570 at 9.
In its original determinations, the Commission rejected petitioners’ request to include tollees Gulf and U.S. Vanadium Corp. (now known as Stratcor) in the domestic industry.\textsuperscript{44} Gulf and U.S. Vanadium Corp. produced vanadium pentoxide, a key intermediate product for producing ferrovanadium.\textsuperscript{45} Bear converted this vanadium pentoxide into ferrovanadium pursuant to tolling arrangements under which Gulf and U.S. Vanadium Corp. retained title to the finished product throughout the conversion process, bore all related risks, and sold the finished product to their customers.\textsuperscript{46} At the time, Gulf had a 49.5-percent ownership interest in Bear.\textsuperscript{47} Because Gulf and U.S. Vanadium Corp. did not produce the domestic like product, the Commission did not include them in the domestic industry.\textsuperscript{48} The Commission, however, also found it appropriate to consider the condition of U.S. Vanadium Corp. and Gulf in its assessment of the impact of subject imports on the domestic industry.\textsuperscript{49}

2. Arguments of the Domestic Interested Parties

In these reviews, domestic interested parties ask the Commission to define the domestic industry as Bear and Metvan.\textsuperscript{50} In addition, they ask the Commission to take into consideration the likely effect on the condition of tollees Gulf and Stratcor of any revocation of the antidumping duty orders as part of the Commission’s evaluation of “all relevant economic factors ... within the context of the business cycle

\textsuperscript{44} USITC Pub. 3570 at 10. At the time of the original investigations, U.S. Vanadium Corp. was a wholly owned subsidiary of Strategic Minerals Corp., but in 2004, Strategic Minerals Corp. consolidated U.S. Vanadium Corp. with another wholly owned subsidiary (Stratcor Performance Materials) into a single wholly owned subsidiary named Stratcor, Inc. See, e.g., CR at I-17 at n.26; PR at I-13 at n.26.

\textsuperscript{45} USITC Pub. 3570 at 10. Vanadium pentoxide has uses other than ferrovanadium such as for chemical applications, and higher grades of vanadium pentoxide are used to manufacture vanadium-aluminum alloys for the titanium industry. See, e.g., Domestic Interested Parties’ Posthearing Br. at 6; Hearing Tr. at 54-56. On a worldwide basis, however, domestic interested parties contend that these other applications for vanadium pentoxide are relatively small compared with ferrovanadium for steel-making, although they admit that most of the specialized uses of vanadium pentoxide are centered in the United States. See, e.g., Domestic Interested Parties’ Posthearing Br. at 6.

\textsuperscript{46} USITC Pub. 3570 at 10.

\textsuperscript{47} USITC Pub. 3570 at 10.

\textsuperscript{48} USITC Pub. 3570 at 10. This conclusion was consistent with the Commission majority’s definition of the domestic industry as Bear and Shieldalloy but not tollees U.S. Vanadium and Gulf in the full first five-year review of the order on imports from Russia. Ferrovanadium and Nitrided Vanadium from Russia, Inv. 731-TA-702 (Review), USITC Pub. 3420 at 6-7 (May 2001). By the time of the subsequent expedited second five-year reviews of the order on imports from Russia, Gulf had increased its ownership interest in Bear to 100 percent. Gulf continued to provide vanadium pentoxide to its now wholly owned subsidiary, Bear, under a tolling arrangement, and Gulf wholesaled the resulting ferrovanadium. See, e.g., USITC Pub. 3887 at 6. Tollees Stratcor did not participate in the Commission’s expedited second five-year review of the antidumping duty order on imports of ferrovanadium and nitrided vanadium from Russia. See, e.g., id. at nn.10, 68. The Commission rejected Gulf’s request to define the domestic industry as Gulf and Metvan and explained that, pursuant to the statute, the Commission does not examine the effects of subject imports on overall corporate operations but only on the operations producing the domestic like product. It also noted that Bear remained a separate corporate entity with its own legal identity, regardless of whether it had a parent company. The Commission thus defined the domestic industry as domestic ferrovanadium producers Bear and Metvan. See, e.g., USITC Pub. 3887 at 6.

\textsuperscript{49} USITC Pub. 3570 at 10.

\textsuperscript{50} See, e.g., Domestic Interested Parties’ Prehearing Br. at 3-4; Domestic Interested Parties’ Posthearing Br. at 3.
and conditions of competition that are distinctive to the affected industry.” They argue that such an approach would be consistent with the Commission’s determination in the original investigations. Domestic interested parties explain that Bear’s condition and performance is intimately linked to tollees Gulf and Stratcor.  

3. Analysis and Conclusion

International Specialty Alloys produced ***, and did not produce ferrovanadium during the period of review. Since International Specialty Alloys no longer produces ferrovanadium, it does not qualify as a domestic producer. Shieldalloy is now known as Metvan. Both Metvan and Bear produce ferrovanadium, and are therefore producers of the domestic like product.

Tollee U.S. Vanadium is now known as Stratcor, and since the original investigations Gulf has increased its ownership in Bear from 49.5 to 100 percent, but neither Stratcor nor Gulf produces the domestic like product. In addition to Gulf, Bear toll-produces ferrovanadium for ***. Gulf and *** supply the vanadium pentoxide intermediate material to Bear, retain title to the product during Bear’s conversion operations, and negotiate the sale of the resulting ferrovanadium. Because the tollees do not produce the domestic like product, under the statute, these firms do not qualify to be included in the domestic industry.

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51 See, e.g., Domestic Interested Parties’ Prehearing Br. at 3-4; Domestic Interested Parties’ Posthearing Br. at 3.
52 Specifically, they contend that Gulf and Stratcor recycle vanadium-bearing raw materials using processes similar to producer Metvan. Gulf and Stratcor are established U.S. producers of vanadium pentoxide, the intermediate material that Bear uses to produce ferrovanadium. They further explain that Bear needs vanadium pentoxide if it is to continue toll-producing ferrovanadium. Gulf and Stratcor retain title to the product during Bear’s conversion operations and sell the resulting ferrovanadium. Bear inventories the ferrovanadium on-site and delivers it directly to the purchasers but never has title to the ferrovanadium. Gulf’s and Stratcor’s sales of ferrovanadium that were toll-produced by Bear account collectively for approximately *** percent by weight of the total sales of U.S.-produced ferrovanadium in these reviews. Moreover, they note that Bear is a 100-percent wholly owned subsidiary of Gulf. See, e.g., Domestic Interested Parties’ Prehearing Br. at 3-4; Domestic Interested Parties’ Posthearing Br. at 2-3.
53 See, e.g., CR at I-16 n.24; PR at I-13 n.24.
54 See, e.g., CR at I-17 n.25; PR at I-13 n.25.
55 See, e.g., CR at I-16 to I-17; PR at I-13.
56 See, e.g., CR at I-17, n.26; PR at I-13 n.26.
57 See, e.g., CR at I-17 n.28; PR I-14 n.28.
58 See, e.g., CR at I-17; PR at I-13; CR/PR at Table I-4.
59 See, e.g., CR at I-17; PR at I-14.
60 See, e.g., Hearing Tr. at 14 (Pakozdi-Luff) (Bear).
61 Gulf and Stratcor convert spent catalysts and other vanadium-bearing materials into vanadium pentoxide, and they have made large capital investments, possess technical expertise, contribute some value added, and employ U.S. workers. See, e.g., Domestic Interested Parties’ Prehearing Br. at 4-6; Domestic Interested Parties’ Posthearing Br. at Exh. Q at 1-8.
62 See, e.g., CR at I-18 to I-19, III-25; PR at I-14, III-6.
63 See, e.g., Certain Welded Large Diameter Line Pipe from Japan, Inv. No. 731-TA-919 (Final), USITC Pub. (continued...)
Likewise, Gulf’s acquisition of 100-percent ownership of Bear as of December 2005 does not change the outcome. Under 19 U.S.C. § 1677(4)(D), the Commission does not examine the effects of subject imports on overall corporate operations, but only on the U.S. operations producing the domestic like product. Bear is a separate legal entity from Gulf, and only Bear produces the domestic like product. As a result, we find that Bear and Metvan are producers of the domestic like product but that Gulf, *** are not members of the domestic industry producing ferrovanadium. Accordingly, we define the domestic industry as all U.S. producers of the domestic like product, namely Bear and Metvan. As discussed below, however, we find it appropriate to consider the condition of tollees Gulf and Stratcor in our assessment of the impact of subject imports on the domestic industry.

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63 (...continued)
3464 at 10 n.53 (Nov. 2001) (“The Commission generally does not include tollers (such as U.S. Steel in this case) that merely supply raw materials and pay a fabrication fee in the domestic industry. It does include tollers (such as Camp Hill Corp. in this case) that engage in sufficient production activity’’); cf. Artists’ Canvas from China, Inv. No. 731-TA-1091 (Final), USITC Pub. 3853 at 12-13 (majority), 31 (concurring views of then-Chairman Koplan and Commissioner Aranoff) (the statute does not permit mere sellers or distributors of a domestic like product to be included in the domestic industry “simply because those sellers handle the goods.” Instead, “the activities of a given firm {are} analyzed to determine whether its activities should be deemed ‘production.’ ... For a firm to qualify as a producer without sufficient production-related activity would expand the definition of domestic industry beyond the Commission’s consistent application of the statutory definition ... and render the domestic industry requirement of ‘production’ devoid of content.’”).

64 See, e.g., Outboard Engines from Japan, Inv. No. 731-TA-1069 (Prelim.), USITC Pub. 3673 at 24, n.165 (Mar. 2004) (noting that consistent with the statute, the Commission was only examining financial data pertaining to operations producing the like product “not the overall operations of its parent company’’); General Motors Corp. v. United States, 827 F. Supp. 774, 780 (Ct. Int’l Trade 1993) (the statute “clearly provides” that effects of dumped imports are to be assessed with respect to production of the like product, in that case minivans, not other types of vehicles also produced by these corporations); cf., e.g., Color Television Receivers from China, Inv. No. 731-TA-1034 (Final), USITC Pub. 3695 at 18, n.105 (May 2004) (noting the focus is on U.S. production operations, even if the firm is a multinational corporation).

65 In these reviews, we have also considered whether any producers should be excluded from the domestic industry under the related parties provision. 19 U.S.C. § 1677(4)(B). In its original determinations, the Commission majority did not find any domestic producer to be a related party. See, e.g., USITC Pub. 3570 at 9-11. Domestic interested parties argue that neither Bear nor Metvan is a related party under the statute and contend that neither Stratcor’s indirect relationship with former South African ferrovanadium producer Vametco nor its former indirect relationship with South African ferrovanadium producer Highveld forms an appropriate basis to exclude toller Stratcor from the Commission’s analysis. See, e.g., Domestic Interested Parties’ Prehearing Br. at 4-6. *** of the domestic producers reported importing subject merchandise from China or South Africa, and *** of the domestic producers reported being related to an exporter or importer of the subject merchandise. See, e.g., CR at I-19; PR at I-15. Bear toll-produces ferrovanadium for ***. See, e.g., CR at I-17, I-19 & n.32; IV-11; PR at I-14-15 & n.32; Domestic Interested Parties’ Prehearing Br. at 4-6; Domestic Interested Parties’ Posthearing Br. at Exh. Q at 44. We find that these relationships between a toller and foreign producers, exporters, or importers of subject merchandise are too attenuated to consider the corresponding toll producer Bear to be a related party.
IV. **CUMULATION**

A. **Overview**

Section 752(a) of the Act provides as follows:

> the Commission may cumulatively assess the volume and effect of imports of the subject merchandise from all countries with respect to which reviews under section 1675(b) or (c) of this title were initiated on the same day, if such imports would be likely to compete with each other and with domestic like products in the United States market. The Commission shall not cumulatively assess the volume and effects of imports of the subject merchandise in a case in which it determines that such imports are likely to have no discernible adverse impact on the domestic industry.

Cumulation therefore is discretionary in five-year reviews, unlike original investigations which are governed by section 771(7)(G)(i) of the Act. The Commission may exercise its discretion to cumulate, however, only if the reviews are initiated on the same day, the Commission determines that the subject imports are likely to compete with each other and the domestic like product in the U.S. market, and imports from each such subject country are not likely to have no discernible adverse impact on the domestic industry in the event of revocation. The statutory threshold for cumulation is satisfied in these reviews because both reviews were initiated on the same day: December 3, 2007.

B. **Likelihood of No Discernible Adverse Impact**

The statute precludes cumulation if the Commission finds that subject imports from a country are likely to have no discernible adverse impact on the domestic industry. Neither the statute nor the Uruguay Round Agreements Act (“URAA”) Statement of Administrative Action (“SAA”) provides

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66 Vice Chairman Pearson and Commissioner Okun note that while they consider the same issues discussed in this section in determining whether to exercise their discretion to cumulate the subject imports, their analytical framework begins with whether imports from the subject countries are likely to face similar conditions of competition. For those subject imports which are likely to compete under similar conditions of competition, they next proceed to consider whether those imports are likely to compete with each other and with the domestic like product. Finally, if based on that analysis they intend to exercise their discretion to cumulate one or more subject countries, they analyze whether they are precluded from cumulating such imports because the imports from one or more subject countries, assessed individually, are likely to have no discernible adverse impact on the domestic industry. See Steel Concrete Reinforcing Bar From Belarus, China, Indonesia, Korea, Latvia, Moldova, Poland, and Ukraine, Invs. Nos. 731-TA-873 to 875, 877 to 880, and 882 (Review), USITC Pub. 3933 (Jul. 2007) (Separate and Dissenting Views of Chairman Daniel R. Pearson and Commissioner Deanna Tanner Okun Regarding Cumulation).


specific guidance on what factors the Commission is to consider in determining that imports “are likely to have no discernible adverse impact” on the domestic industry.\textsuperscript{71} With respect to this provision, the Commission generally considers the likely volume of the subject imports and the likely impact of those imports on the domestic industry within a reasonably foreseeable time if the orders are revoked.

No party argued that imports from either subject country are likely to have no discernible adverse impact if the antidumping duty orders are revoked. Based on the record, we do not find that subject imports from either of the subject countries are likely to have no discernible adverse impact on the domestic industry in the event of revocation. Examined individually, the subject industries in China and in South Africa exported large quantities of ferrovanadium to the United States during the original investigations, and their exports to the United States largely disappeared after imposition of the antidumping duty orders.\textsuperscript{72} The ferrovanadium industries in these subject countries are each large and have grown since the original investigations.\textsuperscript{73} Both subject industries export substantial quantities of ferrovanadium,\textsuperscript{74} and the two responding foreign producers in South Africa collectively report ***.\textsuperscript{75}

In the original investigations, there was some underselling of the domestic like product by subject imports from China, and only overselling by subject imports from South Africa, but the Commission found significant price depression by these imports.\textsuperscript{76} Since the imposition of the antidumping duty order, there have been only limited subject imports from China, but in the four quarters


\textsuperscript{72} In the original investigations, the quantity of contained vanadium in subject ferrovanadium imported from China increased from 826,000 pounds in 1999 to 1.5 million pounds in 2000 before declining somewhat to 992,000 pounds in 2001. Only limited quantities were imported from China thereafter. The quantity of contained vanadium in ferrovanadium imported into the United States from China was 109,000 pounds in 2002, 1,000 pounds in 2005, and 1,000 pounds in 2006. See, e.g., CR/PR at Table I-1. In terms of their share of apparent U.S. consumption by quantity, subject imports from China increased from 6.4 percent in 1999 to 11.3 percent in 2000 before declining to 8.3 percent in 2001. See, e.g., CR/PR at Table I-1. Subject imports from China accounted for 0.9 percent of apparent U.S. consumption in 2002 and less than 0.1 percent thereafter. See, e.g., CR/PR at Table I-1.

In the original investigations, the quantity of contained ferrovanadium in subject ferrovanadium imports from South Africa was 1.5 million pounds in 1999, 1.1 million pounds in 2000, and 2.5 million pounds in 2001. See, e.g., CR/PR at Table I-1. Subject ferrovanadium imports from South Africa in terms of contained vanadium were 441,000 pounds in 2002, 17,000 pounds in 2007, and zero in the intervening years. See, e.g., CR/PR at Table I-1. In terms of their share of apparent U.S. consumption by quantity, subject imports from South Africa declined from 11.4 percent in 1999 to 8.1 percent in 2000 before increasing to 20.8 percent in 2001. See, e.g., CR/PR at Table I-1. Subject imports from South Africa accounted for 3.5 percent of apparent U.S. consumption in 2002 and 0.1 percent or less thereafter. See, e.g., CR/PR at Table I-1.

\textsuperscript{73} See, e.g., Domestic Interested Parties’ Prehearing Br. at 27-28. CR at IV-6 to IV-7; PR at IV-4 to IV-7; CR/PR at Tables IV-5 (China). The two responding producers of subject merchandise in South Africa, Xstrata and Highveld/Vanchem, reported *** production capacity and a third producer, South Africa Japan Vanadium, commissioned a 7.7 million pounds-per-year ferrovanadium plant in July 2003. See, e.g., CR/PR at Table IV-7 (production capacity in South Africa and exports of ferrovanadium from South Africa); CR at IV-11; PR at IV-7.

\textsuperscript{74} See, e.g., CR/PR at Tables IV-5 (exports of ferrovanadium from China), IV-7 (exports of ferrovanadium from South Africa).

\textsuperscript{75} See, e.g., CR/PR at Table IV-7.

\textsuperscript{76} USITC Pub. 3570 at 19. In the original investigations, subject imports from China undersold the domestic like product in 15 of 45 possible comparisons. See, e.g., CR/PR at Table V-7. In the original investigations, subject imports from South Africa oversold the domestic like product in each of the 29 quarters for which there were data at average overselling margins of 11.1 percent based on selling price and 13.3 percent based on purchase price. See, e.g., CR/PR at Table V-7.
where there were pricing data for subject imports from China, these imports undersold the domestic like product at an average underselling margin of 46.0 percent for two quarters in 2005 and 37.2 percent for two quarters in 2006. Likewise, since the imposition of the antidumping duty order, there have been only limited subject imports from South Africa, but in the five quarters where there were pricing data for subject imports from South Africa, these imports undersold the domestic like product at an average underselling margin of 8.5 percent for three of the four quarters in 2002 for which there were comparisons and oversold the domestic like product at a 15.5-percent margin of overselling for one quarter in 2003.

In light of the large and growing capacity, production, and exports of ferrovanadium by producers in China, we find that some increase in subject imports from China into the United States is likely upon revocation. Because of these considerations as well as evidence of underselling even after issuance of the antidumping duty order, we do not find that subject imports from China would have no discernible adverse impact on the domestic industry if the antidumping duty order were revoked. In light of the large capacity and excess capacity for ferrovanadium producers in South Africa as well as the portion of ferrovanadium production in South Africa that is exported, we find that some increase in subject imports from South Africa is likely upon revocation. Based on these considerations as well as evidence that subject imports from South Africa undersold the domestic like product even after imposition of the antidumping duty order, we do not find that subject imports from South Africa would have no discernible adverse impact on the domestic industry if the antidumping duty order were revoked.

C. Likelihood of a Reasonable Overlap of Competition

The Commission generally has considered four factors intended to provide a framework for determining whether the imports compete with each other and with the domestic like product. Only a "reasonable overlap" of competition is required. In five-year reviews, the relevant inquiry is whether there likely would be competition even if none currently exists because the subject imports are absent

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77 See, e.g., CR/PR at Table V-6.
78 See, e.g., CR/PR at Table V-6.
79 The four factors generally considered by the Commission in assessing whether imports compete with each other and with the domestic like product are as follows: (1) the degree of fungibility between the 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 geographical markets of imports from different countries and the domestic like product; (3) the existence of common or similar channels of distribution for imports from different countries and the domestic like product; and (4) whether the imports are simultaneously present in the market. See, e.g., Wieland Werke, AG v. United States, 718 F. Supp. 50 (Ct. Int'l Trade 1989).
from the U.S. market.\textsuperscript{81}  

\textit{Fungibility.} \textsuperscript{82} *** domestic producers and tollees *** reported that subject imports are always interchangeable with one another and are always interchangeable with the domestic like product.\textsuperscript{83} A majority of purchasers said that ferrovanadium was at least frequently interchangeable in all comparisons between the domestic like product and the subject imports and in comparisons between subject imports from China and South Africa.\textsuperscript{84} A majority of importers said that ferrovanadium was at least frequently interchangeable in all comparisons between the domestic like product and the subject imports and in comparisons between subject imports from China and South Africa.\textsuperscript{85}  

In comparing products from different sources with respect to a number of factors, *** responding U.S. producers and tollees *** reported that there were never differences other than price for all country pairs.\textsuperscript{86} The majority of importers in each case reported that there were sometimes differences other than price for each pair.\textsuperscript{87} Differences included grades of ferrovanadium (i.e., percent of contained vanadium), length of relationship, viability of supplier, service, reliability of supplier, and one firm reported difficulties obtaining material because of changing governmental regulations and the lack of formal controls.\textsuperscript{88} At the hearing in the original investigations, the respondents raised for the first time the argument that subject imports from China and South Africa should not be cumulated because producers in South Africa only produced 80-percent grade ferrovanadium.\textsuperscript{89} Both at the time and currently, producers in the United States and China produce 80-percent grade ferrovanadium and a grade with a lower vanadium content.\textsuperscript{90} As was also the case in the original investigations,\textsuperscript{91} the record indicates that many steel producers, which are the main consumers of ferrovanadium, have the technical capability to use different grades of ferrovanadium and simply adjust their steelmaking process and other

\begin{itemize}
\item \textsuperscript{81} See generally Chefline Corp. v. United States, 219 F. Supp. 2d 1313, 1314 (Ct. Int’l Trade 2002).
\item \textsuperscript{82} Commissioner Lane notes that, with respect to fungibility, her analysis does not require such similarity of products that a perfectly symmetrical fungibility is required and that this factor would be better described as an analysis of whether subject imports from each country and the domestic like product could be substituted for each other. See Separate Views of Commissioner Charlotte R. Lane, Certain Lightweight Thermal Paper from China, Germany, and Korea, Invs. Nos. 701-TA-451 and 731-TA-1126-1128 (Prelim.), USITC Pub. 3964 at 32-33 (Nov. 2007).
\item \textsuperscript{83} See, e.g., CR/PR at Table II-5.
\item \textsuperscript{84} See, e.g., CR/PR at Table II-5.
\item \textsuperscript{85} See, e.g., CR/PR at Table II-5. Reasons reported for why product was not always interchangeable included purity, other elements, aluminum levels, and differences in ore. See, e.g., CR at II-14; PR at II-10.
\item \textsuperscript{86} See, e.g., CR at II-15; PR at II-10; CR/PR at Table II-6.
\item \textsuperscript{87} See, e.g., CR at II-15; PR at II-10; CR/PR at Table II-6.
\item \textsuperscript{88} See, e.g., CR at II-15; PR at II-10.
\item \textsuperscript{89} See, e.g., USITC Pub. 3570 at 12.
\item \textsuperscript{90} See, e.g., CR at I-15, II-4; PR at I-11, II-3(noting that China produces a 50-percent grade for internal consumption and an 80-percent grade mainly for exporting); Hearing Tr. at 15-16 (Pakozdi-Luffy), 20 (Carter), 45 (Bunting).
\item \textsuperscript{91} See, e.g., USITC Pub. 3570 at 6-7 (six purchasers reported purchasing both 45-percent and 80-percent grade ferrovanadium, *** purchasers reported being able to switch between the two grades with no adjustments to their melting processes, and one purchaser reported that it could use either grade if it made appropriate adjustments for ***).
\end{itemize}
inputs based on the grade of the ferrovanadium.\textsuperscript{92}

\textit{Geographic Overlap.} In the original investigations, subject imports from China and South Africa and the domestic like product were sold in overlapping geographic regions. During the period of review, \textit{***}. All four responding importers sell in the Northeast; two of them also sell in other regions.\textsuperscript{93}

\textit{Channels of Distribution.} In the U.S. market, ferrovanadium is sold primarily to end users, namely steel companies and iron foundries, as it was during the original investigations.\textsuperscript{94}

\textit{Simultaneous Presence in Market.} Imports from both China and South Africa were present in the U.S. market in each year between 1999 and 2002. Since then, there have been only limited imports from either subject country. Subject imports from China entered the U.S. market in 2005 and 2006, and subject imports from South Africa entered the U.S. market in 2007, according to official import statistics.\textsuperscript{95}

\textit{Analysis.} Market participants overwhelmingly find ferrovanadium from different sources to be at least sometimes interchangeable. Although South Africa produces primarily 80-percent grade ferrovanadium and producers in China and the United States produce ferrovanadium with a broader range of vanadium content, the main users of ferrovanadium, steel producers, are able to adjust their production process to use different grades of ferrovanadium, and ferrovanadium is priced according to vanadium content. Thus, we find a sufficient overlap between the subject imports from China and South Africa and between subject imports and the domestic like product to support a finding of fungibility.

The domestic like product and imports from both subject countries are primarily sold directly to end users.\textsuperscript{96} While imports from China and South Africa were absent from the U.S. market during the bulk of the period of review, this was likely influenced by the imposition of the orders. We conclude that, upon revocation, these imports will likely be simultaneously present in the market in overlapping markets as they were during the original investigations.

No party has asserted an argument that a reasonable overlap of competition is not likely. In view of that fact and the foregoing considerations, we conclude that there will be a likely reasonable overlap of competition between subject imports from China and South Africa and between subject imports and the domestic like product, should the orders be revoked.

\textsuperscript{92} See, e.g., Hearing Tr. at 22 (Carter), 41-44 (Carter, Orr, Bunting), 45 (Bunting).

\textsuperscript{93} See, e.g., USITC Pub. 3570 at 13; CR/PR at II-1.

\textsuperscript{94} See, e.g., CR/PR at II-1; USITC Pub. 3570 at 13.

\textsuperscript{95} See, e.g., CR/PR at Table I-1; USITC Pub. 3570 at 13.

\textsuperscript{96} See, e.g., CR/PR at II-1.
D. Other Considerations

In determining whether to exercise our discretion to cumulate the subject imports, we assess whether the subject imports from China and South Africa are likely to compete under similar or different conditions in the U.S. market after revocation of the orders. No party has asserted and we do not find based on the current record any significant differences in likely conditions of competition between imports from China and South Africa. We accordingly exercise our discretion to cumulate subject imports from China and South Africa.

V. LIKELIHOOD OF CONTINUATION OR RECURRENCE OF MATERIAL INJURY IF THE ANTIDUMPING DUTY ORDERS ON FERROVANADIUM FROM CHINA AND SOUTH AFRICA ARE REVOKED

A. Legal Standards

In a five-year review conducted under section 751(c) of the Act, Commerce will revoke an antidumping or countervailing duty order unless (1) it makes a determination that dumping or subsidization is likely to continue or recur and (2) the Commission makes a determination that revocation of the antidumping or countervailing duty order “would be likely to lead to continuation or recurrence of material injury within a reasonably foreseeable time.” The SAA states that “under the likelihood standard, the Commission will engage in a counterfactual analysis; it must decide the likely impact in the reasonably foreseeable future of an important change in the status quo – the revocation or termination of a proceeding and the elimination of its restraining effects on volumes and prices of imports.”

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97 See, e.g., Allegheny Ludlum Corp., 475 F. Supp. 2d at 1378 (recognizing the wide latitude the Commission has in selecting the type of factors it considers relevant in deciding whether to exercise discretion to cumulate subject imports in five-year reviews); Nucor v. United States, 569 F. Supp. 2d at 1337-38; United States Steel, Slip Op. 08-82.

98 Commissioner Lane and Pinkert explain their analysis of other considerations as follows. Where, in a five-year review, they do not find that the subject imports would be likely to have no discernible adverse impact on the domestic industry if the orders were revoked, and find that such imports would be likely to compete with each other and with the domestic like product in the U.S. market, they cumulate such imports unless there is a condition or propensity – not merely a trend – that is likely to persist for a reasonably foreseeable time and that significantly limits competition such that cumulation is not warranted.

Based on the record in these reviews, they find that there is no such condition or propensity with respect to the subject imports. Therefore, they see no basis for exercising their discretion not to cumulate the subject imports from China and South Africa, and they have cumulated them in these reviews.


100 SAA at 883-84. The SAA states that “[t]he likelihood of injury standard applies regardless of the nature of the Commission’s original determination (material injury, threat of material injury, or material retardation of an industry). Likewise, the standard applies to suspended investigations that were never completed.” Id. at 883.
Thus, the likelihood standard is prospective in nature. The U.S. Court of International Trade has found that “likely,” as used in the five-year review provisions of the Act, means “probable,” and the Commission applies that standard in five-year reviews.

The statute states that “the Commission shall consider that the effects of revocation or termination may not be imminent, but may manifest themselves only over a longer period of time.” According to the SAA, a “reasonably foreseeable time” will vary from case-to-case, but normally will exceed the ‘imminent’ timeframe applicable in a threat of injury analysis in original investigations.

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

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

In evaluating the likely price effects of subject imports if the orders under review were revoked, the Commission is directed to consider whether there is likely to be significant underselling by the subject imports as compared to the domestic like product and whether the subject imports are likely to enter the United States at prices that otherwise would have a significant depressing or suppressing effect on the price of the domestic like product.

In evaluating the likely impact of imports of subject merchandise if the orders under review are revoked, the Commission is directed to consider all relevant economic factors that are likely to have a bearing on the state of the industry in the United States, including but not limited to the following: (1) likely declines in output, sales, market share, profits, productivity, return on investments, and utilization of capacity; (2) likely negative effects on cash flow, inventories, employment, wages, growth, ability to raise capital, and investment; and (3) likely negative effects on the existing development and production efforts of the industry, including efforts to develop a derivative or more advanced version of the domestic like product. All relevant economic factors are to be considered within the context of the business cycle and the conditions of competition that are distinctive to the industry.

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108 19 U.S.C. § 1675(a)(1). Commerce has not made duty absorption findings with respect to either of the orders under review. See, e.g., CR at I-10 to I-11; PR at I-8.

109 19 U.S.C. § 1675(a)(5). Although the Commission must consider all factors, no one factor is necessarily dispositive. SAA at 886.


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


114 19 U.S.C. § 1675(a)(4). Section 752(a)(6) of the Act states that “the Commission may consider the magnitude of the margin of dumping or the magnitude of the net countervailable subsidy” in making its determination in a five-year review. 19 U.S.C. § 1675(a)(6). The statute defines the “magnitude of the margin of dumping” to be used by the Commission in five-year reviews as “the dumping margin or margins determined by the administering authority under section 1675(a)(3) of this title.” 19 U.S.C. § 1677(35)(C)(iv). See also SAA at 887.

