Ferrovanadium and Nitrided Vanadium from Russia

Investigation No. 731-TA-702 (Third Review)

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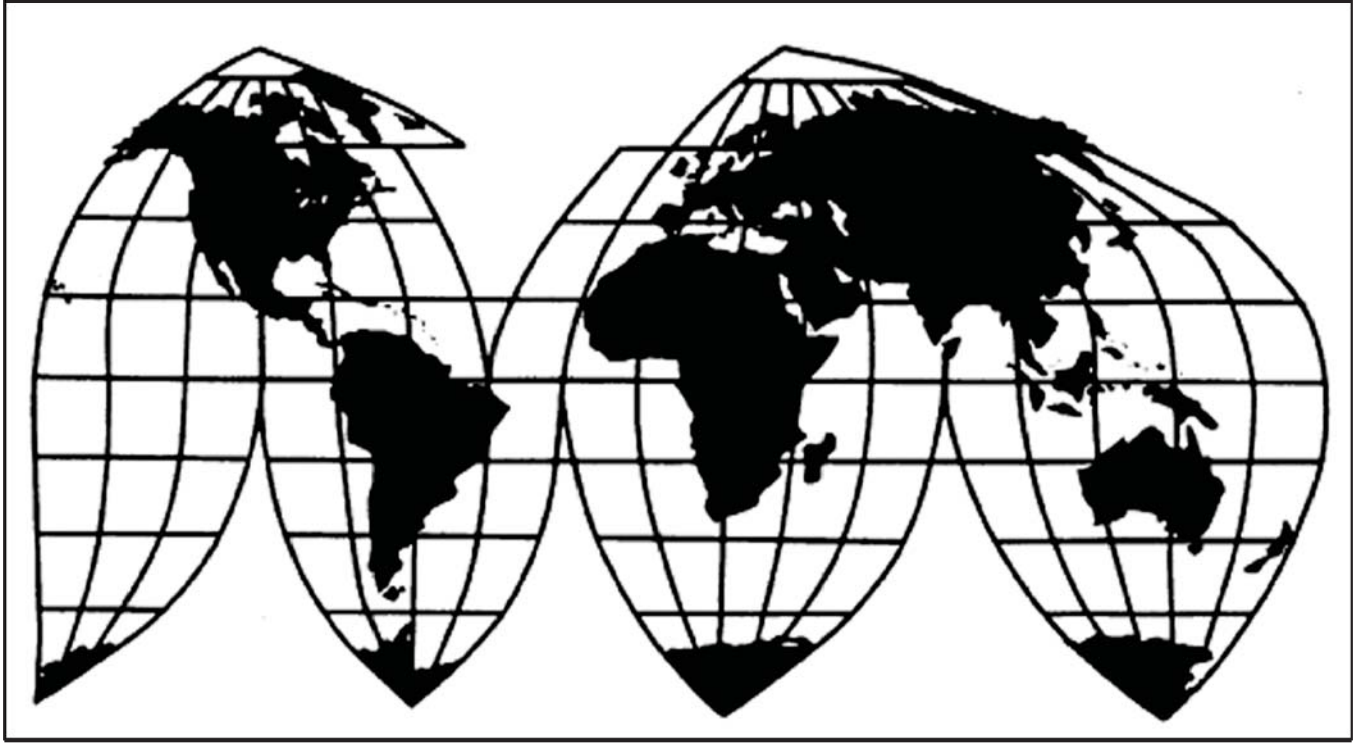
U.S. International Trade Commission



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U.S. International Trade Commission

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UNITED STATES INTERNATIONAL TRADE COMMISSION

Investigation No. 731-TA-702 (Third Review)

FERROVANADIUM AND NITRIDED VANADIUM FROM RUSSIA

DETERMINATION

On the basis of the record[1] developed in the subject five-year review, the United States International Trade Commission (Commission) determines, pursuant to section 751(c) of the Tariff Act of 1930 (19 U.S.C. § 1675(c)), that revocation of the antidumping duty order on ferrovanadium and nitrided vanadium from Russia would not be likely to lead to continuation or recurrence of material injury to an industry in the United States within a reasonably foreseeable time.

BACKGROUND

The Commission instituted this review on September 1, 2011 (76 F.R. 54490) and determined on December 5, 2011 that it would conduct a full review (76 F.R. 79214, December 21, 2011). Notice of the scheduling of the Commission's review and of a public hearing to be held in connection therewith was given by posting copies of the notice in the Office of the Secretary, U.S. International Trade Commission, Washington, DC, and by publishing the notice in the *Federal Register* on February 8, 2012 (77 F.R. 6582). The hearing was held in Washington, DC, on June 21, 2012, and all persons who requested the opportunity were permitted to appear in person or by counsel.

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

VIEWS OF THE COMMISSION

Based on the record in this five-year review, we determine under section 751(c) of the Tariff Act of 1930, as amended ("the Act"), that revocation of the antidumping duty order on ferrovanadium and nitrided vanadium from Russia would not 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

On June 30, 1995, the Commission found that an industry in the United States was materially injured by reason of imports of ferrovanadium and nitrided vanadium from Russia sold at less than fair value.[1] The Department of Commerce ("Commerce") published an antidumping duty order on imports of ferrovanadium and nitrided vanadium from Russia in July 1995.[2]

The Commission instituted the first five-year review of the antidumping duty order on ferrovanadium and nitrided vanadium from Russia in June 2000.[3] It conducted a full review[4] and reached an affirmative determination.[5] Commerce subsequently issued a notice continuing the order.[6]

The Commission instituted the second five-year review of the antidumping duty order in May 2006.[7] It conducted an expedited review[8] and reached an affirmative determination.[9] Commerce subsequently issued a notice continuing the order.[10]

The Commission instituted the instant review on September 1, 2011.[11] The Commission received domestic interested party responses from Gulf Chemical and Metallurgical Company ("Gulf"), a domestic wholesaler of ferrovanadium toll produced by Bear Metallurgical Company ("Bear"); Bear, a wholly owned subsidiary of Gulf and a U.S. producer of ferrovanadium; and AMG Vanadium, Inc. ("AMG"), a U.S. producer of ferrovanadium.[12] The Commission received respondent interested party responses from the Evraz Group, S.A. and its subsidiaries OAO Vanady Tula (now Evraz Vanady Tula) (a Russian producer of the subject merchandise), and East Metals AG, East Metals (North America), LLC, and Evraz Stratcor, Inc. (U.S. wholesalers of the domestic like product) (collectively "Evraz"). On December 5,

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[1] 60 Fed. Reg. 35923 (July 12, 1995); Ferrovanadium and Nitrided Vanadium from Russia, Inv. No. 731-TA-702 (Final), USITC Pub. 2904 (June 1995) ("USITC Pub. 2904").

[2] 60 Fed. Reg. 35550 (July 10, 1995).

[3] 65 Fed. Reg. 35668 (June 5, 2000).

[4] 65 Fed. Reg. 55047 (Sept. 12, 2000).

[5] 66 Fed. Reg. 28540 (May 23, 2001); Ferrovanadium and Nitrided Vanadium from Russia, Inv. No. 731-TA-702 (First Review), USITC Pub. 3420 (May 2001) ("USITC Pub. 3420").

[6] 66 Fed. Reg. 30694 (June 7, 2001).

[7] 71 Fed. Reg. 25609 (May 1, 2006).

[8] 71 Fed. Reg. 47523 (Aug. 17, 2006). Chairman Daniel R. Pearson and Commissioner Deanna Tanner Okun voted to conduct a full review due to changes in the conditions of competition in the U.S. market for ferrovanadium. Id.

[9] 71 Fed. Reg. 58630 (Oct. 4, 2006); Ferrovanadium and Nitrided Vanadium from Russia, Inv. No. 731-TA-702 (Second Review), USITC Pub. 3887 (Sept. 2006) ("USITC Pub. 3887").

[10] 71 Fed. Reg. 60475 (Oct. 13, 2006).

[11] 76 Fed. Reg. 54490 (Sept. 1, 2011).

[12] AMG is the successor to a domestic producer that was called Shieldalloy Metallurgical Corporation at the time of the Commission's original investigation and first five-year review and MVC at the time of the second five-year review. Confidential Report ("CR") at I-24, Public Report ("PR") at I-17. The Commission's report was revised in accordance with memoranda INV-KK-080 and 085 (July 29 and August 6, 2012).

2011, the Commission determined that the domestic interested party group response and the respondent interested party group response were both adequate. Accordingly, the Commission determined that a full review of the order was appropriate.[13]

The Commission received prehearing and posthearing submissions from Bear/Gulf, AMG, and Evraz. Representatives of these companies also appeared at the hearing accompanied by counsel.

The Commission sent questionnaires to two U.S. producers of ferrovanadium, Bear and AMG, which accounted for all domestic production of the domestic like product in 2011. Because Bear produces ferrovanadium under toll agreements with its parent company, Gulf, as well as tollees such as Evraz Stratcor, Glencore Ltd., and Minerais US LLC, the Commission obtained data from its main tollees on their shipments, inventories, sales, and pricing.[14]

There have been no subject imports of ferrovanadium or nitrided vanadium since 1996. The Commission sent importer questionnaires to 15 firms believed to be U.S. importers of ferrovanadium or nitrided vanadium from other countries since 2006 and received questionnaire responses from eight, six of which provided information and two of which reported they had not imported ferrovanadium or nitrided vanadium during the period for which data were requested.[15] The six importers are estimated to account for *** percent of total imports of ferrovanadium and nitrided vanadium from all sources in 2011.[16]

The Commission issued foreign producer questionnaires to two Russian producers of ferrovanadium or nitrided vanadium, Evraz Vanady Tula and Chusovskoy Metallurgical Works ("Chusovskoy"), and received responses from both firms. These firms are believed to account for all production of ferrovanadium and nitrided vanadium in Russia.[17]

II. DOMESTIC LIKE PRODUCT AND INDUSTRY

A. Domestic Like Product

In making its determination under section 751(c) of the Act, the Commission defines "the domestic like product" and the "industry."[18] The Act defines "domestic like product" as "a product which is like, or in the absence of like, most similar in characteristics and uses with, the article subject to an investigation under this subtitle."[19] The Commission's practice in five-year reviews is to look to the domestic like product definition from the original determination and any completed reviews and consider whether the record indicates any reason to revisit the prior findings.[20]

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[13] 77 Fed. Reg. 6582 (Feb. 8, 2012); CR/PR at Appendix A, Explanation of Commission Determination on Adequacy.

[14] CR/PR at III-2; CR at V-7-8, PR at V-4 (***).

[15] CR/PR at IV-1.

[16] CR/PR at IV-1.

[17] CR at IV-7, PR at IV-6.

[18] 19 U.S.C. § 1677(4)(A).

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

[20] See, e.g., Stainless Steel Sheet and Strip from Germany, Italy, Japan, Korea, Mexico, and Taiwan, Inv. Nos. 701-TA-382 and 731-TA-798-803 (Second Review), USITC Pub. 4244 (July 2011) at 6; Certain Carbon Steel

(continued...)

Commerce defined the subject merchandise in this review as:

> Ferrovanadium and nitrided vanadium, regardless of grade, chemistry, form or size, unless expressly excluded from the scope of this order. Ferrovanadium includes alloys containing ferrovanadium as the predominant element by weight (i.e., more weight than any other element, except iron in some instances) and at least 4 percent by weight of iron. Nitrided vanadium includes compounds containing vanadium as the predominant element, by weight, and at least 5 percent, by weight, of nitrogen. Excluded from the scope of the order are vanadium additives other than ferrovanadium and nitrided vanadium, such as vanadium-aluminum master alloys, vanadium chemicals, vanadium waste and scrap, vanadium-bearing raw materials, such as slag, boiler residues, fly ash, and vanadium oxides.[21]

This scope definition is unchanged from the original investigation and the previous five-year reviews.

Ferrovanadium and nitrided vanadium are alloying agents used to add vanadium to molten steel. Steel products that require the addition of vanadium include high-strength low-alloy steels, often called microalloyed steels (the largest use), certain construction alloy steels, rail steels, high-speed and heat-resisting tool and die steels, and certain special stainless steels. Microalloyed steels are used extensively in pipeline steels, concrete reinforcing bars, structural shapes and plate for construction, and automobile components. Ferrovanadium is commonly produced in grades having a vanadium content of 45-55 percent or 75-80 percent. Nitrided vanadium is produced in two types: nitrided ferrovanadium, which typically contains 40-60 percent vanadium and 9-11 percent nitrogen, with the balance being iron; and a product that consists of carbides and nitrides of vanadium and contains no iron. Regardless of grade, the commercial practice is to quote the price of ferrovanadium and nitrided vanadium on the basis of the vanadium contained per pound.[22]

In the original investigation, the Commission defined a single domestic like product, ferrovanadium and nitrided vanadium, consistent with the scope of the investigation.[23] In the first and second five-year reviews, the Commission found that nitrided vanadium had not been produced in the United States since 1992 and defined the domestic like product as ferrovanadium, the domestically produced product like ferrovanadium and most similar in characteristics and uses to nitrided vanadium.[24]

In this third review, the record again reflects that nitrided vanadium is not produced in the United States.[25] No party objects to the domestic like product definition used in the first and second reviews –

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[20] (...continued)
Products from Australia, Belgium, Brazil, Canada, Finland, France, Germany, Japan, Korea, Mexico, Poland, Romania, Spain, Sweden, Taiwan, and the United Kingdom, Inv. Nos. AA1921-197 (Second Review), 701-TA-319, 320, 325-27, 348, and 350 (Second Review), and 731-TA-573-74, 576, 578, 582-87, 612, and 614-618 (Second Review), USITC Pub. 3899 (January 2007) at 31, n. 117; Internal Combustion Industrial Forklift Trucks from Japan, Inv. No. 731-TA-377 (Second Review), USITC Pub. 3831 (December 2005) at 8-9; Crawfish Tail Meat from China, Inv. No. 731-TA-752 (Review), USITC Pub. 3614 (July 2003) at 4; Steel Concrete Reinforcing Bar from Turkey, Inv. No. 731-TA-745 (Review), USITC Pub. 3577 (February 2003) at 4.

[21] Final Results of Expedited Sunset Review: Ferrovanadium and Nitrided Vanadium from Russia, 76 Fed. Reg. 78888 (Dec. 20, 2011).

[22] CR at I-17-18, PR at I-14-15.

[23] USITC Pub. 2904 at I-8.

[24] USITC Pub. 3420 at 5, USITC Pub. 3887 at 5.

[25] CR at I-22-23, PR at I-15-16.

ferrovanadium.[26] The record in this review does not indicate any significant changes in the products at issue or any other appropriate circumstances that warrant revisiting the Commission's definition of the domestic like product in the prior reviews. Based on the record, therefore, the product that is like ferrovanadium and most similar in characteristics and uses to nitrided vanadium that is produced in the United States is ferrovanadium. Accordingly, we find one domestic like product consisting of ferrovanadium.

B. Domestic Industry

Section 771(4)(A) of the Act defines the relevant domestic industry as the "producers as a whole of a domestic like product, or those producers whose collective output of a domestic like product constitutes a major proportion of the total domestic production of the product."[27]

In its original determination, the Commission defined the domestic industry as consisting of domestic producers of ferrovanadium and nitrided vanadium, including Shieldalloy (now AMG), Stratcor (now Evraz Stratcor), ***, and toll producer Bear.[28]

In the first review, the Commission found that the domestic industry consisted of Bear and Shieldalloy, the domestic producers of ferrovanadium. The Commission did not include Gulf or USV, which manufactured an intermediate product, vanadium pentoxide, but not ferrovanadium.[29]

In the expedited second review, the Commission found that Bear and MVC (formerly Shieldalloy, now AMG) were the only two firms that produced ferrovanadium in the United States.[30] Domestic parties urged the Commission to expand the definition of the domestic industry to include Gulf and another tollee, USV.[31] The Commission explained, however, that the tollees produced vanadium pentoxide, an intermediate product, but did not produce ferrovanadium, the domestic like product, production of which would be required for a firm to be part of the domestic industry.[32]

In this review, Bear and Gulf again urge the Commission to include Gulf in the domestic industry. They contend that Gulf conducts substantial production operations in recycling refinery catalysts into vanadium pentoxide, which is then processed by Bear into ferrovanadium. They argue that consideration of Gulf's operations is critical to the Commission's analysis because Gulf's vanadium pentoxide operations and Bear's ferrovanadium operations are closely interconnected and are operated essentially as an integrated operation, much like AMG's.[33]

For the reasons stated in the prior review determinations, we find that Gulf is not a producer of the domestic like product.[34] We recognize that Gulf recycles refinery catalysts into vanadium pentoxide,

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[26] E.g., CR at I-23, PR at I-17, Bear/Gulf Prehearing Brief at 4.

[27] 19 U.S.C. § 1677(4)(A). In defining the domestic industry, the Commission's general practice has been to include in the industry producers of all domestic production of the like product, whether toll-produced, captively consumed, or sold in the domestic merchant market, provided that adequate production-related activity is conducted in the United States. See United States Steel Group v. United States, 873 F. Supp. 673, 682-83 (Ct. Int'l Trade 1994), aff'd, 96 F.3d 1352 (Fed. Cir. 1996).

[28] USITC Pub. 2904 at I-8-10.

[29] USITC Pub. 3420 at 6-7. USV became Stratcor in 2004. CR at III-14, PR at III-5-6.

[30] USITC Pub. 3887 at 6.

[31] USITC Pub. 3887 at 6.

[32] USITC Pub. 3887 at 6.