Commerce conducted expedited sunset reviews of both of the antidumping duty orders. With respect to any revocation of antidumping duty order on subject imports from China, Commerce found likely margins of 12.97

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the statute, we have considered the extent to which any improvement in the state of the domestic industry is related to the orders at issue and whether the industry is vulnerable to material injury if the orders were revoked.\(^\text{115}\)

As stated above, the Commission has relatively complete data coverage for the domestic industry, received complete foreign producer questionnaire responses for two of the three subject producers in South Africa, and did not receive any foreign producer questionnaire responses from ferrovanadium producers in China. We have relied on the facts otherwise available when appropriate in these reviews, which consist primarily of information from the original investigations, information submitted in these reviews, and information available from published sources.\(^\text{116-117}\)

**B. Conditions of Competition and the Business Cycle**

In evaluating the likely impact of the subject imports on the domestic industry, the statute directs the Commission to consider all relevant economic factors “within the context of the business cycle and conditions of competition that are distinctive to the affected industry.”\(^\text{118}\)

In the original determinations, the Commission found that demand for ferrovanadium followed demand for steel products, and demand was relatively level at the beginning, and declining at the end of, the period of investigation. Questionnaire respondents agreed that the global market for ferrovanadium affected U.S. prices of ferrovanadium. The Commission found that ferrovanadium of all grades and sources is interchangeable and that most purchasers bought ferrovanadium at the lowest price. Prices

\(^{114}\) (...continued)

percent for Pangang Group International Economic & Trading Corp. and 66.71 percent for the China-wide entity. With respect to any revocation of the antidumping duty order on subject imports from South Africa, Commerce found likely margins of 116.00 percent for Highveld, Xstrata, and all others. See, e.g., CR at I-10; PR at I-8.

\(^{115}\) The SAA states that in assessing whether the domestic industry is vulnerable to injury if the order is revoked, the Commission “considers, in addition to imports, other factors that may be contributing to overall injury. While these factors, in some cases, may account for the injury to the domestic industry, they may also demonstrate that an industry is facing difficulties from a variety of sources and is vulnerable to dumped or subsidized imports.” SAA at 885.

\(^{116}\) 19 U.S.C. § 1677e(a) authorizes the Commission to “use the facts otherwise available” in reaching a determination when (1) necessary information is not available on the record or (2) an interested party or any other person withholds information requested by the agency, fails to provide such information in the time or in the form or manner requested, significantly impedes a proceeding, or provides information that cannot be verified pursuant to 19 U.S.C. § 1677m(i). The verification requirements in 19 U.S.C. § 1677m(i) are applicable only to Commerce. See Titanium Metals Corp. v. United States, 155 F. Supp. 2d 750, 765 (Ct. Int'l Trade 2002) (“the ITC correctly responds that Congress has not required the Commission to conduct verification procedures for the evidence before it, or provided a minimum standard by which to measure the thoroughness of Commission investigations.”).

\(^{117}\) Commissioner Okun notes that the statute authorizes the Commission to take adverse inferences in five-year reviews, but such authorization does not relieve the Commission of its obligation to consider the record evidence as a whole in making its determination. See 19 U.S.C. § 1677e. She generally gives credence to the facts supplied by the participating parties and certified by them as true, but bases her decision on the evidence as a whole, and does not automatically accept participating parties’ suggested interpretations of the record evidence. Regardless of the level of participation, the Commission is obligated to consider all evidence relating to each of the statutory factors and may not draw adverse inferences that render such analysis superfluous. “In general, the Commission makes determinations by weighing all of the available evidence regarding a multiplicity of factors relating to the domestic industry as a whole and by drawing reasonable inferences from the evidence it finds most persuasive.” SAA at 869.

\(^{118}\) 19 U.S.C. § 1675a(a)(4).
were often based on industry benchmarks in publications such as Ryan’s Notes and American Metal Market. There were few substitutes for ferrovanadium and only in limited circumstances if ferrovanadium prices were high. The Commission identified three producers of ferrovanadium in the U.S. market and explained that two tollees had one of those producers (Bear) toll-produce ferrovanadium for them; the Commission found that in such circumstances, the condition of the tollees affected the condition of Bear. During the original investigations, non-subject imports (primarily from Austria, Belgium, Canada, and the Czech Republic) increased from 1.9 million pounds in 1999 to 3.0 million pounds in 2000, before declining to 2.2 million pounds in 2001.\textsuperscript{119}

In these reviews, we have considered a number of likely conditions of competition in the event the antidumping duty orders are revoked.

1. **Demand**

Ferrovanadium is used in high-strength low-alloy steels (also known as micro-alloy steels) that are used for high-performance long-distance oil and gas pipelines, concrete reinforcing bars, structural building construction, and automobile components.\textsuperscript{120} Demand for ferrovanadium is driven largely by demand for steel.\textsuperscript{121} There are few applications in which other products (typically ferroniobium) can be substituted for ferrovanadium, and then only when the substitution can be justified on a price basis.\textsuperscript{122}

Apparent U.S. consumption of ferrovanadium was higher at the conclusion of the period of review than at its inception but fluctuated annually. By quantity of contained vanadium, apparent U.S. consumption declined from 12.6 million pounds in 2002 to 11.6 million pounds in 2003, and then rose to a period high of 15.4 million pounds in 2004. Apparent U.S. consumption then declined to 12.4 million pounds in 2005, increased to 13.4 million pounds in 2006, and then declined to 13.3 million pounds in 2007.\textsuperscript{123} Reasons offered for increasing demand included increased overall steel production, increased specialty steel production, and lower imports of steel because of the low U.S. dollar.\textsuperscript{124} The reason that firms reported declining demand include price, freight costs, and decreased numbers of customers.\textsuperscript{125} Domestic interested parties contend that the demand outlook for high-strength low-alloy steel is positive in the reasonably foreseeable future because U.S. steel producers are among the largest users of ferrovanadium, and other steel producers will use additional ferrovanadium as the quality of their steel improves.\textsuperscript{126} At the same time, domestic interested parties argue that downturns in steel demand related to the current economic situation would impact ferrovanadium consumption.\textsuperscript{127}

***, two of three responding importers, and eight of ten responding purchasers reported that

\textsuperscript{119} See, e.g., USITC Pub. 3570 at 14-17.
\textsuperscript{120} See, e.g., CR at I-12; PR at I-10.
\textsuperscript{121} See, e.g., Domestic Interested Parties’ Pre-hearing Br. at 9; CR at II-5; PR at II-3. U.S. steel production increased irregularly since 2002, whereas world-wide steel production increased steadily with particularly major increases in China. See, e.g., CR at II-5; PR at II-3.
\textsuperscript{122} See, e.g., USITC Pub. 3570 at II-4.
\textsuperscript{123} See, e.g., CR/PR at Table C-1.
\textsuperscript{124} See, e.g., CR at II-6; PR at II-3 to 4.
\textsuperscript{125} See, e.g., CR at II-6; PR at II-4.
\textsuperscript{126} See, e.g., Hearing Tr. at 47-48 (Orr, Bunting).
\textsuperscript{127} See, e.g., Hearing Tr. at 69-71.
demand outside the United States increased since 2003. Reasons given for demand increases included increased steel production, increased specialty steel production particularly in India and China, and economic growth in China. *** reported that demand outside the United States fluctuated with steel production; one importer reported that demand outside the United States had decreased with a declining consumer base, and two purchasers reported that demand outside the United States was unchanged. *** reported that demand in other markets (particularly in China) and in the United States had increased with growth in steel production.

2. Supply

Throughout the period of review, the domestic industry was the largest supplier to the U.S. market, although non-subject imports also had a large market share. Subject imports had only a limited presence in the U.S. market after imposition of the antidumping duty orders. Subject Imports. During the original investigations, two ferrovanadium producers in China submitted questionnaire responses, Chengde Xinghua Vanadium Chemical Co., Ltd. (“Chengde”) and Panzhihua Iron & Steel Group (“Panzhihua”). These producers estimated that they accounted for *** percent of ferrovanadium production in China at that time, and according to Chinese export statistics, Panzhihua accounted for nearly all ferrovanadium exported directly from China to the United States. Although no Chinese producer submitted a questionnaire response in these five-year reviews, domestic interested parties report that these two producers remain the largest ferrovanadium producers in China today, with Panzhihua being the largest ferrovanadium producer in the world. Whereas these two producers manufacture ferrovanadium from vanadium-bearing slag produced in their related steel operations, domestic interested parties report that a large and increasing number of producers in China convert vanadium pentoxide into ferrovanadium, and they also note the existence of other ferrovanadium producers in China such as Miyi Xingchem Vanadium & Titanium Alloys and Sichuan Chuantou Emei Ferroalloy (Group) Co., Ltd.

At the time of the original investigations, there were two major producers of subject merchandise in South Africa, Xstrata South Africa (Pty) Ltd. and Highveld Steel & Vanadium Corp., Ltd.. On July 12, 2003, South Africa Japan Vanadium (a joint venture between Highveld (50 percent), Nippon Denko (40 percent), and Mitsui & Co. (10 percent)) commissioned a 7.7 million pound-per-year ferrovanadium plant in Witbank, South Africa. Highveld was acquired by Evraz Group, S.A., but Evraz was required by the European Community and South African competition authorities to divest Highveld’s vanadium operations (including its ferrovanadium operations). As of September 2008, Highveld’s vanadium operations are owned by Vanchem Vanadium Products (Proprietary) Limited

128 See, e.g., CR at II-6; PR at II-4.
129 See, e.g., CR at II-6; PR at II-4.
130 See, e.g., CR at II-6; PR at II-4.
131 See, e.g., CR at II-7; PR at II-4.
132 See, e.g., CR/PR at Table C-1.
133 See, e.g., CR/PR at Table C-1.
134 See, e.g., CR at IV-6; PR at IV-4.
135 See, e.g., CR at IV-6; PR at IV-4.
136 See, e.g., Domestic Interested Parties’ Prehearing Br. at 27-28.
137 See, e.g., Domestic Interested Parties’ Prehearing Br. at 28.
(“Vanchem”), which in turn is a subsidiary of Swiss company Duferco Investment Partners, Inc.; Vanchem also acquired Highveld’s 50-percent stake in South Africa Japan Vanadium.138

In these reviews, the Commission received questionnaire responses from Xstrata and Highveld/Vanchem and some information on the operations of South Africa Japan Vanadium.139 Xstrata and Highveld/Vanchem estimate that they collectively account for *** percent of total ferrovanadium production in South Africa and for about *** percent of all ferrovanadium exports from South Africa to the United States.140 Whereas Highveld/Vanchem uses a by-product of steel production, vanadium-bearing slag, to produce ferrovanadium, Xstrata produces ferrovanadium from mined vanadium ore.141

Non-subject Imports. About 50 percent of ferrovanadium imports from non-subject countries since the original investigations originated in the Czech Republic. Non-subject imports from Korea have grown over the period of review and were almost as large as imports from the Czech Republic in 2007.142 As discussed below in our likely volume analysis, non-subject imports from the Czech Republic were reportedly produced with vanadium pentoxide from Russia whereas non-subject imports from Korea were reportedly produced with vanadium pentoxide from China.

Domestic Industry. As discussed above, Bear and Metvan (known as Shieldalloy during the original investigations) account for all current U.S. ferrovanadium production because International Specialty Alloys no longer produces ferrovanadium.143 Metvan sells its own ferrovanadium whereas Bear toll-produces for Gulf, ***.144

The domestic industry’s production capacity was *** the period of review, ***.145 As far as future production capacity, ***.146 The domestic industry operated at fluctuating but *** capacity utilization rates during the period of review.147 Domestic interested parties assert that the development of additional sources of vanadium-bearing raw materials, particularly from oil sands refining operations in Alberta, Canada, during the period of review means that domestic production is not limited by the current availability of inputs.148 The cost of vanadium-bearing inputs such as spent catalysts as well as transportation and energy costs increased *** during the period of review.149 *** of Bear’s production is sold into the market by its tollees;150 therefore, in the somewhat unique structure of this industry, market conditions affect Bear through these tollees. As ferrovanadium

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138 See, e.g., CR at IV-11; PR at IV-7.
139 See, e.g., CR at IV-11; PR at IV-7.
140 See, e.g., CR at IV-11; PR at IV-7.
141 See, e.g., Domestic Interested Parties’ Prehearing Br. at 23-24.
142 See, e.g., CR/PR at Table IV-2. As a share of apparent U.S. consumption, non-subject imports accounted for 39.8 percent in 2002, 25.5 percent in 2003, 43.3 percent in 2004, 39.2 percent in 2005, 35.2 percent in 2006, and 36.5 percent in 2007. See, e.g., CR/PR at Table C-1.
143 See, e.g., Domestic Interested Parties’ Prehearing Br. at 7.
144 See, e.g., CR at III-4; PR at III-2.
145 See, e.g., Domestic Interested Parties’ Prehearing Br. at 8 & n.18.
146 See, e.g., Domestic Interested Parties’ Prehearing Br. at 8.
147 See, e.g., CR/PR at Table III-1.
148 See, e.g., Domestic Interested Parties’ Prehearing Br. at 8; Domestic Interested Parties’ Posthearing Br. at 12 and Exh. 5; Hearing Tr. at 92-95.
149 See, e.g., Domestic Interested Parties’ Prehearing Br. at 11; Hearing Tr. at 27-30.
150 The share of Bear’s sales of ferrovanadium as a share of its total ferrovanadium production during the period of review amounted to *** percent. See, e.g., CR at III-4; PR at III-2.
prices fall, Bear’s tollees become less profitable. As a result, the tollees will exert pressure on Bear to reduce its conversion fee, which, in turn, would reduce Bear’s own profit. Reductions in demand for ferrovanadium sold by the tollees would also reduce the volume of Bear’s toll conversion and its profits. Thus, although Bear is for the most part not directly exposed to the conditions in the ferrovanadium sales market, these conditions, and the health of its tollees, have a very real effect on Bear’s condition. In contrast, Metvan is directly exposed to the market, and therefore can be injured by falling sales volume and prices.

3. **Substitutability**

As indicated in our cumulation analysis above, ferrovanadium from all sources is interchangeable and the main users of ferrovanadium, steel producers, can adjust their production process to use ferrovanadium of different grades.\textsuperscript{151}

**C. Revocation of the Antidumping Duty Orders on Cumulated Subject Imports Is Likely to Lead to Continuation or Recurrence of Material Injury**

1. **Likely Volume of Cumulated Subject Imports**

During the original investigations, the cumulated volume of ferrovanadium imported into the United States from China and South Africa by quantity of contained vanadium increased from 2.3 million pounds in 1999 to 2.5 million pounds in 2000 and to 3.5 million pounds in 2001, but was lower in interim 2002 (0.5 million pounds) than in interim 2001 (1.6 million pounds).\textsuperscript{152} By quantity, subject imports’ share of the U.S. market increased from 17.8 percent in 1999 to 19.4 percent in 2000 and to 29.2 percent in 2001; their market share was 8.1 percent in interim 2002 compared to 26.3 percent in interim 2001. Comparatively, non-subject imports’ market share increased from 15.0 percent in 1999 to 23.0 percent in 2000, then decreased to 18.1 percent in 2001 as non-subject imports lost market share to subject imports; non-subject imports’ market share was 36.4 percent in interim 2002 compared to 17.8 percent in interim 2001.\textsuperscript{153} Domestically produced ferrovanadium had a progressively lower share of the U.S. market, falling from 67.2 percent in 1999 to 57.6 percent in 2000 and 52.8 percent in 2001; domestically produced ferrovanadium accounted for 55.5 percent of the U.S. market in interim 2002 and 55.9 percent in interim 2001.\textsuperscript{154} In its original determinations, the Commission found the volume and the increase in the volume of cumulated subject imports, both in absolute terms and relative to apparent domestic consumption in the United States, to be significant.\textsuperscript{155}

The cumulated quantity of subject imports declined sharply after the antidumping duty orders

\textsuperscript{151} See, e.g., Hearing Tr. at 8, 15, 43-44 (Orr, Carter, Bunting).

\textsuperscript{152} See, e.g., CR/PR at Table I-1. In its original determinations, the Commission gave diminished weight to the dramatic decrease in subject import volume after the November 26, 2001 filing of the antidumping duty petitions because it found that the decline was related to the pendency of the investigations.

\textsuperscript{153} CR/PR at Table IV-5. Total apparent U.S. consumption, by quantity, remained relatively steady at 13.0 million pounds in 1999 and 2000, before decreasing to 11.9 million pounds in 2001. See, e.g., CR/PR at Table I-1.

\textsuperscript{154} See, e.g., CR/PR at Table I-1. The Commission combined U.S. shipments of domestic producers and tollees in calculating U.S. market share because Bear’s toll production of ferrovanadium was sold commercially by tollees Gulf and USV. See, e.g., USITC Pub. 3570 at 22.

\textsuperscript{155} See, e.g., USITC Pub. 3570 at 17-18.
were imposed. From a period peak of 550,000 pounds in 2002, there were no cumulated subject imports in 2003 and 2004, although 1,000 pounds were imported from the subject countries in 2005 and 2006 and the volume of cumulated subject imports to the U.S. market increased somewhat to 17,000 pounds in 2007.\footnote{See, e.g., CR/PR at Table I-1.} The share of apparent U.S. consumption held by cumulated subject imports followed similar trends. From a period high of 4.4 percent in 2002, these imports’ share of apparent U.S. consumption was 0.1 percent or lower in every subsequent year between 2003 and 2007.\footnote{See, e.g., CR/PR at Table I-1.} Thus, the evidence indicates that the orders have had a restraining effect on subject imports from China and South Africa.

After progressively losing market share in the original investigations to subject imports that also displaced non-subject imports, the domestic like product increased market share after imposition of the orders. As a share of apparent U.S. consumption, U.S. shipments of the domestic like product fluctuated during the period of review but increased overall, increasing from 55.9 percent in 2002 to 74.5 percent in 2003 then declining to 56.7 percent in 2004 before increasing to 60.8 percent in 2005 and to 64.8 percent in 2006 and then declining to 63.4 percent in 2007.\footnote{See, e.g., CR/PR at Table C-1.}

The ferrovanadium industries in the subject countries are substantial, and there is *** unused capacity available as well. According to publicly available information, Panzhihua has the capacity to produce 19.8 million pounds per year of ferrovanadium, and in full-year 2004, Chengde was expected to produce 13.2 million pounds of vanadium pentoxide, of which two-thirds was reportedly used internally to produce ferrovanadium and one-third was exported.\footnote{See, e.g., CR at IV-6; PR at IV-7.} Panzhihua and Chengde have increased their vanadium pentoxide and ferrovanadium operations as a direct result of the more than doubling of steel production in China (and the corresponding increase in the production of vanadium-bearing slag byproducts).\footnote{See, e.g., Domesic Interested Parties’ Prehearing Br. at 23-24.} Xstrata and Highveld/Vanchem in South Africa collectively reported *** production capacity of *** but the third producer in South Africa, South Africa Japan Vanadium, commissioned a 7.7 million pounds-per-year green-field ferrovanadium facility in July 2003.\footnote{See, e.g., CR at IV-11; PR at IV-7.} *** reported *** planned ***.\footnote{See, e.g., CR/PR at Table IV-7.} The reported capacity utilization of the two subject South African producers responding to the Commission’s questionnaires *** declined each year from *** percent in 1999 to *** percent in 2007 and was *** percent in interim 2008 compared to *** percent in interin 2007.\footnote{See, e.g., CR at IV-12; PR at IV-7.}

We examined whether recent events in South Africa and China disrupted ferrovanadium production operations in these countries, or were likely to disrupt operations in the reasonably foreseeable future. Due to an energy supply crisis in South Africa, in January 2008, the power company

\begin{itemize}
  \item [156] See, e.g., CR/PR at Table I-1.
  \item [157] See, e.g., CR/PR at Table I-1.
  \item [158] Market share was lower in interim 2008 (50.3 percent) than in interim 2007 (58.1 percent). See, e.g., CR/PR at Table C-1. As a share of apparent U.S. consumption, non-subject imports accounted for 39.8 percent in 2002, 25.5 percent in 2003, 43.3 percent in 2004, 39.2 percent in 2005, 35.2 percent in 2006, and 36.5 percent in 2007. Id.
  \item [159] See, e.g., CR at IV-8, IV-9; PR at IV-5, IV-6. Vanadium pentoxide is primarily used to make ferrovanadium, but does have some other uses. See, e.g., Hearing Tr. at 54-56. Vanadium pentoxide is approximately *** percent contained vanadium, based on ***. See, e.g., *** at 6.
  \item [160] See, e.g., Domesic Interested Parties’ Prehearing Br. at 54.
  \item [161] See, e.g., CR/PR at Table IV-7; CR at IV-11; PR at IV-7. In 2004, Xstrata closed its Vantech plant that had produced vanadium pentoxide because the plant’s existing source of vanadium ore had been depleted, but domestic interested parties point out that Xstrata reported to its investors in 2005 that it was well-positioned to produce ferrovanadium using its fully integrated Rhovan operations (where it mines ore and then processes the ore into vanadium pentoxide and then ferrovanadium). See, e.g., Domestic Interested Parties’ Prehearing Br. at 23-24.
  \item [162] See, e.g., CR at IV-12; PR at IV-7.
  \item [163] See, e.g., CR/PR at Table IV-7.
\end{itemize}
Eskom Holdings, Ltd. asked ferroalloy producers to operate at no more than 90 percent of capacity. In February 2008, South African producer Xstrata reportedly declared *force majeure* on its vanadium mining operations, which a company spokesperson said was to “warn customers that this {electricity cut-back} could be a problem in the future.” Xstrata subsequently reported a 25-percent decline in its production for the second quarter of 2008 compared to 2007, which the company attributed to the power cutback. According to news reports, an earthquake occurred in Sichuan, China in May 2008 in a region where certain ferrovanadium producers such as Panzhihua are located, and weather-related conditions disrupted transportation of ferrovanadium earlier in the year. The current record, however, does not indicate that these events in South Africa and China resulted in any sustained or significant production disruptions, and in particular there is no indication that there will likely be any such disruptions in the reasonably foreseeable future.

Producers in South Africa reported *** end-of-period inventories *** of *** in 2002, *** in 2003, *** in 2004, *** in 2005, *** in 2006, and *** in 2007. There were *** end-of-period inventories of subject merchandise in the United States during the period of review, consisting of ***.

Although imports of subject merchandise from China and South Africa largely disappeared after imposition of the antidumping duty orders on these imports, it would not be difficult for producers in these countries to resume exports to the United States given that ferrovanadium from all sources is highly substitutable. Given their substantial new and *** production capacity and *** end-of-period inventories, we find that producers in the subject countries will likely direct substantial quantities of ferrovanadium to the U.S. market should the antidumping duty orders on ferrovanadium from China and South Africa be revoked.

Producers in China and South Africa are significant world-wide exporters of ferrovanadium. Exports of ferrovanadium from China increased from 3.7 million pounds in 2002 to 12.1 million pounds in 2006 but then dropped to 4.6 million pounds in 2007 and have since rebounded; producers in China exported ferrovanadium mostly to the Netherlands, Russia, Japan, and Taiwan. Producers in South Africa exported *** percent of their ferrovanadium production between 2002 and 2007. Their exports were primarily to ***. The U.S. market for ferrovanadium is attractive because its published spot prices have generally been significantly higher than spot prices in Europe and Asia.

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164 See, e.g., CR at IV-14; PR at IV-8; Domestic Interested Parties’ Prehearing Br. at 25.
165 See, e.g., CR at IV-14; PR at IV-8 to 9.
166 See, e.g., CR at IV-14; PR at IV-9.
167 See, e.g., CR at IV-10; PR at IV-7; Domestic Interested Parties’ Prehearing Br. at 29-30; Domestic Interested Parties’ Posthearing Br. at 4.
168 See, e.g., CR/PR at Table IV-7. End-of-period inventories of ferrovanadium in China are unknown.
169 See, e.g., CR/PR at IV-4 & n.1. There are no known existing or potential barriers to exports of ferrovanadium from China or South Africa to third-country markets, and there is no indication on the current record that producers in China and South Africa produce other products in the same facilities where they produce ferrovanadium.
170 See, e.g., CR/PR at Table IV-5; Domestic Interested Parties’ Posthearing Br. at Exh. 6.
171 As a share of total shipments, their exports in 2007 were *** percent, and they were *** percent in interim 2008 compared to *** percent in interim 2007. See, e.g., CR/PR at Table IV-7.
172 See, e.g., CR/PR at Table IV-7.
173 See, e.g., Domestic Interested Parties’ Prehearing Br. at 31-32; Domestic Interested Parties’ Posthearing Br. at 5; Hearing Tr. at 85-87. We note that *** reported selling all of their products via spot sales whereas *** sold *** (continued...)
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Domestic interested parties contend that changes in the Chinese Government’s export tax regime affected exports of ferrovanadium and vanadium pentoxide from China to third countries during the period of review. All ferrovanadium exports from China were subject to a 10-percent export tax between November 2005 and January 2008. In January 2008, the export tax on 75-percent or higher grade ferrovanadium was eliminated, and the export tax on ferrovanadium of less-than-75-percent grade was increased from 10 to 20 percent. After the increase in the export duty on lower-grade ferrovanadium and the elimination of an export duty on higher-grade ferrovanadium, exports from China of the lower-grade ferrovanadium fell from 440,000 pounds of contained vanadium in the first eight months of 2007 to 137,000 pounds of contained vanadium in the first eight months of 2008, whereas exports of higher-grade ferrovanadium jumped from 1.9 million to 6.8 million pounds of contained vanadium in the same period.

Vanadium pentoxide is an intermediate input used to produce ferrovanadium, but it does have other uses, some of which are in chemical applications. For example, higher grades of vanadium pentoxide are used to manufacture vanadium-aluminum alloys for the titanium industry. On a global basis, domestic interested parties report that these other applications for vanadium pentoxide are relatively small compared with producing ferrovanadium for steel-making, although they admit that most of the specialized uses of vanadium pentoxide are centered in the United States. Producers in China and South Africa have been exporting increased volumes of vanadium pentoxide to the United States since the imposition of the antidumping duty orders. Moreover, Chinese producers’ world-wide exports of vanadium pentoxide increased in each year between 2002 and 2007, from 12.6 million pounds in 2002 to 43.1 million pounds in 2007, with the exception of 2004, where there was a slight dip. The primary destinations for these vanadium pentoxide exports from China were Korea, the Netherlands, Japan, and Germany, with exports to Korea increasing to more than half of vanadium pentoxide exports from China in 2007. By 2007, Korea had become the second largest source of non-subject percent using contracts that averaged 12 months in which prices are typically set based on a reference price from either Metal Bulletin or Ryan’s Notes. See, e.g., CR/PR at V-3.

See, e.g., CR at IV-9; PR at IV-6.

See, e.g., CR at IV-9; PR at IV-6; Hearing Tr. at 73-75. The higher grade is reportedly preferred by steel industries in market economies whereas the lower grade is preferred in China. See, e.g., Domestic Interested Parties’ Prehearing Br. at 29; Domestic Interested Parties’ Posthearing Br. at 5-6.

See, e.g., CR at IV-9 to IV-10; PR at IV-6; Domestic Interested Parties’ Posthearing Br. at Exh. 6. We have considered as part of our likely volume analysis how China’s export tax regime has affected China’s production and exports of vanadium pentoxide and ferrovanadium during the period of review. The Chinese industry’s response to changes in Chinese export tax policy demonstrates its ability to further increase its vanadium pentoxide and ferrovanadium exports quickly in response to favorable circumstances. We recognize, however, that those policies appear to be somewhat fluid and may be modified again in the reasonably foreseeable future.

See, e.g., Domestic Interested Parties’ Posthearing Br. at 6; Hearing Tr. at 54-56.

See, e.g., Domestic Interested Parties’ Posthearing Br. at 6.

See, e.g., Domestic Interested Parties’ Prehearing Br. at 32; Domestic Interested Parties’ Posthearing Br. at 6, Exh. 6.

See, e.g., CR/PR at Table IV-6.

See, e.g., CR/PR at Table IV-6. There continued to be large world-wide exports of vanadium pentoxide from China after the changes, discussed below, in the export tax regime applicable to vanadium pentoxide. See, e.g.,
ferrovanadium imports into the United States due at least in part to the conversion of vanadium pentoxide from China into ferrovanadium in Korea. These trends are consistent with domestic interested parties’ argument that the majority of the vanadium pentoxide exported from China to Korea is for ferrovanadium production, the majority of which is then exported to the United States. In June 2007, the Chinese government cancelled a 5-percent export tax rebate for vanadium pentoxide exports, and in January 2008, the Chinese government imposed a 5-percent duty on exports of vanadium pentoxide from China. These changes likely will increase the availability of the intermediate material for Chinese production of ferrovanadium.

During the period of review, non-subject imports originated primarily in the Czech Republic, although by the end of the period of review, substantial imports were from Korea as well. An antidumping duty order has been in effect on ferrovanadium (and nitrided vanadium) from Russia since July 10, 1995. As further evidence of the attractiveness of the U.S. ferrovanadium market, the producer in Russia reportedly exports vanadium pentoxide to Nikom, AS in the Czech Republic for Nikom in turn to produce ferrovanadium. We also note that an additional global source of vanadium-bearing inputs will resume operations in the near future. In February 2003, South African producer Xstrata’s affiliated Windimurra vanadium mine in Australia ceased operations due to what the company characterized as “chronic oversupply conditions in the vanadium market,” but that facility is set to resume mining operations, which will result in additional vanadium pentoxide for producers such as Windimurra’s former affiliate Xstrata in South Africa to use to increase their capacity-utilization levels and ferrovanadium production. Because ferrovanadium has a higher value than vanadium pentoxide, and in light of the resumption of vanadium mining at the Windimurra facility, we find that subject

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181 (...continued)
Domestic Interested Parties’ Posthearing Br. at Exh. 6.

182 See, e.g., CR/PR at Table IV-2.

183 See, e.g., Domestic Interested Parties’ Prehearing Br. at 36 n.107.

184 See, e.g., CR at IV-9; PR at IV-6; Domestic Interested Parties’ Posthearing Br. at Exh. Q at 33-34.

185 See, e.g., CR/PR at I-3.

186 See, e.g., Hearing Tr. at 87; USITC Pub. 3887 at 11, 14, I-16.

187 See, e.g., CR at IV-13; PR at IV-8; Hearing Tr. at 57-58. The closure coincided with the expiration of Xstrata’s agreement with Glencore International AG that guaranteed a minimum price of $3.80 per pound of vanadium pentoxide, compared to the average price of $1.50 per pound in 2002. See, e.g., CR at IV-13; PR at IV-8. Xstrata had spent $125 million on the Windimurra operations and could not justify an additional $36 million investment needed to correct operational problems and restart the plant. See, e.g., CR at IV-13 at n.25; PR at IV-8 at n.25.

188 Precious Metals Australia, which held a 15-percent stake in the Windimurra Mine, sued Xstrata seeking damages for the closure that it argued had taken place to bolster global ferrovanadium prices. See, e.g., CR at IV-13 at n.25; PR at IV-8 at n.25. Xstrata agreed to pay $10 million to cover royalty payments and final rehabilitation of the Windimurra site and A$5 million in full and final settlement of all outstanding claims by Precious Metals Australia related to the site. See, e.g., CR at IV-13 at n.25; PR at IV-8 at n.25. Precious Metals Australia raised A$13.3 million to reopen the Windimurra Mine, and Noble Group Ltd. (Hong Kong) acquired a 10-percent equity share in the mine for $16.3 million. See, e.g., CR at IV-13 at n.25; PR at IV-8 at n.25. Noble entered into an agreement whereby Noble would handle all marketing and distribution of Windimurra products worldwide and would purchase the entire vanadium output of Windimurra during the first seven years of operation for the cash cost of production. See, e.g., CR at IV-13 at n.25; PR at IV-8 at n.25.

189 See, e.g., Domestic Interested Parties’ Prehearing Br. at 32-33.
producers that already export substantial volumes of ferrovanadium would have an incentive to export larger volumes of ferrovanadium to the United States if the antidumping duty orders were revoked.