[33] Bear/Gulf Prehearing Brief at 4-8.

[34] USITC Pub. 3420 at 6-7, USITC Pub. 3887 at 6. See also Certain Potassium Phosphate Salts from China, Inv. Nos. 701-TA-473 and 473-TA-1173 (Final), USITC Pub. 4171 (July 2010) at 7, n. 30 (production of the domestic

(continued...)

the principal input in Bear's production of ferrovanadium, that Bear produces ferrovanadium for Gulf from that vanadium pentoxide, and that Gulf sells and distributes Bear's toll production of ferrovanadium. However, Bear is a separate legal entity, even though wholly owned by Gulf, and Bear, not Gulf, is the actual producer of the ferrovanadium under their toll agreement.[35] We do not find any circumstances on the current record that would warrant a departure from our prior findings. Consequently, we find that Bear, but not Gulf, is a producer of the domestic like product. Thus, we again find that Bear and AMG, firms that accounted for 100 percent of U.S. ferrovanadium production in 2011, are the only domestic producers of ferrovanadium.[36]

III. LIKELIHOOD OF CONTINUATION OR RECURRENCE OF MATERIAL INJURY IF THE ANTIDUMPING DUTY ORDER IS REVOKED

A. Legal Standard in a Five-Year Review

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."[37] 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."[38] Thus, the likelihood standard is prospective in nature.[39] 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.[40] [41]

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[34] (...continued)
like product necessary to be part of the domestic industry).

[35] Similarly, in the separate investigations and five-year reviews regarding ferrovanadium from China and South Africa, the Commission found that Gulf's (and another tollee's) production of the vanadium pentoxide input used by Bear to produce ferrovanadium under a toll agreement did not render Gulf (or the other tollee) a domestic producer. Ferrovanadium from China and South Africa, Inv. Nos. 731-TA-986 and 987 (Final), USITC Pub. 3570 (Jan. 2003) at 9-10; Ferrovanadium from China and South Africa, Inv. Nos. 731-TA-986 and 987 (Review), USITC Pub. 4046 (Nov. 2008) at 9-10.

[36] Nonetheless, our analysis takes account of shipment, sales, cost, and profit data for Gulf and Bear as if they were a single entity, as well as certain data for other responding tollees. See CR at III-5-31, PR at III-3-9 (including CR/PR at Tables III-3, III-4, III-5, III-7, III-8, III-10, and C-1).

[37] 19 U.S.C. § 1675a(a).

[38] 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.

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

[40] See NMB Singapore Ltd. v. United States, 288 F. Supp. 2d 1306, 1352 (Ct. Int'l Trade 2003) ("'likely' means probable within the context of 19 U.S.C. § 1675(c) and 19 U.S.C. § 1675a(a)"), aff'd mem., 140 Fed. Appx. 268
(continued...)

The Act 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."[42] 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."[43]

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."[44] 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).[45] 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.[46]

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."[47] The following conditions of competition are relevant to our determination.

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[40] (...continued)
(Fed. Cir. 2005); Nippon Steel Corp. v. United States, 26 CIT 1416, 1419 (2002) (same); Usinor Industeel, S.A. v. United States, 26 CIT 1402, 1404 nn.3, 6 (2002) ("more likely than not" standard is "consistent with the court's opinion"; "the court has not interpreted 'likely' to imply any particular degree of 'certainty'"); Indorama Chemicals (Thailand) Ltd. v. United States, Slip Op. 02-105 at 20 (Ct. Int'l Trade Sept. 4, 2002) ("standard is based on a likelihood of continuation or recurrence of injury, not a certainty"); Usinor v. United States, 26 CIT 767, 794 (2002) ("'likely' is tantamount to 'probable,' not merely 'possible'").

[41] For a complete statement of Commissioner Okun's interpretation of the likely standard, see Additional Views of Vice Chairman Deanna Tanner Okun Concerning the "Likely" Standard in Certain Seamless Carbon and Alloy Steel Standard, Line and Pressure Pipe From Argentina, Brazil, Germany, and Italy, Invs. Nos. 701-TA-362 (Review) and 731-TA-707 to 710 (Review) (Remand), USITC Pub. 3754 (Feb. 2005).

[42] 19 U.S.C. § 1675a(a)(5).

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

[44] 19 U.S.C. § 1675a(a)(1).

[45] 19 U.S.C. § 1675a(a)(1). We note that Commerce made no duty absorption findings.

[46] 19 U.S.C. § 1675a(a)(5). Although the Commission must consider all factors, no one factor is necessarily dispositive. SAA at 886.

[47] 19 U.S.C. § 1675a(a)(4).

Demand. As in the original investigation and the first and second reviews, the record indicates that the steel industry accounts for the vast majority of ferrovanadium consumption[48] and that demand for ferrovanadium is a function of the demand for the steel products that incorporate ferrovanadium.[49] Ferrovanadium accounts for only a small portion of the cost of steel production.[50] For this reason, and because there are no good substitutes for ferrovanadium in steel production, demand for ferrovanadium is not price-sensitive.[51] Measured by apparent U.S. consumption, demand for ferrovanadium fluctuated over the period of review, increasing from *** pounds in 2006 to *** pounds in 2008, then declining to *** pounds in 2009 before increasing to *** pounds in 2011.[52]

U.S. demand for ferrovanadium and nitrided vanadium is expected to remain stable or to increase in the reasonably foreseeable future.[53]

Supply. The Commission found in the first and second reviews that vanadium pentoxide was an intermediate product in most ferrovanadium production, including the production process used by Bear and the Russian producers.[54] Vanadium pentoxide was produced most commonly through secondary recovery from steel slags and residue; it was traded worldwide and accounted for most of the cost of the ferrovanadium produced using this process.[55] There is no indication on this record that these conditions have changed.[56]

The U.S. market for ferrovanadium is currently supplied by domestic producers Bear and AMG, as well as by nonsubject imports.[57] There have been no subject imports since 1996.[58] Bear converts vanadium pentoxide produced by Gulf or provided by other firms (Evraz Stratcor, Glencore, and Minerais) under tolling arrangements.[59] AMG does not use vanadium pentoxide in its production but instead *** to produce ferrovanadium.[60] Bear accounted for *** percent of domestic production in 2011, and AMG accounted for *** percent.[61]

The domestic industry's market share fluctuated over the period of review. The industry held a *** percent share of apparent U.S. consumption in 2006. Its share peaked at *** percent in 2009, when apparent consumption was at a period low, and then fell to *** percent in 2011.[62]

At the time of the first and second reviews, there were two producers of subject merchandise in Russia – Tulachermet and Chusovskoy.[63] Tulachermet was purchased by the Evraz Group in 2009, when it became Evraz Vanady Tula. Evraz Vanady Tula is the largest producer in Russia and is the primary

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[48] We use the term "ferrovanadium" broadly to include U.S. imports of nitrided vanadium.

[49] CR at II-19, PR at II-9.

[50] CR at II-18-19, PR at II-9.

[51] CR at II-18, PR at II-9.

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

[53] CR at II-21-22, PR at II-11.

[54] USITC Pub. 3420 at 10, USITC Pub. 3887 at 9-10.

[55] USITC Pub. 3420 at 10-11, USITC Pub. 3887 at 9-10.

[56] See generally CR at I-19-20, PR at I-14-15.

[57] CR/PR at Table I-1.

[58] CR/PR at Table I-1.

[59] CR at I-26-27, PR at I-18-19.

[60] CR at I-26, PR at I-19.

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

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

[63] CR at IV-5-7, PR at IV-5.

supplier of the Russian market, accounting for *** of Russian consumption.[64] Both Evraz Vanady Tula and Chusovskoy reduced their production capacities during the period. Evraz Vanady Tula shut down its number two furnace, and Chusovskoy dismantled its main pig iron furnace.[65] Evraz Vanady Tula described Chusovskoy as having *** production capacity and as now operating primarily ***.[66]

The last year of U.S. imports of Russian ferrovanadium was 1996. Nevertheless, since its acquisition of Vanady Tula and Stratcor, Evraz has supplied the U.S. market with ferrovanadium. It did so initially by exporting Russian vanadium pentoxide to the United States, which was then converted to ferrovanadium by Bear. Later, when Commerce instituted an investigation in 2011, based on a petition filed by AMG, to consider whether imports of Russian vanadium pentoxide were circumventing the order on ferrovanadium from Russia, Evraz began supplying U.S. customers by exporting Russian vanadium pentoxide to Evraz Nikom in the Czech Republic for conversion into ferrovanadium that was then exported to the United States, as well as by importing ferrovanadium from Austria and Canada.[67]

The principal sources of nonsubject imports during the review period were South Africa, the Czech Republic, Canada, Korea, and Austria.[68] South Africa was the leading source in all years except 2008, when Korea was the leading source.[69] Imports of ferrovanadium from China and South Africa have been subject to antidumping duty orders since 2003.[70] Imports from South Africa during the review period, however, were solely of nitrided vanadium, which is not subject to the antidumping order on imports from that country.[71] Nonsubject imports' market share fluctuated over the period of review, ranging between *** percent in 2009 and *** percent in 2008. Overall, their share declined slightly, from *** percent in 2006 to *** percent in 2011.[72]

Interchangeability and Other Conditions. In the first review, purchasers indicated that quality and price were the dominant factors in purchasing decisions, and they anticipated that, if the order were lifted, subject imports would be generally interchangeable with the domestic product.[73] In this review, questionnaire information indicates that the domestic like product and the subject merchandise are highly substitutable, although there may be some differences in quality and packaging.[74] A majority of market participants reported that the domestic like product, nonsubject imports, and the subject merchandise are

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[64] CR at IV-1-2, IV-7; PR at IV-1, IV-6. The Evraz Group also includes, among others, Evraz Vametco, a producer of nitrided vanadium in South Africa; Evraz Nikom, a producer of ferrovanadium in the Czech Republic; Evraz Stratcor, a ferrovanadium tollee in the United States; and East Metals (North America), an importer in the United States. CR at IV-13-14, PR at IV-9. East Metals accounted for *** percent of U.S. imports of ferrovanadium and nitrided vanadium from nonsubject countries in 2011. CR/PR at IV-1.

[65] CR at IV-9, PR at IV-7.

[66] CR at IV-12, PR at IV-8.

[67] Evraz Prehearing Brief at 27, Hearing Transcript at 105-06 (Wiesler). Commerce issued a negative preliminary determination in that anti-circumvention proceeding. CR at I-14, PR at I-12.

[68] CR/PR at Table IV-1.

[69] CR/PR at Table IV-1.

[70] CR at I-10-11, PR at I-8.

[71] CR/PR at Table IV-1.

[72] CR/PR at Table I-1.

[73] In addition, the Commission found evidence that, in the event the order were lifted, the Russian product would be an even closer substitute with the domestic product than before, because Tulachermet (now Evraz Vanady Tula) had begun to produce an 80 percent grade ferrovanadium, ***. USITC Pub. 3420 at 12. No purchaser data were collected in the expedited second review.

[74] CR at II-34, II-36, PR at II-21, 22.

always or frequently interchangeable.[75] Purchasers most often ranked price, quality meeting industry standards, availability, and product consistency as very important factors in their purchasing decisions and most often identified quality, price, and availability as the number one or number two factor in those decisions.[76]

C. Likely Volume of Subject Imports

The Commission is directed to consider whether the likely volume of subject imports would be significant if the order is revoked, either in absolute terms or relative to production or consumption in the United States.[77] 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.[78]

In the original investigation, the volume of subject imports increased substantially both in absolute and relative terms, from *** pounds contained vanadium and a market share of *** percent in 1992 to *** pounds contained vanadium and a market share of *** percent in 1994.[79] The Commission found the volume and market share of subject imports, as well as the increases in volume and market share, to be significant.[80] Subject imports fell dramatically following issuance of the order, and there have been no subject imports since 1996.[81]

In the full first five-year review and the expedited second five-year review, the Commission found that the likely volume of subject imports from Russia would be significant within a reasonably foreseeable time if the order were revoked, citing significant excess production capacity in Russia, a statement by Tulachermet that ***, the increasing export orientation of the Russian industry, and the Russian industry's demonstrated flexibility and speed in shifting sales between national markets. The Commission also found that higher prices in the U.S. market provided an incentive for the Russian producers to export subject merchandise to the United States instead of to the European Union ("EU").[82]

In the current review, we do not find it likely that subject imports would increase to significant levels if the order were revoked. We find that the factors cited above in the prior reviews are absent or much less significant in the current review. As discussed below, we find that the Russian ferrovanadium industry's capacity and production have declined, that it is operating at high levels of capacity utilization, and that it is no longer export-oriented.

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[75] CR/PR at Table II-9. Although U.S. producers believed ferrovanadium and nitrided vanadium to be substitutable, U.S. importers, foreign producers, and purchasers described more limitations on such substitutability. CR at II-2-3, PR at II-1-2.

[76] CR/PR at Tables II-6, II-7.

[77] 19 U.S.C. § 1675a(a)(2).

[78] 19 U.S.C. § 1675a(a)(2)(A-D).

[79] CR/PR at Table I-1.

[80] USITC Pub. 2904 at I-18.

[81] CR/PR at Table I-1.

[82] USITC Pub. 3420 at 13-16, USITC Pub. 3887 at 12-15.

The Russian industry's capacity declined from *** pounds in 2006 to *** in 2011, and production declined from *** pounds in 2006 to *** in 2011.[83] Capacity utilization fluctuated between *** percent and *** percent during the period of review and was *** percent in 2011.[84]

We recognize that Russian producers have at least a theoretical ability to increase production by increasing production capacity. Evraz Vanady Tula acknowledges that it could expand its capacity to produce ferrovanadium by making certain capital improvements that would take *** to implement and would cost $***.[85] Evraz Vanady Tula reports, however, that it has no plans or budget to make such capital improvements in light of limits on its capacity to produce the input vanadium pentoxide.[86] It reports that its capacity to produce vanadium pentoxide is already fully utilized.[87] Thus, absent the ability to increase vanadium pentoxide production, Evraz Vanady Tula would not be able to use the additional capacity that a capital investment could provide.

Chusovskoy ***.[88] Evraz Vanady Tula estimates that ***.[89]

In 1994, the final year of the original period of investigation, Russian producers' exports totaled *** pounds and accounted for *** percent of their total shipments.[90] In 2000, the end of the first review period, their exports totaled *** pounds and accounted for *** percent of their total shipments.[91] *Global Trade Atlas* data, which were on the record in the expedited second review, estimated Russian exports of ferrovanadium in 2005, the end of the second review period, at 9.1 million pounds.[92]

Since 2009, when Evraz purchased Russian producer Tulachermet, the majority of the Russian industry's total shipments have been commercial home market shipments and shipments for internal consumption. In the current review period, the Russian industry's total exports declined from *** pounds in 2006 to *** pounds in 2008, then fell further and were only *** pounds in 2009, *** pounds in 2010, and *** pounds in 2011.[93] Exports in 2011 were predominantly to Ukraine, which accounted for 78.9 percent of Russia's ferrovanadium exports that year.[94] Exports as a share of Russian producers' total shipments declined from *** percent in 2006 to *** percent in 2008, *** percent in 2009, *** percent in 2010, and *** percent in 2011.[95]

Russian producers' commercial home market shipments increased from *** pounds in 2006 to *** pounds in 2008, then increased further to *** pounds in 2009, *** pounds in 2010, and *** pounds in 2011.[96] Russian producers' shipments for internal consumption increased from *** pounds in 2006 to *** pounds in 2008, then were *** pounds in 2009, and *** pounds in 2010, and *** pounds in 2011. Accordingly, the share of Russian producers' total shipments accounted for by commercial home market

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[83] CR/PR at Table IV-4.

[84] CR/PR at Table IV-4. These data do not include *** CR/PR at Table IV-4; CR at IV-7, PR at IV-6.

[85] CR at IV-8, PR at IV-7.

[86] CR at IV-9, PR at IV-7.

[87] Hearing Transcript at 125 (Montalbine), Evraz Posthearing Brief at Appendix 1, p. 3.

[88] CR at IV-9, PR at IV-7.

[89] Evraz Posthearing Brief at Appendix 1, p. 19.

[90] See CR/PR at Table I-1.

[91] See CR/PR at Table I-1.

[92] USITC Pub. 3887 at 13-14.

[93] See CR/PR at Table IV-4.

[94] Evraz Prehearing Brief at Exhibit 1, p. 2 (based on Global Trade Information Services data).

[95] See CR/PR at Table IV-4.

[96] See CR/PR at Table IV-4.

shipments and internal consumption increased from *** percent in 2006 to *** percent in 2008, then increased further to *** percent in 2009, *** percent in 2010, and *** percent in 2011.[97]

Although Russian producers' exports to the EU accounted for *** percent of their total shipments in 2006, they declined to *** percent in 2008, *** percent in 2009, and *** percent in 2011.[98] Rather than export ferrovanadium directly from Russia to the EU, Evraz now serves its EU customers by shipping vanadium pentoxide from Russia to its affiliates, which convert the pentoxide and then exports the ferrovanadium.