As they did in the original investigations, subject imports are likely to take market share from both the domestic like product and the non-subject imports upon revocation, through an overall increase in subject imports and through displacement. Although non-subject imports were present in the U.S. market in large quantities throughout the period of review, U.S. shipments of the domestic like product increased and the domestic industry’s condition improved during the period of review, as discussed below. In light of the above discussion, we conclude that there likely will be a significant increase in cumulated imports of ferrovanadium from the subject countries to the United States, both in absolute terms and relative to U.S. consumption, upon revocation.

2. Likely Price Effects of Subject Imports

In its original determinations, the Commission found that domestically produced ferrovanadium and subject imports were generally substitutable, and that price was the key factor in purchasing decisions. The Commission noted that product-specific price comparison data indicated mostly overselling and therefore did not find underselling to be significant. It observed, however, that prices for both the domestic like product and the subject merchandise declined over the period of investigation at a rate that was steeper than the drop in apparent U.S. consumption. In light of the highly substitutable nature of the products and the increasing volume of subject imports, the Commission found that subject imports depressed domestic prices to a significant degree. With the exception of interim 2002, which the Commission discounted due to the pendency of the investigations, subject imports increased market share at the expense of the domestic industry, even while domestic producers themselves reduced prices in an unsuccessful effort to retain market share. Confirmed lost sales and revenue allegations supported the Commission’s price depression conclusion. Despite the reduction of subject import volume in interim 2002 during the pendency of the original investigations, U.S. prices had not recovered due to an overhang of significant end-of-period inventories held by U.S. importers of subject merchandise in 2001 and interim 2002. The Commission concluded that the significant decline in such inventories from interim 2001 to interim 2002 indicated that U.S. importers were aggressively selling significant volumes of ferrovanadium inventories and continuing to put downward pressure on U.S. ferrovanadium prices.

Respondents had argued that other causes such as world prices, non-subject imports, and *** caused the price declines. The Commission explained that while prices may tend to equalize across countries over time, it must consider whether subject, unfairly traded imports are causing price depression in the United States. It found record support for the proposition that the increasing volumes of highly substitutable subject imports played a significant role in driving down U.S. prices, and concluded that this was clearly price depression in the U.S. market, regardless of prices in other markets. It also found that subject imports had significant price-depressing effects notwithstanding the presence of non-subject imports in the U.S. market. Subject imports gained far more market share in the original investigations than non-subject imports and, except for interim 2002 (after the petition had been filed), had a lower average unit value than non-subject imports. As for respondents’ argument that domestic price competition had been ***, the Commission acknowledged that ***, but it found that increasing subject imports captured market share at the expense of both U.S. producers and tollees, and the purchaser data were inconclusive regarding price leadership. It also found that *** market share was *** than that of subject imports. Therefore, the Commission concluded that prices had been depressed to a

190 See, e.g., USITC Pub. 3570 at 18-19.
significant degree by the subject imports.\textsuperscript{191}

Based on the record in these reviews, given that ferrovanadium from all sources is highly interchangeable, price continues to play an important role in purchasing decisions for ferrovanadium.\textsuperscript{192} The largest number of responding purchasers listed price rather than other factors as the most important consideration in selecting a supplier.\textsuperscript{193} Ferrovanadium is priced based on the vanadium content, and steel mills report being able to adjust their production processes to use different grades.\textsuperscript{194} *** and all four responding importers reported transaction-by-transaction prices. *** and one importer also listed contract prices.\textsuperscript{195} *** reported selling all of their ferrovanadium products via spot sales whereas *** reported selling *** percent using contracts averaging 12 months and the remainder in spot sales.\textsuperscript{196} Contract prices are based on reference prices from industry publications such as Ryan’s Notes or Metal Bulletin, and ferrovanadium is typically sold to steel mills in “requirements contracts.”\textsuperscript{197}

As discussed above, there was some underselling of the domestic like product by the cumulated subject imports during the original investigations, and in the relatively few instances in the current review where there were overlapping sales of subject imports and the domestic like product, subject imports undersold the domestic like product in most quarters.\textsuperscript{198}

The Commission collected quarterly pricing data on two ferrovanadium products for purposes of these reviews: (1) grade 40-60 percent ferrovanadium, 2" by down; and (2) grade 78-82 percent ferrovanadium, 2" by down.\textsuperscript{199} Prices for domestically produced ferrovanadium products were considerably higher at the conclusion of the review period than at its inception. For each of the products, prices for the domestically produced product increased significantly between 2004 and 2005 and again in 2008. Domestic prices for both products peaked in the second quarter of 2005.\textsuperscript{200} In addition to the imposition of the antidumping duty orders, the considerable increase in domestic ferrovanadium prices in 2004 is related to the closure of Xstrata’s Vantech vanadium mine in South Africa, the closure of the vanadium mine and vanadium pentoxide facility in Windimurra, Australia, and the closure of CS Metals in Louisiana (which had previously made vanadium pentoxide), combined with strong world-wide

\textsuperscript{191} See, e.g., USITC Pub. 3570 at 19-20.
\textsuperscript{192} See, e.g., Domestic Interested Parties’ Prehearing Br. at 41; Domestic Interested Parties’ Posthearing Br. at 1.
\textsuperscript{193} See, e.g., CR at II-8 to II-9; PR at II-5; CR/PR at Table II-2.
\textsuperscript{194} See, e.g., Hearing Tr. at 22 (Carter), 41-44 (Carter, Orr, Bunting), 45 (Bunting).
\textsuperscript{195} See, e.g., CR at V-4; PR at V-3.
\textsuperscript{196} See, e.g., CR at V-3; PR at V-3.
\textsuperscript{197} See, e.g., Domestic Interested Parties’ Prehearing Br. at 10; Domestic Interested Parties’ Posthearing Br. at Exh. Q at 40, Exh. 7; Hearing Tr. at 8, 15, 23 (Carter), 59 (Orr), 83-85.
\textsuperscript{198} See, e.g., CR/PR at Tables V-1 and V-2.
\textsuperscript{199} See, e.g., CR at V-4; PR at IV-3.
\textsuperscript{200} See, e.g., CR/PR at Tables V-1 and V-2 (for product 1, showing that prices in per-pound contained vanadium increased from $*** in the first quarter of 2002 to $*** in the second quarter of 2005 and declined from $*** in the third quarter of 2005 to $*** in the fourth quarter of 2007 before increasing to $*** in the first quarter of 2008 and to $*** in the second quarter of 2008) (for product 2, showing that prices in per-pound contained vanadium increased from $*** in the first quarter of 2002 to $*** in the second quarter of 2005 and declined from $*** in the third quarter of 2005 to $*** in the fourth quarter of 2007 before increasing to $*** in the first quarter of 2008 and to $*** in the second quarter of 2008).
demand for ferrovanadium fueled in large part by growing steel demand in China. In 2008, ferrovanadium market prices increased again, with news of electricity disruptions in South Africa and reports of transportation difficulties due to weather and an earthquake in China.

We find that the significant additional quantities of subject imports that are likely if the antidumping duty orders are revoked will likely have significant price-suppressing or -depressing effects in light of the highly substitutable nature of ferrovanadium, the sensitivity of ferrovanadium prices to changes in the supply of ferrovanadium and vanadium pentoxide, and the fact that low-priced subject imports from China and South Africa gained significant market share at the expense of non-subject imports and the domestic industry during the original investigations. Contemporaneous confirmed lost sales and lost revenues during the original investigations further support these findings.

Moreover, as previously discussed, raw material costs for domestic producers, particularly the cost of vanadium-bearing inputs such as spent catalysts, increased during the period of review. Domestic producer Metvan and tollees Gulf and Stratcor rely on secondary recycling technologies as the source for their vanadium-bearing inputs whereas the industries in China and South Africa utilize vanadium-bearing inputs resulting from steel-making and/or ore mining operations. Domestic interested parties were able to obtain spent catalysts from oil refineries at low or almost no cost at the time of the original investigations, but the cost of these vanadium-bearing inputs for Metvan, Gulf, and Stratcor has increased substantially in recent years as the value of the metals contained in these inputs has risen. Further, these domestic firms are now competing with foreign converter operations, which also purchase spent catalysts on the open market.

Although prices of the domestic like product did increase during the period of review as the costs of vanadium-bearing inputs used to produce ferrovanadium in the United States increased, we find that the likely significant quantities of low-priced subject imports from China and South Africa will likely limit the domestic industry’s ability to raise prices commensurately with these increased costs in the event that the antidumping duty orders on subject imports from China and South Africa are revoked.

We acknowledge that non-subject imports played an important role in the U.S. market during the period of review; after the antidumping duty petitions were filed and subject imports became subject to antidumping duty orders, non-subject imports captured a substantial portion of the market previously held by cumulated subject imports. As a share of apparent U.S. consumption, non-subject imports accounted for 39.8 percent in 2002, 25.5 percent in 2003, 43.3 percent in 2004, 39.2 percent in 2005,

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201 See, e.g., Domestic Interested Parties’ Prehearing Br. at 46.
202 See, e.g., Domestic Interested Parties’ Prehearing Br. at 47.
203 See, e.g., Domestic Interested Parties’ Prehearing Br. at 11; Hearing Tr. at 27-30. For its integrated operations, Metvan’s per-pound unit cost of goods sold progressively increased from $*** in 2002 to $*** in 2005 before declining somewhat to $*** in 2006 and to $*** in 2007. Its unit cost of goods sold in interim 2008 ($***) was $*** than in interim 2007 ($***). See, e.g., CR/PR at Table III-8. Tolles Gulf’s and Stratcor’s per-pound unit cost of goods sold on their vanadium operations (which includes their vanadium operations as well as their cost of having Bear toll-produce for them) progressively increased from $*** in 2002 to $*** in 2005, and was $*** in 2006 and $*** in 2007. See, e.g., CR/PR at Table III-15.
204 See, e.g., Domestic Interested Parties’ Prehearing Br. at 11; Domestic Interested Parties’ Posthearing Br. at 7-8; Hearing Tr. at 27-30, 89.
205 See, e.g., Domestic Interested Parties’ Prehearing Br. at 11; Hearing Tr. at 27-30.
206 See, e.g., Domestic Interested Parties’ Prehearing Br. at 11; Hearing Tr. at 27-30.
35.2 percent in 2006, and 36.5 percent in 2007.\textsuperscript{207} Non-subject imports originated primarily in the Czech Republic and, as discussed above, Korea at the end of the period of review. Importantly, however, the large presence of non-subject imports during the period of review did not preclude significant price increases for the domestic like product or improvements in the domestic industry’s condition.\textsuperscript{208} Furthermore, as indicated above, if the antidumping duty orders on subject imports from China and South Africa are revoked, we find that significant volumes of low-priced cumulated subject imports likely will enter the U.S. market. As they did in the original investigations, subject imports likely would take market share from both the domestic like product and the non-subject imports. In addition to directly supplanting non-subject imports, subject imports are likely to supplant non-subject imports indirectly to the extent that producers in China would have less of an incentive to export vanadium pentoxide to Korea for conversion into ferrovanadium for export to the United States and more of an incentive to export higher-valued ferrovanadium to the United States. Even if low-priced subject imports were to replace non-subject imports in the event of revocation, they would likely cause significant adverse price effects on the domestic industry.

For all of the foregoing reasons, we conclude that cumulated subject imports from China and South Africa are likely to have significant price effects in the event that the antidumping duty orders on these imports are revoked.

3. **Likely Impact of Subject Imports**

In the original investigations, the Commission found that subject imports adversely impacted the domestic industry. As the volume of subject imports increased, the industry’s condition worsened as evidenced by declines in a number of performance indicators. Domestic producers’ U.S. shipments fell between 1999 and 2001 and were lower in interim 2002 than in interim 2001. As a result of declining sales, domestic producers’ end-of-period inventories climbed. The domestic industry’s production capacity increased *** between 2000 and 2001, but production decreased between 1999 and 2001 by *** percent overall. The domestic industry’s capacity utilization dropped from *** percent in 1999 to *** percent in 2000 to *** percent in 2001, and was *** percent in interim 2002 compared to *** percent in interim 2001. The domestic industry’s average number of production workers declined, and the domestic industry sustained *** throughout the period of investigation. The domestic industry’s *** in 2001 coincided with the dramatic increase in subject import volume in 2001. Despite a decrease in cost of goods sold that helped the domestic industry *** in 2000, U.S. ferrovanadium prices fell faster than the domestic industry’s declines in cost of goods sold. The Commission attributed domestic producers’ continued performance declines in interim 2002 to the release of significant subject import inventories held by U.S. importers through the end of 2001. These *** and declining end-of-period inventories of subject merchandise held by importers exerted downward pressure on U.S. ferrovanadium prices and impeded U.S. shipments by the domestic industry, even as subject import volume declined in 2002. The Commission found that Bear’s results on its tolling operations also showed *** declines in net quantity tolled, tolling revenue, and ***. The Commission found that large volumes of subject imports took market share from the domestic industry, depressed prices in the U.S. market, and led to severe financial declines and a deterioration in the overall condition of the domestic industry during the original investigations. Accordingly, the Commission found that the cumulated subject imports were having a

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\textsuperscript{207} See, e.g., CR/PR at Table C-1.

\textsuperscript{208} See, e.g., Domestic Interested Parties’ Prehearing Br. at 35-38; Domestic Interested Parties’ Posthearing Br. at 7, 8-9, Exh. Q at 25-27, 46-49; Hearing Tr. at 33-36 (Levin), 77 (Levin); CR/PR at Tables V-1 and V-2.
significant adverse impact on the domestic industry. The Commission noted that its conclusion was further confirmed by consideration of the performance of Bear’s tolees, Gulf and USV.

In these reviews, having defined the domestic industry as Bear and Metvan, we examine the combined data for these two firms for many of the statutory factors (e.g., capacity, production, capacity utilization), although we recognize the differences in operations between a firm that produces and sells its production and a firm that toll produces for others. In addition, to measure U.S. shipments of the domestic like product and apparent U.S. consumption, we examined the combined data of Metvan, ***.

To measure end-of-period inventories, we examined the combined data of Metvan, ***.

Since imposition of the orders, the domestic industry’s capacity has remained largely stable at *** pounds annually, although ***. The domestic industry’s production fluctuated during the period of review declining from *** pounds in 2002 to *** pounds in 2003 before increasing to a period high of *** pounds in 2004. Production declined to *** pounds in 2005, increased to *** pounds in 2006, and declined to *** pounds in 2007. Production in interim 2008 was higher than in interim 2007. Capacity utilization remained relatively steady and *** during the period of review although ***.

Domestic producers have taken steps to ***. Metvan signed a new multi-year agreement in March 2008 with a major operator in the Alberta Oil Sands to process and recycle additional quantities of spent catalysts. Metvan ***. Bear ***.

U.S. shipments of the domestic like product fluctuated during the period of review. U.S. shipments of the domestic like product increased from 7.0 million pounds in 2002 to 8.7 million pounds in 2003 and 2004 before declining to 7.5 million pounds in 2005. Shipments then rose to 8.7 million pounds in 2006 before declining to 8.4 million pounds in 2007. U.S. shipments were higher in interim 2008 than in interim 2007.

After progressively losing market share in the original investigations to subject imports, which also displaced non-subject imports, U.S. shipments of the domestic like product increased their share of apparent U.S. consumption. Their market share rose from 55.9 percent in 2002 to 74.5 percent in 2003 then declined to 56.7 percent in 2004. Their market share increased to 60.8 percent in 2005 and to 64.8 percent in 2006 before declining to 63.4 percent in 2007.

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209 See, e.g., USITC Pub. 3570 at 21-22.
210 See, e.g., USITC Pub. 3570 at 22-23.
211 See, e.g., CR/PR at Table III-2.
212 See, e.g., CR/PR at Table III-5 & n.1.
213 See, e.g., CR/PR at Table III-1.
214 See, e.g., CR/PR at Table III-1.
215 ***. See, e.g., CR/PR at III-1; CR/PR at Table III-1. Capacity utilization levels declined from *** percent in 2002 to *** percent in 2003 and then increased to *** percent in 2004 before declining to *** percent in 2005. The domestic industry’s capacity utilization level then increased to *** percent in 2006 and declined to *** percent in 2007. Capacity utilization reached a period high of *** percent in interim 2008 compared to *** percent in interim 2007 after ***. See, e.g., CR/PR at Table III-1.
216 See, e.g., CR/PR at III-2 to III-3.
217 See, e.g., CR/PR at III-3.
218 See, e.g., CR/PR at Table III-2.
219 See, e.g., CR/PR at Table I-1.
220 Market share was lower in interim 2008 (50.3 percent) than in interim 2007 (58.1 percent). See, e.g., CR/PR (continued...)
The industry’s end-of-period inventories declined from a period peak of *** pounds in 2002 to a period low of *** pounds in 2003 then increased to *** pounds in 2004 and to *** pounds in 2005. Inventories then declined to *** pounds in 2006 and to *** pounds in 2007. Inventories in interim 2008 were lower than in interim 2007. Employment levels generally increased over the period of review, although they declined between 2002 and 2003. The *** production employees in interim 2008 were greater than the *** employees in 2002. Hourly wages fluctuated but were higher at the end of the period of review than at the inception. Productivity fluctuated on an annual basis, reaching a period high of *** pounds per hour in 2004 and a period low of *** pounds per hour in 2007, a lower level than at the beginning of the period of review.

In contrast to the period examined in the original investigations, domestic producers operated profitably during much of the period of review, although their performance fluctuated considerably throughout. The domestic industry had a *** percent *** in 2002, a *** percent *** in 2003, a *** percent *** in 2004 and a period high *** percent *** in 2005. Operating performance *** in the subsequent two years. In 2006, the industry had a *** percent *** and in 2007 it had a *** percent ***. The domestic industry’s capital expenditures fluctuated widely during the period of review, reaching a period high of $*** in 2007 and a period low of $*** in 2004.

These trends are consistent with the performance of Bear’s tollees Gulf and Strator during the period of review. Our consideration of these tollees’ performance is 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.” As noted above, Bear is dependent on its tollees for inputs and revenue, and financial difficulties for the tollees in turn affect Bear. Further, *** of the commercial sales of Bear’s production of ferrovanadium is reflected in the financial data of Gulf and Strator. With respect to these tollees, U.S. shipments increased from *** pounds in 2002 to *** pounds in 2003 before falling to *** pounds in 2004, *** pounds in 2005, *** pounds in 2006, and *** pounds in 2007; their U.S. shipments consistently accounted for *** of the reported U.S. shipments of the domestic like product during the period of review, ***. With respect to profitability, these tollees had *** of *** percent in 2002 and *** percent in 2003 but *** of *** percent in 2004, *** percent in 2005, and *** percent in 2006, although they had an *** of *** percent in 2007.

As discussed above, the antidumping duty orders have restrained the volume of cumulated subject imports shipped to the U.S. market. By restraining the volume of such imports, the orders contributed to the industry’s improved financial performance during the period of review. In light of the

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220 (...continued)

at Table C-1.

221 See, e.g., CR/PR at Table III-5.

222 See, e.g., CR/PR at Table III-6.

223 See, e.g., CR/PR at Table III-7.

224 See, e.g., CR/PR at Table III-9. Research and development expenses were ***. Id.


226 In these reviews, tollees Gulf and Strator submitted information on their performance during the period of review, although ***. We note that Bear’s production of ferrovanadium that was shipped by *** represented *** percent of Bear’s total ferrovanadium production in 2007, ***. See, e.g., CR at 1-17 n.27; PR at I-13 n.27.

227 See, e.g., CR/PR at Table III-2.

228 See, e.g., CR/PR at Table III-15.
domestic industry’s performance, we do not find that the domestic industry as a whole is in a vulnerable state.

As we explained above, low-priced subject imports displaced non-subject imports during the original investigations, and after imposition of the antidumping duty orders, non-subject imports increased their presence in the U.S. market to levels that exceeded the previous level of subject imports. Nevertheless, the domestic industry also increased its market share over the period of review, and its overall performance indicators improved considerably notwithstanding the large presence of fairly traded non-subject imports in the U.S. market throughout the period of review.

We have also considered the impending resumption of vanadium mining and vanadium pentoxide production at the Windimurra facility in Australia. As we found above, the imposition of the antidumping duty orders on ferrovanadium from China and South Africa and the closure of the Windimurra facilities in 2003 helped to explain the dramatic increase in ferrovanadium prices between 2003 and 2004. In addition, record evidence indicates that a green-field ferrovanadium facility in Windimurra, Australia is expected to begin producing 80-percent grade ferrovanadium in January 2009 and to begin exporting to Europe by the second quarter of 2009. When the ferrovanadium facility in Australia reaches its full smelting capacity in the second year of its operation, industry sources report that the facility will have the capacity to produce between 14.3 million to 15.4 million pounds of ferrovanadium annually, most of which is likely to be exported.

Given current global economic conditions, there is unlikely to be sufficient increased demand to fully absorb this substantial increase in supply. The record demonstrates ferrovanadium’s price-sensitivity to changes in the supply of ferrovanadium and vanadium-bearing inputs during the period of review. Thus, the impending resumption of vanadium mining and vanadium pentoxide production in Australia coupled with the opening of a new ferrovanadium facility in Australia increases the likelihood that, if the antidumping duty orders are revoked, subject producers in China and South Africa will ship a significant volume of ferrovanadium to the U.S. market to make use of the newly available supplies of vanadium-bearing intermediate products and because of competition in the markets where they currently export due to increased global supplies of ferrovanadium. We find that these subject imports from China and South Africa are likely to have significant price-suppressing or -depressing effects.

Thus, in conclusion, we find that revocation of the antidumping duty orders on the cumulated subject imports would likely have a significant adverse impact on the domestic industry’s output, sales, market share, employment, profits, and return on investment.

**CONCLUSION**

For the foregoing reasons, we determine that revocation of the antidumping duty orders on ferrovanadium from China and South Africa would be likely to lead to continuation or recurrence of material injury to the domestic industry within a reasonably foreseeable time.

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229 See, e.g., CR at IV-13; PR at IV-8; Domestic Interested Parties’ Posthearing Br. at Exh. Q at 45.

230 See, e.g., CR at IV-13; PR at IV-8; Hearing Tr. at 57-58, 101.
PART I: INTRODUCTION AND OVERVIEW

BACKGROUND

On December 3, 2007, the U.S. International Trade Commission (“Commission” or “USITC”) gave notice, pursuant to section 751(c) of the Tariff Act of 1930 (“the Act”), that it had instituted reviews to determine whether revocation of the antidumping duty orders on ferrovanadium from China and South Africa would likely lead to the continuation or recurrence of material injury to a domestic industry within a reasonably foreseeable time. On March 7, 2008, the Commission determined that it would conduct full reviews pursuant to section 751(c)(5) of the Act. Information relating to the background and schedule of these reviews is provided in the following tabulation.

<table>
<thead>
<tr>
<th>Effective date</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>January 28, 2003</td>
<td>Commerce’s antidumping duty orders (68 FR 4168 and 4169)</td>
</tr>
<tr>
<td>December 3, 2007</td>
<td>Commission’s institution of reviews (72 FR 67962)</td>
</tr>
<tr>
<td>March 7, 2008</td>
<td>Commission’s decision to conduct full reviews (73 FR 14484, March 18, 2008)</td>
</tr>
<tr>
<td>April 9, 2008</td>
<td>Commerce’s final results of expedited reviews (73 FR 19192)</td>
</tr>
<tr>
<td>May 22, 2008</td>
<td>Commission’s scheduling of the reviews (73 FR 31711, June 3, 2008)</td>
</tr>
<tr>
<td>July 1, 2008</td>
<td>Commission’s revised scheduling of the reviews (73 FR 39040, July 8, 2008)</td>
</tr>
<tr>
<td>October 7, 2008</td>
<td>Commission’s hearing¹</td>
</tr>
<tr>
<td>November 13, 2008</td>
<td>Date of the Commission’s vote</td>
</tr>
<tr>
<td>November 24, 2008</td>
<td>Commission’s determinations transmitted to Commerce</td>
</tr>
</tbody>
</table>

¹ App. B contains a list of witnesses who appeared at the hearing.

¹ 72 FR 67962, December 3, 2007. All interested parties were requested to respond to this notice by submitting the information requested by the Commission. Copies of notices pertaining to these reviews and the Commission’s statement on adequacy are contained in app. A.

² On March 7, 2008, the Commission determined that the domestic interested party group response to its notice of institution was individually adequate. The Commission did not receive a response from any importer or foreign producer of ferrovanadium to its notice of institution and found the respondent interested party response to be inadequate with respect to the review on imports from China and with respect to the review on imports from South Africa. The law firm of Vinson & Elkins filed a notice of appearance and obtained administrative protective order access on behalf of Highveld Steel and Vanadium Corp. Limited (“Highveld”), a South African producer and exporter of subject merchandise, but subsequently withdrew its notice of appearance shortly after the deadline to respond to the notice of institution. Subsequently, the law firm of Alston & Bird notified the Commission that it would be assisting Xstrata South Africa (“Xstrata”), a South African producer and exporter of subject merchandise and its U.S. affiliate, Glencore Ltd. (“Glencore”), an importer of subject merchandise, in the completion of the Commission’s questionnaires. No notice of appearance was filed by Alston & Bird nor any other entity on behalf of Xstrata, Glencore, or any other respondent interested party in these reviews.
The Original Investigations

On November 26, 2001, a petition was filed with the Department of Commerce (“Commerce”) and the Commission alleging that an industry in the United States was materially injured and threatened with material injury by reason of less than fair value imports of ferrovanadium from China and South Africa. In the ensuing original investigations, Commerce defined the subject merchandise as imports of ferrovanadium (regardless of grade, chemistry, form, shape, or size), an alloy of iron and vanadium that is used chiefly as an additive in the manufacture of steel. On November 29, 2002, Commerce published its final affirmative determinations with dumping margins (in percent) as follows:

<table>
<thead>
<tr>
<th>Country</th>
<th>Manufacturer/producer/exporter</th>
<th>Weighted-average margin</th>
</tr>
</thead>
<tbody>
<tr>
<td>China</td>
<td>Pangang Group International Economic &amp; Trading Corp.</td>
<td>12.97%</td>
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<tr>
<td></td>
<td>China-wide entity</td>
<td>66.71%</td>
</tr>
<tr>
<td>South Africa</td>
<td>Highveld Steel and Vanadium Corp.</td>
<td>116.00%</td>
</tr>
<tr>
<td></td>
<td>Xstrata South Africa</td>
<td>116.00%</td>
</tr>
<tr>
<td></td>
<td>All others</td>
<td>116.00%</td>
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</tbody>
</table>

The Commission issued its affirmative final injury determinations on January 16, 2003 and Commerce issued an amended final determination on China and antidumping duty orders on ferrovanadium from both countries on January 28, 2003. Table I-1 presents information on the U.S. market and aggregate reported information on the U.S. firms (currently Bear and Metvan) that produce ferrovanadium plus the U.S. firms known as “tollees” that sell ferrovanadium that is toll-produced for them by Bear. Table I-2 presents information on the U.S. producers of ferrovanadium.

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Previous Investigations/Five-Year Reviews

Since July 10, 1995, there has been an antidumping duty order in effect on ferrovanadium and nitrided vanadium from Russia. In May 2001, the Commission determined, after conducting a full five-year review, that revocation of the order would be likely to lead to continuation or recurrence of material injury to the domestic industry within a reasonably foreseeable time. After conducting an expedited second five-year review of the order, the Commission unanimously determined on September 18, 2006, that revocation of the order would be likely to lead to continuation or recurrence of material injury to the domestic industry within a reasonably foreseeable time, based on the record in that expedited review, the Commission was unable to determine whether the domestic industry was vulnerable.

SUMMARY DATA

A summary of data collected in these reviews is presented in appendix C. Table C-1 consists of data for U.S. producers/tollees of ferrovanadium. Table C-2 consists of data only for U.S. producers of ferrovanadium. U.S. industry data are based on the U.S. producers’ questionnaire responses of four firms that accounted for *** of U.S. production and shipments of U.S. ferrovanadium during 2007. U.S. import data are based on official import statistics for ferrovanadium as revised by the Bureau of the Census. When factoring in these adjustments, responses to importers’ questionnaires accounted for 100 percent of 2007 subject imports. Responses by U.S. producers, importers, and purchasers of ferrovanadium and producers of ferrovanadium in South Africa to a series of questions concerning the significance of the existing antidumping duty orders and the likely effects of revocation are presented in appendix D.
### Table I-1
Ferrovanadium: Summary data for U.S. producers/tolnees from the original investigations and the current reviews, 1999-2007

(Quantity=1,000 pounds of contained vanadium; value=1,000 dollars; unit values, unit labor costs, and unit financial data are per pound)

<table>
<thead>
<tr>
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<tr>
<td><strong>U.S. consumption quantity:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Amount</td>
<td>12,965</td>
<td>13,012</td>
<td>11,891</td>
<td>12,606</td>
<td>11,625</td>
<td>15,381</td>
<td>12,397</td>
<td>13,403</td>
<td>13,327</td>
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<tr>
<td>Producers’ share:¹</td>
<td>67.2</td>
<td>57.6</td>
<td>52.8</td>
<td>55.9</td>
<td>74.5</td>
<td>56.7</td>
<td>60.8</td>
<td>64.8</td>
<td>63.4</td>
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<tr>
<td><strong>Importer’s share:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>China</td>
<td>6.4</td>
<td>11.3</td>
<td>8.3</td>
<td>0.9</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
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<tr>
<td>South Africa</td>
<td>11.4</td>
<td>8.1</td>
<td>20.8</td>
<td>3.5</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.1</td>
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<tr>
<td>Subtotal</td>
<td>17.8</td>
<td>19.4</td>
<td>29.2</td>
<td>4.4</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.1</td>
</tr>
<tr>
<td>All other countries¹</td>
<td>15.0</td>
<td>23.0</td>
<td>18.1</td>
<td>39.8</td>
<td>25.5</td>
<td>43.3</td>
<td>39.2</td>
<td>35.2</td>
<td>36.5</td>
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<td>$28.08</td>
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Table I-1--Continued
Ferrovanadium: Summary data for U.S. producers/tolles from the original investigations and the current reviews, 1999-2007

(Quantity=1,000 pounds contained vanadium; value=1,000 dollars; unit values, unit labor costs, and unit financial data are per pound)

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<td>$19.94</td>
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<td>Capacity quantity&lt;sup&gt;3&lt;/sup&gt;</td>
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<td>***</td>
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<td>Capacity utilization&lt;sup&gt;1, 3&lt;/sup&gt;</td>
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<td>***</td>
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<td>***</td>
<td>***</td>
<td>***</td>
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<td>Inventories/total shipments&lt;sup&gt;1&lt;/sup&gt;</td>
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<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
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<td>Production workers&lt;sup&gt;3&lt;/sup&gt;</td>
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<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
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</tr>
<tr>
<td>Hours worked (1,000 hours)&lt;sup&gt;3&lt;/sup&gt;</td>
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<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
</tr>
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<td>Wages paid (1,000 dollars)&lt;sup&gt;3&lt;/sup&gt;</td>
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<td>***</td>
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<td>***</td>
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<td>***</td>
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<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
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</tr>
<tr>
<td>Productivity (pounds per hour)&lt;sup&gt;3&lt;/sup&gt;</td>
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<td>***</td>
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<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>Gross profit or (loss)</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>(10,773)</td>
<td>(8,479)</td>
<td>21,453</td>
<td>102,547</td>
<td>31,925</td>
<td>986</td>
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<td>Operating income or (loss)</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>(10,773)</td>
<td>(8,479)</td>
<td>21,453</td>
<td>102,547</td>
<td>31,925</td>
<td>986</td>
</tr>
<tr>
<td>Unit cost of goods sold</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
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<td>***</td>
<td>***</td>
<td>***</td>
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<td>Unit operating income or (loss)</td>
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<td>***</td>
<td>***</td>
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<td>$(0.94)</td>
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<td>$14.16</td>
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<td>***</td>
<td>***</td>
<td>***</td>
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<td>***</td>
</tr>
<tr>
<td>Operating income or (loss)/sales&lt;sup&gt;1&lt;/sup&gt;</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>(-37.1)</td>
<td>(-18.9)</td>
<td>22.8</td>
<td>47.3</td>
<td>23.3</td>
<td>0.8</td>
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<sup>1</sup> In percent.
<sup>2</sup> Not applicable.
<sup>3</sup> Data are for Bear and Metvan only.

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

Source: Compiled from data submitted in response to Commission questionnaires and from official Commerce statistics.
Table I-2
Ferrovanadium: Summary data for U.S. producers Bear and Metvan from the original investigations and the current reviews, 1999-2007

From the original investigations through the end of the period of review, U.S. consumption has remained relatively steady, except for a 32-percent one-year spike in 2004. Domestic producers’/tollees share of U.S. consumption has also remained relatively stable, except for an 18.6-percentage-point increase in 2003, the year the antidumping duty orders took effect. Between 2001 and 2007, U.S. imports of ferrovanadium from China and South Africa virtually ceased while at the same time, nonsubject imports’ share of U.S. consumption increased. In 2002, nonsubject imports’ share of U.S. consumption more than doubled, reaching levels that (except for a brief decrease in 2003) were maintained throughout the review period.

STATUTORY CRITERIA

Section 751(c) of the Act requires Commerce and the Commission to conduct a review no later than five years after the issuance of an antidumping or countervailing duty order or the suspension of an investigation to determine whether revocation of the order or termination of the suspended investigation “would be likely to lead to continuation or recurrence of dumping or a countervailable subsidy (as the case may be) and of material injury.” Section 752(a) of the Act provides that in making its determination of likelihood of continuation or recurrence of material injury—

(1) IN GENERAL.-- . . . the Commission shall determine whether revocation of an order, or termination of a suspended investigation, would be likely to lead to continuation or recurrence of material injury within a reasonably foreseeable time. The Commission shall consider the likely volume, price effect, and impact of imports of the subject merchandise on the industry if the order is revoked or the suspended investigation is terminated. The Commission shall take into account--

(A) its prior injury determinations, including the volume, price effect, and impact of imports of the subject merchandise on the industry before the order was issued or the suspension agreement was accepted,
(B) whether any improvement in the state of the industry is related to the order or the suspension agreement,
(C) whether the industry is vulnerable to material injury if the order is revoked or the suspension agreement is terminated, and
(D) in an antidumping proceeding . . ., (Commerce’s findings) regarding duty absorption . . . .

(2) VOLUME.--In evaluating the likely volume of imports of the subject merchandise if the order is revoked or the suspended investigation is terminated, the Commission shall consider whether the likely volume of imports of the subject merchandise would be significant if the order is revoked or the suspended investigation is terminated, either in absolute terms or relative to

---

production or consumption in the United States. In so doing, the Commission shall consider all relevant economic factors, including--

(A) any likely increase in production capacity or existing unused production capacity in the exporting country,
(B) existing inventories of the subject merchandise, or likely increases in inventories,
(C) the existence of barriers to the importation of such merchandise into countries other than the United States, and
(D) the potential for product-shifting if production facilities in the foreign country, which can be used to produce the subject merchandise, are currently being used to produce other products.

(3) PRICE.--In evaluating the likely price effects of imports of the subject merchandise if the order is revoked or the suspended investigation is terminated, the Commission shall consider whether--

(A) there is likely to be significant price underselling by imports of the subject merchandise as compared to domestic like products, and
(B) imports of the subject merchandise are likely to enter the United States at prices that otherwise would have a significant depressing or suppressing effect on the price of domestic like products.

(4) IMPACT ON THE INDUSTRY.--In evaluating the likely impact of imports of the subject merchandise on the industry if the order is revoked or the suspended investigation is terminated, the Commission shall consider all relevant economic factors which are likely to have a bearing on the state of the industry in the United States, including, but not limited to--

(A) likely declines in output, sales, market share, profits, productivity, return on investments, and utilization of capacity,
(B) likely negative effects on cash flow, inventories, employment, wages, growth, ability to raise capital, and investment, and
(C) likely negative effects on the existing development and production efforts of the industry, including efforts to develop a derivative or more advanced version of the domestic like product.

The Commission shall evaluate all such relevant economic factors . . . within the context of the business cycle and the conditions of competition that are distinctive to the affected industry.

Section 752(a)(6) of the Act states further that in making its determination, “the Commission may consider the magnitude of the margin of dumping or the magnitude of the net countervailable subsidy. If a countervailable subsidy is involved, the Commission shall consider information regarding the nature of the countervailable subsidy and whether the subsidy is a subsidy described in Article 3 or 6.1 of the Subsidies Agreement.”
COMMERCE’S RESULTS OF EXPEDITED REVIEWS

On December 3, 2007, Commerce initiated sunset reviews of the antidumping duty orders on ferrovanadium from China and South Africa. On January 22, 2008, domestic producers jointly filed substantive responses to both sunset reviews. Commerce did not receive a substantive response from any respondent interested party in either sunset review. As a result, Commerce conducted expedited reviews of the antidumping duty orders on ferrovanadium from China and South Africa. On April 9, 2008, Commerce found that revocation of the antidumping duty orders on ferrovanadium from China and South Africa would likely lead to continuation or recurrence of dumping as follows:14

<table>
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<th>Country</th>
<th>Manufacturer/Producer/Exporter</th>
<th>Weighted-average margin (in percent)</th>
</tr>
</thead>
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<tr>
<td>China</td>
<td>Pangang Group International Economic &amp; Trading Corp.</td>
<td>12.97</td>
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<tr>
<td></td>
<td>China-wide entity</td>
<td>66.71</td>
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<tr>
<td>South Africa</td>
<td>Highveld Steel and Vanadium Corp.</td>
<td>116.00</td>
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<tr>
<td></td>
<td>Xstrata South Africa</td>
<td>116.00</td>
</tr>
<tr>
<td></td>
<td>All others</td>
<td>116.00</td>
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</table>

COMMERCE’S ADMINISTRATIVE REVIEWS

There have been no completed administrative reviews since issuance of the antidumping duty orders on ferrovanadium from China and South Africa.15 There have been no related findings or rulings (e.g., changed circumstances reviews, scope rulings, or duty absorption reviews) since the issuance of the antidumping duty orders on ferrovanadium from China and South Africa.

DISTRIBUTION OF CONTINUED DUMPING AND SUBSIDY OFFSET ACT FUNDS

The Continued Dumping and Subsidy Offset Act of 2000 (“CDSOA”) (also known as the Byrd Amendment) provides that assessed duties received pursuant to antidumping or countervailing duty orders must be distributed to affected domestic producers for certain qualifying expenditures that these producers incur after the issuance of such orders.16 During the review period, qualified U.S. producers of

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14 Commerce’s notice is presented in app. A.


16 Section 754 of the Tariff Act of 1930, as amended (19 U.S.C. § 1675(c)).
ferrovanadium were eligible to receive disbursements from U.S. Customs and Border Protection (“Customs”) under CDSOA relating to the two antidumping duty orders on the subject product beginning in Federal fiscal year 2003.\textsuperscript{17} Table I-3 presents CDSOA disbursements by firms and total claims for Federal fiscal years (October 1-September 30) 2003-07.

Table I-3  
Ferrovanadium: CDSOA disbursements, by firm, and total claims, Federal fiscal years 2003-07

<table>
<thead>
<tr>
<th>Item</th>
<th>Federal fiscal year</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2003</td>
</tr>
<tr>
<td>Disbursements (dollars)\textsuperscript{1}</td>
<td></td>
</tr>
<tr>
<td>Bear Metallurgical</td>
<td>0</td>
</tr>
<tr>
<td>Shieldalloy Metallurgical (MVC)</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>0</td>
</tr>
<tr>
<td>Claims (dollars)</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>0</td>
</tr>
</tbody>
</table>

\textsuperscript{1} All of the disbursements resulted from the antidumping duty order on ferrovanadium from China. There were no disbursements resulting from the antidumping duty order on ferrovanadium from South Africa.


\textsuperscript{17} 19 CFR 159.64 (g).
THE SUBJECT MERCHANDISE

Commerce’s Scope and Tariff Treatment

The imported product subject to the antidumping orders under review, as defined by Commerce, is as follows:

all ferrovanadium 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 vanadium. The scope 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.18

Merchandise imported under Harmonized Tariff Schedule of the United States (HTSUS) subheadings 2850.00.20, 8112.92.06, 8112.92.70, and 8112.99.20 is specifically excluded. Ferrovanadium is classified under HTSUS subheading 7202.92.00, with a normal trade relations import duty (applicable to both China and South Africa) of 4.2 percent ad valorem.

THE PRODUCT

Description and Applications

Ferrovanadium is an alloy of vanadium and iron that is used to add vanadium to molten steel. Ferrovanadium is the largest use of vanadium and accounts for 85 percent or more of all vanadium consumption worldwide. Steel products that require the addition of vanadium include certain construction alloy steels, rail steels, heat-resisting tool and die steels, certain special stainless steels, and the largest use, high-strength low-alloy steels, often called microalloy steels. Microalloy steels are used extensively in pipeline steel, concrete reinforcing bars, structural shapes and plate for construction, and in automobile components.

All ferrovanadium products are subject to these investigations, but there are two common grades of ferrovanadium: a 45–55 percent vanadium product and a 78–82 percent vanadium product. Regardless of grade, commercial practice is to quote the price of ferrovanadium on the basis of the contained vanadium content, and ferrovanadium is commonly packaged in containers of a specified content of contained vanadium, typically 25 pounds.

Although vanadium is one of the most common elements in the earth’s crust, it is found mostly in concentrations that would be uneconomical to mine or process for vanadium content alone. As a result, it is most often produced as a byproduct or co-product of other mineral operations. By far, the largest source of vanadium is a byproduct of the production of steel using iron ore with a high vanadium content. There are only a few such steel plants in operation—one in South Africa, one in Russia, one in New Zealand, and two in China—and these operations are the source of the raw material for the production of about 60 percent of vanadium worldwide.

The second source of vanadium is vanadium ore. Most ore production is in South Africa, with a smaller amount in China. These operations currently contribute about one-quarter of the supply of

vanadium, but involve high capital and operating costs. Nonetheless, a new mine and processing operation dedicated to the production of ferrovanadium is currently under development in Australia and expected to begin operations in the first quarter of 2009. The new operation, Windimurra Vanadium, Ltd., is expected to have an annual capacity of 6,500-7,000 metric tons (14.3 million to 15.4 million pounds) of vanadium, equivalent to about 8 to 10 percent of world production.

The third and final source of vanadium is residue from the processing and burning of vanadium-containing oil products. Used catalyst from oil-refining operations and ash residue from oil-burning power plants are the source of about 18 percent of vanadium worldwide. Crude oil from Venezuela and Mexico and Canadian oil sands are notably high in vanadium content and are the source of most of the vanadium produced in the United States.

**Manufacturing Processes**

The manufacturing processes to produce ferrovanadium are determined by the raw material to be used. Most operations utilize a two-step process: first, the production and separation of vanadium pentoxide from the other contents of the raw material, and second, the production of ferrovanadium from vanadium pentoxide. Vanadium pentoxide is an important intermediate chemical compound that is used primarily for ferrovanadium, but also for many other vanadium chemicals and alloys. It is widely traded and its price is regularly reported in industry publications.

Gulf is primarily a processor of spent catalyst from oil refineries. Catalyst contains recoverable cobalt, molybdenum, and nickel as well as vanadium, and the operation depends upon the profitable recovery not only of vanadium but of the other elements as well. Gulf produces vanadium pentoxide, which it transfers to its corporate affiliate, Bear, which processes the vanadium pentoxide into ferrovanadium in exchange for a processing fee. The ferrovanadium remains the property of Gulf, which takes responsibility for selling the product and administering the sales. Gulf also sells other products recovered from catalyst, including molybdenum oxide, which is used to produce ferromolybdenum or used directly in steelmaking, and a metallic alloy that is used as a feedstock for nickel and cobalt recovery at smelters or refineries.

Stratcor is a producer of vanadium pentoxide as well as a variety of vanadium chemicals. Stratcor’s starting material is primarily ***. Stratcor transfers vanadium pentoxide to Bear, which processes the vanadium pentoxide into ferrovanadium in exchange for a processing fee. The ferrovanadium remains the property of Stratcor, which takes responsibility for selling the product and administering the sales.

Bear receives vanadium pentoxide and processes it into ferrovanadium in return for a processing fee. The process used by Bear is aluminothermic, in which heat for the process is derived from chemical reactions. Vanadium pentoxide and aluminum are placed in a conversion vessel along with steel scrap and flux materials. The contents are ignited with a fuse and the reaction proceeds quickly, with the oxidation (burning) of aluminum providing the heat. The result is molten ferrovanadium and an aluminum oxide-rich slag. After cooling, both are crushed and sized for sale. The ferrovanadium is packaged in individual containers, usually of 25 pounds of vanadium, or in supersacks. Slag is sold for use as flux in steelmaking operations.

Metvan produces ferrovanadium from ***. In addition to ferrovanadium, Metvan recovers *** a nickel-molybdenum-iron alloy which is used in steelmaking. Metvan uses ***. Metvan’s ferrovanadium product differs from that of Bear in that it contains roughly *** percent of vanadium, whereas Bear’s product contains 80 percent. Metvan’s product also contains more silicon but less aluminum than Bear’s. Despite the difference in contained content of vanadium, the product is packaged similarly to 80-percent product, in individual cans or paper sacks, typically of 25 pounds of vanadium content or in supersacks containing 2,000 pounds of alloy.
Spent oil refinery catalyst *** are waste products that are subject to regulation with respect to their handling, processing, and disposition. Two classes of spent catalysts are specifically classified as hazardous wastes under the RCRA (the Resource Conservation and Recovery Act): hydrotreating catalysts (RCRA waste K171) and hydrefining catalysts (RCRA waste K172). As receivers and processors of hazardous waste, Gulf and Metvan must be licensed and comply with RCRA regulations with respect to handling, processing, and record-keeping related to the hazardous wastes.

DOMESTIC LIKE PRODUCT ISSUES

In its original determinations the Commission found the appropriate domestic like product to be “ferrovanadium of all grades coextensive with the scope of these investigations.”¹⁹ In response to a question soliciting comments regarding the appropriate domestic like product in the Commission’s notice of institution of these reviews, the Vanadium Producers and Reclaimers Association (“VPRA”) and VPRA members Bear, Gulf, Metvan, and Stratcor agree with the definition of the “domestic like product” from the original investigations.²⁰

DOMESTIC INDUSTRY ISSUES

In the original investigations, the Commission defined the domestic industry as petitioners Bear and Shieldalloy (now Metvan) as well as non-petitioner International Specialty Alloys, each of which toll-produced ferrovanadium for other firms. The Commission majority declined to include in the domestic industry tollees USV (now Stratcor) or Gulf, because they produced vanadium pentoxide (an upstream product used to make ferrovanadium) but did not produce the domestic like product.²¹

In response to a question soliciting comments regarding the appropriate domestic industry in the Commission’s notice of institution of these reviews, the VPRA, Gulf, Bear, Metvan, and Stratcor agree with the definition of the domestic industry as consisting of Bear and Metvan.²²

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²⁰ Domestic interested parties’ response to the notice of institution, p. 28.


²² The domestic interested parties request that the Commission continue to find it appropriate to consider the condition of Stratcor and Gulf in its assessment of the impact of subject imports on the domestic industry because: Gulf and Stratcor utilize recycling technologies to process vanadium-bearing raw materials, processes similar to those used by Metvan; Gulf and Stratcor are established U.S. producers of the intermediate material used by Bear to produce ferrovanadium; Bear is dependent upon vanadium pentoxide manufactured by Gulf and Stratcor for its continued operations as a toll-converter; and Gulf and Stratcor’s sales of ferrovanadium toll-produced by Bear account for approximately *** by weight of the total sales of U.S.-produced ferrovanadium during the period of the reviews. Domestic interested parties’ posthearing brief, p. 3.
U.S. MARKET PARTICIPANTS

U.S. Producers

The Commission received questionnaire responses from firms that accounted for the great bulk of U.S. production and shipments of ferrovanadium during the review period.23 These firms can be divided into two groups.24 First, there are those that either produce the subject product for their own account or toll process the product for the account of others under a toll agreement. The two firms that fall into this group are U.S. producers Bear and Metvan.25 Gulf and Stratcor26 fall into the second group, commonly referred to for Commission purposes as tollees. Tollees supply Bear with the principal materials which it then converts to the finished product. The tollees retain title to the product and sell it to their customers. Table I-4 presents the U.S. producers, their plant locations, positions on continuing the antidumping duty orders, and shares of 2007 production.27

Table I-4
Ferrovanadium: U.S. producers, their positions on continuing the antidumping duty orders, plant locations, and shares of production, 2007

<table>
<thead>
<tr>
<th>Firm</th>
<th>Position on orders1</th>
<th>Plant location</th>
<th>Share (in percent) of reported production</th>
</tr>
</thead>
<tbody>
<tr>
<td>Producers</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bear</td>
<td>Support</td>
<td>Butler, PA</td>
<td>***</td>
</tr>
<tr>
<td>Metvan</td>
<td>Support</td>
<td>Cambridge, OH</td>
<td>***</td>
</tr>
</tbody>
</table>

1 Tollees Gulf and Stratcor both support continuing the antidumping duty orders.

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

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23 U.S. producers/tollees’ responses regarding changes in the character of their operations since January 1, 2002 are contained in app. E.

24 In the original investigations, International Specialty Alloys had *** toll production of ferrovanadium. International Specialty no longer produces ferrovanadium. ***. Doc. ID 309315.

25 At the time of the original investigations, Metvan conducted its vanadium operations as Shieldalloy Metallurgical Corp. Domestic interested parties’ response to the notice of institution, p. 2 at fn. 2. This name change became effective May 1, 2002, and was made so that investors could more easily identify the different parts of Metallurg, Inc., the parent company. (Ryan’s Notes, 2002k.)

26 At the time of the original investigations, Strategic Minerals Corporation participated in the VPRA through its wholly owned subsidiary, USV. In 2004, Strategic Minerals Corp. consolidated USV and another wholly owned subsidiary (Stratcor Performance Materials) into a single, wholly owned subsidiary named Stratcor, Inc. Domestic interested parties’ response to the notice of institution, p. 2, fn. 3.

27 Bear’s production of ferrovanadium that was shipped by *** represented *** percent of Bear’s total ferrovanadium production in 2007. ***. Domestic interested parties prehearing brief, exh. 12.
Bear

Bear, a wholly owned subsidiary of Gulf, produces ferrovanadium at its facility in Butler, Pennsylvania. As at the time of the original investigations, Bear continues to toll convert materials provided by other companies including *** into ferrovanadium. In addition to ferrovanadium, Bear also is a toll processor of ferromolybdenum. ***.

Gulf

Gulf, a subsidiary of Comilog US Inc., operates under a toll agreement whereby it supplies the intermediate material to Bear, which then converts the material to ferrovanadium. In December 2005, Gulf acquired 100 percent of Bear. Gulf retains title to the finished product throughout the conversion process and sells the finished product to its customers. *** of Gulf’s shipments of ferrovanadium during the review period were produced under the toll agreement with Bear.

Metvan

Metvan, a wholly owned subsidiary of Advanced Metallurgical Group (“AMG”), has been a producer of ferrovanadium since 1952. The company’s production facility is located in Cambridge, OH. Unlike Bear’s ferrovanadium aluminothermic production process (which utilizes a chemical reaction to convert vanadium pentoxide to ferrovanadium), Metvan uses a modified silicothermic reduction process which is capable of utilizing ***. Metvan purchases these materials, manufactures these materials into ferrovanadium, and sells the product to purchasers.

Stratcor

Stratcor is a wholly owned subsidiary of Strategic Minerals Corp. Like Gulf, Stratcor operates under a toll agreement whereby it supplies the intermediate material, vanadium pentoxide, to Bear, which then converts the material to ferrovanadium. Stratcor retains title to the product throughout the conversion process and sells the finished product to its customers. *** of Stratcor’s shipments of ferrovanadium during the review period were produced under the toll agreement with Bear.

*** of the domestic producers or tollees reported being related to an exporter or an importer of the subject product. Tolle Stratcor was indirectly related to South African producer of subject merchandise Highveld. ***. *** of the domestic producers or tollees reported imports from subject

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28 In December 2005, Gulf acquired 100 percent of Bear, an increase from its previous stake of 49.5 percent.

29 Domestic interested parties’ prehearing brief, exh. 12.

30 Bear’s response to the Commission’s questionnaire.

31 Stratcor had been a U.S. producer of ferrovanadium until December 1993 when it shut down its facility in Niagara Falls, NY. See Ferrovanadium and Nitrided Vanadium from Russia, Inv. No. 731-TA-702 (Final), USITC Publication 2904, pp. II-13 to II-14. In October 2005, Stratcor announced plans to consolidate all its vanadium production operations at its Hot Springs, AR facility to produce intermediate products like vanadium pentoxide and trioxide that are used to produce ferrovanadium (Ryan’s Notes, 2006d).

32 In April 2006, Evraz Group S.A. (Luxembourg) acquired a 72.8-percent stake in Strategic Minerals Corp. See “Evraz acquires leading vanadium producer Stratcor,” Evraz Press Release, April 10, 2006. In September 2007, Evraz Group acquired an additional 24.9-percent interest in Highveld Steel and Vanadium Corp. (“Highveld”), a producer of ferrovanadium located in South Africa, increasing its stake in Highveld to 80.9 percent. See “Evraz (continued...)
countries, *** report producing the subject product in a foreign trade zone. *** firms reported being involved in a toll agreement whereby *** toll converted for ***. Data on domestic producers’/tollees’ imports and purchases of the subject product are presented in Part III of this report.

**U.S. Importers**

Given that there have only been sporadic U.S. imports of the subject merchandise since the order date, the petitioners did not provide information regarding specific U.S. importers which entered those small quantities of ferrovanadium. The Commission identified eight importers through proprietary Customs data, that may have imported ferrovanadium from the subject countries during the period of review. The Commission also sent importer questionnaires to all U.S. producers/tollees. *** reported importing ferrovanadium from subject countries during the review period. *** reported that they had imported ferrovanadium from nonsubject countries. One firm (****) reported being related to a firm engaged in exporting ferrovanadium from South Africa to the United States (***). One firm (****) reported being related to a firm engaged in importing ferrovanadium from countries other than China or South Africa into the United States (***). One firm (****) reported being related to a firm which is engaged in the production of ferrovanadium (***).

**U.S. Purchasers**

The Commission sent questionnaires to 34 firms believed to be purchasers of the subject merchandise. In response, 16 purchasers provided data. Major reporting purchasers include ***.

**APPARENT U.S. CONSUMPTION AND MARKET SHARES**

Table I-5 presents apparent U.S. consumption for the review period and table I-6 presents U.S. market shares for the same period. The quantity of apparent U.S. consumption of ferrovanadium has remained relatively steady over the review period, temporarily spiking in 2004. The value of apparent U.S. consumption during the review period increased by 175 percent in 2004 and 129 percent in 2005 owing to historically high prices for ferrovanadium. Reasons cited by U.S. producers for these price increases include reductions in world supply of ferrovanadium and vanadium pentoxide combined with strong worldwide demand, fueled in large part by growing steel demand in China. After peaking in

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32 (continued)

increases its stake in Highveld to 80.9%.” Evraz Press Release, September 27, 2008. Under the conditions set forth by the European Commission, Evraz committed to divest certain of Highveld’s vanadium and ferrovanadium production facilities and related assets, including the Vanchem operations located in Witbank, South Africa; divest its 50-percent joint venture holdings in South Africa Japan Vanadium (Proprietary) Ltd.; and maintain existing vanadium feedstock supply agreements with certain customers. See “Mergers: Commission approves proposed acquisition of steel and vanadium producer Highveld by steel company, Evraz, subject to conditions,” EU press release, February 20, 2007. In September 2008, Evraz completed its divestiture of Highveld’s vanadium-related assets and other assets to Duferco Investment Partners for $160 million. Domestic interested parties’ posthearing brief, exh. 8.

33 Due to several reporting errors in the original import data, the Bureau of the Census made several corrections to those data. Those adjusted figures are included in table C-1 in appendix C. See exh. 1 in the domestic interested parties’ response to the notice of institution.

34 Xstrata’s closure of its Vantech operations in South Africa, the closure of the Windimurra facility in Australia, and the closure of CS Metals of Louisiana, a processor of spent catalysts into vanadium pentoxide, helped contribute (continued...
2005, the value of apparent U.S. consumption decreased by 34 percent in 2006 and 17 percent in 2007, but increased by 107 percent between the interim periods reportedly owing to an increase in ferrovanadium prices brought about by power supply interruptions in South Africa, abnormally severe winter weather in China, and transportation disruptions caused by an earthquake in China in May 2008.

U.S. producers’/tollers’ share of the U.S. market in terms of quantity and value has fluctuated during the review period, reaching its peak in 2003, the year the antidumping duty orders took effect. During the review period, imports from subject countries have virtually ceased while the market share for all other import sources fluctuated.

\[\text{...continued}\]

to reductions in the world supply of ferrovanadium and vanadium. Domestic interested parties’ prehearing brief, p. 46.
Table I-5

<table>
<thead>
<tr>
<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Quantity (1,000 pounds of contained vanadium)</strong></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>U.S. producers'/tollees' U.S. shipments¹</td>
<td>7,045</td>
<td>8,661</td>
<td>8,717</td>
<td>7,537</td>
<td>8,684</td>
<td>8,444</td>
<td>3,731</td>
<td>3,946</td>
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<td>U.S. imports from--</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td>China</td>
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<td>1</td>
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<td>South Africa</td>
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<td>17</td>
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<td>1</td>
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<tr>
<td>Other sources</td>
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<td>6,564</td>
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<td>4,718</td>
<td>4,866</td>
<td>2,691</td>
<td>3,905</td>
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<td>2,964</td>
<td>6,564</td>
<td>4,860</td>
<td>4,719</td>
<td>4,883</td>
<td>2,691</td>
<td>3,905</td>
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<td>11,625</td>
<td>15,381</td>
<td>12,397</td>
<td>13,403</td>
<td>13,327</td>
<td>6,422</td>
<td>7,851</td>
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<td><strong>Value ($1,000)</strong></td>
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</tr>
<tr>
<td>U.S. producers'/tollees' U.S. shipments¹</td>
<td>27,647</td>
<td>42,773</td>
<td>93,586</td>
<td>226,920</td>
<td>146,245</td>
<td>134,686</td>
<td>57,402</td>
<td>114,185</td>
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<td>U.S. imports from--</td>
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<td></td>
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</tr>
<tr>
<td>Subtotal</td>
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<td>16</td>
<td>24</td>
<td>350</td>
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<tr>
<td>Other sources</td>
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<td>14,903</td>
<td>65,107</td>
<td>136,445</td>
<td>94,075</td>
<td>64,120</td>
<td>44,281</td>
<td>96,324</td>
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<td>14,903</td>
<td>65,107</td>
<td>136,461</td>
<td>94,099</td>
<td>64,470</td>
<td>44,281</td>
<td>96,324</td>
</tr>
<tr>
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<td>57,676</td>
<td>158,693</td>
<td>363,381</td>
<td>240,344</td>
<td>199,156</td>
<td>101,683</td>
<td>210,509</td>
</tr>
</tbody>
</table>

¹ Reported U.S. shipments data ***.
² Landed, duty-paid.

Source: Compiled from data submitted in response to Commission questionnaires and from official Commerce statistics.
## Table I-6

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<thead>
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<th></th>
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<td><strong>Quantity (1,000 pounds contained vanadium)</strong></td>
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<td>Apparent consumption</td>
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<td>11,625</td>
<td>15,381</td>
<td>12,397</td>
<td>13,403</td>
<td>13,327</td>
<td>6,422</td>
<td>7,851</td>
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<td><strong>Value (1,000 dollars)</strong></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Apparent consumption</td>
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<td>57,676</td>
<td>158,693</td>
<td>363,381</td>
<td>240,344</td>
<td>199,156</td>
<td>101,683</td>
<td>210,509</td>
</tr>
<tr>
<td><strong>Share of quantity (percent)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>U.S. producers’/tollers’ U.S. shipments&lt;sup&gt;1&lt;/sup&gt;</td>
<td>55.9</td>
<td>74.5</td>
<td>56.7</td>
<td>60.8</td>
<td>64.8</td>
<td>63.4</td>
<td>58.1</td>
<td>50.3</td>
</tr>
<tr>
<td>China</td>
<td>0.9</td>
<td>0.0</td>
<td>0.0</td>
<td>(2)</td>
<td>(2)</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>South Africa</td>
<td>3.5</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.1</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Subtotal, subject sources</td>
<td>4.4</td>
<td>0.0</td>
<td>0.0</td>
<td>(2)</td>
<td>(2)</td>
<td>0.1</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>All other sources</td>
<td>39.8</td>
<td>25.5</td>
<td>43.3</td>
<td>39.2</td>
<td>35.2</td>
<td>36.5</td>
<td>41.9</td>
<td>49.7</td>
</tr>
<tr>
<td>Total imports</td>
<td>44.1</td>
<td>25.5</td>
<td>43.3</td>
<td>39.2</td>
<td>35.2</td>
<td>36.6</td>
<td>41.9</td>
<td>49.7</td>
</tr>
</tbody>
</table>

| **Share of value (percent)** |      |      |      |      |      |      |                |                |
| U.S. producers’/ tollers’ U.S. shipments<sup>1</sup> | 57.7 | 74.2 | 59.0 | 62 | 61 | 67.6 | 56.5 | 54.2         |
| China                      | 0.7 | 0.0 | 0.0 | (2) | (2) | 0.0 | 0.0 | 0.0  |
| South Africa               | 3.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.0 | 0.0  |
| Subtotal, subject sources  | 4.2 | 0.0 | 0.0 | (2) | (2) | 0.2 | 0.0 | 0.0  |
| All other sources          | 38.1 | 25.8 | 41.0 | 37.5 | 39.1 | 32.2 | 43.5 | 45.8         |
| Total imports              | 42.3 | 25.8 | 41.0 | 37.6 | 39.2 | 32.4 | 43.5 | 45.8         |

<sup>1</sup> Reported U.S. shipments data ***.

<sup>2</sup> Less than 0.05 percent.

Source: Compiled from data submitted in response to Commission questionnaires and from official Commerce statistics.
PART II: CONDITIONS OF COMPETITION IN THE U.S. MARKET

MARKET CHARACTERISTICS

*** produces ferrovanadium in the United States directly from ***. *** produce the intermediate product vanadium pentoxide, which is toll converted by Bear into ferrovanadium.\(^1\) When ***. In the U.S. market, ferrovanadium is sold primarily to end users, namely steel companies and iron foundries.