Evraz explains that Evraz Vanady Tula's shift in market focus since it became part of the Evraz Group results from the Group's rationalization of production among its production facilities worldwide and its overall strategy for serving its ferrovanadium customers through regional production facilities.[99] Evraz asserts that, consistent with its regional supply strategy, its U.S. subsidiary Evraz Stratcor supplied its U.S. customers from 2009 to 2011 with ferrovanadium that was toll produced on its behalf in the United States by Bear from Russian vanadium pentoxide. However, in 2011, AMG filed an anti-circumvention petition with Commerce alleging that imports from Russia of the input vanadium pentoxide should be included within the scope of the order on ferrovanadium from Russia.[100] While this anti-circumvention investigation was pending, Evraz ceased its arrangement with Bear and instead converted the Russian vanadium pentoxide to ferrovanadium for export to the United States at its affiliate Evraz Nikom in the Czech Republic, and by importing ferrovanadium from Austria and Canada.[101] We note that, on February 8, 2012, Commerce issued a negative preliminary determination in the anti-circumvention proceeding.[102]

Evraz Vanady Tula could convert its Russian-produced vanadium pentoxide into ferrovanadium in Russia for export to the United States.[103] However, given its lack of excess vanadium pentoxide capacity, this would require it to reduce its production of ferrovanadium for the home market and/or reduce its current exports of vanadium pentoxide to its affiliates that serve other markets with ferrovanadium. We find no indication on the record that Evraz Vanady Tula would have an incentive to significantly divert its vanadium pentoxide from such uses in order to export ferrovanadium from Russia to the United States. The Evraz group has been able to serve the U.S. ferrovanadium market through toll

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[97] See CR/PR at Table IV-4. These data do not include ***. See id.

[98] See CR/PR at Table I-4. We note that this decline is accounted for by reductions in total exports to the EU by Evraz Vanady Tula as well as, to a lesser extent, Chusovskoy. Evraz Vanady Tula Foreign Producer Questionnaire response at 12; Chusovskoy Foreign Producer Questionnaire response at 11.

[99] Evraz describes its business model as follows:

> [A] coordinated global strategy calling for a diversified vanadium processing base that includes unrelated strategic partners and is distributed over four continents. The basis for this strategy is to minimize costs and maximize profits, as there exist differences in production costs, logistics, and transportation costs in supplying regional markets from alternative production platforms, including the availability of toll production. Evraz's decision to supply the U.S. market with toll production in the United State with exports of vanadium pentoxide from Russia is a rational business decision that will continue after revocation of the order, based on the cost-economics of toll-production of ferrovanadium in the United States compared to production of ferrovanadium by Evraz Vanady Tula for export to the United States.

Evraz Posthearing Brief at 2.

[100] Evraz Prehearing Brief at 27.

[101] Evraz Prehearing Brief at 27.

[102] 77 Fed. Reg. 6537 (Feb. 8, 2012), CR at I-14, PR at I-12.

[103] Evraz Prehearing Brief at 28-29.

production at Bear, prior to the anti-circumvention investigation, and currently through Evraz Nikom in the Czech Republic[104] and Masterloy in Canada.[105] Thus, we conclude that if the order were revoked, Evraz Vanady Tula would not likely produce a significant volume of ferrovanadium in Russia for export to the United States.

We also note that Evraz has submitted information to support its claim that its total costs to serve the U.S. market with ferrovanadium is lowest if the product is ***, second lowest if the product is ***, and highest if the product is ***.[106] One reason cited by Evraz for the higher costs of conversion in Russia is that Evraz Vanady Tula uses a more energy-intensive production process for converting ferrovanadium than does Bear and Nikom. In addition, U.S. imports of ferrovanadium from Russia face a 4.2 percent tariff, while vanadium pentoxide enters duty-free.[107]

Accordingly, we find that Evraz's demonstrated global behavior, including its regional supply strategy, and Evraz Vanady Tula's current focus on its home and other regional markets indicate that subject imports would not be likely to increase significantly if the order is revoked. Indeed, Evraz Vanady Tula has chosen to export vanadium pentoxide for conversion in other countries, rather than retain the input to utilize its idle ferrovanadium capacity. This supports its claim that there is a significant cost disadvantage to produce and export ferrovanadium in Russia and also supports our finding that subject imports from Russia are not likely to increase in significant volumes if the order is revoked. Also militating against a likely increase in subject imports in the event of revocation is Evraz's forecast that demand for ferrovanadium will likely increase in Russia and the CIS countries at faster rates than in the United States. *** also predict increased demand for ferrovanadium and nitrided vanadium outside the United States.[108]

In conclusion, any increase in subject imports from Russia upon revocation would likely be modest at most. The strong home and regional market orientation of the Russian industry, the global marketing strategy of the Evraz Group, which dominates the Russian ferrovanadium industry,[109] the limited ability of Evraz Vanady Tula to increase its production of the input vanadium pentoxide, the high cost of producing ferrovanadium in Russia, and likely increases in demand in Russia and the CIS countries, primarily Ukraine, indicate that the volume of subject imports from Russia would not likely be significant upon revocation.[110]

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[104] Commissioner Pinkert finds, with respect to Evraz Vanady Tula's exporting of vanadium pentoxide to Evraz Nikom in the Czech Republic and Masterloy in Canada for production into ferrovanadium for export to the United States, that it is unclear whether revocation will give Evraz an incentive to move the ferrovanadium production to Russia. As explained later in the text, however, any such displacement is unlikely to have an adverse impact on U.S. market dynamics.

[105] Evraz Prehearing Brief at 27; CR at IV-12, PR at IV-8. Evraz also reported importing ferrovanadium from Austria while the anti-circumvention proceeding was pending. Evraz Prehearing Brief at 27.

[106] Evraz reported that it costs about *** percent more per metric ton of contained vanadium to produce ferrovanadium at Vanady Tula than it does to produce it at Evraz Nikom in the Czech Republic. Evraz Posthearing Brief at Appendix 1, pp. 5-6.

[107] Evraz Prehearing Brief at 19, 28; Evraz Posthearing Brief at 6.

[108] CR at IV-18, PR at IV-12.

[109] Although Chusovskoy also produces subject merchandise in Russia, ***. See Evraz Prehearing Brief at 12; Evraz Posthearing Brief at Appendix 1 p. 19 & Appendix 19 (***).

[110] We examined inventories of the subject merchandise. Because there have been no subject imports since 1996, there were no end-of-period inventories of subject merchandise from Russia in the United States. CR/PR at Table IV-4. End-of-period inventories of subject merchandise in Russia as a share of total production were *** percent in 2006, fluctuated within a range of *** percent to *** percent from 2007 to 2011, and were *** in 2011. CR/PR at Table IV-4. The available information on inventories therefore does not detract from our conclusion that a

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D. Likely Price Effects of Subject Imports

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.[111]

As noted above, the record indicates that, as in the original investigation and the prior reviews, domestic ferrovanadium and nonsubject imports are largely interchangeable, subject imports of ferrovanadium would likely be interchangeable with the domestic like product, and price remains an important consideration in purchasing decisions.[112]

In the original investigation, subject imports oversold the domestic like product in nine of 14 quarterly comparisons.[113] The Commission found adverse price effects resulting from the increasing volume of subject imports notwithstanding the predominant overselling. The Commission noted, for instance, that "the rate at which prices . . . declined accelerated . . . at the same time that subject imports entered the market in increasing volumes . . . [and] the domestic industry's largest price declines occurred in 1993, which is when the largest increases in the volume of subject imports occurred."[114]

In the first and second reviews, because of the absence of imports from Russia, the record did not include current data comparing the prices of subject imports with those for the domestic like product. Considering the price effects findings in the original investigation, the likely volume findings in the two reviews, and the low prices at which subject imports would have to be sold to regain market share, among other things, the Commission found in both reviews that subject imports would be likely to have significant depressing or suppressing effects on the prices of the domestic like product within a reasonably foreseeable time.[115]

As discussed above, we find that the volume of subject imports is not likely to be significant within a reasonably foreseeable time if the order is revoked. We also find that the likely limited volume of imports from Russia would not likely result in significant underselling even if they were priced in the same manner as the subject imports during the original period of investigation, given the predominance of overselling in the period covered by that investigation. In addition, Evraz would be unlikely to price any subject imports in a manner that would lower the prices of its substantial volumes of nonsubject imports

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[110] (...continued)
significant volume of subject imports would not be likely upon revocation.

We also examined the potential for product shifting. The Russian producers ***. CR at IV-8, PR at IV-6.

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

[112] In the first review, the Commission found that nonsubject imports were comparable to the domestic product in terms of price, quality, and availability and that they were used in the same applications as the domestic product. It further noted that in the original determination, the Commission had found that subject imports and the domestic like product generally were interchangeable and served as good substitutes and that if subject imports re-entered the U.S. market they would likely be an even closer substitute for the domestic product than in the original investigation, because Tulachermet had begun production of an 80 percent grade ferrovanadium, the *** produced by Bear. USITC Pub. 3420 at 12.

[113] USITC Pub. 2904 at I-19 n.89.

[114] USITC Pub. 2904 at I-18-19.

[115] USITC Pub. 3420 at 16-17, USITC Pub. 3887 15-17.

of ferrovanadium and nitrided vanadium, or its toll production in the United States.[116] In light of the likely modest volume of subject imports from Russia and the likely absence of significant underselling, such imports would not be likely to affect U.S. producers' price, production, or shipment levels.

Therefore, if the orders were revoked, the likely volume of subject imports would not be significant and those imports would not likely undersell the U.S. product in order to gain U.S. market share and would not have significant price-suppressing or price-depressing effects. We conclude, therefore, that if the orders were revoked, subject imports would not be likely to have significant adverse effects on the price of the domestic like product.

E. Likely Impact of Subject Imports[117]

In evaluating the likely impact of imports of subject merchandise if the orders under review were 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.[118] All relevant economic factors are to be considered within the context of the business cycle and the conditions of competition that are distinctive to the industry. As instructed by the statute, we have considered the extent to which any improvement in the state of the domestic industry is related to the order at issue and whether the industry is vulnerable to material injury if the order were revoked.[119]

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[116] Indeed, Evraz East Metals (North America) has been responsible for the importation and sale of ferrovanadium and nitrided vanadium from nonsubject Evraz affiliates throughout the period of review. See Evraz Prehearing Brief at 14; see also id. at 13 (stating that East Metals, S.A. is the exclusive marketing channel for Evraz Vanady Tula's vanadium production and is the trading arm for the Evraz Group). Evraz East Metals (North America) provided evidence showing that its prices for both U.S.-tolled produced ferrovanadium and nonsubject imports from South Africa have been primarily higher than the prices of U.S. producers during the period of review. See Evraz Prehearing Brief at 30 & Exhibit 13. Given the role of East Metals as the importer and seller of Evraz-sourced ferrovanadium in the U.S. market, it is likely that, in the event of revocation of the order, any imports from Evraz Vanady Tula would be imported through East Metals as well. In light of East Metals' historic pricing practices in the United States, it also is likely that any subject imports from Russia would be offered at prices comparable to the nonsubject imports from Evraz affiliates. This is particularly true given the commodity nature of the product. See CR/PR at Table II-9.

[117] 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. § 1675a(a)(6). The statute defines the "magnitude of the margin of dumping" to be used by the Commission in five-year reviews as "the dumping margin or margins determined by the administering authority under section 1675a(c)(3) of this title." 19 U.S.C. § 1677(35)(C)(iv). See also SAA at 887. Commerce expedited its determination in its third five-year review of ferrovanadium and nitrided vanadium from Russia and found that revocation of the antidumping duty order would be likely to lead to continuation or recurrence of dumping at the following margins: Galt Alloys, Inc., 3.75 percent; Gesellschaft far Elektrometallurgie m.b.H. (and its related companies Shieldalloy Metallurgical Corporation, and Metallurg, Inc.), 11.72 percent; Odermet, 10.10 percent; and Russia-wide rate, 108.00 percent. CR/PR at Table I-3.

[118] 19 U.S.C. § 1675a(a)(4).

[119] 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

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In its original determination, the Commission found that the large and increasing volume and market share of the subject imports captured U.S. market share at the expense of the domestic industry, while subject imports depressed or suppressed domestic prices to a significant degree. The subject imports negatively impacted key domestic industry indicators, including shipments, employment, sales revenue, and market share, and prevented the domestic industry from taking full advantage of declining costs and an expanding U.S. market.[120]

In the first review, the Commission found that the condition of the domestic industry improved following the imposition of the order, at the same time that the Russian product left the U.S. market. That improved condition continued through 1998, but then the industry's production levels and prices declined, and it experienced operating ***. Based on those indicators, the Commission found that the domestic industry was vulnerable to material injury if the order were revoked.[121] In the expedited second review, the Commission did not make a finding of whether the domestic industry was vulnerable in light of the limited evidence on the record.[122] In both the first review and the second review, the Commission found that, given the generally substitutable nature of the domestic like product and subject imports, the likely significant volume of subject imports, and the expected negative price effects of those imports, revocation of the order would be likely to have a significant adverse impact on the domestic industry within a reasonably foreseeable time.[123]

In assessing the domestic industry's condition in the current review, we rely primarily on data for the U.S. producers Bear and AMG, but also take into account their data consolidated with those of tollees. We find that the domestic industry is not vulnerable to the continuation or recurrence of material injury. Although the domestic industry has experienced fluctuations and some declines in certain performance indicators during the period of review,[124] those declines do not reflect poor performance to an extent that would render the industry vulnerable. The industry's current positive performance reflects profitable operations as well as modest increases during the period in capacity, shipments, and employment.[125] This record, coupled with forecasts of stable or increased demand,[126] indicates continued positive prospects for the domestic industry in the reasonably foreseeable future.

Domestic capacity increased irregularly from *** pounds in 2006 to *** pounds in 2011, an increase of *** percent over the period of review.[127] Domestic industry production fluctuated and increased overall only slightly, from *** pounds in 2006 to *** pounds in 2011, an increase of *** percent over the period of review.[128] The domestic industry's rate of capacity utilization declined irregularly over the period from *** percent in 2006 to *** percent in 2011, a decline of *** percentage points.[129]

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[119] (...continued)
industry is facing difficulties from a variety of sources and is vulnerable to dumped or subsidized imports." SAA at 885, 19 U.S.C. § 1675a(a)(4).

[120] USITC Pub. 2904 at I-20-21.

[121] USITC Pub. 3420 at 17-18.

[122] USITC Pub. 3887 at 18.

[123] USITC Pub. 3420 at 18-19, USITC Pub. 3887 at 17-19.

[124] See CR/PR at Table C-2.

[125] See CR/PR at Table C-1.

[126] CR at II-22, PR at II-11.

[127] CR/PR at Table III-2.

[128] Id.

[129] Id.

Employment increased from *** production and related workers in 2006 to *** in 2011, an increase of *** percent.[130] Hours worked increased from *** hours in 2006 to *** hours in 2011, a *** percent increase.[131] Wages paid increased from $*** in 2006 to $*** in 2011, an increase of *** percent.[132] Unit labor costs increased from $*** in 2006 to $*** in 2011, an increase of *** percent, while domestic industry productivity declined irregularly, from *** pounds per hour in 2006 to *** pounds per hour in 2011, a decline of *** percent.[133]

The industry's net sales increased irregularly from *** pounds in 2006 to *** pounds in 2011, an increase of *** percent.[134] Similarly, U.S. shipments by the domestic industry and tollees increased irregularly from *** pounds in 2006 to *** pounds in 2011, an increase of *** percent.[135] The industry's and tollees' share of apparent U.S. consumption fluctuated during the period of review, increasing slightly overall from *** percent 2006 to *** percent in 2011, a level *** percentage points higher than in 2006.[136]

The industry's cost of goods sold ("COGS") as a share of net sales fluctuated over the period but increased overall from *** percent in 2006 to *** percent in 2011.[137] Its operating income declined irregularly from $*** in 2006 to $*** in 2011, while its operating income margin declined irregularly from *** percent in 2006 to a still high *** percent in 2011.[138] The industry's capital expenditures were $*** in 2006, $*** in 2007, $*** in 2008, $*** in 2009, $*** in 2010, and $*** in 2011.[139]

The substantial presence of nonsubject imports in the U.S. market is relevant to our analysis. Nonsubject imports accounted for *** percent of apparent U.S. consumption on a quantity basis in 2010 and *** percent in 2011.[140] The Russian producers would have to compete with nonsubject imports to re-enter the U.S. market, including imports from Evraz affiliates in South Africa and the Czech Republic,

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[130] CR/PR at Table III-6.

[131] Id.

[132] Id.

[133] Id.

[134] CR/PR at Table C-2. Based on data including tollees, net sales increased irregularly from *** pounds in 2006 to *** pounds in 2011, an overall increase of *** percent. CR/PR at Table C-1.

[135] CR/PR at Table III-4. The domestic industry's export shipments increased from *** pounds in 2006 to *** pounds in 2011. Id.

[136] CR/PR at Table I-6.

[137] CR/PR at Table C-2. Based on data including tollees, COGS as a share of net sales fluctuated over the period but increased overall from *** percent in 2006 to *** percent in 2011. CR/PR at Table III-7.

[138] CR/PR at Table C-2. Based on data that include tollees, operating income declined from $*** in 2006 to $*** million in 2011, while the operating income margin declined irregularly from *** percent in 2006 to *** percent in 2011. CR/PR at Table C-1. We note that, when apparent U.S. consumption fell severely, there was an operating loss of $*** in 2009 and an operating margin that year of *** percent if tollee data are included. CR/PR at Table C-1. Operating margins were nonetheless *** of the six years of the review period. Id.

[139] CR/PR at Table III-9. The domestic industry reported *** R&D expenses during the period. The U.S. industry's return on investment declined irregularly over the period. It declined from *** percent in 2006 to *** percent in 2007, increased to *** percent in 2008, declined to *** percent in 2009, increased to *** percent in 2010, then declined to *** percent in 2011. Calculated from CR/PR at Tables III-10 and C-2. Based on data that include tollees, return on investment declined from *** percent in 2006 to *** percent in 2007, increased to *** percent in 2008, declined to *** percent in 2009, increased to *** percent in 2010, then declined to *** percent in 2011. CR/PR at Table III-10.