*** sell nationwide. All four responding importers sell in the Northeast; two of these also sell in other regions. *** reported selling *** percent of its product within 100 miles of its facilities, and the other reporting producers/tollee sold between *** and *** percent within 100 miles of their facilities, and from *** to *** percent between 101 miles and 1,000 miles of their facilities. *** reported selling *** percent to locations over 1,000 miles from its facilities. The three responding importers reported selling 50 to 90 percent of their ferrovanadium within 100 miles of their facilities; two of these sold all of the remainder between 101 miles and 1,000 miles of their facilities, and one sold *** percent over 1,000 miles from its facility.

The quantity of imports from the subject countries comprised 0.1 percent of the total U.S. market in 2007; domestic production comprised 63.4 percent of the market; and imports from nonsubject sources comprised 36.5 percent. Overall apparent U.S. consumption increased irregularly between 2002 and 2007 from 12.6 million pounds (contained vanadium) in 2002 to 13.3 million pounds in 2007.

SUPPLY AND DEMAND CONSIDERATIONS

U.S. Supply

Based on available information, staff believes that U.S. producers have the ability to respond to changes in demand with relatively small changes in shipments of U.S.-produced ferrovanadium to the U.S. market. Factors affecting supply responsiveness are discussed below.

Industry Capacity

U.S. producers’ capacity was steady at *** million pounds from 2002 through 2007. Capacity utilization fluctuated from year to year, but increased from *** percent in 2002 to *** percent in 2007. In spite of major changes in the price of ferrovanadium, capacity utilization remained between *** and *** percent. Thus, ferrovanadium production appears to be somewhat constrained by the availability of spent catalysts, vanadium pentoxide, and other sources of vanadium rather than by capacity constraints. Metvan is reported to have signed a multi-year catalyst recycling agreement with Alberta Oil Sands which should enable Metvan to increase production.\(^3\) It is unclear, however, when Metvan’s production will

\(^1\) In December 2005, Gulf increased its ownership in Bear from 49.5 to 100 percent. Both before and after this change Bear produced ferrovanadium for Gulf under a tolling agreement. In addition, Bear continues to toll-produce for ***.

\(^2\) For a more detailed explanation of U.S. producers and tollers in the U.S. market, please see Parts I and III of this report.

\(^3\) Domestic interested parties’ posthearing brief, exh. 5.
increase and by how much it will increase, although it is reported to be doubling its capacity to process spent catalysts by late 2009.4

Production Alternatives

*** reported producing other products on the same equipment as used in ferrovanadium. *** produced *** on some of the same equipment and *** produces ***.5

Inventory Levels and Exports

U.S. producers’ and tollees’ inventories of ferrovanadium, as a ratio to U.S. shipments, decreased irregularly from *** percent in 2002 to *** percent in 2007, indicating that recently there have been relatively low levels of inventory which could be used to increase sales. Domestic producers/tollees exported between *** to *** percent of their total shipments in 2002-07. This relatively *** level of exports indicates that domestic producers/tollees are constrained in their ability to shift a large volume of shipments to the U.S. market from other markets.

Subject Imports

Based on available information, ferrovanadium producers in subject countries collectively have a substantial capability to increase shipments to the U.S. market in the event of a price increase in the U.S. market. Data provided by foreign producers indicate that ferrovanadium producers in the subject countries are operating at *** levels of capacity utilization although South African producers reported *** capacity utilization rates *** those reported by the U.S. producers. Since most subject foreign producers ship very little of their production to the United States but export large amounts to other countries, they may have the flexibility to shift shipments from other markets to the U.S. market.

China

No Chinese producers responded to the Commission’s foreign producers’ questionnaire. However, available data suggest that Chinese ferrovanadium producers have substantial capacity to increase shipments to the U.S. market. Chinese exports more than tripled between 2002 and 20066 to 2.1 million pounds of ferrovanadium in 2006 and then fell to 4.6 million pounds in 2007. Recent declines in the price of ferrovanadium are reported to have reduced production,7 indicating some ability on the part of Chinese manufacturers to increase production in response to greater access to the U.S. market. Chinese product is reported to be largely produced from slag generated in the production of steel by the parent companies of the main Chinese ferrovanadium producers;8 therefore, Chinese overall ferrovanadium production may be constrained by these firms’ steel production. On January 1, 2008, China eliminated the 10-percent export surcharge on 80-percent grade ferrovanadium and imposed a 5-percent export surcharge on vanadium pentoxide, used to produce ferrovanadium. These changes may increase the

4 Ibid.
5 ***.
6 World Trade Atlas, exh. 7, domestic interested parties’ response to the notice of institution, and domestic interested parties’ posthearing brief, Responses to Commissioners’ Questions, pp. 33-34.
7 Metal Pages, “V2O5 producer looks to FeV”, exh. 6, domestic interested parties’ response to the notice of institution.
8 Hearing transcript, p. 29 (Orr).
incentive to produce and export 80-percent grade ferro-vanadium from China.\textsuperscript{9} Domestic interested parties report that China produces both 50-percent grade, mainly sold within China, and 80-percent grade, mainly exported.\textsuperscript{10}

**South Africa**

Two large South African producers responded to the Commission’s foreign producers’ questionnaire. Reported South African capacity fell from *** million pounds in 2002 and 2003 to *** million pounds in 2004 through 2007. The capacity utilization rate fell steadily from *** percent in 2002 to *** percent in 2007, which would indicate an increasing ability to export to the United States if resources are available to increase ferrovanadium production. Inventories, as a share of total shipments, decreased irregularly from *** percent in 2002 to *** percent in 2007. *** inventory levels increase South African producers’ ability to supply other markets. Shipments to the United States were less than *** percent of total shipments in 2002 and 2003 and fell to zero thereafter. South African producers’ commercial shipments to their home market accounted for less than *** percent of total shipments in each year between 2002 and 2007, but were *** percent during January-June 2008 compared with *** percent during January-June 2007. *** the South African material is exported to Europe, Asia, and other markets, indicating that South Africa may be able to shift sales from these countries relatively easily. Domestic interested parties report that South Africans primarily produce 80-percent grade ferrovanadium.\textsuperscript{11}

**U.S. Demand**

**Demand Characteristics**

Ferrovanadium, an intermediate product, is used exclusively to produce steel and iron products; as a result, demand for ferrovanadium tends to follow trends in steel production (table II-1). U.S. steel production increased irregularly since 2002, while production increased steadily worldwide with major increases in steel production in China.

Domestic interested parties report that U.S. use of ferrovanadium in steel is among the highest in the world, because of high production of high strength, low alloy steels. This use continues to grow and with it, U.S. demand for ferrovanadium is expected to continue to grow.\textsuperscript{12} Chinese steel, in contrast, is reported to typically use less ferrovanadium than steel produced in most countries, although China’s use of ferrovanadium is rising as the quality of steel it produces improves.

Based on available information, the overall demand for ferrovanadium is likely to change relatively little in response to changes in price. Price sensitivity is low because of the limited range of substitute products and the low cost share of ferrovanadium in downstream products.

Increasing U.S. demand since 2003 was reported by ***, by two of three responding importers, and by nine of the 12 responding purchasers. *** reported that demand had fluctuated since 2003, and *** reported that demand had not changed. One importer reported that demand for ferrovanadium had fallen since 2003; two purchasers reported that demand for ferrovanadium was unchanged; and one purchaser reported that demand had decreased since 2003. Reasons offered for increasing demand

\textsuperscript{9} Metal Pages, “Removal of export duty to boost Chinese high grade ferro-vanadium exports,” exh. 2, domestic interested parties’ posthearing brief.
\textsuperscript{10} Hearing transcript, p. 45 (Bunting).
\textsuperscript{11} Hearing transcript, p. 44 (Carter).
\textsuperscript{12} Hearing transcript, pp. 47-48 (Bunting).
Table II-1
Steel production in the United States, subject countries, and world total, by year, 2002-07

<table>
<thead>
<tr>
<th>Country</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thousand metric tons</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>United States</td>
<td>91,587</td>
<td>93,677</td>
<td>99,681</td>
<td>94,897</td>
<td>98,557</td>
<td>98,181</td>
</tr>
<tr>
<td>China</td>
<td>182,249</td>
<td>222,413</td>
<td>280,486</td>
<td>355,790</td>
<td>422,660</td>
<td>489,241</td>
</tr>
<tr>
<td>South Africa</td>
<td>9,095</td>
<td>9,481</td>
<td>9,500</td>
<td>9,494</td>
<td>9,718</td>
<td>9,100</td>
</tr>
<tr>
<td>All others</td>
<td>620,998</td>
<td>644,172</td>
<td>679,024</td>
<td>686,022</td>
<td>719,062</td>
<td>747,743</td>
</tr>
<tr>
<td>Total, world</td>
<td>903,929</td>
<td>969,743</td>
<td>1,068,691</td>
<td>1,146,203</td>
<td>1,249,997</td>
<td>1,344,265</td>
</tr>
</tbody>
</table>

Source: Steel Statistical Archive.

included increased steel production, increased specialty steel production, and lower imports of steel because of the low U.S. dollar. The reason that firms reported declining demand include price and freight costs, and decreased numbers of consumers.

***, two of three importers, and eight of 10 purchasers reported that demand outside the United States increased since 2003. Reasons given for demand increases included increased steel production, increased specialty steel production particularly in India and China, and increased growth in China. *** reported that demand outside the United States fluctuated with steel production; one importer reported that demand outside the United States had decreased with a declining consumer base; and two purchasers reported that demand outside the United States was unchanged. Domestic interested parties report that if the current economic situation causes demand for automobiles to collapse, this would reduce demand for ferrovanadium.13

Foreign producers were asked if demand had increased, decreased, or stayed the same in their home market, the U.S. market, and in other markets. *** responding foreign producers reported that demand in *** home market had increased with steel production, and *** reported that demand was unchanged. *** responding foreign producers reported that U.S. demand was increasing with steel production. *** reported that demand in markets outside of their home market (particularly in China) and in the United States had grown with growth in steel production.

***, two of three responding importers, seven of 12 responding purchasers, and *** reported that they anticipate future changes in demand in the United States and/or in other markets. Most of these firms expect that demand will continue to grow either in the United States or in the rest of the world, although one firm expects U.S. demand to depend on exchange rates.

Substitute Products

*** responding U.S. producers/tollees, two of the five responding importers, eight of the 12 responding purchasers, and both responding foreign producers reported substitutes for ferrovanadium. The substitutes included nitrided vanadium, ferrocolumbium (ferroniobium), and columbium (niobium). Firms reported that these substitutes could be used to produce high strength low alloy steels. *** of the U.S. producers/tollees, only one of the three responding importers, four of 10 responding purchasers, and *** reported that the price of substitutes did affect the price of ferrovanadium. ***, domestic interested parties report that in 2005 substitution did occur and it did affect the price of ferrovanadium. They reported that the very high price of ferrovanadium in early 2005 lead to customers substituting

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13 Hearing transcript, p. 48 (Bunting).
historically higher priced ferroniobium for ferrovanadium and this “led to a marked reduction of ferrovanadium pricing over the second half of 2005 and into 2006.”

**Cost Share**

The cost of ferrovanadium tends to be a small share of the cost of products produced from it. Four purchasers reported that the cost of ferrovanadium in final products ranged from 0.1 percent to 2.5 percent. *** and two importers estimated that ferrovanadium’s share of the cost of downstream products ranged from 0.2 percent to 10 percent. Domestic interested parties reported that ferrovanadium accounts for no more than 1 percent of the total cost of producing steel.

**SUBSTITUTABILITY ISSUES**

The degree of substitution between domestic and imported ferrovanadium depends upon such factors as relative prices, chemical composition, quality meeting industry standards, conditions of sale, and availability of ferrovanadium grades. Based on available information, staff believes that where forms of ferrovanadium are the same or similar, there is usually a high degree of substitution between domestic ferrovanadium and subject imports.

**Factors Affecting Purchasing Decisions**

Purchasers were asked if buying product made in the United States was an important factor in their purchases of ferrovanadium. Fifteen of 16 responding purchasers reported it was not. One reported that it preferred purchasing competitively priced U.S. product.

**Knowledge of Country Sources**

Purchasers were asked to identify the sources of ferrovanadium of which they have actual marketing or pricing knowledge. All 13 responding purchasers identified the U.S.-produced product, five reported knowing about the South African product, five about the Chinese product, three about the Korean product, three about the Russian product, one about the Canadian product, and one about the Czech product.

**Major Factors in Purchasing**

Purchasers were asked to identify the three major factors considered by their firm in deciding from whom to purchase ferrovanadium (table II-2). Price was reported by the largest number of purchasers as the most important factor. Availability was reported by the largest number of firms as the second and the third most important factor. Other factors reported by more than one purchaser were quality, reliability, and extension of credit.

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14 Domestic interested parties’ posthearing brief, Responses to Commissioners’ Questions, p. 11.
15 Hearing transcript, p. 15 (Pakozdi-Luffy).
16 One firm reporting that buying the U.S. product was not an important factor also reported that it preferred U.S. product in sales to Mexico because of NAFTA requirements.
Table II-2
Ferrovanadium: Most important factors in selecting a supplier, as reported by purchasers

<table>
<thead>
<tr>
<th>Factor</th>
<th>First</th>
<th>Second</th>
<th>Third</th>
</tr>
</thead>
<tbody>
<tr>
<td>Price</td>
<td>10</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Quality</td>
<td>5</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>Availability</td>
<td>2</td>
<td>7</td>
<td>4</td>
</tr>
<tr>
<td>Reliability</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Extension of credit</td>
<td>0</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Other&lt;sup&gt;2&lt;/sup&gt;</td>
<td>0</td>
<td>0</td>
<td>4</td>
</tr>
</tbody>
</table>

<sup>1</sup> One firm reported both price and availability as the most important factor; both responses are recorded.

<sup>2</sup> “Other” includes service, past performance of the supplier, location of the warehouse, and size of packaging.

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

Factors Determining Quality

Purchasers were asked to identify the factors that determine the quality of ferrovanadium. Purchasers reported specific factors including residual elements (aluminum, silicon, and phosphorus), chemistry, lump size, meeting specifications, and product consistency.

Qualification

Purchasers were asked if they require prequalification of their suppliers. Eleven of 14 responding purchasers reported that they required prequalification for all of their purchases, and one purchaser reported requiring prequalification but did not report the percent of purchases for which it requires prequalification. Factors considered in the qualification of a supplier included meeting specifications, certification of analysis, ISO certification, testing in production, and sampling results from independent sources. Time required for qualification was reported by 11 purchasers as ranging from 2 to 30 days. No purchasers reported that any domestic or foreign producer failed in its attempts to certify or qualify its ferrovanadium or had lost its approved status since 2003.

Importance of 18 Specified Purchase Factors

Purchasers were asked to rate the importance of 18 factors in their purchasing decisions (table II-3). The factors listed as “very important” by all 16 responding purchasers were availability, price, product consistency, and quality meets industry standards. Other factors that were reported as “very important” by half or more of the responding firms were reliability of supply (15 firms), availability of 80 percent vanadium (14 firms), reputation/performance of supplier (13 firms), delivery time (12 firms), and discounts offered and extension of credit (8 firms).

Changes in Purchasing Patterns

Purchasers were asked a number of questions about whether their purchasing patterns for ferrovanadium from subject and nonsubject sources had changed since 2002. Five of 15 responding purchasers reported that they had purchased ferrovanadium from subject countries before 2002. Three of these reported discontinuing purchases from China because of the antidumping duty order, one discontinued its purchases from South Africa because of the antidumping duty order, and one reported
Table II-3
Ferrovanadium: Importance of purchase factors, as reported by purchasers

<table>
<thead>
<tr>
<th>Factor</th>
<th>Very important</th>
<th>Somewhat important</th>
<th>Not important</th>
</tr>
</thead>
<tbody>
<tr>
<td>Availability</td>
<td>16</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Availability of 45% vanadium</td>
<td>2</td>
<td>3</td>
<td>9</td>
</tr>
<tr>
<td>Availability of 80% vanadium</td>
<td>14</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Delivery terms</td>
<td>6</td>
<td>9</td>
<td>1</td>
</tr>
<tr>
<td>Delivery time</td>
<td>12</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Discounts offered</td>
<td>8</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Extension of credit</td>
<td>8</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>Minimum quantity requirement</td>
<td>1</td>
<td>6</td>
<td>9</td>
</tr>
<tr>
<td>Packaging</td>
<td>5</td>
<td>6</td>
<td>5</td>
</tr>
<tr>
<td>Price</td>
<td>16</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Product consistency</td>
<td>16</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Product range</td>
<td>3</td>
<td>8</td>
<td>4</td>
</tr>
<tr>
<td>Quality exceeds industry standards</td>
<td>3</td>
<td>7</td>
<td>6</td>
</tr>
<tr>
<td>Quality meets industry standards</td>
<td>16</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Reliability of supply</td>
<td>15</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Reputation/performance of supplier</td>
<td>13</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Technical support/service</td>
<td>4</td>
<td>9</td>
<td>3</td>
</tr>
<tr>
<td>U.S. transportation costs</td>
<td>7</td>
<td>6</td>
<td>3</td>
</tr>
</tbody>
</table>

Note. -- Not all firms responded for all questions. Two firms listed other factors; one of these reported “producer rather than trader” as very important and one reported “domestic source” as somewhat important.

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

that its purchases were unchanged. Purchasers also were asked if their purchases from nonsubject countries had changed since 2003: 10 reported unchanged patterns; four of these reported that they did not purchase nonsubject product before or after the orders, five purchasers reported that their purchases of nonsubject product had increased because of the orders, and one reported that it had increased purchases from nonsubject countries because the price was competitive and it was available from U.S. warehouses.

More generally, purchasers were asked to report any changes in the countries from which they purchased ferrovanadium since 2002. Seven reported changes in their purchases of U.S. product, with five reporting increases, three of these because of the antidumping duty measures and one because of price, and two reported decreases, one of these because of price and one because of competition. Two reported decreased purchases of product from China and one decreased purchases from South Africa, with all of these reporting that it was because of the antidumping duty measures.

Purchases from Specific Producers and Countries

Purchasers were asked how frequently they and their customers purchase ferrovanadium based on the producer and country of origin. The following tabulation summarizes the responses.
Half of the responding purchasers (8 of 16) reported that they never make purchases based on the producer of the ferrovanadium. The purchasers that reported that they always or usually make decisions based on the producer cited availability, quality, price, and reliability as reasons. Most purchasers (10 of 13) reported that their customers sometimes or never make decisions based on the producer. Country of origin was also not very important for both purchasers and their customers, with 12 of 15 responding purchasers reporting that the country was only sometimes or never important for their purchases; 9 of 11 responding purchasers reported that it was sometimes or never important for their customers.

Purchasers were also asked to compare domestically produced ferrovanadium and that produced in subject and nonsubject countries, with respect to 18 different attributes (table II-4).

Two firms compared products from the United States and China. They agreed that U.S. and Chinese product were comparable in eight factors and that U.S. product was superior in availability of 45 percent vanadium, price, reliability of supply, reputation/performance of supplier, and technical support/service. One purchaser each reported that U.S. product was superior and comparable to Chinese product for availability of 80-percent vanadium, delivery time, and discounts offered; and one purchaser each reported that U.S. product was superior and inferior to Chinese product for delivery terms and product range. Two firms compared product from the United States with product from South Africa, with both reporting that they were comparable for nine factors; both reported that the U.S. product was superior for delivery time and technical support/service, and one each reported that the U.S. product was superior and comparable to the South African product for availability, availability of 45-percent and 80-percent vanadium, delivery terms, price, reliability of supply, and reputation/performance of supplier. Only one firm compared product from China with that from South Africa; it reported that the products were comparable for all factors except delivery time, product consistency, quality exceeds industry standards, reputation/performance of supplier, and technical support/service for which the South African product was superior, and discounts offered and price, for which the Chinese product was superior. The majority of purchasers comparing U.S. product with that from other (nonsubject) countries reported that the products were comparable for 16 factors. The majority reported that the U.S. product was superior for availability of 45-percent vanadium, and an equal number of purchasers reported that the U.S. product was superior and comparable to other countries in terms of technical support. Two firms compared the Chinese product that with that from nonsubject countries; both reported they were comparable for 10 factors. One firm each reported that the products were comparable and that the Chinese product was inferior for availability, delivery times, product consistency, quality exceeds industry standards, reliability of supply and reputation/performance of supplier; one firm each reported that the Chinese product was superior and comparable on discounts offered; and one firm each reported that the Chinese product was superior and inferior on price.
Table II-4
Ferrovanadium: Comparisons of imported and U.S. product, as reported by purchasers

<table>
<thead>
<tr>
<th>Factor</th>
<th>U.S. vs. China</th>
<th>U.S. vs. South Africa</th>
<th>China vs. South Africa</th>
<th>U.S. vs. other</th>
<th>China vs. other</th>
<th>South Africa vs. other</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>S  C  I</td>
<td>S  C  I</td>
<td>S  C  I</td>
<td>S  C  I</td>
<td>S  C  I</td>
<td>S  C  I</td>
</tr>
<tr>
<td>Availability</td>
<td>0  2  0</td>
<td>1  1  0</td>
<td>0  1  0</td>
<td>2  5  0</td>
<td>0  1  1</td>
<td>0  1  0</td>
</tr>
<tr>
<td>Availability of 45 percent vanadium</td>
<td>2  0  0</td>
<td>1  1  0</td>
<td>0  1  0</td>
<td>3  2  0</td>
<td>0  2  0</td>
<td>0  1  0</td>
</tr>
<tr>
<td>Availability of 80 percent vanadium</td>
<td>1  1  0</td>
<td>1  1  0</td>
<td>0  1  0</td>
<td>1  4  1</td>
<td>0  2  0</td>
<td>0  1  0</td>
</tr>
<tr>
<td>Delivery terms</td>
<td>0  1  1  1  0</td>
<td>0  1  0</td>
<td>1  5  0</td>
<td>0  2  0  0</td>
<td>0  1  0</td>
<td></td>
</tr>
<tr>
<td>Delivery time</td>
<td>1  1  0  2  0</td>
<td>0  0  1</td>
<td>1  2  4  0</td>
<td>0  1  1  0</td>
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<tr>
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<td>0  1  0</td>
<td>0  0  5  1</td>
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<tr>
<td>Extension of credit</td>
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<td>0  0  1</td>
<td>0  0  6  0</td>
<td>0  2  0  0</td>
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<td></td>
</tr>
<tr>
<td>Minimum quantity requirement</td>
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<td>0  0  1</td>
<td>0  0  6  0</td>
<td>0  2  0  0</td>
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<tr>
<td>Packaging</td>
<td>0  2  0  0  2</td>
<td>0  0  1</td>
<td>0  0  6  0</td>
<td>0  2  0  0</td>
<td>0  1  0</td>
<td></td>
</tr>
<tr>
<td>Price²</td>
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<td>0  1  0</td>
<td>1  4  1  1</td>
<td>1  0  1  0</td>
<td>0  0  1</td>
<td></td>
</tr>
<tr>
<td>Product consistency</td>
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<td>0  0  1</td>
<td>1  1  6  0</td>
<td>0  1  1  0</td>
<td>0  1  0</td>
<td></td>
</tr>
<tr>
<td>Product range</td>
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<td>0  0  1</td>
<td>0  0  5  1</td>
<td>0  2  0  0</td>
<td>0  1  0</td>
<td></td>
</tr>
<tr>
<td>Quality meets industry standards</td>
<td>0  2  0  0  2</td>
<td>0  0  1</td>
<td>0  1  6  0</td>
<td>0  2  0  0</td>
<td>0  1  0</td>
<td></td>
</tr>
<tr>
<td>Quality exceeds industry standards</td>
<td>0  2  0  0  2</td>
<td>0  0  1</td>
<td>0  1  6  0</td>
<td>0  2  0  0</td>
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<tr>
<td>Reliability of supply</td>
<td>2  0  0  1  1</td>
<td>0  0  1</td>
<td>0  3  4  0</td>
<td>0  1  1  0</td>
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<tr>
<td>Reputation/performance of supplier</td>
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<td>2  5  0</td>
<td>0  1  1  0</td>
<td>0  1  0</td>
<td></td>
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<tr>
<td>Technical support/service</td>
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<td>0  0  1</td>
<td>3  3  0</td>
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<td></td>
</tr>
<tr>
<td>U.S. transportation costs²</td>
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<td>0  0  1</td>
<td>1  5  0</td>
<td>0  2  0  0</td>
<td>0  1  0</td>
<td></td>
</tr>
</tbody>
</table>

¹ Some firms reported answers for multiple nonsubject countries.
² A rating of superior means that the price or cost is generally lower. For example, if a firm reported “U.S. superior,” it meant that the price of the U.S. product was generally lower than the price of the imported product.

Note.—S=first listed country’s product is superior; C=both countries’ products are comparable; I=first listed country’s product is inferior. Not all companies gave responses for all factors.

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

Purchasers were asked how frequently product from various countries meet their firm’s or their customers’ minimum quality specifications. All countries identified by more than one purchaser appear in the following tabulation.
Comparisons of Domestic Products and Subject Imports

Producers/tollees, importers, and purchasers were requested to provide information regarding the interchangeability of domestic, subject, and nonsubject ferrovanadium and to discuss reasons for any opinions that the products were not interchangeable (table II-5). *** responding producers/tollees reported that product from each of the country pairs was always interchangeable. Most importers responded that each pair was either always interchangeable or frequently interchangeable. Purchasers’ responses were more varied; however, most firms reported that product from each of the country pairs was either always or frequently interchangeable. Reasons reported for why product was not always interchangeable included purity, other elements, aluminum levels, and that differences in the ore may reduce interchangeability.

Table II-5  
**Ferrovanadium: Perceived interchangeability between ferrovanadium produced in the United States and in other countries, by country pairs**

<table>
<thead>
<tr>
<th>Country pair</th>
<th>Number of U.S. producers/tollees reporting</th>
<th>Number of U.S. importers reporting</th>
<th>Number of U.S. purchasers reporting</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A</td>
<td>F</td>
<td>S</td>
</tr>
<tr>
<td>U.S. vs. China</td>
<td>***</td>
<td>***</td>
<td>0</td>
</tr>
<tr>
<td>U.S. vs. South Africa</td>
<td>***</td>
<td>***</td>
<td>0</td>
</tr>
<tr>
<td>U.S. vs. other</td>
<td>***</td>
<td>***</td>
<td>0</td>
</tr>
<tr>
<td>China vs. South Africa</td>
<td>***</td>
<td>***</td>
<td>0</td>
</tr>
<tr>
<td>China vs. other</td>
<td>***</td>
<td>***</td>
<td>0</td>
</tr>
<tr>
<td>South Africa vs. other</td>
<td>***</td>
<td>***</td>
<td>0</td>
</tr>
</tbody>
</table>

Note.—A = Always, F = Frequently, S = Sometimes, N = Never.

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

Producers/tollees and importers were requested to provide information regarding the significance of differences other than price for domestic, subject, and nonsubject ferrovanadium (table II-6). *** responding U.S. producers/tollees reported that there were never differences other than price for all country pairs. The majority of importers in each case reported that there were sometimes differences other than price for each pair. Differences included grades of ferrovanadium (40-percent vs. 80-percent grade), length of relationship, viability of supplier, service, reliability of supplier, and one firm reported difficulties obtaining material because of changing government regulations and the lack of formal controls.

II-10
Table II-6
Ferrovanadium: Perceived importance of differences in factors other than price between ferrovanadium produced in the United States and in other countries in purchases of ferrovanadium in the U.S. market, by country pairs

<table>
<thead>
<tr>
<th>Country pair</th>
<th>Number of U.S. producers/tollees reporting</th>
<th>Number of U.S. importers reporting</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A</td>
<td>F</td>
</tr>
<tr>
<td>U.S. vs. China</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>U.S. vs. South Africa</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>U.S. vs. other</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>China vs. South Africa</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>China vs. other</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>South Africa vs. other</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Note.--A = Always, F = Frequently, S = Sometimes, N = Never.

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

Foreign producers were asked if the ferrovanadium that they sold in their home market was different from that they sold in the United States or other markets. *** reported that the product sold in South Africa was the same as that sold to other markets.

Original Investigation Comparisons

In its final determinations in the original investigations, the Commission found a reasonable overlap of competition between subject imports from China and South Africa and between subject imports and the domestic like product. It found at least a moderate level of fungibility between domestic ferrovanadium and the subject imports and among imports from China and South Africa. The Commission noted that U.S. producers, tollees, and importers reported that subject imports and the domestic like product are always or frequently interchangeable and differences other than price between products were only "sometimes" or "never" important. Seven purchasers reported that U.S. and Chinese ferrovanadium are used in the same applications, 11 purchasers stated that U.S. and South African ferrovanadium are used in the same applications, and the majority of purchasers indicated that they did not order ferrovanadium specifically from just one source. The domestic industry and importers of ferrovanadium from China and South Africa all sold 80-percent grade ferrovanadium.

At the hearing in the original investigations, respondents argued that only the domestic industry and importers from China supplied the U.S. market with 45-percent grade ferrovanadium. The Commission noted that purchaser questionnaire responses indicated that 45-percent grade product was supplied only by subject producers in China and not by subject producers in South Africa. In light of the interchangeability of 45-percent and 80-percent grade product from China and South Africa and the United States, the Commission found that imports from China and South Africa were sufficiently fungible with each other as well as with the domestic like product to warrant cumulation.

In the original investigations, the Commission cited record evidence that subject imports from China and South Africa and ferrovanadium produced in the United States were sold in the same geographic markets throughout the United States and that all were sold in the U.S. market during each year of the period of investigation. It also found that ferrovanadium (whether from subject countries or produced domestically) was sold primarily to end users, namely steel companies and iron foundries. The
Commission consequently cumulated subject imports from China and South Africa for the purpose of its material injury analysis.\textsuperscript{17}

\textbf{ELASTICITY ESTIMATES}

This section discusses elasticity estimates. Parties were requested to provide comments in their briefs but no comments were received.

\textbf{U.S. Supply Elasticity}\textsuperscript{18}

The domestic supply elasticity for ferrovanadium measures the sensitivity of the quantity supplied by U.S. producers to changes in the U.S. market price of ferrovanadium. The elasticity of domestic supply depends on factors such as the availability of inputs, the level of excess capacity, the level of inventories, and the availability of alternate markets for domestically produced ferrovanadium. Analysis of these factors indicates that the U.S. industry has excess capacity but very limited supply of inputs,\textsuperscript{19} relatively little inventories, and relatively small export shipments which could be used to increase or decrease domestic shipments in response to price increases. A supply elasticity in the range of 1 to 2 is suggested.

\textbf{U.S. Demand Elasticity}

The U.S. demand elasticity for ferrovanadium measures the sensitivity of the overall quantity demanded to a change in the U.S. market price of ferrovanadium. This sensitivity depends on the availability and viability of substitute products as well as on the component share of ferrovanadium in the production of downstream products. Domestic interested parties report that, at the high prices during the period under review, purchasers substituted out of ferrovanadium and this caused ferrovanadium’s price to fall, indicating that demand is sensitive to price at some price levels. In addition, demand may be sensitive to price because of the possibility of imports of downstream products such as steel products made using ferrovanadium. Demand is estimated to be inelastic and is likely to be in the -0.5 to -1.0 range.\textsuperscript{20}

\textbf{Substitution Elasticity}

The elasticity of substitution depends on the extent of product differentiation between the domestic and imported products. Product differentiation depends on factors such as the range of products produced, quality, availability, and reliability of supply. The elasticity of substitution for imports from subject countries is estimated to be in the range of 2 to 5.


\textsuperscript{18} A supply function is not defined in the case of a non-competitive market.

\textsuperscript{19} Availability of inputs is expected to increase when Metvan begins to process additional catalysts based on its agreement with Alberta Oil Sands. Domestic interested parties’ posthearing brief, exh. 5.

\textsuperscript{20} Demand elasticity will increase once the price of ferrovanadium is high enough for substitution by ferroniobium because, as domestic interested parties report, purchasers substitute ferroniobium for ferrovanadium when the price of ferrovanadium is high enough. Domestic interested parties’ posthearing brief, Responses to Commissioners’ Questions, p. 11.
PART III: CONDITION OF THE U.S. INDUSTRY

U.S. PRODUCERS’ CAPACITY, PRODUCTION, AND CAPACITY UTILIZATION

Table III-1 presents the responding U.S. producers’/tollies’ production capacity, production, and capacity utilization. Between 2002 and 2007, U.S. ferrovanadium production capacity remained unchanged; however, ***.1 U.S. ferrovanadium production fluctuated somewhat during the review period, with *** reaching peak production in 2004. Capacity utilization remained relatively steady during the review period although in ***.

*** reported that during the period of review they produced other products on the same equipment and machinery used in the production of ferrovanadium. These products included: ***. *** reported that they are not able to switch between production of ferrovanadium and other products in response to a relative change in the price of ferrovanadium vis-a-vis the price of other products, using the same equipment and labor.

Concerning constraints on production capacity, ***. ***.

Table III-1

<table>
<thead>
<tr>
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<th>*</th>
</tr>
</thead>
</table>

U.S. ferrovanadium producers have taken steps towards increasing their production, capacity, and capacity utilization levels. For example, Metvan signed a new multi-year agreement in March 2008 with a major operator in the Alberta Oil Sands to process and recycle additional quantities of spent catalysts. In a press release, Metvan’s parent company, AMG, stated that the contract is the basis for the first stage of Metvan’s two-stage expansion plans and will require that the company double its capacity to process spent catalysts by late 2009.2 This increased supply of spent catalysts would permit Metvan to utilize more of its capacity to produce ferrovanadium. ***.3

Gulf’s projects will focus on ***.4 ***. ***. Bear provides toll production services to other parties, and thus *** in terms of capacity utilization in that ***.5

The Commission’s producers’ questionnaire requested U.S. producers to supply the details as to the time, nature, and significance of any changes (i.e., plant openings, relocations, expansions, acquisitions, consolidations, closures, prolonged shutdowns, etc.) that had an effect on the character of their ferrovanadium operations during the period for which information was requested. The responses of U.S. producers/tollies are presented in appendix E.

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1 Domestic interested parties’ prehearing brief, p. 8.
2 Domestic interested parties’ posthearing brief, exh. 5.
3 Domestic interested parties’ posthearing brief, Responses to Commissioners’ Questions, p. 29.
5 Ibid., pp. 32-33.
U.S. PRODUCERS’/TOLLEES’ SHIPMENTS

Data on U.S. producers’/tollees’ U.S. shipments of ferrovanadium during the review period are shown in table III-2. During the period for which data were collected in the reviews, the quantity of the firms’ U.S. shipments of ferrovanadium fluctuated with no clear trend, whereas the value of the firms’ U.S. shipments of ferrovanadium reached record levels in 2005, increasing by 142 percent from 2004; between 2005 and 2007, the value of the firms’ shipments declined sharply, but again increased by 99 percent between the interim periods. These increases can be attributed to the average unit values of ferrovanadium, which increased by 180 percent between 2004 and 2005 and by 88 percent between the interim periods.

Tollees Gulf, Stratcor, *** accounted for *** percent of U.S. producers’/tollees’ U.S. shipments in 2007, as compared with a combined average of *** percent for Bear and Metvan; however, *** of Gulf and Stratcor’s shipments of ferrovanadium were in fact produced by Bear. When one considers only Bear’s U.S. shipments of product not produced under a toll agreement, Bear’s share on the basis of quantity of U.S. producers’/tollees’ total U.S. shipments amounted to *** during the review period.

Table III-2

Table III-3 presents data on U.S. producers’/tollees’ export shipments of ferrovanadium. Each reported export shipments of ferrovanadium during the review period; however, the total of such export shipments represented *** percent of the four U.S. firms’ total ferrovanadium shipments.

Table III-3

U.S. PRODUCERS’/TOLLEES’ PURCHASES

Three firms reported purchases of ferrovanadium during the review period. Data on U.S. producers’/tollees’ purchases of ferrovanadium are shown in table III-4. As measured against their U.S. shipments, the quantity and value of U.S. producers’/tollees’ ferrovanadium purchases were *** accounting for *** percent of the quantity and *** percent of the value of their combined U.S. shipments during the period for which data were collected in the review.

---

6 U.S. shipment data are ***.
7 Data on export shipments are ***.
8 No U.S. producer reported direct imports of ferrovanadium during the review period.
Table III-4
Ferrovanadium: U.S. producers'/tollees' purchases, by firms, 2002-07

<p>| | | | | |</p>
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</table>

U.S. PRODUCERS'/TOLLEES' INVENTORIES

Data on U.S. producers'/tollees' end-of-period inventories of ferrovanadium are shown in table III-5. The data are for inventories resulting from production as reported by Bear and Metvan, including those end-of-period inventories of ferrovanadium that were reported by Gulf and Stratcor but that were toll-produced for these firms by Bear.

Table III-5

<p>| | | | | |</p>
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</table>

U.S. EMPLOYMENT, WAGES AND PRODUCTIVITY

The employment data presented in this section of the report for Bear and Metvan are production and related workers (“PRWs”) employed in the production of ferrovanadium. The data shown for tollees Gulf and Stratcor are these firms’ PRWs employed in the production of the intermediate material, vanadium pentoxide. In 2007, Gulf and Stratcor reported that the production of vanadium pentoxide accounted for *** percent and *** percent, respectively, of the cost of ferrovanadium that was produced for them under tolling agreements.

During the review, producers Bear and Metvan reported steady increases in the number of PRWs between 2004 and 2007 (table III-6). When asked about the increase, Metvan responded that ***.

Bear *** productivity in the first half of 2008. Hours worked per worker by Bear’s PRWs decreased steadily between 2003 and 2007.

***

Table III-6
Ferrovanadium: Average number of production and related workers, hours worked, wages paid to such employees, hourly wages, productivity, and unit labor costs, by firms, 2002-07, January-June 2007, and January-June 2008

<p>| | | | | |</p>
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</thead>
</table>

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9 ***
FINANCIAL EXPERIENCE OF U.S. PRODUCERS

Background

Bear, Gulf, Metvan, and Stratcor provided financial data on their operations either producing or selling ferrovanadium. As noted earlier, the operations of some of the four firms are dissimilar. *** produced its ferrovanadium at its own facilities in every period, while *** ferrovanadium was *** in every period. *** of Gulf’s ferrovanadium was toll-produced by its corporate affiliate Bear from January 2002 to November 2005, when Gulf owned 49.5 percent of Bear. The production arrangement did not change after Gulf acquired 100 percent of Bear in December 2005. Finally, *** toll-produced/produced ferrovanadium for *** (which provided questionnaire responses) ***. Bear, Gulf, Metvan, and Stratcor all have fiscal years ending December 31. For a more detailed description of the domestic firms’ manufacturing processes, including a discussion of the vanadium-bearing inputs, see the discussion in Part I of this report.

In the original investigations, and in previous reviews of related products, the Commission determined that tollees (in this case *** were not engaged in the production of ferrovanadium, and were therefore not part of the domestic industry producing ferrovanadium. Thus, in keeping with previous determinations, the staff is providing data on *** ferrovanadium operations first (tables III-7 to III-10). In the event the Commission wishes to evaluate the data on the operations of all four companies, staff is providing such data in tables III-11 through III-14. Lastly, data on *** ferrovanadium operations are presented in table III-15. These data are similar to the data in table F-5 of the staff report in the original investigations, which presented data on Gulf and USV (USV became Stratcor in 2004).

Ferrovanadium Operations of Bear and Metvan

Aggregate income-and-loss data on Bear’s and Metvan’s production and sale of ferrovanadium are presented in table III-7. From 2002 to 2005, as sales quantities increased and then decreased, and as unit raw materials costs increased by almost $*** per pound, *** increases in unit sales prices resulted in an approximate *** percent increase in sales values and in *** increases in all levels and measures of profitability. Operating income as a share of net sales value *** increased, from a *** percent in 2002 to a *** percent in 2005. The trend of increasing profitability was replaced by decreasing profitability in 2006 and 2007 even though sales quantities increased, as unit sales values decreased by *** while unit costs decreased by *** that amount in 2006 and then essentially returned to 2005 levels in 2007. As a result, operating margins decreased to *** percent in 2006 and then *** percent in 2007.

All financial indicators were higher during the first half of 2008 relative to the first half of 2007. *** in sales quantities (*** percent increase) and values (*** percent increase) coupled with increases in unit sales prices ($*** per pound) relative to operating costs ($*** per pound) resulted in *** higher absolute levels of operating profits and operating profits as a percentage of net sales.


11 In the discussion of Bear’s and Metvan’s combined results in this section, the term sales refers to the revenues associated with Bear’s toll production of ferrovanadium, Bear’s sales of ferrovanadium it produced in its toll operations in excess of the guaranteed return, and the revenues associated with Metvan’s production and sales of ferrovanadium.
When asked about the *** increase in unit prices from 2004 to 2005 and from 2007 to 2008,*

Selected company-by-company financial data are presented in table III-8. Bear’s sales/tolling quantities vacillated from full-year period to full-year period but generally remained within a *** range; comparing the first half of 2008 to the same period in 2007, its sales/tolling quantities were *** percent higher. The company’s unit operating costs increased in every period except interim 2008, with virtually all of the increases attributable to ***. *** increased by $*** per pound from 2002 to the first half of 2008, while direct labor and other factory costs increased and decreased, respectively, by about $*** per pound each and SG&A expenses declined by $*** per pound over the same time period. At the same time, Bear’s unit sales/tolling values were increasing by *** amounts. As a result, Bear’s operating income increased in every period but one (2007), and operating income as a ratio to net sales/tolling revenues was in the *** percent range from 2005 onward. Although not presented separately, Bear’s revenues, costs, and profits are comprised of its operations toll converting raw materials into ferrovanadium (*** percent of reported sales revenues in every period) and its operations selling ferrovanadium in excess of the guaranteed return on the open market (*** percent of reported sales/tolling revenues every period).

Metvan’s sales quantities also vacillated from period to period but generally trended higher until interim 2008. The company’s sales values increased, decreased, and then increased again, the result of *** swings in the unit sales prices. While the changes in unit sales prices were *** changes in unit raw materials costs, the increases or decreases in unit sales prices from 2005 on were *** the increases or decreases in unit raw materials costs. When coupled with *** changes in other unit operating costs, this resulted in *** increases (in 2005 and interim 2008) or decreases (2006 and 2007) in operating income.

Given the *** in unit sales values and cost structure between Bear and Metvan, a variance analysis is not being presented. Variance analyses are useful in quantifying the effects of changes in volume, unit prices, and unit costs on operating profitability when the product mix is generally homogeneous. As shown by the data in table III-8, that is not the case.

Capital Expenditures and Research and Development Expenses

Bear’s and Metvan’s capital expenditures and research and development (R&D) expenses are presented in table III-9. Capital expenditures declined in 2003 and 2004 but then increased as the industry’s profitability increased. R&D expenses were ***.

---

12 E-mail from ***, August 21, 2008.
Assets and Return on Investment

The industry’s assets and its return on investment are presented in table III-10. The total value of assets *** from 2002 to 2007, reaching its highest point in 2005. The *** in current assets (reported by *** was the *** behind the ***. Return on investment mirrored the trends of the operating income to sales ratio in table III-7.

Table III-9
Ferrovanadium: Bear’s and Metvan's capital expenditures and research and development expenditures, fiscal years 2002-07, January-June 2007, and January-June 2008

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

Table III-10
Ferrovanadium: Bear’s and Metvan's assets and return on assets, as of the end of fiscal years 2002-07

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

Consolidated Ferrovanadium Operations of Bear, Gulf, Metvan, and Stratcor

The consolidated ferrovanadium operations of Bear, Gulf, Metvan, and Stratcor are presented in table III-11. These data differ from those in table III-7 in that they consist of the sales revenues earned and the costs incurred by Bear, Gulf, Metvan, and Stratcor selling ferrovanadium to other parties. In other words, using 2005 as an example, while table III-7 includes the $*** in revenues earned by Bear in toll-converting raw materials into ferrovanadium for Gulf and Stratcor (**), table III-11 instead substitutes the $*** in revenues earned by Gulf and Stratcor selling the finished ferrovanadium to other parties. While the trends in tables III-7 and III-11 are essentially the same, the absolute values and per-unit values are higher in table III-11, a reflection of the open market sales values and “fully loaded” costs in table III-11 as opposed to the tolling fees and toll conversion costs in table III-7. The sales quantities in table III-11 are less than the sales quantities in table III-7 because, as noted earlier, ***.

Selected company-by-company financial data for the consolidated operations of Bear, Gulf, Metvan, and Stratcor are presented in table III-12; capital expenditure and research and development expenditure data are presented in table III-13, and asset and return on assets data are presented in table III-14. *** becomes clear. At the same time, *** become apparent.

The combined ferrovanadium operations of tollees Gulf and Stratcor are presented in table III-15.
### Table III-11
Ferrovandium: Consolidated results of Bear's, Gulf's, Metvan's, and Stratcor's operations,\(^1\) fiscal years 2002-07, January-June 2007, and January-June 2008

<table>
<thead>
<tr>
<th>Item</th>
<th>Fiscal years ending</th>
<th>January-June</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Quantity (1,000 pounds contained vanadium)</td>
<td>Value ($1,000)</td>
</tr>
<tr>
<td>Net sales</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quantity</td>
<td>7,413</td>
<td>9,063</td>
</tr>
<tr>
<td>Value</td>
<td>29,060</td>
<td>44,889</td>
</tr>
<tr>
<td>Cost of goods sold:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Raw materials</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>Direct labor</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>Other factory costs</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>Tolling expenses(^2)</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>Total COGS(^2)</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>Gross profit/(loss)(^2)</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>SG&amp;A expenses</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Op. income/(loss)(^2)</td>
<td>-10,773</td>
<td>-8,479</td>
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<tr>
<td>Other exp./inc.:</td>
<td></td>
<td></td>
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<tr>
<td>Interest expense</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>All other expenses</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>CDSOA (Byrd)</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>All other income</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>Net, other inc/exp:</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>Net income/(loss)(^2)</td>
<td>***</td>
<td>***</td>
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<tr>
<td>Depreciation above</td>
<td>***</td>
<td>***</td>
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<tr>
<td>Cash flow</td>
<td>***</td>
<td>***</td>
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Number of firms reporting

<table>
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<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Data</td>
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<td>4</td>
</tr>
</tbody>
</table>

Table continued on following page.
Table III-11—Continued
Ferrovanadium: Consolidated results of Bear’s, Gulf’s, Metvan’s, and Stratcor’s operations,¹ fiscal years 2002-07, January-June 2007, and January-June 2008

<table>
<thead>
<tr>
<th>Item</th>
<th>Fiscal years ending</th>
<th>January-June</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ratio to net sales (percent)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cost of goods sold:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Raw materials</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>Direct labor</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>All other factory costs</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>Tolling expenses²</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>Total COGS²</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>Gross profit/(loss)²</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>SG&amp;A expenses</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>Operating inc./ (loss)²</td>
<td>(37.1)</td>
<td>(18.9)</td>
</tr>
</tbody>
</table>

Unit value (per pound contained vanadium)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Net sales</td>
<td>$3.92</td>
<td>$4.95</td>
<td>$10.90</td>
<td>$29.96</td>
<td>$17.04</td>
<td>$16.18</td>
<td>$15.87</td>
<td>$28.68</td>
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<tr>
<td>Cost of goods sold:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Raw materials</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>Direct labor</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>All other factory costs</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>Tolling expenses²</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>Total COGS²</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>Gross profit/(loss)²</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>SG&amp;A expenses</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>Operating inc./ (loss)²</td>
<td>(1.45)</td>
<td>(0.94)</td>
<td>2.48</td>
<td>14.16</td>
<td>3.96</td>
<td>0.13</td>
<td>0.24</td>
<td>7.47</td>
</tr>
</tbody>
</table>

¹ The data in this table are (1) Gulf’s and Stratcor’s commercial sales of ferrovanadium toll-produced by Bear, (2) Bear’s sale of ferrovanadium it produced in its toll operations in excess of the guaranteed return, and (3) the revenues and costs associated with Metvan’s production and sales of ferrovanadium. In order to present consolidated data, the operating profits earned by Bear in its toll production operations ($*** percent of net sales values in this table) have been eliminated by deducting them from tolling expenses. This may result in overstating operating profits to some small extent from 2005 on as the percentage of Bear’s toll production reported as *** in interim 2008 ***.

² As noted in footnote 1 above, the ***. Thus, tolling expenses, total cost of goods sold, gross profits/(losses), operating income/(losses), and net income/(losses) were all affected by this elimination.

Source: Compiled from data submitted in response to Commission questionnaires.
Table III-12
Ferrovanadium: Selected financial data of the consolidated operations of Bear, Gulf, Metvan, and Stratcor, on a company-by-company basis, fiscal years 2002-07, January-June 2007, and January-June 2008

Table III-13

Table III-14
Ferrovanadium: Bear's, Gulf's, Metvan's, and Stratcor's consolidated assets and return on assets, as of the end of fiscal years 2002-07

Table II-15
Ferrovanadium: Results of Gulf's and Stratcor's operations, fiscal years 2002-07, January-June 2007, and January-June 2008
PART IV: U.S. IMPORTS AND THE FOREIGN INDUSTRIES

U.S. IMPORTS

Imports of ferrovanadium into the United States from all sources based on official import statistics from the Department of Commerce are presented in table IV-1.\(^1\) Data received in response to importers’ questionnaires were consistent with official import statistics, as adjusted, with regard to imports of ferrovanadium from subject countries. However, official import statistics, as adjusted, were deemed to be preferable to the incomplete data received in response to importers’ questionnaires with regard to imports of ferrovanadium from nonsubject countries. The Commission identified eight importers through proprietary Customs data, that may have imported ferrovanadium from the subject countries during the period of review. The Commission also sent importers’ questionnaires to four U.S. producers/tolles.

Six firms\(^2\) supplied usable questionnaire information regarding their U.S. imports of the subject merchandise, and five\(^3\) firms reported that they did not import ferrovanadium at any time during the review period. Three\(^4\) of the six firms reported that they had imported ferrovanadium from subject countries during the review period.\(^5\) Three firms\(^6\) reported that they had imported ferrovanadium from nonsubject countries during the review period, and one firm (***)) did not respond to the Commission’s request for information.

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\(^1\) These data were adjusted to reflect corrections made by the Bureau of the Census to reflect several errors in the original data. See exh. 1 of the domestic interested parties’ response to the notice of institution.

\(^2\) ***.

\(^3\) ***.

\(^4\) ***.

\(^5\) ***.

\(^6\) ***.
Table IV-1  

<table>
<thead>
<tr>
<th>Source</th>
<th>Calendar year</th>
<th>Jan.-June 2007</th>
<th>Jan.-June 2008</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Quantity (1,000 pounds of contained vanadium)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>China</td>
<td>109</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>South Africa</td>
<td>441</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Subtotal</td>
<td>550</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Other sources</td>
<td>5,011</td>
<td>2,964</td>
<td>6,664</td>
</tr>
<tr>
<td>Total</td>
<td>5,561</td>
<td>2,964</td>
<td>6,664</td>
</tr>
<tr>
<td><strong>Landed, duty-paid value (1,000 dollars)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>China</td>
<td>349</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>South Africa</td>
<td>1,644</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Subtotal</td>
<td>1,993</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Other sources</td>
<td>18,263</td>
<td>14,903</td>
<td>65,107</td>
</tr>
<tr>
<td>Total</td>
<td>20,256</td>
<td>14,903</td>
<td>65,107</td>
</tr>
<tr>
<td><strong>Unit value (per pound)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>China</td>
<td>$3.20</td>
<td>(1)</td>
<td>(1)</td>
</tr>
<tr>
<td>South Africa</td>
<td>3.73</td>
<td>(1)</td>
<td>(1)</td>
</tr>
<tr>
<td>Average</td>
<td>3.62</td>
<td>(1)</td>
<td>(1)</td>
</tr>
<tr>
<td>Other sources</td>
<td>3.64</td>
<td>$5.03</td>
<td>$9.77</td>
</tr>
<tr>
<td>Average</td>
<td>3.64</td>
<td>5.03</td>
<td>9.77</td>
</tr>
<tr>
<td><strong>Share of quantity (percent)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>China</td>
<td>2.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>South Africa</td>
<td>7.9</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Subtotal</td>
<td>9.9</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Other sources</td>
<td>90.1</td>
<td>100.0</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
</tr>
<tr>
<td><strong>Share of value (percent)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>China</td>
<td>1.7</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>South Africa</td>
<td>8.1</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Subtotal</td>
<td>9.8</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Other sources</td>
<td>90.2</td>
<td>100.0</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

1 Not applicable.

Source: Compiled from official Commerce statistics, as adjusted by the Bureau of the Census.
*** reported being related to a firm engaged in exporting ferrovanadium from South Africa to
the United States (**). *** reported being related to a firm engaged in importing ferrovanadium from
countries other than China or South Africa into the United States (**). *** reported being related to a
firm which is engaged in the production of ferrovanadium (**).

The quantity of U.S. imports of ferrovanadium fluctuated somewhat during 2002-07 with no
clear trend, and decreased overall from 5.6 million pounds in 2002 to 4.9 million pounds in 2007, or by
12.2 percent. However, the value of U.S. imports fluctuated substantially, and increased overall from
$20.3 million in 2002 to $64.5 million in 2007, or by over 218 percent. The unit value of imports also
fluctuated substantially, and increased from $3.64 per pound in 2002 to $13.20 per pound in 2007, or by
over 262 percent. Between the interim periods of January-June 2007 and January-June 2008, U.S.
imports of ferrovanadium increased substantially in quantity, value, and unit value.

Imports from China and South Africa were minimal, and virtually nil after 2002. Virtually all
U.S. imports of ferrovanadium during 2002-07 were from nonsubject countries, principally from the
Czech Republic (table IV-2).

Table IV-2
Ferrovanadium: U.S. imports, 2002-06 and January-September 2007

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

RATIO OF IMPORTS TO PRODUCTION

U.S. production and ratios of U.S. imports to U.S. production during the period for which data
were collected are presented in table IV-3. As noted earlier, U.S. imports of ferrovanadium from China
and South Africa virtually ceased early in the review period.

Table IV-3
Ferrovanadium: U.S. production and ratio of imports to U.S. production, 2002-07, January-June
2007, and January-June 2008

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

U.S. IMPORTERS’ INVENTORIES

U.S. importers’ end-of-period inventories are presented in table IV-4. There were no reported
inventories of ferrovanadium from China during the review period.

Table IV-4
Ferrovanadium: U.S. importers’ end-of-period inventories of subject and nonsubject imports, by sources,
2002-07, January-June 2007, and January-June 2008

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

U.S. IMPORTERS’ CURRENT ORDERS

In the Commission’s questionnaire, U.S. importers were asked if they had imported or arranged
for the importation of ferrovanadium from China or South Africa for delivery after June 30, 2008. No
firm responded in the affirmative to this question.
THE INDUSTRY IN CHINA

In the original investigations, there were three firms identified in the petition as principal producers of ferrovanadium in China: Chengde Xinghua Vanadium Chemical Co., Ltd. (“Chengde”); Jinzhou Ferroalloy (Group) Co., Ltd. (“Jinzhou”); and Panzhihua Iron & Steel Group (“Panzhihua”). In the original investigations, the Commission received information from Chengde and Panzhihua. Together these two firms estimated that they accounted for *** percent of China’s total ferrovanadium production in 2001. Based on Chinese export statistics, Panzhihua accounted for nearly all ferrovanadium exported directly from China to the United States.7

For these reviews, questionnaires were sent to Chengde, Jinzhou, Panzhihua, and seven other possible Chinese producers, but no responses were received. The domestic interested parties report that Panzhihua and Chengde ***.8 The domestic interested parties maintain that ***.9

Table IV-5 presents data on China’s exports of ferrovanadium. According to data from the World Trade Atlas as submitted by the domestic interested parties, China’s exports of ferrovanadium have increased unevenly since 2002, totaling 5,400 metric tons or 11.9 million pounds (gross weight) of ferrovanadium in 2006. According to these data, most of China’s exports of ferrovanadium in 2006 were shipped to the Netherlands (40 percent) and Russia (23 percent).10

Table IV-5
Ferrovanadium: Exports from China, by destination, 2002-07

<table>
<thead>
<tr>
<th>Country</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
</tr>
</thead>
<tbody>
<tr>
<td>Netherlands</td>
<td>1,160</td>
<td>2,077</td>
<td>3,399</td>
<td>4,625</td>
<td>4,905</td>
<td>1,124</td>
</tr>
<tr>
<td>Russia</td>
<td>0</td>
<td>24</td>
<td>55</td>
<td>1,759</td>
<td>2,806</td>
<td>970</td>
</tr>
<tr>
<td>Japan</td>
<td>653</td>
<td>617</td>
<td>650</td>
<td>622</td>
<td>1,127</td>
<td>490</td>
</tr>
<tr>
<td>Taiwan</td>
<td>366</td>
<td>353</td>
<td>547</td>
<td>474</td>
<td>963</td>
<td>840</td>
</tr>
<tr>
<td>Subtotal</td>
<td>2,179</td>
<td>3,071</td>
<td>4,651</td>
<td>7,480</td>
<td>9,801</td>
<td>3,424</td>
</tr>
<tr>
<td>All others</td>
<td>1,523</td>
<td>761</td>
<td>1,533</td>
<td>1,704</td>
<td>2,301</td>
<td>1,160</td>
</tr>
<tr>
<td>Total</td>
<td>3,702</td>
<td>3,832</td>
<td>6,184</td>
<td>9,184</td>
<td>12,102</td>
<td>4,584</td>
</tr>
</tbody>
</table>

Note: Data combine 50 percent and 80 percent ferrovanadium.

Source: China Customs and compiled by World Trade Atlas as submitted by the domestic interested parties in exh. 7 of their notice of institution, in gross weight kilograms, converted to 1,000 pounds. Data for 2007 are from domestic interested parties’ posthearing brief, exh. 6.

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7 Chengde estimated that its production amounted to *** percent of China’s total ferrovanadium production, and Panzhihua estimated that its production amounted to *** percent of total production. Staff report in the original investigations on ferrovanadium from China and South Africa, memorandum INV-Z-197, December 11, 2002, p. VII-1, fn. 3.

8 See domestic interested parties’ response to the notice of institution, p. 13.

9 See domestic interested parties’ response to the notice of institution, p. 27.

10 These data were submitted by the domestic interested parties and involve estimates of China’s exports of ferrovanadium as reported by China Customs and compiled by World Trade Atlas. The domestic interested parties note that “as it appears that the reported data contain significant errors, we are also providing estimates to correct these errors.” These data reflect combined 80 percent and 50 percent ferrovanadium. Exh. 7 of the domestic interested parties’ response to the notice of institution.
According to testimony presented at the Commission’s hearing for the original investigations, Chengde and Panzhihua accounted for the vast majority of China’s production of vanadium pentoxide. For these reviews, the domestic interested parties note that in addition to producing ferrovanadium in China, 11

Table IV-6 presents data on China’s exports of vanadium pentoxide. According to data from the World Trade Atlas submitted by the domestic interested parties, China’s exports of vanadium pentoxide have increased since 2004, totaling 10,400 metric tons or 22.9 million pounds (gross weight) in 2006. According to these data, most of China’s exports of vanadium pentoxide were shipped to South Korea (34 percent), the Netherlands (24 percent), and Japan (20 percent). 12

<table>
<thead>
<tr>
<th>Table IV-6</th>
<th>Vanadium pentoxide: Exports from China, by destination, 2002-07</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Country</strong></td>
<td><strong>2002</strong></td>
</tr>
<tr>
<td>Korea</td>
<td>4,894</td>
</tr>
<tr>
<td>Netherlands</td>
<td>1,660</td>
</tr>
<tr>
<td>Japan</td>
<td>4,387</td>
</tr>
<tr>
<td>Germany</td>
<td>936</td>
</tr>
<tr>
<td>Subtotal</td>
<td>11,877</td>
</tr>
<tr>
<td>All others</td>
<td>720</td>
</tr>
<tr>
<td>Total</td>
<td>12,597</td>
</tr>
</tbody>
</table>

Source: China Customs and compiled by World Trade Atlas as submitted by the domestic interested parties in exh. 7 of their response to the notice of institution, in gross weight, converted to 1,000 pounds. Data for 2007 from domestic interested parties’ posthearing brief, exh. 6.

Several developments have occurred in the Chinese ferrovanadium industry during the review period. In October 2004, Panzhihua shut down one of its vanadium trioxide (a substitute for vanadium pentoxide when producing ferrovanadium) facilities for regular maintenance for about 45 days. Industry sources point out that Panzhihua has the capacity to produce 9,000 metric tons (19.8 million pounds) per year of ferrovanadium. 13

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12 These data were submitted by the domestic interested parties and involve estimates of China’s exports of vanadium pentoxide as reported by China Customs and compiled by World Trade Atlas. The domestic interested parties note that “as it appears that the reported data contain significant errors, we are also providing estimates to correct these errors.” Exh. 7 of the domestic interested parties’ response to the notice of institution.
13 Domestic interested parties’ prehearing brief, exh. 8.
Industry sources pointed out that Chengde Xinxin Vanadium & Titanium Co. Ltd., a subsidiary of Chengde Iron & Steel Group Co., Ltd., produced more than 2,100 metric tons (4.6 million pounds) per year of vanadium pentoxide in the first half of 2005 (up 8 percent from that of first half of 2004) and was expected to produce about 6,000 metric tons (13.2 million pounds) during the full year owing to increased steel production by its parent company. About two-thirds of the pentoxide was used internally in the production of ferrovanadium, and the remainder was exported. In June 2007, Chengde Xinxin Vanadium & Titanium and Panzhihua New Steel & Vanadium established a joint venture accounting for 90 percent of the market share for vanadium in China and 20 percent globally.

According to industry analysts, the Chinese government imposed a 10-percent export duty on ferrovanadium in November 2005. The duty may have been part of an effort to curb the export of energy-intensive products. However, in January 2008, China eliminated the 10-percent export duty on 80 percent grade ferrovanadium (specifically, all ferrovanadium with a percentage grade of 75 percent or higher) and doubled the export duty from 10 percent to 20 percent on ferrovanadium with lower percentage grades. China also imposed a 5-percent duty on exports of vanadium pentoxide. (In June 2007 it had cancelled a 5-percent export tax rebate.)