[140] CR/PR at Table I-6.

which accounted for about 40 percent of all nonsubject imports in 2011.[141] We have discussed above why we conclude that it is not in Evraz's economic interest to divert vanadium pentoxide supplies from its other operations to increase supplies for its facility in Russia, and that such diversion would be necessary in order to increase production of ferrovanadium in Russia. Even if Evraz did engage in such diversion, however, any increase in subject import volume from Evraz Vanady Tula would likely be balanced by a corresponding decline in import volume from nonsubject Evraz facilities, with no significant likely impact on the domestic industry. The domestic industry's market share would not materially change, and additional subject imports from Russia would not be likely to have significant price effects for the reasons discussed above.

In view of our findings regarding the likely volume and price effects of subject imports from Russia and the performance of the domestic industry during the period of review, we conclude that subject imports from Russia would not be likely to have a significant adverse impact on the domestic industry's output, sales, market share, profits, or return on investments if the order were revoked. In light of projected stable to increasing U.S. demand, the relatively small additional volumes of subject imports from Russia that would be likely upon revocation would be insufficient to take any significant market share from the domestic industry. Moreover, because subject imports would not be likely to significantly undersell the domestic like product or have other significant price effects, they would not be likely to cause any significant declines in the domestic industry's revenues or financial performance. Accordingly, we determine that revocation of the antidumping duty on subject imports from Russia would not be likely to lead to the continuation or recurrence of material injury to the domestic industry within a reasonably foreseeable time.

CONCLUSION

For the foregoing reasons, we determine that revocation of the antidumping duty order on ferrovanadium and nitrided vanadium from Russia would not be likely to lead to continuation or recurrence of material injury to the domestic industry within a reasonably foreseeable time.

[141] CR/PR at Table IV-1. As noted above, after it acquired Stratcor and Vanady Tula, Evraz initially suspended imports of ferrovanadium from the Czech Republic to the U.S. market in favor of shipping Russian vanadium pentoxide for conversion by Bear, but began importing ferrovanadium from the Czech Republic and other sources in 2011 as a result of the anti-circumvention inquiry. Evraz Prehearing Brief at 27, Hearing Transcript at 105-06 (Wiesler).

PART I: INTRODUCTION AND OVERVIEW

BACKGROUND

On September 1, 2011, the U.S. International Trade Commission ("Commission" or "USITC") gave notice, pursuant to section 751(c) of the Tariff Act of 1930, as amended ("the Act"),[1] that it had instituted a review to determine whether revocation of the antidumping duty order on ferrovanadium and nitrided vanadium from Russia would likely lead to the continuation or recurrence of material injury to a domestic industry.[2] [3] On December 5, 2011, the Commission determined that it would conduct a full review pursuant to section 751(c)(5) of the Act.[4] The following tabulation presents information relating to the schedule of this proceeding:[5]

Effective date	Action
July 10, 1995	Commerce's antidumping duty order (60 FR 35550)
June 7, 2001	Commerce's continuation of antidumping duty order after first five-year review (66 FR 30694)
October 13, 2006	Commerce's continuation of antidumping duty order after second five-year review (71 FR 60475)
September 1, 2011	Commission's institution of five-year review (76 FR 54490)
September 1, 2011	Commerce's initiation of five-year review (76 FR 54430)
December 5, 2011	Commission's determination to conduct full five-year review (76 FR 79214, December 21, 2011)
December 20, 2011	Commerce's final results of expedited five-year review of the antidumping duty order on ferrovanadium and nitrided vanadium from Russia (76 FR 78888)
February 2, 2012	Commission's scheduling of the review (77 FR 6582, February 8, 2012)
June 21, 2012	Commission's hearing
August 8, 2012	Commission's vote
August 22, 2012	Commission's determination transmitted to Commerce

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

[2] *Institution of a Five-Year Review Concerning the Antidumping Duty Order on Ferrovanadium and Nitrided Vanadium From Russia*, 76 FR 54490, September 1, 2011. All interested parties were requested to respond to this notice by submitting the information requested by the Commission.

[3] In accordance with section 751(c) of the Act, the U.S. Department of Commerce ("Commerce") published a notice of initiation of a five-year review of the subject antidumping order concurrently with the Commission's notice of institution. *Initiation of Five-Year (''Sunset'') Review*, 76 FR 54430, September 1, 2011.

[4] *Ferrovanadium and Nitrided Vanadium From Russia; Determination To Conduct a Full Five-Year Review*, 76 FR 79214, December 21, 2011. The Commission found that both the domestic and respondent interested party group responses to its notice of institution (76 FR 54490, September 1, 2011) were adequate.

[5] The Commission's notice of institution, notice to conduct full reviews, scheduling notice, and statement on adequacy appear in appendix A and may also be found at the Commission's web site (internet address *www.usitc.gov*). Commissioners' votes on whether to conduct expedited or full reviews may also be found at the web site. Appendix B presents the witnesses appearing at the Commission's hearing.

The Original Investigation

The original investigation resulted from a petition filed by Shieldalloy Metallurgical Corp. ("Shieldalloy"), New York, NY, on May 31, 1994, alleging that an industry in the United States was materially injured and threatened with material injury by reason of less-than-fair-value ("LTFV") imports of ferrovanadium and nitrided vanadium from Russia. Following notification of a final determination by Commerce that imports of ferrovanadium and nitrided vanadium from Russia were being sold at LTFV, the Commission determined on June 30, 1995 that a domestic industry was materially injured by reason of LTFV imports of ferrovanadium and nitrided vanadium from Russia.[6] Commerce published the antidumping duty order on ferrovanadium and nitrided vanadium from Russia on July 10, 1995.[7]

First Full Five-Year Review

In May 2001, the Commission completed a full five-year review of the subject order and determined that revocation of the antidumping duty order on ferrovanadium and nitrided vanadium from Russia would be likely to lead to continuation or recurrence of material injury to an industry in the United States within a reasonably foreseeable time.[8] Following the affirmative determinations in the first five-year review by Commerce and the Commission,[9] Commerce issued a continuation of the antidumping duty order on imports of ferrovanadium and nitrided vanadium from Russia, effective June 7, 2001.[10]

Second Expedited Five-Year Review

In September 2006, the Commission completed an expedited five-year review of the subject order and determined that revocation of the antidumping duty order on ferrovanadium and nitrided vanadium from Russia would be likely to lead to continuation or recurrence of material injury to an industry in the United States within a reasonably foreseeable time.[11] Following the affirmative determinations in the second five-year review by Commerce and the Commission,[12] Commerce issued a continuation of the

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[6] *Ferrovanadium and Nitrided Vanadium from Russia: Determination*, 60 FR 35923, July 12, 1995 and *Ferrovanadium and Nitrided Vanadium from Russia, Inv. No. 731-TA-702 (Final)*, USITC Publication 2904, June 1995.

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

[8] *Ferrovanadium and Nitrided Vanadium from Russia, Inv. No. 731-TA-702 (Review)*, USITC Publication 3420, May 2001.

[9] *Ferrovanadium and Nitrided Vanadium From Russia: Determination*, 66 FR 28540, May 23, 2001; *Final Results of Expedited Sunset Review: Ferrovanadium and Nitrided Vanadium From Russia*, 65 FR 60168, October 10, 2000.

[10] *Continuation of Antidumping Duty Order: Ferrovanadium and Nitrided Vanadium From Russia*, 66 FR 30694, June 7, 2001.

[11] *Ferrovanadium and Nitrided Vanadium from Russia, Inv. No. 731-TA-702 (Second Review)*, USITC Publication 3887, September 2006.

[12] *Ferrovanadium and Nitrided Vanadium From Russia: Determination*, 71 FR 58630, October 4, 2006; *Final Results of Expedited Sunset Review: Ferrovanadium and Nitrided Vanadium from Russia*, 71 FR 44998, August 8, 2006.

antidumping duty order on imports of ferrovanadium and nitrided vanadium from Russia, effective October 13, 2006.[13]

SUMMARY DATA

Table I-1 presents a summary of data from the original investigation, the first full five-year review, the second expedited five-year review, and the current full third five-year review. Data in this table and throughout the report are based on "contained vanadium" unless otherwise stated. U.S. industry data are based on the U.S. producers/tollees' questionnaire responses of six firms that accounted for all U.S. production and the vast majority of shipments of U.S. ferrovanadium from 2006 to 2011.[14] U.S. import data are based on official import statistics for ferrovanadium and nitrided vanadium as adjusted.[15]

[13] *Ferrovanadium and Nitrided Vanadium From Russia: Notice of Continuation of Antidumping Duty Order*, 71 FR 60475, October 13, 2006.

[14] Nitrided vanadium has not been produced in the United States since 1992, and therefore is not included in the discussion on U.S. production of ferrovanadium throughout this report.

[15] See exh. 1 of the domestic interested party's response to the notice of institution.

Table I-1
Ferrovanadium and nitrided vanadium: Comparative data from the original investigation, the first review, the second review, and the current review, 1992-94, 1995-2000, 2005, and 2006-11

(***Quantity in 1,000 pounds of contained vanadium, value in 1,000 dollars, shares/ratios in percent***)

Item	1992	1993	1994	1995	1996	1997	1998
U.S. consumption quantity:							
Amount	***	***	***	***	***	***	***
U.S. producers/tollees' share	***	***	***	***	***	***	***
U.S. importers' share:							
Russia	***	***	***	***	***	0.0	0.0
All other sources	***	***	***	***	***	***	***
Total imports	***	***	***	***	***	***	***
U.S. consumption value:							
Amount	***	***	***	***	***	***	***
U.S. producers/tollees' share	***	***	***	***	***	***	***
U.S. importers' share:							
Russia	***	***	***	***	***	0.0	0.0
All other sources	***	***	***	***	***	***	***
Total imports	***	***	***	***	***	***	***
U.S. imports from:							
Russia:							
Quantity	23	1,547	2,513	352	155	0	0
Value	89	4,817	7,145	2,087	1,520	0	0
Unit value	$3.80	$3.11	$2.84	$5.92	$9.79	([2])	([2])
All other sources:							
Quantity	2,405	3,368	2,855	***	***	***	***
Value	12,754	13,546	10,809	***	***	***	***
Unit value	$5.30	$4.02	$3.79	***	***	***	***
All countries:							
Quantity	2,428	4,915	5,368	***	***	***	***
Value	12,843	18,363	17,954	***	***	***	***
Unit value	$5.29	$3.74	$3.34	***	***	***	***

Table continued.

Table I-1--*Continued*

1999	2000	2005	2006	2007	2008	2009	2010	2011
***	***	(1)	***	***	***	***	***	***
***	***	(1)	***	***	***	***	***	***
0.0	0.0	(1)	0.0	0.0	0.0	0.0	0.0	0.0
***	***	(1)	***	***	***	***	***	***
***	***	(1)	***	***	***	***	***	***
***	***	(1)	***	***	***	***	***	***
***	***	(1)	***	***	***	***	***	***
0.0	0.0	(1)	0.0	0.0	0.0	0.0	0.0	0.0
***	***	(1)	***	***	***	***	***	***
***	***	(1)	***	***	***	***	***	***
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)
***	***	4,861	7,558	7,230	8,376	1,675	5,208	7,503
***	***	136,461	124,988	121,822	212,567	23,022	70,877	98,355
***	***	$28.07	$16.54	$16.85	$25.38	$13.75	$13.61	$13.11
***	***	4,861	7,558	7,230	8,376	1,675	5,208	7,503
***	***	136,461	124,988	121,822	212,567	23,022	70,877	98,355
***	***	$28.07	$16.54	$16.85	$25.38	$13.75	$13.61	$13.11

Table I-1--*Continued*
Ferrovanadium and nitrided vanadium: Comparative data from the original investigation, the first review, the second review, and the current review, 1992-94, 1995-2000, 2005, and 2006-11

(*Quantity in 1,000 pounds of contained vanadium, value in 1,000 dollars*, *shares/ratios in percent*)

Item	1992	1993	1994	1995	1996	1997	1998
U.S. producers':							
Capacity quantity	***	***	***	***	***	***	***
Production quantity	***	***	***	***	***	***	***
Capacity utilization	***	***	***	***	***	***	***
U.S. shipments:[3]							
Quantity	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***
Unit value (per pound)	***	***	***	***	***	***	***
Export shipments:							
Quantity	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***
Unit value	***	***	***	***	***	***	***
Ending inventory quantity	***	***	***	***	***	***	***
Inventory/total shipments	***	***	***	***	***	***	***
Production workers	***	***	***	***	***	***	***
Hours worked (*1,000* hours)	***	***	***	***	***	***	***
Wages paid	***	***	***	***	***	***	***
Hourly wages	***	***	***	***	***	***	***
Productivity (*pounds per hour*)	***	***	***	***	***	***	***
Net sales:							
Quantity	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***
Unit Value	***	***	***	***	***	***	***
Cost of goods sold	***	***	***	***	***	***	***
Gross profit or (loss)	***	***	***	***	***	***	***
Operating income or (loss)	***	***	***	***	***	***	***
Unit cost of goods sold	***	***	***	***	***	***	***
Unit operating income or (loss)	***	***	***	***	***	***	***
Cost of goods sold/sales (%)	***	***	***	***	***	***	***
Operating income or(loss)/sales	***	***	***	***	***	***	***

Footnotes on next page.

Table I-1--*Continued*

1999	2000	2005	2006	2007	2008	2009	2010	2011
***	***	***	***	***	***	***	***	***
***	***	***	***	***	***	***	***	***
***	***	***	***	***	***	***	***	***
***	***	***	***	***	***	***	***	***
***	***	***	***	***	***	***	***	***
***	***	***	***	***	***	***	***	***
***	***	***	***	***	***	***	***	***
***	***	***	***	***	***	***	***	***
***	***	***	***	***	***	***	***	***
***	***	***	***	***	***	***	***	***
***	***	***	***	***	***	***	***	***
***	***	***	***	***	***	***	***	***
***	***	***	***	***	***	***	***	***
***	***	***	***	***	***	***	***	***
***	***	***	***	***	***	***	***	***
***	***	***	***	***	***	***	***	***
***	***	***	***	***	***	***	***	***
***	***	***	***	***	***	***	***	***
***	***	***	***	***	***	***	***	***
***	***	***	***	***	***	***	***	***
***	***	***	***	***	***	***	***	***
***	***	***	***	***	***	***	***	***
***	***	***	***	***	***	***	***	***
***	***	***	***	***	***	***	***	***

[1] Not available.
[2] Not applicable.
[3] U.S. shipment data includes reported U.S. shipments from U.S. producers (AMG and Bear) and tollees (***) that responded to the Commission's questionnaires.
[4] Positive figure, but less than significant digits displayed.
[5] Financial data for 1995-2000 collected in the first review include financial data of tollees and are not comparable to the Commission's definition of domestic industry in the first and second five-year reviews.

Note regarding historic data.--Data in 1992 include Stratcor's nitrided vanadium; all other years present data on ferrovanadium only. Financial data collected for 1995-2000 do not represent the Commission's definition of the domestic industry due to the Commission's decision to exclude U.S. tollees from the definition of the domestic industry in the first five-year review and therefore are not presented. Data on U.S. shipments in 2005 are not comparable with data in earlier periods because the data in 2005 do not include the U.S. tollee Evraz Stratcor's shipments of material converted by Bear (the toller), and nor do they contain the transfer shipments from Bear to Evraz Stratcor.

Note regarding 2006-11 data.--As discussed in greater detail in Part III, capacity data for 2006-11 exclude actual volumes of ***, while allocating both actual production and all remaining available capacity to ferrovanadium. Staff notes that ***. Also as discussed in Part III, U.S. shipment data are presented as reported, and thus do not capture U.S. shipments by non-reporting tollees. Financial data capture these quantities as reflected in ***.

Source: Compiled from data submitted in response to Commission questionnaires (U.S. trade and financial data) and from adjusted official imports statistics from Commerce. Data for 1992-2000 are compiled from *Staff Report on Ferrovanadium and Nitrided Vanadium from Russia, Investigation No. 731-TA-702 (Final)*, INV-S-082 (June 15, 1995), table 2, table 3, table 5, table 6, and table 7; *Staff Report on Ferrovanadium and Nitrided Vanadium from Russia, Investigation No. 731-TA-702 (Review),* INV-Y-072 (April 13, 2001), table III-1, table III-2, table III-4. Data for 2005 are compiled from *Staff Report on Ferrovanadium and Nitrided Vanadium from Russia, Investigation No. 731-TA-702 (Second Review)*, INV–DD-134 (August 30, 2006), table I-4.

PREVIOUS AND RELATED INVESTIGATIONS

In November 2001, the Ferroalloys Association Vanadium Committee and its members filed an antidumping duty petition covering ferrovanadium from China and South Africa. Following affirmative determinations by Commerce in November 2002, the Commission determined that an industry in the United States was materially injured by reason of LTFV imports of ferrovanadium from China and South Africa.[16] On January 28, 2003, Commerce issued antidumping duty orders on imports of ferrovanadium from South Africa with a 116.00 percent margin for all firms, and on imports of ferrovanadium from China at margins ranging from 12.97 percent to 66.71 percent.[17] On December 3, 2007, the Commission instituted the first five-year reviews on ferrovanadium from China and South Africa.[18] On November 13, 2008, the Commission determined that revocation of the countervailing and antidumping duty orders on ferrovanadium from China and South Africa would be likely to lead to a continuation or recurrence of material injury. Following affirmative determinations in the first five-year reviews by Commerce and the

[16] *Ferrovanadium From China and South Africa: Determinations,* 68 FR 2361, January 16, 2003.