According to testimony at the hearing, 50-percent grade ferrovanadium is more commonly consumed by steelmakers in China, and Chinese producers export a much smaller volume of 50-percent grade ferrovanadium compared to 80-percent grade ferrovanadium. Consistent with the reported increase in the export duty on 50-percent grade ferrovanadium beginning in January 2008, China’s exports of this product decreased from 440,000 pounds contained vanadium in January-August 2007 to 137,000 pounds contained vanadium in January-August 2008. At the same time, total exports of 80-percent ferrovanadium from China increased from 1.9 million pounds contained vanadium in January-August 2007 to 6.8 million pounds contained vanadium in January-August 2008. A large proportion of this growth is attributed to increased exports to the Netherlands, which increased from 635,000 pounds contained vanadium in January-August 2007 to 2.9 million pounds contained vanadium in January-August 2008.

China also changed its 5-percent rebate on exports of vanadium pentoxide to a 5-percent duty on this product. The volume of China’s exports of this product is nearly unchanged in the first eight months of 2008 as compared to the same period of 2007. These data seem to confirm testimony given at the hearing that despite the imposition of a duty on vanadium pentoxide, the production capacity of China’s producers has grown to such an extent that it can continue to ship substantial quantities of vanadium pentoxide at the same time that it more than tripled its exports of 80-percent grade ferrovanadium in the first eight months of 2008 compared to the same period in 2007.

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15 Domestic interested parties’ prehearing brief, exh. 7.
16 Domestic interested parties’ posthearing brief, exh. 1.
17 Hearing transcript, p. 74 (Bunting).
18 Domestic interested parties’ prehearing brief, p. 29, and posthearing brief, p. 8.
19 Domestic interested parties’ posthearing brief, Responses to the Commissioner’s Questions, p. 33.
20 Ibid., p. 34. Industry sources project that this change in the vanadium pentoxide duty will lead to more of that product being converted to ferrovanadium and exported from China, and smaller quantities of Chinese vanadium pentoxide being exported to Korea and converted into ferrovanadium in that country. Data show that China’s exports of vanadium pentoxide to Korea declined by 15 percent, but also that Korea remained the largest export destination for that product, accounting for 52 percent and 45 percent of export volumes in January-August 2007 and January-August 2008, respectively. Domestic interested parties’ posthearing brief, exhs. 1 and 6.
In May 2008, a major earthquake hit China’s Sichuan province, home to a number of ferrovanadium producers, including Panzhihua. In the months following the earthquake, uncertainties as to the extent of supply disruptions caused by the earthquake, concerns over the availability of vanadium pentoxide, and production cutbacks aimed at reducing smog around Beijing for the Olympics led to volatility in ferrovanadium prices.\footnote{American Metal Market, May 16, 2008, “Ferrovanadium rockets past $80 on China panic;” American Metal Market, June 6, 2008, “European ferrovanadium steady in wary market;” American Metal Market, July 9, 2008, “Ferrovanadium slips amid talk of prices as low as $60/kg;” American Metal Market, July 30, 2008, “Ferrovanadium flips on Chinese pentoxide squeeze;” American Metal Market, August 1, 2008, “Ferrovanadium hit by ‘whiplash’ as rebound continues.”

\footnote{The Mapochs transaction is still subject to final approval by the South African natural resources and energy ministry. Domestic interested parties’ posthearing brief, exh. 8.}

\footnote{US Geological Survey Minerals Yearbook, 2003.}

THE INDUSTRY IN SOUTH AFRICA

At the time of the original investigations, there were two major producers and exporters of ferrovanadium in South Africa: Highveld Steel & Vanadium Corp. Ltd. (“Highveld”) and Xstrata South Africa Pty Ltd. (“Xstrata”). In the current reviews, questionnaires were sent to Highveld, Xstrata, and one other firm from South Africa. The Commission received completed foreign producers’ questionnaire responses from Xstrata and Highveld’s Vanchem division, which Highveld has recently sold off as an independent unit. The divestiture was required under conditions set forth by the European Commission for approval of Evraz’s acquisition of Highveld. Effective September 2008, Vanchem Vanadium Products (“Vanchem Vanadium”), a subsidiary of the Swiss firm Duferco Investment Partners, acquired Highveld’s Vanchem operations, as well as a 50-percent stake in South Africa Japan Vanadium (“SAJV”) and 350 ordinary shares in the Mapochs mine, which produced titaniferous ore for Highveld Steel and ore fines for Vanchem.\footnote{The Mapochs transaction is still subject to final approval by the South African natural resources and energy ministry. Domestic interested parties’ posthearing brief, exh. 8.}

On July 12, 2003, SAJV, a joint venture between Highveld (50 percent), Nippon Denko (40 percent), and Mitsui & Co. (10 percent) commissioned a 3,500 metric tons (7.7 million pounds) per year ferrovanadium plant in Witbank, South Africa.\footnote{US Geological Survey Minerals Yearbook, 2003.}

Aggregate data for Xstrata and Vanchem Vanadium are shown in table IV-7. Between them, Xstrata and Vanchem Vanadium estimate that they account for *** percent of total ferrovanadium production in South Africa and for about *** percent of all ferrovanadium exports from South Africa to the United States. In terms of ferrovanadium’s contribution to total establishment sales, Xstrata estimates that ferrovanadium accounted for *** percent of its total establishment sales in its most recent fiscal year, while Vanchem Vanadium estimated that ferrovanadium accounted for *** percent of its total establishment sales in its most recent fiscal year. When asked in the Commission’s questionnaire to describe any plans to add, expand, curtail, or shut down production capacity and/or production of ferrovanadium in South Africa, Vanchem Vanadium responded: “***.” To this question, Xstrata responded “***.”

Table IV-7

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Aggregate reported production steadily decreased in each year during the review period, with 2007 levels *** percent below 2002. *** of South Africa’s reported shipments of ferrovanadium were exported, accounting for *** percent of total shipments in 2007; *** percent of the total shipments were shipped to the European Union. 24 Exports of ferrovanadium from South Africa to the United States ended in 2003, the year the antidumping duty orders were imposed.

Several developments have occurred in South Africa’s ferrovanadium industry during the review period. In February 2003, Xstrata announced the closure of its Windimurra Mine in Australia, citing chronic oversupply conditions in the vanadium market. 25 The closure coincided with the expiration of Xstrata’s agreement with Glencore International AG that guaranteed a minimum price of $3.80 per pound of vanadium pentoxide, compared to the average price of $1.50 per pound in 2002. The Windimurra Vanadium project is reportedly on target to restart production of 80-percent grade ferrovanadium in January 2009, and expects to begin exporting to Europe by the second quarter of 2009. According to industry sources, when Windiumurra reaches its full smelting capacity in the second year of its operation, it will have the capacity to produce between 6,500 and 7,000 metric tons (14.3 million to 15.4 million pounds) of ferrovanadium. 26

In 2004, Xstrata permanently closed its Vantech vanadium mine in South Africa after determining the investment required to develop the Steelpoortdrift deposit and evaluating higher ongoing costs, the sustained strength of the South African rand, and its view that the current price for vanadium was not sustainable in the long term. Xstrata had been reducing production at Vantech throughout the year while replacing some of the lost units by increased output at its Rhovan, South Africa operation, which reached record levels. 27 Xstrata told industry analysts that its fully integrated Rhovan vanadium operation was well-positioned to capitalize on future expansion options. Rhovan’s production capacity is about 10,000 metric tons (22.0 million pounds) per year of vanadium pentoxide and 7,800 metric tons (17.2 million pounds) per year of ferrovanadium. 28

Most recently, industry analysts have cited production cutbacks in South Africa due to the country’s energy supply crisis. In January 2008, South African power company Eskom Holdings, Ltd. asked ferroalloy producers to operate at no more than 90 percent of capacity. In February 2008, it was reported that Xstrata had declared force majeure on its vanadium mining operations in South Africa. Explaining the action, a spokeswoman for the company said, “Xstrata wanted to warn customers that this
could be a problem in the future.” On July 30, 2008, Xstrata announced that its second-quarter ferrovanadium production was down 25 percent compared with 2007. A representative from the company attributed the decrease to the 10-percent power cutback affecting all South African metals producers.

THE WORLD MARKET

Major known producers of ferrovanadium include China, South Africa, Austria, and Russia. The South African producer, Highveld, identifies the main suppliers of ferrovanadium internationally as itself, Xstrata, Pangang (Panzhihua), and producers in Austria (Treibacher) and Russia (Tulachermet). Chinese and South African producers export a significant amount of ferrovanadium to markets in Europe. Spot prices for ferrovanadium have been generally higher in the United States than in Europe.

As noted earlier, ferrovanadium is used primarily as a steel additive in products. Steel products that require the addition of vanadium include certain construction alloy steels, rail steels, heat-resisting tool and die steels, certain special stainless steels, and the largest use, high-strength low-alloy steels, often called microalloy steels. High-strength low alloy steels are used extensively in pipeline steel, concrete reinforcing bars, structural shapes and plate for construction, and in automobile components. Therefore, the ferrovanadium market is largely driven by world steel demand. In 2005, firm steel demand and concerns regarding the availability of vanadium pentoxide led to temporary increases in world ferrovanadium prices. Although prices decreased in 2006-07, in 2008 ferrovanadium prices have increased due to the previously noted supply concerns in South Africa and China and firm steel demand.

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31 Domestic interested parties’ response to the notice of institution, p. 11.

32 Ibid., exhs. 2 and 7.

33 Ibid., exh. 8.

PART V: PRICING AND RELATED INFORMATION

FACTORS AFFECTING PRICES

Raw Material Costs

The primary inputs used in the production of ferrovanadium in the United States are spent catalyst from oil refineries and ***, which are either processed into vanadium pentoxide (which can be further refined to produce ferrovanadium) or are processed directly into ferrovanadium and other products. Thus, U.S. production of ferrovanadium may be limited by the availability of the catalysts and residuals and imports of vanadium pentoxide. (For further details on the production of ferrovanadium see Part I.) Publicly available data on the price of vanadium pentoxide used in the production of most ferrovanadium and on the price of ferrovanadium are shown in figure V-1.

Figure V-1
Price of vanadium ore (pentoxide), Min 98 percent, Europe, dollars per pound, by months, and the ferrovanadium U.S. free market price, 70-80 percent vanadium, in warehouse, Pittsburgh, January 2003 through October 2008

Note.–Prices are average of high and low prices. Vanadium pentoxide prices are monthly averages prices in Europe, converted to dollars. Prices for ferrovanadium are from the first day of the month on which prices were available. Data were not available for ferrovanadium in May 2003.

Source: Metal Bulletin.

Transportation Costs to the U.S. Market

Transportation costs for ferrovanadium from the subject countries to the United States (excluding U.S. inland costs) are estimated for 2007 to be 0.5 percent of the customs value for subject product from China. Transportation costs for product from South Africa were not available. Estimates are derived
from official import data and represent the transportation and other charges on imports valued on a c.i.f. basis, as compared with customs value.¹

**U.S. Inland Transportation Costs**

U.S. producers/tollees reported that U.S. inland transportation costs accounted for 0.3 to 2 percent of the total delivered value of ferrovanadium. Three importers reported that U.S. inland transportation costs ranged from 0.25 to 1 percent of the total delivered value of ferrovanadium.

**Exchange Rates**

Real and nominal quarterly exchange rates reported by the International Monetary Fund during 2003-08 for China and South Africa are shown in figure V-2.

**Figure V-2**

Exchange rates: Indices of the nominal and real exchange rates (when available) of the subject countries relative to the U.S. dollar, by quarters, January-March 2003 to April-June 2008


¹ Estimates are based on import data for HTS subheading 7202.92.00.
PRICING PRACTICES

Pricing Methods

*** reported selling all their product via spot sales. *** sold *** percent using contracts averaging 12 months and the remainder in spot sales. *** reported that contract prices and quantities were fixed and could not be renegotiated during the contract. Domestic interested parties reported that in their contracts, prices are typically set based on a reference price either from Metal Bulletin or Ryan’s Notes; the price paid under these contracts changes in line with the published reference price. Domestically interested parties reported that the method of setting contracts has not changed from the original investigations. Importers did not report their sales methods for their sales of ferrovanadium from subject countries in 2007, because none of the responding importers had such sales. One importer reported that both price and quantity were not fixed in a 12-month contract, and the other two responding importers reported that both price and quantity were fixed and could not be renegotiated. No firm reported contracts with meet-or-release provisions.

Sales Terms and Discounts

*** responding producers/tollees and all four responding importers reported transaction-by-transaction prices. *** and one importer also listed contract prices. None of these firms reported using a price list. *** reported annual discounts; *** reported volume discounts; and *** reported no discounts. Two of four responding importers reported volume discounts and the other two reported no discounts. *** responding U.S. producers/tollees and both responding importers reported sales terms of net 30 days. *** and both responding importers reported mainly delivered sales, while *** reported mainly f.o.b. sales.

Most ferrovanadium is sold from inventories, with *** responding U.S. producers/tollees and all three responding importers reporting that they sold all their product from inventories. The lead time for delivery for U.S. producers’/tollees’ ferrovanadium ranged from 0 to 5 days, while importers’ delivery lead times ranged from 3 to 15 days.

PRICE DATA

The Commission requested that U.S. producers/tollees and importers provide quarterly data for their sales of two ferrovanadium products during January 2002- June 2008. 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

Four U.S. producers/tollees and two importers provided usable pricing data for sales of the requested products in the U.S. market, although these firms did not necessarily report pricing data for all

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2 Hearing transcript, pp. 59, 84 (Orr, Carter).
3 Hearing transcript, pp. 59 (Orr).
4 This firm also reported 1- to 3-month contracts with fixed prices and quantities and no renegotiation of prices.
5 One importer reported selling only 25 percent from inventories but did not sell any ferrovanadium produced to order. It is included as one of the three importers that sell all their ferrovanadium from inventories.
products or for all quarters. Selling price data reported by U.S. producers/tollees accounted for *** of U.S. producers’/tollees’ commercial shipments of ferrovanadium during January 2002-June 2008. This can be broken down between either U.S. producers accounting for *** percent and tollees accounting for *** percent of total U.S.-produced commercial shipments, or U.S. producers/owners accounting for *** percent, and independent tollees accounting for *** percent of commercial shipments.\(^6\) Selling prices reported by importers accounted for 0.6 percent of imports from China and 0.2 percent of imports from South Africa. Coverage for subject imports was very low because almost all subject imports entered in the first half of 2002 and import coverage for 2002 was very low.

Data on U.S. producers’ and importers’ selling prices and quantities of products 1 and 2 are presented in tables V-1 through V-4 and figures V-3 and V-4. Tables V-1 and V-2 provide for the U.S. producers’ pricing data for Metvan and Bear and tollee pricing data for Gulf and Stratcor. Tables V-3 and V-4 provide for producers/owners pricing data for Metvan; Bear; and Gulf for the period during which Gulf was the sole owner of Bear. Independent tollees’ price data in tables V-3 and V-4 include Stratcor, and Gulf before it became the sole owner of Bear.\(^7\)

Figure V-3 summarizes the pricing data for producers and tollees from tables V-1 and V-2, while Figure V-4 summarizes price data for producer/owners and independent tollees from tables V-3 and V-4. Table V-5 summarizes high and low prices and the change in price data. Table V-6 summarizes the data on margins of under/(over)selling during the period of review. Table V-7 summarizes margins of under/(over)selling during the original investigations.

Domestic interested parties report that, while price spikes have occurred before for ferrovanadium, such price increases had in the past been half as large as the price spike in recent years, and the increases had lasted about a year. In contrast, this spike “has lasted almost 5 years.”\(^8\)

**Table V-1**
Ferrovanadium: Weighted-average f.o.b. prices and quantities of domestic and imported product 1 and margins of underselling/(overselling), by quarters, January 2002-June 2008

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**Table V-2**
Ferrovanadium: Weighted-average f.o.b. prices and quantities of domestic and imported product 2 and margins of underselling/(overselling), by quarters, January 2002-June 2008

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**Table V-3**
Ferrovanadium: Weighted-average f.o.b. prices and quantities of domestic and imported product 1 and margins of underselling/(overselling), by quarters, January 2002-June 2008

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**Table V-4**
Ferrovanadium: Weighted-average f.o.b. prices and quantities of domestic and imported product 2 and margins of underselling/(overselling), by quarters, January 2002-June 2008

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\(^6\) ***. This differs from the overall U.S. product coverage of *** percent because of rounding.

\(^7\) ***.

\(^8\) Domestic interested parties’ posthearing brief, Responses to Commissioners’ Questions, p. 12.
Figure V-3
Ferrovanadium: Weighted-average f.o.b. prices of products 1 and 2 sold by U.S. producers and tollees and by importers, by quarter, January-March 2002 to April-June 2008

Figure V-4
Ferrovanadium: Weighted-average f.o.b. prices of products 1 and 2 sold by U.S. producers/owners and independent tollees and by importers, by quarter, January-March 2002 to April-June 2008

Table V-5
Ferrovanadium: Summary of weighted-average f.o.b. prices for products 1 and 2, by countries

<table>
<thead>
<tr>
<th>Source</th>
<th>Number of quarters</th>
<th>Highest price</th>
<th>Lowest price</th>
<th>Percentage increase (decrease) in price(^1)</th>
</tr>
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<tbody>
<tr>
<td></td>
<td></td>
<td>Per pound</td>
<td>Per pound</td>
<td>Percent</td>
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<tr>
<td>Product 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>U.S. producers</td>
<td>26</td>
<td>$***</td>
<td>$***</td>
<td>***</td>
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<tr>
<td>U.S. tollees</td>
<td>16</td>
<td>***</td>
<td>***</td>
<td>***</td>
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<tr>
<td>China</td>
<td>4</td>
<td>***</td>
<td>***</td>
<td>***</td>
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<tr>
<td>Product 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>U.S. producers</td>
<td>26</td>
<td>***</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>U.S. tollees</td>
<td>26</td>
<td>***</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>South Africa</td>
<td>5</td>
<td>***</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>Product 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>U.S. producers/owners</td>
<td>26</td>
<td>***</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>U.S. independent tollees</td>
<td>15</td>
<td>***</td>
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<tr>
<td>China</td>
<td>4</td>
<td>***</td>
<td>***</td>
<td>***</td>
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<tr>
<td>Product 2</td>
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<tr>
<td>U.S. producers/owners</td>
<td>26</td>
<td>***</td>
<td>***</td>
<td>***</td>
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<tr>
<td>U.S. independent tollees</td>
<td>26</td>
<td>***</td>
<td>***</td>
<td>***</td>
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<tr>
<td>South Africa</td>
<td>5</td>
<td>***</td>
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</table>

\(^1\) Percentage change from the first quarter in which price data were available to the last quarter in which price data were available.

Note.--Only countries for which price data were reported are listed.

Source: Compiled from data submitted in response to Commission questionnaires.
### Table V-6
**Ferrovanadium: Summary of underselling/overselling,¹ 2002-07**

<table>
<thead>
<tr>
<th>Country/period</th>
<th>Number of quarters of underselling</th>
<th>Number of quarters of overselling</th>
<th>Average margin of underselling/(overselling)</th>
<th>Weighted-average margin of underselling/(overselling)</th>
</tr>
</thead>
<tbody>
<tr>
<td>China:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2005</td>
<td>2</td>
<td>0</td>
<td>46.0</td>
<td>45.3</td>
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<tr>
<td>2006</td>
<td>2</td>
<td>0</td>
<td>37.2</td>
<td>37.2</td>
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<tr>
<td>South Africa:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2002</td>
<td>3</td>
<td>1</td>
<td>8.5</td>
<td>15.8</td>
</tr>
<tr>
<td>2003</td>
<td>0</td>
<td>1</td>
<td>(15.5)</td>
<td>(15.5)</td>
</tr>
</tbody>
</table>

¹ Margins of underselling and overselling were not affected by the treatment of Gulf’s prices after its purchase of Bear.

Note.–Margins are weighted by the quantity of imports.

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

### Table V-7
**Ferrovanadium: Summary of the number of quarters of underselling/overselling and average margins of underselling or overselling for selling prices and purchase prices from the original investigations, January 1999-March 2002**

<table>
<thead>
<tr>
<th>Country</th>
<th>Number of quarters of underselling</th>
<th>Number of quarters of overselling</th>
<th>Average margin of underselling/(overselling)</th>
<th>Weighted-average margin of underselling/(overselling)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relative to price of producers</td>
<td></td>
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<tr>
<td>China, selling price</td>
<td>10</td>
<td>17</td>
<td>(0.6)</td>
<td>(1.2)</td>
</tr>
<tr>
<td>China, purchase price</td>
<td>5</td>
<td>13</td>
<td>(4.0)</td>
<td>(6.8)</td>
</tr>
<tr>
<td>South Africa, selling price</td>
<td>0</td>
<td>14</td>
<td>(11.1)</td>
<td>(11.1)</td>
</tr>
<tr>
<td>South Africa, purchase price</td>
<td>0</td>
<td>15</td>
<td>(13.3)</td>
<td>(10.5)</td>
</tr>
</tbody>
</table>

Note.–Margins are weighted by the quantities of imports.

APPENDIX A

FEDERAL REGISTER NOTICES AND
THE COMMISSION’S STATEMENT ON ADEQUACY
INTERNATIONAL TRADE COMMISSION

[Investigation Nos. 731–TA–986–987 (Review)]

Ferrovanadium From China and South Africa


ACTION: Institution of five-year reviews concerning the antidumping duty orders on ferrovanadium from China and South Africa.

SUMMARY: The Commission hereby gives notice that it has instituted reviews pursuant to section 751(c) of the Tariff Act of 1930 (19 U.S.C. 1675(c)) (the Act) to determine whether revocation of the antidumping duty orders on ferrovanadium from China and South Africa would be likely to lead to continuation or recurrence of material injury. Pursuant to section 751(c)(2) of the Act, interested parties are requested to respond to this notice by submitting the information specified below to the Commission;¹ to be assured of

¹ No response to this request for information is required if a currently valid Office of Management and Budget (OMB) number is not displayed; the OMB number is 3117–0016/USITC No. 08–5–177, expiration date June 30, 2008. Public reporting burden for the request is estimated to average 10 hours per response. Please send comments regarding the accuracy of this burden estimate to the Office of Investigations, U.S. International Trade Commission, 500 E Street, SW., Washington, DC 20436.
consideration, the deadline for responses is January 22, 2008. Comments on the adequacy of responses may be filed with the Commission by February 15, 2008. For further information concerning the conduct of these reviews 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, D, E, and F (19 CFR part 207).

**EFFECTIVE DATE:** December 3, 2007.

**FOR FURTHER INFORMATION CONTACT:**

General information concerning the conduct of these reviews may be viewed on the Commission’s electronic docket (EDIS) at http://edis.usitc.gov. The public record for these reviews may be viewed on the Commission’s electronic docket (EDIS) at http://edis.usitc.gov.

**SUPPLEMENTARY INFORMATION:**

*Background.*—On January 28, 2003, the Department of Commerce issued antidumping duty orders on imports of ferrovanadium from China and South Africa (68 FR 4168 and 4169). The Commission is conducting reviews to determine whether revocation of the orders would be likely to lead to continuation or recurrence of material injury to the domestic industry within a reasonably foreseeable time. It will assess the adequacy of interested party responses to this notice of institution to determine whether to conduct full reviews or expedited reviews. The Commission’s determinations in any expedited reviews will be based on the facts available, which may include information provided in response to this notice.

*Definitions.*—The following definitions apply to these reviews:

1. **Subject Merchandise** is the class or kind of merchandise that is within the scope of the five-year reviews, as defined by the Department of Commerce.

2. The **Subject Countries** in these reviews are China and South Africa.

3. The **Domestic Like Product** is the domestically produced product or products, which, in the absence of like, most similar in characteristics and uses with, the

**Subject Merchandise.** In its original determinations, the Commission found a single **Domestic Like Product** consisting of ferrovanadium of all grades coextensive with Commerce’s scope.

4. The **Domestic Industry** is the U.S. producers as a whole of the **Domestic Like Product**, or those producers whose collective output of the **Domestic Like Product** constitutes a major proportion of the total domestic production of the product. In its original determinations, the Commission defined a single **Domestic Industry** consisting of the U.S. producers of ferrovanadium, i.e., Bear Metallurgical Co.; Shieldalloy Metallurgical Corp.; and International Specialties Alloys. The Commission did not include tollies U.S. Vanadium Corp. and Gulf Chemical & Metallurgical Corp. in the **Domestic Industry.**

5. The **Order Date** is the date that the antidumping duty orders under review became effective. In these reviews, the **Order Date** is January 28, 2003.

6. An **Importer** is any person or firm engaged, either directly or through a parent company or subsidiary, in importing the **Subject Merchandise** into the United States from a foreign manufacturer or through its selling agent.

*Participation in the reviews and public service list.*—Persons, including industrial users of the **Subject Merchandise** and, if the merchandise is sold at the retail level, representative consumer organizations, wishing to participate in the reviews as parties must file an entry of appearance with the Secretary to the Commission, as provided in section 201.11(b)(4) of the Commission’s rules, no later than 21 days after publication of this notice in the Federal Register. The Secretary will maintain a public service list containing the names and addresses of all persons, or their representatives, who are parties to the reviews.

*Former Commission employees who are seeking to appear in Commission five-year reviews are reminded that they are required, pursuant to 19 CFR 201.15, to seek Commission approval if the matter in which they are seeking to appear was pending in any manner or form during their Commission employment. The Commission’s designated agency ethics official has advised that a five-year review is the “same particular matter” as the underlying original investigation for purposes of 19 CFR 201.15 and 18 U.S.C. 207, the post-employment statute for Federal employees. Former employees may seek informal advice from Commission ethics officials with respect to this and the related issue of whether the employee’s participation was “personal and substantial.” However, any informal consultation will not relieve former employees of the obligation to seek approval to appear from the Commission under its rule 201.15. For ethics advice, contact Carol McCae Verratti, Deputy Agency Ethics Official, at 202–205–3088.

Limited disclosure of business proprietary information (BPI) under an administrative protective order (APO) and APO service list.—Pursuant to section 207.7(a)(1) of the Commission’s rules, the Secretary will make BPI submitted in these reviews available to authorized applicants under the APO issued in the reviews, provided that the application is made no later than 21 days after publication of this notice in the Federal Register. Authorized applicants must represent interested parties, as defined in 19 U.S.C. 1677(9), who are parties to the reviews. A separate service list will be maintained by the Secretary for those parties authorized to receive BPI under the APO.

Certification.—Pursuant to section 207.3 of the Commission’s rules, any person submitting information to the Commission in connection with these reviews must certify that the information is accurate and complete to the best of the submitter’s knowledge. In making the certification, the submitter will be deemed to consent, unless otherwise specified, for the Commission, its employees, and contract personnel to use the information provided in any other reviews or investigations of the same or comparable products which the Commission conducts under Title VII of the Act, or in internal audits and investigations relating to the programs and operations of the Commission pursuant to 5 U.S.C. Appendix 3.

*Written submissions.*—Pursuant to section 207.61 of the Commission’s rules, each interested party response to this notice must provide the information specified below. The deadline for filing such responses is January 22, 2008. Pursuant to section 207.62(b)(2) of the Commission’s rules, eligible parties (as specified in Commission rule 207.62(b)(1)) may also file comments concerning the adequacy of responses to the notice of institution and whether the Commission should conduct expedited or full reviews. The deadline for filing such comments is February 15, 2008.
All written submissions must conform with the provisions of sections 201.8 and 207.3 of the Commission’s rules, and any submissions that contain BPI must also conform with the requirements of sections 201.6 and 207.7 of the Commission’s rules. The Commission’s rules do not authorize filing of submissions with the Secretary by facsimile or electronic means, except to the extent permitted by section 201.8 of the Commission’s rules, as amended, 67 Fed. Reg. 68036 (November 8, 2002). Also, in accordance with sections 201.16(c) and 207.3 of the Commission’s rules, each document filed by a party to the reviews must be served on all other parties to the reviews (as identified by either the public or APO service list as appropriate), and a certificate of service must accompany the document (if you are not a party to the reviews, you do not need to serve your response).

Inability to provide requested information.—Pursuant to section 207.61(c) of the Commission’s rules, any interested party that cannot furnish the information requested by this notice in the requested form and manner shall notify the Commission at the earliest possible time, provide a full explanation of why it cannot provide the requested information, and indicate alternative forms in which it can provide equivalent information. If an interested party does not provide this notification (or the Commission finds the explanation provided in the notification inadequate) and fails to provide a complete response to this notice, the Commission may take an adverse inference against the party pursuant to section 776(b) of the Act in making its determinations in the reviews.

Information To Be Provided in Response To This Notice of Institution: If you are a domestic producer, union/worker group, or trade/business association; import/export Subject Merchandise from more than one Subject Country; or produce Subject Merchandise in more than one Subject Country, you may file a single response. If you do so, please ensure that your response to each question includes the information requested for each pertinent Subject Country. As used below, the term “firm” includes any related firms.

(1) The name and address of your firm or entity (including World Wide Web address if available) and name, telephone number, fax number, and E-mail address of the certifying official.

(2) A statement indicating whether your firm/entity is a U.S. producer of the Domestic Like Product, a U.S. union or worker group, a U.S. importer of the Subject Merchandise, a foreign producer or exporter of the Subject Merchandise, a U.S. or foreign trade or business association, or another interested party (including an explanation). If you are a union/worker group or trade/business association, identify the firms in which your workers are employed or which are members of your association.

(3) A statement indicating whether your firm/entity is willing to participate in these reviews by providing information requested by the Commission.

(4) A statement of the likely effects of the revocation of the countervailing duty orders on the Domestic Industry in general and/or your firm/entity specifically. In your response, please discuss the various factors specified in section 752(a) of the Act (19 U.S.C. 1675a(a)) including the likely volume of subject imports, likely price effects of subject imports, and likely impact of imports of Subject Merchandise on the Domestic Industry.

(5) A list of all known and currently operating U.S. producers of the Domestic Like Product. Identify any known related parties and the nature of the relationship as defined in section 771(4)(B) of the Act (19 U.S.C. 1677(4)(B)).

(6) A list of all known and currently operating U.S. importers of the Subject Merchandise and producers of the Subject Merchandise in the Subject Countries that currently export or have exported Subject Merchandise to the United States or other countries since the Order Date.

(7) If you are a U.S. producer of the Domestic Like Product, provide the following information on your firm’s operations on that product during calendar year 2006 (report quantity data in pounds of contained vanadium and value data in U.S. dollars, landed and duty-paid at the U.S. port but not including antidumping duties). If you are a trade/business association, provide the information, on an aggregate basis, for the firms which are members of your association.

(a) Production (quantity) and, if known, an estimate of the percentage of total production of Subject Merchandise in each Subject Country for your firm’s(s’) production; and

(b) the quantity and value of your firm’s(s’) exports to the United States of Subject Merchandise and, if known, an estimate of the percentage of total exports to the United States of Subject Merchandise from each Subject Country accounted for by your firm’s(s’) exports.

(10) Identify significant changes, if any, in the supply and demand conditions or business cycle for the Domestic Like Product that have occurred in the United States or in the market for the Subject Merchandise in each Subject Country since the Order Date, and significant changes, if any, that are likely to occur within a reasonably foreseeable time. Supply conditions to consider include: tecnology, product mix, development efforts; ability to increase production (including the shift of
production facilities used for other products and the use, cost, or availability of major inputs into production); and factors related to the ability to shift supply among different national markets (including barriers to importation in foreign markets or changes in market demand abroad).

Demand conditions to consider include end uses and applications; the existence and availability of substitute products; and the level of competition among the Domestic Like Product produced in the United States, Subject Merchandise produced in each Subject Country, and such merchandise from other countries.

(11) (OPTIONAL) A statement of whether you agree with the above definitions of the Domestic Like Product and Domestic Industry; if you disagree with either or both of these definitions, please explain why and provide alternative definitions.

Authority: These reviews are being conducted under authority of title VII of the Tariff Act of 1930; this notice is published pursuant to section 207.61 of the Commission’s rules.

By order of the Commission.


Marilyn R. Abbott,
Secretary to the Commission.
people of the United States (HTSUS) item numbers 2850.00.2000, 8112.40.3000, and 8112.40.6000 are specifically excluded. Ferrovanadium is classified under HTSUS item number 7202.92.00. Although the HTSUS item number is provided for convenience and Customs purposes, the Department’s written description of the scope of this order remains dispositive.

**Amended Final Determination**

On November 29, 2002, in accordance with sections 735(d) and 777(i)(1) of the Act, the Department published its affirmative final determination in this proceeding. **See Final Determination, 67 FR 71137.** Pursuant to 19 CFR 351.224(c), on December 5, 2002, the Department received timely filed allegations of ministerial errors in the **Final Determination** from the petitioners and the respondent, Pangang Group International Economic & Trading Corp. (Pangang). The petitioners alleged that the Department inadvertently failed to (1) exclude abysmal data from the calculation of the surrogate value for sulfuric acid, (2) remove all subsidized imports from the import statistics used to calculate the surrogate value for wooden boxes, and (3) accurately convert the unit of measure for Pangang’s consumption of nitrogen. Pangang alleged that the Department failed to (1) accurately calculate the surrogate value for barium peroxide and (2) calculate normal value using the correct consumption quantities for the auxiliary materials used to produce FeV<sub>90</sub>. On December 10, 2002, Pangang filed rebuttal comments in response to the petitioners’ allegation of ministerial errors.

We have reviewed the calculations used in the **Final Determination** and find that there are two errors that constitute ministerial errors within the meaning of 19 CFR 351.224(f). For a detailed analysis of the ministerial error allegations and the Department’s position on each, see Memorandum to Fayar Shizzad, Assistant Secretary for Import Administration, from Bernard T. Carreau, Deputy Assistant Secretary for Import Administration, “Allegation of Ministerial Errors in the **Final Determination,” dated concurrently with this notice. Pursuant to section 735(e) of the Act, we have amended the **Final Determination** and corrected the following errors: (1) the calculation of the surrogate value for barium peroxide and (2) the auxiliary material consumption quantities for FeV<sub>90</sub>. Correcting these errors changes Pangang’s final antidumping duty margin from 13.03 percent to the margin listed below. We found the petitioners’ allegations to involve methodological issues, rather than ministerial errors, and therefore have not adjusted Pangang’s final antidumping duty margin based on the petitioners’ allegations.

**Antidumping Duty Order**

On January 13, 2003, in accordance with section 735(d) of the Act, the International Trade Commission (the Commission) notified the Department of its final determination that an industry in the United States is materially injured by reason of less-than-fair-value imports of subject merchandise from the PRC, pursuant to section 735(b)(1)(A) of the Act. Therefore, in accordance with section 356(a)(1) of the Act, the Department will direct the U.S. Customs Service to assess, upon further advice by the Department, antidumping duties equal to the amount by which the normal value of the merchandise exceeds the export price of the merchandise for all relevant entries of ferrovanadium from the PRC. For all producers and exporters, antidumping duties will be assessed on all unliquidated entries of subject merchandise that are entered, or withdrawn from warehouse, for consumption on or after July 8, 2002, the date on which the Department published its notice of affirmative preliminary determination in the **Federal Register.** **See Notice of Preliminary Determination of Sales at Less Than Fair Value and Postponement of Final Determination: Ferrovanadium from the People’s Republic of China,** 67 FR 45088 (July 8, 2002).

On or after the date of publication of this notice in the **Federal Register,** the U.S. Customs Service must require, at the same time as importers would normally deposit estimated duties, cash deposits for the subject merchandise equal to the estimated weighted-average dumping margins listed below. The “PRC-Wide” rate applies to all exporters of subject merchandise not specifically listed below.

<table>
<thead>
<tr>
<th>Manufacturer/exporter</th>
<th>Margin (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pangang Group International Economic &amp; Trading Corporation</td>
<td>12.97</td>
</tr>
<tr>
<td>PRC-Wide Rate</td>
<td>66.71</td>
</tr>
</tbody>
</table>
This notice constitutes the antidumping duty order with respect to ferrovanadium from the Republic of South Africa. Interested parties may contact the Department’s Central Records Unit, Room B-099 of the main Commerce building, for copies of an updated list of antidumping duty orders currently in effect. This order is issued and published in accordance with section 736(a) of the Act and 19 CFR 351.211.


Faryar Shirzad, Assistant Secretary for Import Administration.

[FR Doc. 03–1900 Filed 1–27–03; 8:45 am]

BILLING CODE 3510–DS–S

DEPARTMENT OF COMMERCE

International Trade Administration

[A–791–815]

Notice of Antidumping Duty Order: Ferrovanadium from the Republic of South Africa

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

ACTION: Notice of Antidumping Duty Order: Ferrovanadium from the Republic of South Africa.


FOR FURTHER INFORMATION CONTACT: Mark Manning or Crystal Scherr Crittenden; AD/CVD Enforcement, Office 4, Group II, Import Administration, International Trade Administration, U.S. Department of Commerce, 14th Street and Constitution Avenue NW, Washington, DC 20230; telephone: (202) 482–5253 or (202) 482–0989, respectively.

SUPPLEMENTARY INFORMATION:

Scope of the Order

The scope of this order covers all ferrovanadium 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 vanadium. It 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) item numbers 2850.00.2000, 8112.40.3000, and 8112.40.6000 are specifically excluded. Ferrovanadium is classified under HTSUS item number 7202.92.00. Although the HTSUS item number is provided for convenience and Customs purposes, the Department’s written description of the scope of this order remains dispositive.

Antidumping Duty Order

On January 13, 2003, in accordance with section 735(d) of Tariff Act of 1930, as amended (the Act), the International Trade Commission (the Commission) notified the Department of Commerce (the Department) of its final determination that an industry in the United States is materially injured by reason of less-than-fair-value imports of subject merchandise from South Africa, pursuant to section 735(b)(1)(A) of the Act. Therefore, in accordance with section 736(a)(1) of the Act, the Department will direct the U.S. Customs Service to assess, upon further advice by the Department, antidumping duties equal to the amount by which the normal value of the merchandise exceeds the U.S. price of the merchandise for all relevant entries of ferrovanadium from South Africa. For all producers and exporters, antidumping duties will be assessed on all unliquidated entries of subject merchandise that are entered, or withdrawn from warehouse, for consumption on or after July 8, 2002, the date on which the Department published its notice of affirmative preliminary determination in the Federal Register. See Notice of Preliminary Determination of Sales at Less Than Fair Value and Postponement of Final Determination: Ferrovanadium from the Republic of South Africa, 67 FR 45083 (July 8, 2002). On or after the date of publication of this notice in the Federal Register, the U.S. Customs Service must require, at the same time as importers would normally deposit estimated duties, cash deposits for the subject merchandise equal to the estimated weighted-average dumping margins listed below. The “All Others” rate applies to all exporters of subject merchandise not specifically listed below.

<table>
<thead>
<tr>
<th>Manufacturer/exporter</th>
<th>Margin (percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Highveld Steel and Vanadium Corporation, Ltd.</td>
<td>116.00</td>
</tr>
<tr>
<td>Xstrata South Africa (Proprietary) Limited.</td>
<td>116.00</td>
</tr>
<tr>
<td>All Others</td>
<td>116.00</td>
</tr>
</tbody>
</table>

This notice constitutes the antidumping duty order with respect to ferrovanadium from the Republic of South Africa. Interested parties may contact the Department’s Central Records Unit, Room B-099 of the main Commerce building, for copies of an updated list of antidumping duty orders currently in effect.


Faryar Shirzad, Assistant Secretary for Import Administration.

[FR Doc. 03–1901 Filed 1–27–03; 8:45 am]

BILLING CODE 3510–DS–S
INTERNATIONAL TRADE COMMISSION

[Investigation Nos. 731–TA–986–987 (Review)]

Ferrovanadium From China and South Africa


ACTION: Notice of Commission determination to conduct full five-year reviews concerning the antidumping duty orders on ferrovanadium from China and South Africa.

SUMMARY: The Commission hereby gives notice that it will proceed with full reviews pursuant to section 751(c)(5) of the Tariff Act of 1930 (19 U.S.C. 1675(c)(5)) to determine whether revocation of the antidumping duty orders on ferrovanadium from China and South Africa would be likely to lead to continuation or recurrence of material injury within a reasonably foreseeable time. A schedule for the reviews will be established and announced at a later date. For further information concerning the conduct of these reviews 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, D, E, and F (19 CFR part 207).

EFFECTIVE DATE: March 7, 2008.

FOR FURTHER INFORMATION CONTACT:
Mary Messer (202–205–3193), 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 reviews may be viewed on the Commission’s electronic docket (EDIS) at http://edis.usitc.gov.

SUPPLEMENTARY INFORMATION: On March 7, 2008, the Commission determined that it should proceed to full reviews in the subject five-year reviews pursuant to section 751(c)(5) of the Act. The Commission found that the domestic interested party group response to its notice of institution (72 FR 67962, December 3, 2007) was adequate and that the respondent interested party group response was inadequate. The Commission also found that other circumstances warranted conducting full reviews. A record of the Commissioners’ votes, the Commission’s statement on adequacy, and any individual Commissioner’s statements will be available from the Office of the Secretary and at the Commission’s Web site.

Authority: These reviews are being conducted under authority of title VII of the Tariff Act of 1930; this notice is published pursuant to section 207.62 of the Commission’s rules.

By order of the Commission.

Issued: March 12, 2008.

Marilyn R. Abbott,

Secretary to the Commission.
DEPARTMENT OF COMMERCE
International Trade Administration

A–570–873 ; A–791–815


SUPPLEMENTARY INFORMATION:

Background

On December 3, 2007, the Department initiated sunset reviews of the PRC Order and South Africa Order on ferrovanadium pursuant to section 751(c) of the Act. See Sunset Initiations. On December 18, 2007, the Department received timely notices of intent to participate in both sunset reviews as (joint submissions) from the Vanadium Producers and Reclaimers Association (“VPRA”), and its members Gulf Chemical & Metallurgical Corporation (“Gulf”), Gulf’s wholly owned subsidiary Bear Metallurgical Company (“Bear Metallurgical”), Metallurg Vanadium Corporation (“MVC”), and Strategic Minerals Corporation (on behalf of its wholly owned subsidiary, Stratcor, Inc.) (“Stratcor”) (collectively “Domestic Producers”), pursuant to 19 C.F.R. 351.218(d)(1)(i). In accordance with 19 C.F.R. 351.218(d)(1)(ii)(A), VPRA claimed interested party status under section 771(9)(E) of the Act as a trade or business association, a majority of whose members produce or wholesale a domestic like product in the United States. Gulf, Bear Metallurgical, MVC, and Stratcor claimed interested party status under section 771(9)(C) of the Act as domestic producers and/or wholesalers of subject merchandise. On January 2, 2008, Domestic Producers jointly filed substantive responses in both sunset reviews, within the 30-day deadline as specified in 19 C.F.R. 351.218(d)(3)(i). The Department did not receive a substantive response from any respondent interested party in either sunset review. As a result, pursuant to section 751(c)(3)(B) of the Act and 19 C.F.R. 351.218(e)(1)(ii)(C)(2), the Department conducted expedited sunset reviews of the PRC Order and the South Africa Order.

SCOPE OF THE ORDERS

The scope of the orders covers all ferrovanadium 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 vanadium. The scope 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.

ANALYSIS OF COMMENTS RECEIVED

A complete discussion of all issues raised in these sunset reviews is addressed in the accompanying Issues and Decision Memorandum, which is hereby adopted by this notice. See “Issues and Decision Memorandum for the Final Results in the Expedited Sunset Reviews of the Antidumping Duty Orders on Ferrovanadium from the People’s Republic of China and from the Republic of South Africa,” from Stephen J. Claeyts, Deputy Assistant Secretary, to David M. Spooner, Assistant Secretary for Import Administration, dated April 1, 2008 (“I&D Memo”). The issues discussed in the accompanying I&D Memo include the likelihood of continuation or recurrence of dumping and the magnitude of the dumping margin likely to prevail if either the PRC Order or the South Africa Order were revoked.

The Department determines that revocation of the PRC Order on ferrovanadium would likely lead to continuation or recurrence of dumping at the rates listed below:

<table>
<thead>
<tr>
<th>Manufacturers/Exporters/Producers</th>
<th>Weighted–Average Margin (Percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pangang Group International Economic &amp; Trading Corporation</td>
<td>12.97%</td>
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<td>PRC–Wide Entity</td>
<td>66.71%</td>
</tr>
</tbody>
</table>

The Department determines that revocation of the South Africa Order on ferrovanadium would likely lead to...
continuation or recurrence of dumping at the rates listed below:

<table>
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</tr>
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<td>All Others</td>
<td>116.00%</td>
</tr>
</tbody>
</table>
Ferrovanadium From China and South Africa


ACTION: Scheduling of full five-year reviews concerning the antidumping duty orders on ferrovanadium from China and South Africa.

SUMMARY: The Commission hereby gives notice of the scheduling of full reviews pursuant to section 751(c)(5) of the Tariff Act of 1930 (19 U.S.C. 1675(c)(5)) (the Act) to determine whether revocation of the antidumping duty orders on ferrovanadium from China and South Africa would be likely to lead to continuation or recurrence of material injury within a reasonably foreseeable time. For further information concerning the conduct of these reviews 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, D, and E (19 CFR part 207).

DATES: Effective Date: May 22, 2008.


Hearing. The Commission will hold a hearing in connection with the reviews beginning at 9:30 a.m. on September 23, 2008, at the U.S. International Trade Commission Building. Requests to appear at the hearing should be filed in writing with the Secretary to the Commission on or before September 17, 2008. A nonparty who has testimony that may aid the Commission’s deliberations may request permission to present a short statement at the hearing. All parties and nonparties desiring to appear at the hearing and make oral presentations should attend a prehearing conference to be held at 9:30 a.m. on September 19, 2008, at the U.S. International Trade Commission Building. Oral testimony and written materials to be submitted at the public hearing are governed by sections 201.6(b)(2), 201.13(f), 207.24, and 207.66 of the Commission’s rules. Parties must submit any request to present a portion of their hearing testimony in camera no later than 7 business days prior to the date of the hearing.

Written submissions. Each party to the reviews may submit a prehearing brief to the Commission. Prehearing briefs must conform with the provisions of section 207.65 of the Commission’s rules; the deadline for filing is September 12, 2008. Parties may also file written testimony in connection with their presentation at the hearing, as provided in section 207.24 of the Commission’s rules, and posthearing briefs, which must conform with the provisions of section 207.67 of the Commission’s rules. The deadline for filing posthearing briefs is October 6, 2008; witness testimony must be filed no later than three days before the hearing. In addition, any person who has not entered an appearance as a party to the reviews may submit a written statement of information pertinent to the subject of the reviews on or before October 6. On October 27, 2008, the Commission will make available to parties all information on which they have not had an opportunity to comment. Parties may submit final comments on this information on or before October 29, 2008, but such final comments must not contain new factual information and must otherwise comply with section 207.68 of the Commission’s rules. All written submissions must conform with the provisions of section 201.8 of the Commission’s rules; any submissions that contain BPI must also 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

International Trade Commission

[Investigation Nos. 731–TA–986–987 (Review)]

Background. On March 7, 2008, the Commission determined that circumstances warranted conducting full reviews pursuant to section 751(c)(5) of the Act (73 FR 14484, March 18, 2008). A record of the Commissioners’ votes, the Commission’s statement on adequacy, and any individual Commissioner’s statements are available from the Office of the Secretary and at the Commission’s Web site.

Participation in the reviews and public service list. Persons, including industrial users of the subject merchandise and, if the merchandise is sold at the retail level, representative consumer organizations, wishing to participate in these reviews as parties must file an entry of appearance with the Secretary to the Commission, as provided in section 201.11 of the Commission’s rules, by 45 days after publication of this notice. A party that filed a notice of appearance following publication of the Commission’s notice of institution of the reviews need not file an additional notice of appearance. The Secretary will maintain a public service list containing the names and addresses of all persons, or their representatives, who are parties to the reviews.

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 reviews available to authorized applicants under the APO issued in the reviews, provided that the application is made by 45 days after publication of this notice. Authorized applicants must represent interested parties, as defined by 19 U.S.C. 1677(9), who are parties to the reviews. A party granted access to BPI following publication of the Commission’s notice of institution of the reviews need not reapply for such access. A separate service list will be maintained by the Secretary for those parties authorized to receive BPI under the APO.

Staff report. The prehearing staff report in the reviews will be placed in the nonpublic record on September 3, 2008, and a public version will be issued thereafter, pursuant to section 207.64 of the Commission’s rules.

SUPPLEMENTARY INFORMATION:
submissions with the Secretary by facsimile or electronic means, except to the extent permitted by section 201.8 of the Commission’s rules, as amended, 67 FR 68036 (November 8, 2002). Even where electronic filing of a document is permitted, certain documents must also be filed in paper form, as specified in II (C) of the Commission’s Handbook on Electronic Filing Procedures, 67 FR 68166, 68173 (November 8, 2002).

Additional written submissions to the Commission, including requests pursuant to section 201.12 of the Commission’s rules, shall not be accepted unless good cause is shown for accepting such submissions, or unless the submission is pursuant to a specific request by a Commissioner or Commission staff.

In accordance with sections 201.16(c) and 207.3 of the Commission’s rules, each document filed by a party to the reviews must be served on all other parties to the reviews (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 reviews are being conducted under authority of title VII of the Tariff Act of 1930; this notice is published pursuant to section 207.62 of the Commission’s rules.

By order of the Commission.

Issued: May 29, 2008.

Marilyn R. Abbott,
Secretary to the Commission.

[FR Doc. E8–12311 Filed 6–2–08; 8:45 am]
INTERNATIONAL TRADE COMMISSION

[Investigation Nos. 731–TA–986–987 (Final)]

Ferrovanadium From China and South Africa


ACTION: Revised schedule for the subject reviews.

DATES: Effective Date: July 1, 2008.

FOR FURTHER INFORMATION CONTACT:

SUPPLEMENTARY INFORMATION: On May 22, 2008, the Commission established a schedule for the conduct of the subject reviews (73 FR 31711, June 3, 2008). Subsequently, the parties submitted a request to postpone the hearing date. The Commission, therefore, is revising its schedule to conform with the parties’ requests.

The Commission’s new schedule for the reviews is as follows: requests to appear at the hearing must be filed with the Secretary to the Commission not later than September 29, 2008; the prehearing conference will be held at the U.S. International Trade Commission Building at 9:30 a.m. on October 2, 2008; the hearing will be held at the U.S. International Trade Commission Building at 9:30 a.m. on October 7, 2008; the deadline for filing posthearing briefs is October 17, 2008; the Commission will make its final release of information on November 5, 2008; and final party comments are due on November 7, 2008.

For further information concerning these reviews see the Commission’s notice cited above and the Commission’s Rules of Practice and Procedure, part 201, subparts A through E (19 CFR part 201), and part 207, subparts A and C (19 CFR part 207).

Authority: These reviews are being conducted under authority of title VII of the
Termination of investigation.

This investigation is being terminated under authority of title VII of the Tariff Act of 1930; this notice is published pursuant to section 207.21 of the Tariff Act of 1930; this notice is published.

Issued: July 2, 2008.

By order of the Commission.

Marilyn R. Abbott,
Secretary to the Commission.

[FR Doc. E8–15407 Filed 7–7–08; 8:45 am]

BILLING CODE 7020–02–P
EXPLANATION OF COMMISSION’S DETERMINATION ON ADEQUACY

in

Ferrovanadium from China and South Africa,

On March 7, 2008, the Commission unanimously determined that it should proceed to full reviews in the subject five-year reviews pursuant to section 751(c)(5) of the Tariff Act of 1930, as amended, 19 U.S.C. § 1675(c)(5).

In response to the notice instituting five-year reviews of the antidumping duty orders on imports of ferrovanadium from the People’s Republic of China (“China”) and South Africa, the Vanadium Producers and Reclaimers Association (“VPR Association”) filed a submission on behalf of its members Gulf Chemical & Metallurgical Corporation (“Gulf”); Gulf’s wholly-owned subsidiary Bear Metallurgical Company (“Bear”); Metallurg Vanadium Corporation (“MVC”); and Strategic Minerals Corporation (on behalf of its wholly owned subsidiary, Stratcor, Inc. (“Stratcor”)). The VPR Association is a trade association whose members produce and/or wholesale domestically-produced ferrovanadium. Bear and MVC are U.S. producers of ferrovanadium, and Bear, MVC, Gulf, and Stratcor are wholesalers of domestically produced ferrovanadium in the United States. The Commission found this individual domestic interested party response to be adequate. Based on the current record, because Bear and MVC account for all known U.S. ferrovanadium production, the Commission additionally found that the domestic interested party group response was adequate.

With respect to the review on ferrovanadium from China, the Commission did not receive a response to the notice of institution from any respondent interested party. The Commission determined that the respondent interested party group response was inadequate in this review.

The Commission also did not receive a response to the notice of institution from any respondent interested party with respect to the review on ferrovanadium from South Africa. The Commission determined that the respondent interested party group response was inadequate in this review.

Notwithstanding the Commission’s determination that the respondent interested party group response was inadequate with respect to each of the reviews, in light of information regarding possible changes in the conditions of competition related to developments in the subject countries, the Commission unanimously determined to conduct full reviews of the orders on ferrovanadium from China and South Africa.

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

CALENDAR OF THE PUBLIC HEARING
CALENDAR OF PUBLIC HEARING

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

**Subject:** Ferrovanadium from China and South Africa

**Inv. Nos.:** 731-TA-986 and 987 (Review)

**Date and Time:** October 7, 2008 - 9:30 a.m.

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

**OPENING REMARKS:**

In Support of Continuation of the Orders (**John B. Totaro, Jr., Saul Ewing, LLP**)

**In Support of the Continuation of the Antidumping Duty Orders:**

Saul Ewing, LLP
Washington, DC
on behalf of

Vanadium Producers and Reclaimers Association ("VPRA")
Gulf Chemical & Metallurgical Corp. ("Gulf")
Bear Metallurgical Co. ("Bear")
Metallurg Vanadium Corp. ("Metvan")
Strategic Minerals Corp. ("Stratcor")

**Janice Pakozdi-Luffy,** Secretary, Treasurer, and Controller, Bear
**R. James Carter,** Director of Sales and Marketing, Metvan
**Allan Orr,** Vice President of Sales and Marketing, Gulf
**Robert Bunting,** Consultant, Stratcor, Inc.
**John W. Hilbert III,** President, VPRA

**John B. Totaro, Jr.**
**Jeffrey S. Levin** – OF COUNSEL

**CLOSING REMARKS:**

In Support of Continuation of Orders (**John B. Totaro, Jr., Saul Ewing, LLP**)

B-3
APPENDIX C

SUMMARY TABLES
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(1) Reported data are in percent and "period changes" are in percentage points.
(2) Not applicable.
(3) Data are for Bear and Melvin only.

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

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

The Commission requested U.S. producers to describe any anticipated changes to the character of their operations or organization relating to the importation of ferrovanadium in the future if the antidumping duty orders covering imports of ferrovanadium from China and South Africa were revoked. (Questions II-3 and II-4.) The following are quotations from the responses of U.S. producers.

**Metvan**

***.

**Bear**

***.

**Gulf**

***.

**Stratcor**

***.

The Commission requested U.S. producers to describe the significance of the existing antidumping duty orders covering imports of ferrovanadium from China and South Africa in terms of their effect on their firms’ production capacity, production, U.S. shipments, inventories, purchases, employment, revenues, costs, profits, cash flow, capital expenditures, research and development expenditures, and asset values. (Question II-17.) The following are quotations from the responses of U.S. producers.

**Metvan**

***.

**Bear**

***.

**Gulf**

***.

**Stratcor**

***.
The Commission requested U.S. producers to describe any anticipated changes in their production capacity, production, U.S. shipments, inventories, purchases, employment, revenues, costs, profits, cash flow, capital expenditures, research and development expenditures, and asset values relating to the production of ferrovanadium in the future if the existing antidumping duties on ferrovanadium from China and South Africa were revoked. (Question II-18.) The following are quotations from the responses of U.S. producers.

**Metvan**

***.

**Bear**

***.

**Gulf**

***.

**Stratcor**

***.
The Commission requested U.S. importers to describe any anticipated changes to the character of their operations or organization relating to the importation of ferrovanadium in the future if the antidumping duty orders covering imports of ferrovanadium from China and South Africa were revoked. (Questions II-3 and II-4.) The following are quotations from the responses of U.S. importers.

***

Will start to import ferrovanadium. Will have more business, may hire more people.

***

No.

***

No.

***

No.

***

No.

***

No.

***

Yes, our business depends on free trade, so we welcome open markets.

The Commission requested U.S. importers to describe the significance of the existing antidumping duty orders covering imports of ferrovanadium from China and South Africa in terms of their effect on their imports, U.S. shipments of imports, and inventories. (Question II-10.) The following are quotations from the responses of importers.

***

Antidumping duty makes import prices higher, not competitive, also makes import complicated. Will not import under the antidumping duty.

***

No comparative perspective.

***
Not too significant. ***.

***

Cannot answer. Do not know.

***

The antidumping duty has shifted our purchasing of material to other countries of production. It has had the effect of increasing the unit price of FeV in this country.

***

Our business depends on free trade. The antidumping duty order limits our supplies and results in higher prices for our customers.

The Commission requested U.S. importers to describe any anticipated changes in their imports, U.S. shipments of imports, or inventories of ferrovanadium in the future if the existing antidumping duty orders were revoked. (Question II-11.) The following are quotations from the responses of importers.

***

We may import ferrovanadium if antidumping duty is revoked.

***

No comparative perspective.

***

No.

***

No.

***

The assumption being that with material being available from China and South Africa, which are major countries of production, this would make us rely on other countries for material, thereby increasing the possible imports and also decreasing any possible situations from arising in various countries causing a shortage of material to be available in the United States.

***

If the antidumping were revoked we may look at those countries for ferrovanadium but only providing that it made prudent business sense.
U.S. PURCHASERS’ COMMENTS REGARDING THE SIGNIFICANCE OF
THE ANTIDUMPING DUTY ORDERS
AND THE LIKELY EFFECTS OF REVOCATION OF THE ORDERS

The Commission’s questionnaires in these reviews requested comments from U.S. purchasers (Question III-35) regarding the effects of revocation of the antidumping duty orders on (1) the future activities of their firms and (2) the U.S. market as a whole. The following comments were received.

***:

(1) Activities of firm.—If the duty is revoked, prices from ferrovanadium from China and South Africa will be lower than domestic producer prices.

(2) Entire U.S. market.—Domestic market will be hurt.

***:

(1) Activities of firm.—With the availability of material from China and South Africa, it would allow our company as a distributor more quantity for sale.

(2) Entire U.S. market.—Would affect the U.S. market in the same manner as above.

***:

(1) Activities of firm.—Not quite sure.

(2) Entire U.S. market.—Not quite sure. May create a more competitive market.

***:

(1) Activities of firm.—If these AD were revoked, we would not anticipate significant change. Today, prices in the U.S. market are more on par with other markets, such as Europe. As water finds its level, so too world imports of feva. to the USA. This holds true for the entire U.S.

(2) Entire U.S. market.—If these AD were revoked, we would not anticipate significant change. Today, prices in the U.S. market are more on par with other markets, such as Europe. As water finds its level, so too world imports of feva. to the USA. This holds true for the entire U.S.

***:

(1) Activities of firm.—None.

(2) Entire U.S. market.—None.
(1) Activities of firm.–None.

(2) Entire U.S. market.–None.

***:

(1) Activities of firm.–Unless U.S. and world market conditions change significantly, we expect our activities to remain the same as last couple years.

(2) Entire U.S. market.–Yes, there would most likely be more product in U.S. markets probably from South Africa, as Glencore and Stratcor have been known to be price leaders and aggressive in this market in the past. In 2009, we expect new production from Australia and in 2010 from Brazil to target U.S. markets.

***:

(1) Activities of firm.–n/a

(2) Entire U.S. market.–blank

***:

(1) Activities of firm.–No real effect as our firm seeks to sell product in the markets that provides the highest return to our group. If duties are revoked, we would review sending Chinese or South African FeV to the USA if it made economic sense.

(2) Entire U.S. market.–No real impact, market would adjust based upon global supply/demand.

***:

(1) Activities of firm.–None.

(2) Entire U.S. market.–Unknown.
(1) Activities of firm.–We will continue to send inquiries to companies representing producers from several countries and expect the Chinese & S. African material to be more available and more competitive than previously.

(2) Entire U.S. market.–More material will be purchased from Chinese & S. African producers, but I think other countries will continue to be competitive.
FOREIGN PRODUCERS'/EXPORTERS COMMENTS REGARDING THE SIGNIFICANCE OF
THE ANTIDUMPING DUTY ORDERS
AND THE LIKELY EFFECTS OF REVOCATION

The Commission requested foreign producers/exporters to describe any anticipated changes to the character of their operations or organization relating to the importation of ferrovanadium in the future if the antidumping duty orders covering imports of ferrovanadium from China and South Africa were revoked. (Question II-4.) The following are quotations from the responses of foreign producers.

***.

The Commission requested foreign producers to identify export markets other than the United States that have been developed as a result of the antidumping duty orders from China and South Africa. (Question II-13.)

***.

The Commission requested foreign producers to describe the significance of the existing antidumping duty orders covering imports of ferrovanadium from China and South Africa in terms of their effect on their firms’ production capacity, production, home market shipments, exports to the United States and other markets, and inventories. (Question II-14.)

***.

The Commission requested foreign producers/exporters to describe any anticipated changes in their production capacity, production, home market shipments, exports to the U.S. and other markets, or inventories relating to the production of ferrovanadium in the future if the existing antidumping duty orders were revoked. (Question II-15.)

***.
APPENDIX E

RESPONSES OF U.S. PRODUCERS/TOLLEES CONCERNING CHANGES IN THE CHARACTER OF THEIR OPERATIONS OR ORGANIZATION SINCE JANUARY 1, 2002
U.S. PRODUCERS’ COMMENTS REGARDING CHANGES IN THE CHARACTER OF ITS OPERATIONS OR ORGANIZATION RELATING TO THE PRODUCTION OF FERROVANADIUM SINCE JANUARY 1, 2002

The Commission requested U.S. producers to supply details as to the time, nature, and significance of any such changes, and provide underlying assumptions, together with relevant portions of business plans, public corporate filings, or other internal documentation that address this (Questions II-2.) The following are quotations from the responses of U.S. producers.

**Bear**

***.

**Metvan**

***.

**Gulf**

***.

**Stratcor**

***.