[17] *Notice of Amended Final Antidumping Duty Determination of Sales at Less Than Fair Value and Antidumping Duty Order: Ferrovanadium From the People's Republic of China,* 68 FR 4168, January 28, 2003 and *Notice of Antidumping Duty Order: Ferrovanadium from the Republic of South Africa,* 68 FR 4169, January 28, 3002.

[18] *Institution Of Five Year Reviews Concerning The Antidumping Duty Orders On Ferrovanadium From China And South Africa,* 72 FR 67962, December 3, 2007.

Commission,[19] Commerce issued a continuation of the antidumping duty orders on imports of ferrovanadium from China and South Africa, effective May 8, 2008.[20]

STATUTORY CRITERIA AND ORGANIZATION OF THE REPORT

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,*

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[19] *Ferrovanadium From China and South Africa: Determinations*, 73 FR 72837, December 1, 2008; *Ferrovanadium from the People's Republic of China and the Republic of South Africa: Final Results of the Expedited Sunset Reviews of the Antidumping Duty Orders*, 7 FR 19192, April 9, 2008.

[20] *Ferrovanadium from the People's Republic of China and the Republic of South Africa: Continuation of Antidumping Duty Orders*, 73 FR 77609, December 19, 2008.

(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."

Organization of the Report

Information obtained during the course of this review that relates to the statutory criteria is presented throughout this report. A summary of trade and financial data for ferrovanadium and nitrided vanadium as collected in the review is presented in appendix C. U.S. industry data are based on the questionnaire responses of six U.S. producers and tollees of ferrovanadium that are believed to have accounted for all domestic production and the large majority of U.S. shipments of ferrovanadium in 2011. There has been no production of nitrided vanadium in the United States since July 1992. U.S. import data

and related information are based on adjusted Commerce's official import statistics and the questionnaire responses of six U.S. importers of ferrovanadium and nitrided vanadium that are believed to have accounted for approximately *** of total U.S. imports from other sources during the review period.[21] Foreign industry data and related information are based on the questionnaire responses of two producers of ferrovanadium and nitrided vanadium in Russia accounting for all known production. Responses by U.S. producers, importers, purchasers, and foreign producers of ferrovanadium and nitrided vanadium to a series of questions concerning the significance of the existing antidumping order and the likely effects of revocation of such order are presented in appendix D. Appendix E presents supplemental price data.

COMMERCE'S REVIEWS

Administrative Reviews

Commerce has completed one antidumping duty administrative review with regard to subject imports of ferrovanadium and nitrided vanadium from Russia.[22] The results of the administrative review is shown in table I-2.

Table I-2
Ferrovanadium and nitrided vanadium: Administrative review of the antidumping duty order for Russia

Date results published	Period of review	Producer or exporter	Margin (*percent*)
December 15, 1997	01/04/1995-06/30/1996	Galt Alloys, Inc.	34.73

Source: *Ferrovanadium and Nitrided Vanadium From the Russian Federation: Notice of Final Results of Antidumping Duty Administrative Review*, 62 FR 65656 December 15, 1997.

On May 2, 2011, pursuant to an allegation by AMG Vanadium, Inc. ("AMG"), Commerce initiated an anti-circumvention inquiry to determine whether imports of vanadium pentoxide from the Russia that are converted into ferrovanadium in the United States are circumventing the antidumping duty order on ferrovanadium and nitrided vanadium from Russia.[23] On February 8, 2012, Commerce preliminarily determined that the importation of vanadium pentoxide by the Evraz Group, which is toll converted into ferrovanadium in the United States by Bear Metallurgical Corp. ("Bear"),

[21] There were no U.S. imports of ferrovanadium or nitrided vanadium from Russian during 2006-11. U.S. import coverage ranged from *** percent to *** percent over the six year period.

[22] On August 15, 1996, Commerce initiated an administrative review of its antidumping duty order for imports of ferrovanadium and nitrided vanadium from Galt Alloys, Inc., ("Galt") and Odermet Limited ("Odermet") in Russia. On August 7, 1997, Commerce rescinded in part the administrative review for Odermet since Odermet did not ship subject merchandise to the United States within the period of review. *Ferrovanadium and Nitrided Vanadium From the Russian Federation: Notice of Final Results of Antidumping Duty Administrative Review*, 62 FR 65656, December 15, 1997.

On August 28, 1997, Commerce initiated an administrative review of its antidumping duty order for imports of ferrovanadium and nitrided vanadium from Galt in Russia. On March 17, 1998, Commerce rescinded the administrative review for Galt since Galt did not ship subject merchandise to the United States within the period of review. *Ferrovanadium and Nitrided Vanadium From the Russian Federation: Termination of Antidumping Duty Administrative Review*, 63 FR 13031, March 17, 1998.

[23] *Initiation of Anticircumvention Inquiry on Antidumping Duty Order on Ferrovanadium and Nitrided Vanadium From the Russian Federation*, 76 FR 26243, May 6, 2011.

prior to sale to unaffiliated customers in the United States, does not constitute circumvention.[24] Commerce is scheduled to publish the final determination with respect to this anti-circumvention inquiry in August 2012.

Commerce has not conducted any new shipper reviews in relation to the antidumping duty order on ferrovanadium and nitrided vanadium from Russia. Commerce has not made any scope clarifications, rulings, or changed circumstances determinations over the history of the order. Commerce has not made any findings of duty absorption.

Five-Year Reviews

Commerce has issued the final results of its expedited third-review on the antidumping duty order on ferrovanadium and nitrided vanadium from Russia. Table I-3 presents the dumping margins calculated by Commerce in its original investigation, first review, second review, and current third review.

Table I-3
Ferrovanadium and nitrided vanadium: Commerce's original, first five-year, second five-year, and third five-year LTFV dumping margins for producers/exporters

Producer/exporter	Original margin (*percent*)	First five-year review margin (*percent*)	Second five-year review margin (*percent*)	Third five-year review margin (*percent*)
Galt Alloys, Inc.[1]	3.75	3.75	3.75	3.75
Gesellschaft fur Elektrometallurgie m.b.H. (and its related companies Shieldalloy Metallurgical Corporation, and Metallurg, Inc.)[2]	11.72	11.72	11.72	11.72
Odermet[1]	10.10	10.10	10.10	10.10
Russia-wide rate	108.00	108.00	108.00	108.00

[1] Neither Galt Alloys nor Odermet imported ferrovanadium or nitrided vanadium into the United States during the third five-year review.

[2] Gesellschaft fur Elektrometallurgie m.b.H. (and its related companies Shieldalloy Metallurgical Corporation, and Metallurg, Inc.) ("GfE") is a related company to AMG Vanadium. GfE ***. GfE ***.

Source: *Notice of Antidumping Order: Ferrovanadium and Nitrided Vanadium From the Russian Federation*, 60 FR 35550, July 10, 1995; *Final Results of Expedited Sunset Review: Ferrovanadium and Nitrided Vanadium From Russia*, 65 FR 60168, October 10, 2000; *Final Results of Expedited Sunset Review: Ferrovanadium and Nitrided Vanadium from Russia*, 71 FR 44998, August 8, 2006; and *Final Results of Expedited Sunset Review: Ferrovanadium and Nitrided Vanadium from Russia*, 76 FR 78888, December 20, 2011.

[24] *Preliminary Negative Determination and Extension of Time Limit for Final Determination of Circumvention of the Antidumping Duty Order on Ferrovanadium and Nitrided Vanadium From the Russian Federation,* 77 FR 6537, February 8, 2012.

THE SUBJECT MERCHANDISE

Commerce's Scope

The imported product subject to the antidumping duty order under review, as defined by Commerce in its original orders, is as follows:

> Ferrovanadium and nitrided vanadium, regardless of grade, chemistry, form or size, unless expressly excluded from the scope of the order. Ferrovanadium includes alloys containing ferrovanadium as the predominant element by weight (i.e., more weight than any other element, except iron in some instances) and at least 4 percent by weight of iron. Nitrided vanadium includes compounds containing vanadium as the predominant element, by weight, and at least 5 percent, by weight, of nitrogen. Excluded from the scope of the order are vanadium additives other than ferrovanadium and nitrided vanadium, such as vanadium-aluminum master alloys, vanadium chemicals, vanadium waste and scrap, vanadium-bearing raw materials, such as slag, boiler residues, fly ash, and vanadium oxides.[25]

Tariff Treatment

Ferrovanadium and nitrided vanadium are classifiable in the Harmonized Tariff Schedule of the United States ("HTS") under subheadings 7202.92.00 (ferrovanadium), 7202.99.80 (statistical reporting number 7202.99.8040, covering other ferroalloys, including nitrided ferrovanadium with over 10 percent nitrogen), or 2849.90.50 (a provision covering miscellaneous carbides, including nitrided vanadium).[26] The current column 1-general rate of duty for ferrovanadium is 4.2 percent ad valorem, that for nitrided ferrovanadium with over 10 percent nitrogen is 5.07 percent, and that for nitrided vanadium is 3.7 percent.

THE PRODUCT

Description and Applications

Ferrovanadium and nitrided vanadium are alloys that are used to add vanadium to molten steel. Steelmaking 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, high-speed and 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.

Ferrovanadium is commonly produced in grades having a vanadium content of 45–55 percent or 75-85 percent. Nitrided vanadium is produced in two types: nitrided ferrovanadium, which typically contains 40-60 percent vanadium and 9-11 percent nitrogen with the balance being iron; and a product

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[25] *Final Results of Expedited Sunset Review: Ferrovanadium and Nitrided Vanadium From Russia*, 76 FR 78888, December 20, 2011.

[26] Other statistical reporting numbers are 2850.00.2000 (no longer applicable to nitrided vanadium--see Customs ruling letter HQ 959438 (July 7, 1997) and 8112.92.0600, 8112.92.7000, and 8112.99.9000 (HTS subheading 8112 should not be applicable to ferrovanadium as described in the scope).

that consists of carbides and nitrides of vanadium and contains no iron.[27] Regardless of grade, commercial practice is to quote the price of ferrovanadium and nitrided vanadium on the basis of the contained vanadium content. Both ferrovanadium and nitrided vanadium are commonly packaged for sale in the United States 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 frequently is found 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. Iron ore containing recoverable vanadium is mined at only a few places in the world--in South Africa, Russia, New Zealand, and China–and these operations are the source of the raw material for the production of more than 60 percent of vanadium worldwide.[28]

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-fifth of the supply of vanadium, but involve high capital and operating costs.[29] Nonetheless, a new mine and processing operation dedicated to the production of ferrovanadium has recently begun production in Australia. The new operation, the Windimurra project of Atlantic, Ltd., is expected to have an annual capacity of 6,300 metric tons (13.9 million pounds) of vanadium, equivalent to about 7 percent of world production. Shipments of ferrovanadium from Windimurra have begun and North America is listed as its "target market" due to its relatively higher prices.[30]

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.[31]

Manufacturing Processes

Manufacture of Ferrovanadium

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 to produce ferrovanadium, and also is used to produce many other vanadium chemicals and alloys. It is widely traded and its price is regularly reported in industry publications.

Bear's operations are based on the production of ferrovanadium in return for a processing fee, ("toll production"), using vanadium pentoxide provided by its customers. The process used by Bear is

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[27] Because it contains no iron, this product is not classified as ferrovanadium in the HTSUS; it is classified as a chemical carbide. Its use and its physical properties are similar to those of ferrovanadium. Neither nitrided ferrovanadium nor the vanadium nitride product are produced in the United States. Nitrided ferrovanadium is produced in Russia, by Chusovskoy.

[28] Bunting, Robert M. *The Recession's Effect of Vanadium*, presented at Metal Bulletin Asian Ferro-Alloys Conference, March 29, 2009.

[29] Bunting, Robert M. *The Recession's Effect of Vanadium*, presented at Metal Bulletin Asian Ferro-Alloys Conference, March 29, 2009.

[30] Metal Bulletin. *Atlantic ships first ferrovanadium from Windimurra mine*. May 30, 2012.

[31] Bunting, Robert M. *The Recession's Effect of Vanadium*, presented at Metal Bulletin Asian Ferro-Alloys Conference, March 29, 2009.

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.[32]

Gulf is primarily a processor of spent catalyst from oil refineries. Catalyst contains recoverable cobalt, molybdenum, and nickel as well as vanadium, and Gulf's 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 toll-produced ferrovanadium remains the property of Gulf, which is responsible for selling the product and administering the sales. Gulf also sells other products ***.[33]

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

AMG produces ferrovanadium from spent catalyst and petroleum combustion residues. In addition to ferrovanadium, AMG recovers from the spent catalyst *** which is used in steelmaking. AMG uses pyrometallurgical processing in electrical furnaces and ***. AMG's ferrovanadium product differs from that of Bear in that it contains approximately 55 percent of vanadium, whereas Bear's product contains 80 percent.[34] AMG'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.[35]

Spent oil refinery catalyst, as well as oil residues and ash, 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 hydrorefining catalysts (RCRA waste K172). Receivers and processors of hazardous waste must be licensed and comply with RCRA regulations with respect to handling, processing, and record-keeping related to the hazardous wastes.[36]

Manufacture of Ferrovanadium as a Byproduct of Steelmaking

As noted above, most ferrovanadium, worldwide, is produced as a byproduct of the manufacture of steel using iron ores that contain a high content of vanadium. The ferrovanadium produced in Russia is produced in this manner, as is the ferrovanadium produced in China and much of that produced in South Africa. The process is designed to recover a steelmaking slag which contains 20 to 40 percent of vanadium pentoxide. The slag is further refined to produce vanadium pentoxide of suitable purity for the manufacture of ferrovanadium and other vanadium products. Vanadium pentoxide then is converted on

[32] E-mail from ***, June 28, 2012.

[33] Staff telephone interview with ***, July 12, 2012

[34] Hearing transcript, p. 15 (Carter), p. 34 (Button), p. 77 (Carey), p. 78 (Button), and p. 79 (Carter).

[35] ***, used with permission. See also hearing transcript, p. 15 (Carter) and p. 22 (Neal).

[36] ***, used with permission.

site or shipped to any of a number of converters who convert vanadium pentoxide into ferrovanadium by a process similar to that described for Bear.

Manufacture of Nitrided Vanadium

Nitrided ferrovanadium is produced by heating ferrovanadium in a nitrogen-rich, oxygen-free environment. Vanadium nitride is produced from vanadium pentoxide by a chemical process of first producing vanadium carbide, which is then heated in a nitrogen-rich, oxygen-free environment. The product is in powder form so it is compacted into round or oval briquets suitable for steelmaking.[37] Figure I-1 provides illustrations of ferrovanadium and nitrided vanadium.

Figure I-1
Ferrovanadium and nitrided vanadium: Samples

Ferrovanadium Nitrided vanadium

Source: *Vanadium Alloys for Steel*, Evraz Stratcor website, http://www.stratcor.com/steel/steel.html.

DOMESTIC LIKE PRODUCT ISSUES

In its original determination, the Commission defined the domestic like product as ferrovanadium and nitrided vanadium, regardless of grade, chemistry, form, or size.[38] In the first five-year review, the Commission determined that, because nitrided vanadium had not been produced in the United States since 1992 and because there were no significant changes in the nature, use, and production of ferrovanadium and nitrided vanadium, the domestic like product consisted of ferrovanadium.[39] In the second five-year review, the Commission continued to find one domestic like product consisting of ferrovanadium.[40] In a related investigation on ferrovanadium from China and South Africa, the Commission determined that

[37] Staff telephone interview with ***, April 20, 2012.

[38] *Ferrovanadium and Nitrided Vanadium from Russia, Inv. No. 731-TA-702 (Final),* USITC Publication 2904, pp. I-6 to I-8 (June 1995). The Commission stated that the similarities between ferrovanadium and nitrided vanadium (such as end use application, related prices, and vanadium content) outweigh their differences (production, limited interchangeablility). The issue of the grade of ferrovanadium was not specifically addressed.

[39] *Ferrovanadium and Nitrided Vanadium from Russia, Inv. No. 731-TA-702 (Review),* USITC Publication 3420, p. 5 (May 2001). The issue of the grade of ferrovanadium was not specifically addressed.

[40] *Ferrovanadium and Nitrided Vanadium from Russia, Inv. No. 731-TA-702 (Second Review),* USITC Publication 3887, p. 5 (September 2006). The Commission noted that no new information was obtained during the second review that would suggest any reason for revisiting the Commission's like product definition in the first five-year review.

low vanadium content grade and ASTM standard grade ferrovanadium do not constitute separate like products.[41]

In its notice of institution in these third five-year review, the Commission solicited comments from interested parties regarding the appropriate domestic like product and domestic industry.[42] Both the domestic and the respondent interested parties agree with the Commission definition that the domestic like product is ferrovanadium.[43] No party requested that the Commission collect data concerning other possible domestic like products in their comments on the Commission's draft questionnaires.

DOMESTIC INDUSTRY ISSUES

In the original investigation, the Commission determined that three firms performed sufficient domestic like product (i.e., ferrovanadium and nitrided vanadium) production-related activities between 1992 and 1994 to be considered domestic producers: AMG (then Shieldalloy), Bear, and Evraz Stratcor (then Stratcor).[44] Additionally, the Commission determined in the origination investigation that *** was engaged in sufficient production-related activities to qualify as a domestic producer.[45] In the first five-year review, the Commission determined that AMG (then Shieldalloy) and Bear were the only domestic producers of the domestic like product (i.e., ferrovanadium).[46] The Commission did not include Evraz Stratcor (then USV) and Gulf, because they produced vanadium pentoxide (an upstream product used to make ferrovanadium), but did not produce the domestic like product.[47] In the second five-year review, the domestic interested parties Bear and Gulf argued that the Commission should consider Gulf as part of the domestic industry because Gulf acquired 100 percent of Bear's common stock in December 2005, making Bear Gulf's wholly owned subsidiary.[48] The Commission determined that Bear was at that

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[41] *Ferrovanadium from China and South Africa, Inv. Nos. 731-TA-986 and 987 (Review),* USITC Publication 3570, pp. 8 to 9. The Commission found that all grades of ferrovanadium were potentially interchangeable, share physical characteristics, contain vanadium. The Commission also found that U.S. producers had the potential ability to produce either grade, had overlapping distribution channels, and their products displayed strong price correlation.

[42] *Ferrovanadium and Nitrided Vanadium From Russia; Institution of a Five-Year Review Concerning the Antidumping Duty Order on Ferrovanadium and Nitrided Vanadium From Russia,* 76 FR 54490, September 1, 2011.

[43] Domestic interested party and Russian respondents' responses to Notice of Institution of Five-Year Review, October 3, 2011.

[44] *Ferrovanadium and Nitrided Vanadium from Russia, Inv. No. 731-TA-702 (Final),* USITC Publication 2904, June 1995, p. I-9. Bear and Shieldalloy transformed raw material inputs into ferrovanadium and Stratcor produced nitrided vanadium.

[45] *Ferrovanadium and Nitrided Vanadium from Russia: BPI Determination, Inv. No. 731-TA-702 (Final),* p. 12; *Ferrovanadium and Nitrided Vanadium from Russia, Inv. No. 731-TA-702 (Final),* USITC Publication 2904, June 1995, p. I-9. ***.

[46] *Ferrovanadium and Nitrided Vanadium from Russia, Inv. No. 731-TA-702 (Review),* USITC Publication 3420, May 2001, p. 6. Commissioner Bragg dissented and determined that Gulf was also part of the domestic industry in the first five-year review. *See* USITC publication 3420, fn. 35.

[47] *Ferrovanadium and Nitrided Vanadium from Russia, Inv. No. 731-TA-702 (Review),* USITC Publication 3420, May 2001, p. 6. While Stratcor/USV produced the domestic like product (*i.e.*, ferrovanadium and nitrided vanadium) during the original investigation, it did not produce the domestic like product (*i.e.*, ferrovanadium) over the period of the first five-year review. The Commission concluded that Gulf's and Stratcor/USV's production of vanadium pentoxide for production into ferrovanadium in their toll relationship with Bear did not constitute production of the domestic like product, ferrovanadium, and thus they were not included in the domestic industry.

[48] *Ferrovanadium and Nitrided Vanadium from Russia, Inv. No. 731-TA-702 (Second Review),* USITC Publication 3887, September 2006, p. I-7 and I-8.

time a separate corporate entity from Gulf and did not include Gulf from the domestic industry. As a result, the Commission defined the domestic industry as AMG (then Metvan) and Bear.

In response to the Commission's notice of institution, domestic interested party AMG and the respondent interested parties agree with the definition of the domestic industry as consisting of AMG and Bear.[49] Domestic interested parties Bear and Gulf contend that Gulf should be included in the definition of the domestic industry based on its full ownership of Bear since December 2005 and the integrated operations of Bear and Gulf.[50]

U.S. MARKET PARTICIPANTS

U.S. Producers

During the original investigation, four firms supplied the Commission with information on their U.S. operations with respect to ferrovanadium and nitrided vanadium. These firms accounted for all known U.S. production of ferrovanadium and nitrided vanadium in 1994.[51] In these current proceedings, the Commission received questionnaire responses from firms that accounted for all known U.S. production and a large majority of shipments of ferrovanadium during the review period.[52] These firms can be divided into two groups. 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 AMG and Bear. Evraz Stratcor,[53] Glencore Ltd. ("Glencore"), Gulf, and Minerais US LLC ("Minerais") fall into the second group, commonly referred to for Commission purposes as *tollees*. Tollees supply Bear with the nonsubject principal materials which Bear then converts to the subject 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 2011 production.

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[49] Domestic interested party AMG and Russian respondents' responses to Notice of Institution of Five-Year Review, October 3, 2011.

[50] "Consideration of Gulf's operations is critical to the Commission's analysis because Gulf and Bear's ferrovanadium operations are closely interconnected and, with regard to Bear's toll production on behalf of Gulf, are operated essentially as an integrated operation, much like AMG's." Domestic interested parties Bear and Gulf's prehearing brief, pp. 4-8.

[51] The four U.S. producers that supplied the Commission with usable questionnaire information during the original investigation were: Bear Metallurgical Corp. ("Bear"), Gulf Chemical and Metallurgical Corp. ("Gulf"), Shieldalloy Metallurgical Corp. ("Shieldalloy"), and Strategic Minerals Corp. ("Evraz Stratcor"). Evraz Stratcor is the only U.S. firm to have produced nitrided vanadium but ceased producing in July 1992. *Ferrovanadium and Nitrided Vanadium from Russia, Inv. No. 731-TA-702 (Final),* USITC Publication 2904 (June 1995), p. I-9.

[52] U.S. shipment data are compiled from the four tollees who responded to the Commission's questionnaire. However, Bear reported shipments to all of its tollees, including those that did not submit questionnaire responses. Staff believes that the non-responsive tollees account for a small amount of U.S. shipments during the review period. See table III-3 for more details.

[53] At the time of the original investigation, Strategic Minerals Corporation (now Evraz Stratcor) produced nitrided vanadium and was considered a domestic producer. Evraz Stratcor stopped producing nitrided vanadium in July 1992. In 2006, the Evraz Group purchased a majority interest of Strategic Minerals Corporation. Domestic interested party AMG's response to the notice of institution, p. 2.

Table I-4
Ferrovanadium and nitrided vanadium: U.S. producers, positions on the orders, U.S. production locations, related and/or affiliated firms, and shares of 2011 reported U.S. production

Firm	Position on continuation of the orders	U.S. production location(s)	Parent company	Share of production (*percent*)
AMG	***	Cambridge, OH	Metallurg, Inc., Wayne, PA	***
Bear	***	Butler, PA	Gulf Chemical & Metallurgical Corp., Freeport, TX	***

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

AMG

AMG and its predecessor companies (Shieldalloy and Metvan) have been a producing ferrovanadium since 1952. The company's production facility is located in Cambridge, OH. AMG uses ***. AMG purchases these materials, and manufactures ferrovanadium and *** used for steelmaking.

AMG does not produce vanadium pentoxide and does not use vanadium pentoxide as the intermediate material to produce ferrovanadium.[54]

Bear and Gulf

Bear, a wholly owned subsidiary of Gulf, produces ferrovanadium at its facility in Butler, PA. Bear toll converts materials provided by other companies, including ***, into ferrovanadium.[55] In addition to ferrovanadium, Bear also toll produces ferromolybdenum.

Gulf operates under a toll agreement whereby it supplies the intermediate material (vanadium pentoxide produced in its Freeport, TX facility) 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.

Evraz Stratcor

Evraz Stratcor is a wholly owned subsidiary of Evraz PLC, London, UK.[56] Evraz Stratcor does not produce ferrovanadium at its Hot Springs operations, instead, it produces high-purity vanadium oxides primarily converted into critical-quality vanadium-aluminum for the titanium industry and

[54] Hearing transcript, p. 6 (Carter).

[55] Bear's producer questionnaire, exh. 1.

[56] "After its purchase by Evraz, Evraz Stratcor continued its business in the United States with little change from past practices. Evraz Stratcor supplies U.S.-produced vanadium alloys for the titanium industry, U.S.-produced vanadium oxides and vanadium chemicals to the chemical industry, and also converted its U.S.-produced vanadium pentoxide to ferrovanadium at Bear." Hearing transcript, p. 105 (Wiesler). "Stratcor significantly reduced its own shipments of vanadium pentoxide to Bear, concentrating almost exclusively on selling its products into the specialty vanadium chemical and titanium markets. In essence, Evraz replaced what Stratcor out of its Hot Springs, AR production was sending to Bear with what Evraz, as a corporation would be able to supply. One of the reasons for that is the purity of the oxide produced in Hot Springs, AK is the highest in the world and can be used in very specialty-type higher margin vanadium products." Hearing transcript, p. 107 (Wiesler).

high-purity catalysts for the chemical industry.[57] Evraz Stratcor operates under a toll agreement whereby it supplies the intermediate material, vanadium pentoxide from imported sources, to Bear, which then converts the material to ferrovanadium.[58] Evraz Stratcor retains title to the product throughout the conversion process and sells the finished product to its customers. Evraz Stratcor, operating as Evraz East Metals, also imports ferrovanadium from nonsubject countries. Stratcor's shipments of ferrovanadium during the review period were produced under its toll agreement with Bear.

Glencore

Glencore, wholly owned by Glencore International AG., Baarermattstrasse, Switzerland, operates under a toll agreement whereby it supplies the intermediate material, vanadium pentoxide, to Bear, which then converts the material to ferrovanadium. Glencore does not produce vanadium pentoxide, instead, it ***.

Minerais

Minerais was tollee of ferrovanadium during ***. It had a toll agreement with Bear, which then converted the intermediate material, vanadium pentoxide, to ferrovanadium. Minerais is not a producer of ferrovanadium or vanadium pentoxide. It imports and/or purchases ferrovanadium or vanadium pentoxide. Minerais is *** but continues to import small amounts of ferrovanadium from ***.[59]

*** reported being related to an exporter or an importer of the subject product, but tollee Evraz Stratcor is affiliated with Russian producer, Vanady-Tula (both are owned by the Evraz Group). *** reported being involved in ongoing toll agreements whereby *** toll converted for them. In addition, as discussed in greater detail in Part III, no U.S. producers directly imported the subject merchandise or purchased the subject merchandise from U.S. importers since there were no imports of ferrovanadium or nitrided vanadium from Russia during the review period.

U.S. Importers

In the original investigation, approximately a dozen U.S. firms were identified as importers of subject merchandise, including the petitioner AMG (then Shieldalloy). AMG and Evraz East Metals accounted for *** percent of U.S. imports of ferrovanadium and nitrided vanadium during 1994. There have been no known imports of ferrovanadium or nitrided vanadium from Russian since 1996.[60]

In these current proceedings, the Commission issued importers' questionnaires to 15 firms believed to be importers of nonsubject ferrovanadium and nitrided vanadium, as well as to all U.S. producers of ferrovanadium and nitrided vanadium. Usable questionnaire responses were received from

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[57] http://www.evraz.com/business/vanadium/?factory=1149, retrieved July 6, 2012.

[58] Evraz Stratcor (then U.S. Vanadium Corporation) was a U.S. producer of nitrided vanadium until it stopped its nitrided vanadium production in July 1992. It was also 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. Although Evraz Stratcor produces vanadium pentoxide at its facility in Hot Springs, Arkansas, "***." E-mail from Kevin Horgan, Counsel to Evraz Stratcor, July 13, 2012.

[59] "***." E-mail from ***.

[60] *Staff Report on Ferrovanadium and Nitrided Vanadium from Russia, Investigation No. 731-TA-702 (Review),* INV-Y-072 (April 13, 2001), p. I-16 and *Staff Report on Ferrovanadium and Nitrided Vanadium from Russia, Investigation No. 731-TA-702 (Second Review),* INV–DD-134 (August 30, 2006), p. I-21.

six companies (***,[61] ***, ***, ***, ***, and ***) on their imports of ferrovanadium and nitrided vanadium from nonsubject countries.

U.S. Purchasers

The Commission issued questionnaires to approximately 24 purchasers of ferrovanadium and/or nitrided vanadium. Twelve purchasers responded, including steel producers ***. ***.[62]

APPARENT U.S. CONSUMPTION

Data concerning apparent U.S. consumption of ferrovanadium and nitrided vanadium during the period for which data were collected in this proceeding are shown in table I-5. As stated earlier, no subject imports were present in the U.S. market during 2006-11. The data for U.S. shipments includes U.S. shipments reported by U.S. producers and tollees.

Table I-5
Ferrovanadium and nitrided vanadium: U.S. shipments of domestic product, U.S. imports, and apparent U.S. consumption, 2006-11

* * * * * * *

U.S. MARKET SHARES

U.S. market share data are presented in table I-6. The data for U.S. shipments includes both U.S. shipments reported by U.S. producers and tollees.

Table I-6
Ferrovanadium and nitrided vanadium: Apparent U.S. consumption and market shares, 2006-11

* * * * * * *

[61] ***.

[62] See ***.

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

The U.S. market for ferrovanadium and/or nitrided vanadium is served entirely by U.S. production and nonsubject imports. Most end-users are long and structural steel producers for which ferrovanadium is a small portion of the cost of producing steel, but can nonetheless improve the strength of the steel. For example, AMG attributed the relative success of buildings in the Oakland/San Francisco area in resisting earthquake damage to the higher vanadium content of the concrete reinforcing steel bar in those buildings.[1]

U.S. MARKET CHARACTERISTICS

The U.S. market consists of ferrovanadium and nitrided vanadium; ferrovandium, in turn, includes both grade 40-60 and grade 75-85. While "grade" is common parlance in the ferrovanadium industry, it only indicates the vanadium content of the ferrovanadium, and is not an indicator of product quality.[2]

U.S.-produced ferrovanadium is supplied both by ***, and by tollees that supply Bear with vanadium pentoxide, either from domestic sources (*** or imports (***)). Stratcor, while still supplying some vanadium pentoxide to be toll-converted into ferrovanadium by Bear, has recently shifted its emphasis away from selling ferrovanadium and instead toward selling nonsubject products containing vanadium (e.g., vanadium aluminum and vanadium chemicals).[3]

Ferrovanadium and Nitrided Vanadium

U.S. producers described ferrovanadium and nitrided vanadium as substitutable, while U.S. importers, foreign producers, and purchasers generally described more limitations on such substitutability. Producers,[4] importers, and purchasers were asked if ferrovanadium and nitrided vanadium can be substituted for one another in all end uses. *** all stated that ferrovanadium and nitrided vanadium could be substituted in the end uses of which they were aware. *** stated that they could be substitutes in some end uses, but not in all. Four importers *** also stated that ferrovanadium and nitrided vanadium could not substitute in all end uses. *** elaborated that certain grades of steel specifically require ferrovanadium (and not nitrided vanadium). *** noted that nitrided vanadium's lack of iron hinders substitution. *** described nitrided vanadium as helping steelmakers achieve a higher silicon content in their steel, unlike ferrovanadium. It added that the availability of nitrided vanadium is limited, as is the technical support helpful for proper use. Purchaser *** stated that it uses *** pounds per year of ferrovanadium, compared to *** pounds per year of nitrided vanadium. It added that while it could use more nitrided vanadium, doing so would be more costly.

Among purchasers, four indicated that ferrovanadium could be substituted for nitrided vanadium in all end uses, while six indicated that it could not. Among those that did see substitution in all end uses, *** elaborated that nitrided vanadium was preferred for nitrogen-bearing heats.[5] *** indicated that ferrovanadium could be used with nitrided molybdenum to replace nitrided vanadium. However,

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[1] Hearing transcript, pp. 55-56 (Carter).

[2] Hearing transcript, pp. 15 (Carter) and 26-27 (Button). ASTM specification A102-04 covers one grade of ferrovanadium, having a vanadium content of 75-85 percent.

[3] Hearing transcript, pp. 94 (Carter), 106 (Wiesler), and 125-26 (Wiesler).

[4] For purposes of this chapter, unless otherwise indicated, producers include all firms that submitted producer questionnaires, ***.

[5] *** also noted that steelmakers that do not need nitrogen in their steel cannot use nitrided vanadium.

purchasers that did not see substitution in all end uses generally described nitrided vanadium's nitrogen content as affecting the specification of the finished steel, making it inappropriate for some applications.

No U.S. producer produces nitrided vanadium, nor did any U.S. importer import any nitrided vanadium from Russia during 2006-11. Nitrided vanadium is imported primarily, if not exclusively, from South Africa.[6]

Ferrovanadium Grades

Ferrovanadium is generally sold as grade 75-85-percent (vanadium by contained weight) ferrovanadium and grade 40-60-percent ferrovanadium. In the U.S. market, AMG commonly provides approximately 55 percent grade ferrovanadium,[7] while other producers more commonly provide vanadium in grades 75-85.

Purchasers were asked to indicate the share of their total 2011 purchases of ferrovanadium and/or nitrided vanadium accounted for by different grades of ferrovanadium and nitrided vanadium. Their answers are summarized in table II-1. Eight purchasers did not purchase grade 40-60 product, while two did not purchase grade 75-85 product. Four purchasers reported purchasing both grade 40-60 and grade 75-85 ferrovanadium. Seven purchasers reported purchases of nitrided vanadium.

In its posthearing brief, ***.[8]

Table II-1
Ferrovanadium and/or nitrided vanadium: Share of purchasers' purchases, by grade and type, 2011

* * * * * * *

Purchasers were also asked if they or their customers made purchasing decisions involving ferrovanadium and/or nitrided vanadium based on the product grade (see also table II-5 below). Three purchasers stated that they only used grade 75-85 ferrovanadium product. Another (***) described its preference for grade 75-85 ferrovanadium as due to fewer trace elements in the product and less material handling of the product. However, *** stated that both grades work well, and *** stated that is purchasing decisions are based on other elements, not the grade. As shown in table II-5, product grade was always an important purchasing factor for five purchasers, while it was less important for purchasers' customers.

Additionally, importer *** described substituting one grade of ferrovanadium for another, or for nitrided vanadium, as requiring a change in specifications for the steelmaker.

Geographic Markets

Most producers and importers shipped ferrovanadium and/or nitrided vanadium to multiple regions within the continental United States. *** shipped ferrovanadium and/or nitrided vanadium to *** while *** shipped to ***. *** reported that a majority of *** sales was 101-1,000 miles from *** storage or production facilities while *** reported that *** percent of *** sales was within 100 miles of

[6] See staff interview with ***, May 10, 2012.

[7] AMG's product falls into the grade 40-60 range. In the past, AMG's product had a lower vanadium content while still in the grade 40-60 range. Hearing transcript, p. 79 (Carter). ***. Posthearing brief of AMG, p. 10.

[8] ***.

*** facilities.[9] Among importers, two reported sales to the continental United States while two reported sales only to the Midwest or Northeast and Midwest.

Channels of Distribution

As shown in table II-2, the majority of ferrovanadium and/or nitrided vanadium shipments by U.S. importers was shipped to end users directly, although a not insubstantial market for distributors also exists. U.S. producers sold to both end users and distributors. U.S. producers' sales to distributors were ***.[10]

Table II-2
Ferrovanadium and nitrided vanadium: U.S. producers' and importers' U.S. commercial shipments, by sources and channels of distribution, 2006-11

* * * * * * *

U.S. Purchasers

The Commission received responses from 12 purchasers of ferrovanadium and/or nitrided vanadium. ***.[11]

Some responding purchasers are owned by other firms, both domestic and foreign. ***. No purchasers reported being related to any U.S. or Russian producers of ferrovanadium and/or nitrided vanadium.

*** purchasers were end users, iron and steel producers that use ferrovanadium and/or nitrided vanadium in their production process. *** other purchasers (***) were re-sellers and traders, ***. *** indicated that *** did compete with *** suppliers for sales to *** customers, while *** stated that *** did not.

Five purchasers identified Evraz East Metals as their primary supplier of ferrovanadium and/or nitrided vanadium in 2011. Three named AMG, and three named Gulf. However, when asked to identify their 2011 suppliers, many purchasers (including those who listed one supplier as their only supplier in 2011) listed multiple suppliers of ferrovanadium and/or nitrided vanadium, even if they had not purchased from those suppliers in 2011.

SUPPLY AND DEMAND CONSIDERATIONS

Supply

U.S. Supply

Based on available information, U.S. ferrovanadium and/or nitrided vanadium producers have the ability to respond to changes in demand with moderate-to-large changes in the quantity of shipments of U.S.-produced ferrovanadium and/or nitrided vanadium to the U.S. market. Contributing factors to the moderate-to-large degree of responsiveness of supply include moderate capacity utilization and moderate-to-high inventory levels, restrained by few export markets. However, supply responsiveness will also

[9] As can be seen in table III-4, ***.

[10] Telephone message from ***.

[11] See ***.

depend on the degree to which U.S. producers could divert production of alternative products to production of ferrovanadium and/or nitrided vanadium.

Industry capacity

U.S. producer capacity utilization was generally more than *** percent over 2006-11, settling at *** percent in 2011. AMG described its production process as capital-intensive, requiring high capacity utilization to cover fixed costs.[12] However, counsel for Evraz stated that the U.S. industry could only supply about half the ferrovanadium needed by U.S. steelmakers.[13]

*** expected an increase in the availability of U.S.-produced ferrovanadium and/or nitrided vanadium in the U.S. market, but ***,[14] ***.[15]

Ferrovanadium and/or nitrided vanadium capacity could also be restrained by the availability of raw material.[16] Market participants offered widely varied assessments of whether there was adequate raw material in the U.S. market. Evraz described the United States as in an "extreme shortage" of vanadium pentoxide, and added that the proposed American Vanadium project in Nevada will not affect this shortage in the foreseeable future.[17] However, AMG stated that it had had no trouble securing raw materials in the U.S. market.[18] Australian producer Atlantic Ltd. stated its belief that the "almost wholesale" change of U.S. power stations from oil to gas had resulted in a shortage of fly ash (for the production of ferrovanadium) in the U.S. market.[19] Evraz Stratcor reported some difficulty in securing supplies of its raw material, *** for its vanadium pentoxide production in Arkansas, due to the shutdown of a power generation plant in Texas.[20] Additionally, American Metal Market reported in March 2012 that ***.[21]

Alternative markets

Export shipments represented a very small share of U.S. producers' and tollees' commercial shipments.

*** did not identify any tariff or nontariff barriers for their exports of ferrovanadium and/or nitrided vanadium. *** did, describing consistently lower prices in foreign markets as a disincentive to export. ***. Similarly, ***.

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[12] Hearing transcript, p. 22 (Neal).

[13] Hearing transcript, p. 146 (Montalbine).

[14] See also ***.

[15] Additionally, parties disagreed as to whether U.S. ferrovanadium producers could currently meet their customers' needs. See posthearing brief of AMG, response to questions, pp. 22-23, posthearing brief of Bear/Gulf, p. 14.

[16] See, for example, ***, which notes that there is global excess capacity for processing vanadium, but that capacity can be limited by availability of raw materials. See also Part V.

[17] Posthearing brief of Evraz, p. 13.

[18] Hearing transcript, p. 53 (Carter).

[19] Fly ash is a byproduct of burning oil in power plants. "Australia's Atlantic sees 14,000 mt ferrovanadium deficit in US market." Metals Week, February 6, 2012.

[20] Staff interview with ***, and hearing transcript, p. 140 (Wiesler).

[21] Thorsten Schier, "Evraz unit to produce vanadium from slag," *American Metal Market*, March 15, 2012.

Inventory levels

U.S. producers' inventories ranged widely over 2006-11, and were equivalent to *** percent of total shipments in 2011.

Production alternatives

*** also produce *** using the same equipment and workers *** use to produce ferrovanadium. ***.

Subject Imports from Russia

Based on available information, Russian producers have the ability to respond to changes in demand with moderate changes in the quantity of shipments of ferrovanadium and/or nitrided vanadium to the U.S. market. ***. The degree of responsiveness of supply will likely depend on ***. Evraz described its global strategy as exporting vanadium pentoxide from Evraz Vanady Tula to regional ferrovanadium producers while using U.S. affiliate Stratcor to produce non-ferrovanadium vanadium products.[22]

Industry capacity

Data for responding Russian producers suggest that capacity utilization was always at least *** percent over 2006-11. *** capacity utilization figures take into account changes in capacity due to ***.[23] However, because ***. ***.

***. ***.

*** described the *** as the main constraint on ferrovanadium production, while *** named the ***.

Alternative markets

Evraz Vanady Tula reported commercial shipments to ***,[24] in addition to home market shipments. However, it stated that, while *** was historically its primary export market, it has more recently ***. Data from Evraz Vanady Tula show exports to ***. Since 2008, Evraz Vanady Tula's ***. Chusovskoy ships ***. Data for Russian shipments of ferrovanadium and nitrided vanadium are shown in figure II-1.

Figure II-1
Ferrovanadium and/or nitrided vanadium: Russian shipments by destination, 2006-11

* * * * * * *

[22] Hearing transcript, pp. 119 (Wiesler) and 166 (Montalbine).

[23] ***.

[24] ***.

***. However, Evraz Vanady Tula described shifting sales from Russia to the United States as difficult because of Russian anti-monopoly regulations. It stated that shifting sales would cause shortages and increase prices in Russia,[25] ***. ***.

Additionally, *** reported that Russian ferrovanadium and/or nitrided vanadium was not subject to antidumping duties in third-country markets, nor was it subject to any tariff or non-tariff barriers in third-country markets.

Inventory levels

Data for responding Russian producers suggest that Russian inventories as a share of production ***.

Production alternatives

***.

Domestic and respondent interested parties disagreed as to whether it would be more or less expensive for Evraz Vanady Tula to produce ferrovanadium in Russia and ship the product to the United States, versus producing vanadium pentoxide in Russia, shipping it to a third country for production into ferrovanadium, and then shipping that ferrovanadium to the United States. For example, AMG stated that ***.[26] Similarly, Evraz Vanady Tula can ship vanadium pentoxide to Evraz subsidiary Nikom in the Czech Republic for production into ferrovanadium.

Evraz provided a comparison of ferrovanadium conversion costs at Evraz Vanady Tula and Nikom, ***.[27] It also offered an additional comparison of three different possibilities for ***: ***. Of these options, the most expensive was ***.[28] Evraz Stratcor described higher costs from exporting ferrovanadium from Evraz Vanady Tula to the United States as coming from higher U.S. duties (4.2 percent) on ferrovanadium than on vanadium pentoxide, unique U.S. packing requirements, and similar U.S. and Russian conversion costs.[29] Counsel for Evraz added that both ferrovanadium and vanadium pentoxide enter the EU with no duty.[30]

Parties in support of continuation noted that when Nikom produces ferrovanadium from Russian-made vanadium pentoxide, then such ferrovanadium production would remain within Evraz facilities.[31] They also alleged that producing ferrovanadium outside of Russia using Russian-produced vanadium pentoxide would include several other costs not accounted for in Evraz's analysis, such as paying a profit to unaffiliated toll producers (such as Bear), packing and unpacking vanadium pentoxide, ***, ***, more stringent packing costs for ferrovanadium in Europe, and the costs of shipping vanadium pentoxide (which Gulf/Bear described as more expensive to ship than ferrovanadium).[32] AMG also noted that using the ***

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[25] Hearing transcript, p. 155 (Horgan).

[26] Prehearing brief of AMG, p. 24.

[27] Posthearing brief of Evraz, appendix 7.

[28] Posthearing brief of Evraz, appendix 8.

[29] Hearing transcript, p. 109 (Wiesler).

[30] Hearing transcript, p. 112 (Klett).

[31] For example, see posthearing brief of Bear/Gulf, p. 9.

[32] Posthearing brief of AMG, p. 8 and responses to questions, pp. 5 and 8-9, and posthearing brief of Bear/Gulf, p. 10 and response to questions, p. 16.

would result in a U.S. comparison price (in Evraz's analysis) that would make the U.S. market more attractive relative to the Russian market.[33]

Nonsubject Supply

Producers and outside information described increasing nonsubject-country supplies of ferrovanadium and/or nitrided vanadium in the U.S. market since 2006. These supplies came from multiple sources.

*** reported that the supply of nonsubject ferrovanadium and/or nitrided vanadium in the U.S. market had increased since 2006. *** noted official import data showing increases in nonsubject imports from Austria, Canada, the Czech Republic, and Korea. *** described imports from ***.

***.[34]

Australia's Atlantic Ltd. has announced plans to open a ferrovanadium-producing facility in Windimurra, Australia, in 2012. The Windimurra facility may produce as much as seven percent of global consumption of ferrovanadium at "low" production costs of approximately $6.80 per pound.[35]

Factors Affecting Supply

Market participants reported that the U.S. supply of ferrovanadium and/or nitrided vanadium has been affected by the existing duties on ferrovanadium and/or nitrided vanadium from several countries (including Russia) as well as related investigations at the Department of Commerce. Participants also expected some new U.S. and global supply of ferrovanadium and/or nitrided vanadium in coming years.

Availability of Supply

U.S. producers stated that they had been able to supply their customers with demanded ferrovanadium.[36] In the questionnaires, U.S. producers, importers, and purchasers were asked if there have been any changes in factors affecting the supply of U.S.-produced ferrovanadium and/or nitrided vanadium.[37] ***, three importers, and six purchasers answered "No," while *** and four purchasers answered "Yes." (Another purchaser answered that it did not know.) *** described the May 2011 initiation of the Department of Commerce's anticircumvention inquiry on vanadium pentoxide as having led to a reduction in U.S. imports of Russian vanadium pentoxide, in turn reducing the supply of U.S. ferrovanadium in 2011 and 2012. Importer *** reported a significant increase in the use of ferrovanadium in China in the production of high strength low alloy (HSLA) steels since 2008.

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[33] Posthearing brief of AMG, responses to questions, p. 6.

[34] ***.

[35] "Australia's Atlantic sees 14,000 mt ferrovanadium deficit in US market." Metals Week, February 6, 2012, and ***.

[36] Hearing transcript, pp. 50-51 (Carter and Carey).

[37] Factors identified as affecting supply include changes in the availability or prices of energy or labor; transportation conditions; production capacity and/or methods of production; technology; export markets; or alternative production opportunities that affected the availability of U.S.-produced ferrovanadium and/or nitrided vanadium in the U.S. market since 2006.

Among purchasers, *** described early 2008 power shortages in South Africa as causing a doubling in ferrovanadium prices,[38] but said that prices were more normal now. *** stated that a Russian producer's decision to toll produce ferrovanadium in the United States and Canada from imported vanadium pentoxide had increased the U.S. supply of ferrovanadium. It added that other U.S. producers had also engaged in capacity increases. *** stated that supply factors had been affected by energy costs, transportation costs, and the value of the dollar. ***, which had not observed any changes, stated that it has had no trouble securing supplies of ferrovanadium.

Importers and Russian producers were also asked about changes in the availability of both subject and nonsubject import supply. ***. *** changes in the availability of Russian ferrovanadium and/or nitrided vanadium in the U.S. market in the near future. Three importers also did not anticipate any changes in the availability of ferrovanadium and/or nitrided vanadium imported from Russia in the U.S. market.

However, when asked about changes in the availability of nonsubject ferrovanadium and/or nitrided vanadium since 2006, *** answered that supply from countries not subject to U.S. antidumping orders, such as Austria and Korea, had increased. *** stated that there had been an increase in imports of ferrovanadium from Korea and nitrided vanadium from China. However, two importers had not observed any changes in the availability of nonsubject ferrovanadium and/or nitrided vanadium since 2006.

Importers *** stated that they can easily shift their sales of ferrovanadium and/or nitrided vanadium between the U.S. and alternative country markets. However, importers *** stated that they only served the North American market.

Eight purchasers were not aware of any new suppliers since 2006, but four were aware, citing Evraz East Metals and the Windimurra facility in Australia (cited by three purchasers). Two purchasers stated that they had become aware of the Windimurra facility due to personal contact with Windimurra representatives. *** described Windimurra as being a potentially significant source of ferrovanadium in 2012.[39] Similarly, when asked if they anticipated any new suppliers to enter the U.S. market, four purchasers answered that they did not, while four cited their expectation that Windimurra would be supplying the U.S. market in the next year. In addition to new supply from Windimurra, *** anticipated new U.S. supply from American Vanadium. American Vanadium expects to begin vanadium pentoxide production within the next three years.[40]

Product/marketing trends

*** importers stated that they had not observed any significant changes in the product range, product mix, or marketing of ferrovanadium and/or nitrided vanadium, and did not anticipate any such changes. However, ***.
***.

***.

[38] This shortage and subsequent price increase were also reported on in *American Metal Market*. Sean Barry, "Ferroalloy consumers turning to spot market," *American Metal Market*, February 5, 2008.

[39] *** also indicated that it had heard of a new operation potentially opening in Colorado, but provided no more details.

[40] Orr, Leanna. "American Vanadium targets defense with Gibellini output," *American Metal Market*, July 16, 2012.

U.S. Demand

Based on available information, overall U.S. demand for ferrovanadium and/or nitrided vanadium is likely to experience small changes in response to changes in price. The main contributing factors are the limited availability of substitute products and the small percentage of purchasers' end-use costs accounted for by ferrovanadium and/or nitrided vanadium.

Available data indicate that total apparent U.S. consumption of ferrovanadium and/or nitrided vanadium peaked in 2008, dropped sharply in 2009, and then nearly returned to 2008 levels in 2011.

End Uses

Ferrovanadium and nitrided vanadium improve the strength-to-weight ratio and other properties of steel products. They are used especially in high-strength-low-alloy ("HSLA") steels where they can impart useful properties without the cost of additional chemistry to use other alloys. ***.[41] Thus, ferrovanadium and/or nitrided vanadium consumption tends to correlate with steel production. Nonetheless, it rarely accounts for a large percentage of the steel by weight. Historically, contained vanadium accounted for between 0.02 to 0.10 percent of steel, by weight, in the case of HSLA steels; up to about 5 percent, by weight, in the case of vanadium-chromium tool steels; and for a very small percent in the case of carbon steel.[42]

Among questionnaire respondents, most reported steelmaking (or particular types of steel making, such as high-strength low-alloy steel) as the end use of ferrovanadium and/or nitrided vanadium.[43] Purchasers reported using ferrovanadium and/or nitrided vanadium in rebar, flat-rolled steel, structural steel, steel bar products, coiled steel, and steel long products. Generally, purchasers and producers described ferrovanadium and/or nitrided vanadium as a small portion (usually under five percent, and often under one percent) of the total cost of the products that they or their customers produced.

All responding producers and purchasers reported no changes in the end uses of ferrovanadium and/or nitrided vanadium since 2006, and all producers and eleven purchasers did not anticipate any (with the twelfth not knowing whether there would be any changes). Additionally, *** reported no changes in the end uses of ferrovanadium and/or nitrided vanadium since 2006, and did not anticipate any.

AMG stated that purchasers can and do purchase ferrovanadium from multiple suppliers and use it in the same production processes.[44]

Demand Characteristics

Most questionnaire respondents agreed that ferrovanadium and nitrided vanadium demand is ultimately driven by demand from steel producers. Table II-3 shows steel production in the United States and the world during 1992-2011 (where available). During 2006-11, U.S. steel production fell by 12.5 percent while world steel production rose by 21.2 percent. Nonetheless, the selected use of vanadium in only some types of steel means that total steel production is not necessarily a perfect proxy for

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[41] ***.

[42] *Ferrovanadium from China and South Africa, Inv. No. TA-986-987 (Final)*, USITC Publication 3570, January 2003, p. I-3.

[43] No importers imported any ferrovanadium and/or nitrided vanadium from Russia, and thus none could discuss its end uses.

[44] Hearing transcript, pp. 63-64 (Carter).

ferrovanadium and/or nitrided vanadium demand. Additionally, increased intensity of vanadium in steel production can drive higher demand.[45]

Table II-3
U.S., former Soviet Union, and world steel production, 1992-2011

Year	United States	Former Soviet Union	World
	Quantity (million metric tons)		
1992	84.3	118.0	719.8
1993	88.8	98.1	727.6
1994	91.2	78.3	725.1
1995	95.2	79.1	752.3
1996	95.5	77.2	750.1
1997	98.5	81.0	799.0
1998	98.7	74.4	777.3
1999	97.4	86.1	789.0
2000	101.8	99.0	848.9
2001	90.1	100.2	851.1
2002	91.6	101.7	904.2
2003	93.7	107.0	969.9
2004	99.7	114.0	1,071.4
2005	94.9	113.9	1,144.0
2006	98.6	120.6	1,247.1
2007	98.1	124.9	1,346.6
2008	91.4	115.0	1,329.2
2009	58.2	98.3	1,232.4
2010	80.5	108.9	1,417.3
2011	86.2	113.2	1,511.8

Note.-- World data for 2011 are based on monthly reports and includes an estimate by USITC for 25 nations that do not report production on a monthly basis.

Source: World Steel Association Statistical Reports.

[45] Hearing transcript, p. 55 (Kramer). Counsel for AMG, as well as Evraz Stratcor, also described vanadium intensity in U.S.-produced steel as higher than in Russian-produced steel. Hearing transcript, pp. 56-57 (Button) and 141 (Bunting).

Demand Trends

Historical demand

End-user (steel mill) purchasers reported mixed demand trends for their products made with ferrovanadium and/or nitrided vanadium since 2006. Two purchasers described increased demand for their products, five described fluctuating demand for their products, and two indicated no change in demand for their products. Seven purchasers stated that changes in demand for their products had affected their demand for ferrovanadium and/or nitrided vanadium, with several describing increased demand for vanadium-bearing steel caused an increase in their demand for ferrovanadium and/or nitrided vanadium. *** described its demand for ferrovanadium and/or nitrided vanadium as directly tied to demand for its products in a "very linear" manner.

Among producers, importers, and foreign producers, *** reported that U.S. demand for ferrovanadium and/or nitrided vanadium had fluctuated since 2006 due to fluctuating steel production. *** described U.S. steel production as declining over 2008-10, but rising somewhat since 2010. *** also reported fluctuating U.S. demand, but due to changing product mix. *** described demand as increasing due to increasing demand from U.S. stainless steel producers.

Four purchasers stated that U.S. demand for ferrovanadium and/or nitrided vanadium had fluctuated since 2006, while five stated that it had not changed. Purchasers attributed demand fluctuations to changes in steel demand and/or wider economic difficulties in 2008 and 2009.

Future demand

*** indicated that they did not anticipate any change in U.S. demand for ferrovanadium and/or nitrided vanadium. However, in its posthearing brief, Bear/Gulf cited *** and published reports indicating that U.S. steel production (and hence demand for ferrovanadium and/or nitrided vanadium in the U.S. market) would remain strong.[46] *** anticipated fluctuating U.S. demand for ferrovanadium and/or nitrided vanadium based on steel production. *** were somewhat more optimistic. *** anticipated an increase in demand for ferrovanadium and/or nitrided vanadium due to an anticipated increase in steel production, with *** adding that it anticipated increased demand for structural steel using vanadium alloys. *** anticipated increasing demand coming from the stainless steel, aerospace, and automotive sectors. *** anticipated fluctuating demand for ferrovanadium and/or nitrided vanadium, though also based on steel production.

One purchaser anticipated an increase in U.S. demand for ferrovanadium and/or nitrided vanadium (due to a growing demand for ***), two anticipated fluctuating demand, and five anticipated no change in demand. Among those anticipating no change in demand, *** described the U.S. economy as not strong enough to generate more demand, and *** indicated that the U.S. ferrovanadium and/or nitrided vanadium market is mature and saturated.

Business Cycles

Market participants generally reported that any distinctive business cycles for ferrovanadium and/or nitrided vanadium were based on trade remedies, as well as distinctive market conditions in the steel market.

[46] Posthearing brief of Bear/Gulf, response to questions, p. 4 and exhibit 11. However, at the hearing, it added that it did not expect demand to grow. Hearing transcript, p. 46 (Carey).

*** indicated that the ferrovanadium and/or nitrided vanadium market is not subject to business cycles distrinctive to ferrovanadium and/or nitrided vanadium, but added that the market does respond to changes in the demand for steel (often based on the wider economy) and the vanadium intensity in steel. *** stated that ferrovanadium and/or nitrided vanadium was subject to distintive conditions of competition, noting the effects of the 2008 recession and ***.

Among importers, three stated that the ferrovanadium and/or nitrided vanadium market is not subject to business cycles distinctive to ferrovanadium and/or nitrided vanadium, while *** described current U.S. antidumping duty orders as having changed the conditions of competition in the U.S. market by having increased the market share of imports not subject to any orders.

Five purchasers stated that the ferrovanadium and/or nitrided vanadium market is subject to distinctive business cycles, while six thought that it is not. Among those describing distinctive business cycles, *** identified steel business cycles as driving business cycles for ferrovanadium and/or nitrided vanadium.[47] *** added that the steel business cycle is not always the same as the wider economy's business cycle. *** described U.S. and global prices for ferrovanadium and/or nitrided vanadium as following similar cycles, and added that market consolidation had resulted in a disciplined supply that maintains high prices.

Few market participants described changes in business cycles for ferrovanadium and/or nitrided vanadium. *** had not seen any change in the business cycles for ferrovanadium and/or nitrided vanadium, but *** had, noting the 2008 recession and ***. Among importers, two reported no changes in the business cycle for ferrovanadium and/or nitrided vanadium since 2006. However, *** described an increased market share for imports from countries not subject to antidumping duty orders, and *** described increased demand for vanadium in China.

Five purchasers stated that business cycles or conditions of competition in the ferrovanadium and/or nitrided vanadium market had changed since 2006, citing less competition from foreign producers, increased Asian and global demand, decreased demand from Europe diverting supply to the U.S. market, increased supply of imported nitrided vanadium from Asian producers, and increased demand for titanium alloy in aircraft causing increased demand for vanadium (which can be alloyed with titanium). Six purchasers reported no changes in ferrovanadium and/or nitrided vanadium business cycles since 2006.

Substitute Products

There are few substitutes for ferrovanadium and/or nitrided vanadium, with most market participants naming only ferroniobium[48] as a substitute, although its efficacy as a substitute may be limited to certain products or by higher prices. Nonetheless, ferrovanadium has a reputation for having more historic price volatility than its substitutes.[49]

*** listed ferroniobium as a substitute for ferrovanadium and/or nitrided vanadium. *** described ferroniobium as a substitute in steel reinforcing bars and structural steel. *** described ferroniobium as a potential substitute in certain steel grades. *** also listed ferrotitanium as a potential substitute. However, *** stated that changes in the price of niobium had not affected the price for ferrovanadium and/or nitrided vanadium, as did *** for changes in the price of ferrotitanium. *** described stable ferroniobium prices

[47] ***, which stated that ferrovanadium and/or nitrided vanadium is not subject to distinctive business cycles, also described ferrovanadium and/or nitrided vanadium demand as following demand in the merchant steel market.

[48] Columbium and niobium are different names for the same element. Some questionnaire respondents named niobium, columbium, ferroniobium, and ferrocolumbium as substitutes. All such answers are included as "ferroniobium" in this discussion. Public data are not available on ferroniobium prices, but prices for ferromolybdenum, named as a substitute for nitrided vanadium earlier in this chapter, are included in appendix E.

[49] ***.

during a time of volatile ferrovanadium prices as having contributed to substitution between ferrovanadium and ferroniobium.

Seven purchasers listed substitutes, with all seven naming ferroniobium. However, some purchasers also indicated that such substitution was limited to certain grades and specifications (e.g., carbon steel, low-gauge steel, etc.).[50] *** estimated that substitution was possible in approximately 10-15 percent of ferrovanadium and/or nitrided vanadium applications. Of the seven purchasers listing substitutes, six reported that changes in the price of the substitute had not affected the price of ferrovanadium and/or nitrided vanadium since 2006, while *** reported that those changes had, noting that ferrovanadium was less expensive right now. *** described ferroniobium prices as more stable than ferrovanadium and/or nitrided vanadium prices, and *** stated that as there are only two producers of ferroniobium, ferroniobium prices are high and "less market-driven" than ferrovanadium prices. Three purchasers *** reported that there are no substitutes for ferrovanadium and/or nitrided vanadium.

Three U.S. producers, two Russian producers, three importers, and eleven purchasers had not observed any changes in substitutes for ferrovanadium and/or nitrided vanadium since 2006, and three U.S. producers, two Russian producers, three importers, and ten purchasers did not anticipate any.

SUBSTITUTABILITY ISSUES

The degree of substitution between domestic and imported ferrovanadium and/or nitrided vanadium depends upon such factors as price, quality (e.g., reliability of supply, defect rates, etc.), and conditions of sale (e.g., price discounts/rebates, lead times between order and delivery dates, payment terms, product services, etc.). Based on available data, staff believes that there is a moderate-to-high degree of substitution between U.S. and imported ferrovanadium and/or nitrided vanadium.

U.S. Purchasers' Marketing Knowledge

Eleven purchasers expressed marketing/pricing knowledge for U.S. ferrovanadium and/or nitrided vanadium,[51] three for Russian ferrovanadium and/or nitrided vanadium, and eight for other countries' ferrovanadium and/or nitrided vanadium. Other countries included Australia, Austria, Canada, China, the Czech Republic, Korea, and South Africa. Twelve purchasers reported purchases of U.S. product and seven reported purchasers from other countries.[52]

Purchasers were asked how relative levels of their purchases from the United States, Russia, and other countries had changed since 2006.[53] Their answers are summarized in table II-4.

Table II-4
Ferrovanadium and nitrided vanadium: Change in purchasers' relative levels of purchases from different countries

* * * * * * *

[50] On the other hand, in answer to another question, *** described ferrovanadium and/or nitrided vanadium and ferroniobium as substitutable in many end uses, with substitution based on price.

[51] Another purchaser, ***, did not answer the question, but reported purchases of U.S. ferrovanadium and/or nitrided vanadium from 2006 through 2011.

[52] Additionally, ***.

[53] Additionally, purchasers were asked if they had purchased from only one country, and if so, why they had done so. Three purchasers did, citing ***.

Certification

Nine purchasers required that their suppliers be certified or prequalified for all purchases, while *** did not require certification. Those that required qualification examine compliance with ISO or other standards, quality, timely delivery, cost, customer service, and trial analysis of material. Most purchasers' certification took between 10 and 60 days. Eleven purchasers stated that no suppliers had failed to qualify since 2006, but *** indicated that two U.S. trading firms had tried to qualify some Asian-produced nitrided vanadium, and failed to do so.

Factors Affecting Purchasing Decisions

Purchasers generally described quality and availability as the most important factors in purchasing ferrovanadium and/or nitrided vanadium, with price as an important factor as well. Factors such as the product's producer, country of origin, and grade were generally more important to purchasers than to their customers.

Nine purchasers stated that buying a product that is produced in the United States was not an important factor in their purchases of ferrovanadium and/or nitrided vanadium. (However, one of those, ***, added that it prefers U.S. production, but requires that U.S. product be competitive with fairly-produced product from other countries.) Three stated that purchasing U.S. product was important because of cost, on-time delivery, avoidance of duties, and a preference for U.S. product when possible and feasible.

Purchasers were asked how often they and their customers made purchasing decisions based on the producer of, the country-of-origin of, the grade of, and the other substances in the ferrovanadium and/or nitrided vanadium that they purchase. Their answers are summarized in table II-5. As can be seen from the table, the factors listed generally played a more important role in purchasers' purchase decisions than in those of their customers.

Table II-5
Ferrovanadium and/or nitrided vanadium: Basis of purchasers' and their customers' purchasing decisions

Question	Always	Usually	Sometimes	Never
Does your firm base purchasing decisions on producer?	3	1	2	6
Do your customers base purchasing decisions on producer?	0	0	1	9
Does your firm base purchasing decisions on country-of-origin?	2	2	1	7
Do your customers base purchasing decisions on country-of-origin?	0	0	0	10
Does your firm base purchasing decisions on product grade?	7	1	1	3
Do your customers base purchasing decisions on product grade?	1	1	1	6
Does your firm base purchasing decisions on other substances contained in the ferrovanadium and/or nitrided vanadium?	8	0	1	3
Do your customers base purchasing decisions on other substances contained in the ferrovanadium and/or nitrided vanadium?	3	0	0	7

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

In further comments on whether they or their customers base decisions on producers, *** noted that it and its customers sometimes make purchasing decisions based on producer quality and availability. *** noted that it preferred to have information on producer capability and reliability in order to ensure continuity of supply. *** indicated a preference for knowing the producer, and *** noted that producers must meet all its specifications. *** indicated a preference for nitrovanadium from ***.

Regarding basing decisions on country of origin of ferrovanadium and/or nitrided vanadium, purchasers described duties, on-time delivery, knowledge of the source of the product, and cost as factors that might lead to a preference among product from particular country of origin.

In further comments on other substances, ***. *** stated that it always wants to know the chemistry of product that it purchases, but added that most of the time, other substances will not make a difference. *** stated that they had exact specifications that needed to be met by suppliers' product.

Table II-6 summarizes the purchasers' responses concerning the top three reported purchasing decision factors. As indicated in the table, the most important factors were quality, availability, and price, with price most often listed as the second-most important factor.

Table II-6
Ferrovanadium and nitrided vanadium: Ranking of factors used in purchasing decisions, as reported by U.S. purchasers

Factor	Number of firms reporting		
	Number one factor	Number two factor	Number three factor
Quality[1]	5	3	2
Price	3	6	2
Availability	3	3	4
Contracts	1	0	0
On-time delivery	0	0	2
Extension of credit	0	0	1
Reputation	0	0	1

[1] Quality means size, packaging, and chemistry, e.g., vanadium content, impurities content, ASTM specifications, and customer specifications.

Note.– Other factors mentioned include consistent packaging and on-time delivery (as an additional "third" factor).

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

Purchasers were asked to rate the importance of 15 specified factors in their purchasing decisions (table II-7). Availability, price, product consistency, quality meeting specifications, and reliability were the factors most often characterized as very important. Credit extension, product range, and technical support were the least likely factors to be named as very important.

Table II-7
Ferrovanadium and nitrided vanadium: Importance of purchasing factors, as reported by U.S. purchasers

Factor	Number of firms reporting		
	Very important	Somewhat important	Not important
Availability	12	0	0
Delivery terms	6	6	0
Delivery time	10	2	0
Discounts offered	7	5	0
Extension of credit	3	6	3
Minimum quantity requirements	5	4	3
Packaging	10	2	0
Price	12	0	0
Product consistency	12	0	0
Quality meets industry standards	12	0	0
Quality exceeds industry standards	5	1	5
Product range	3	6	3
Reliability of supply	11	1	0
Technical support/service	3	8	1
U.S. transportation costs	6	4	2
Other[1]	0	0	0

[1] Purchasers were given the opportunity to specify other purchasing factors and rate their importance, but none did so.

Note.–Not every purchaser ranked every factor.

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

Asked if certain grades, sizes, or types of ferrovanadium and/or nitrided vanadium were available from a single source, eight purchasers answered "No," and three answered "Yes." Those that answered "Yes" described nitrided vanadium (or the Stratcor brand Nitrovan) as a product only available from South Africa. *** elaborated that nitrided vanadium is now available from multiple sources, but that it considered Asian nitrided vanadium to be a substandard product.

Purchasers were asked how often they purchased the lowest priced ferrovanadium and/or nitrided vanadium. Four answered "always," seven answered "usually," and one (***) answered "sometimes." Four purchasers also indicated that they might purchase ferrovanadium and/or nitrided vanadium from one source although a comparable product was available at a lower price from another source. Reasons given include annual contracts, availability, reliability of supply, service, time to fill order, and minimum order size. At least four other purchasers indicated that they had always purchased the lowest-priced material. *** stated that has always purchased based on price, and *** stated that the lowest-priced material also met their other requirements.

Lead Times

*** sold *** of their ferrovanadium and/or nitrided vanadium out of inventory, with lead times of *** or fewer. *** sold *** of *** product produced to order with a lead time of ***. No importers imported product from Russia, and so could not provide lead time information.

Comparison of U.S.-Produced and Imported Ferrovanadium and/or Nitrided Vanadium

Purchasers were asked for a country-by-country comparison on the same factors they had rated in table II-7. Their responses are shown in table II-8. A majority of purchasers found U.S. ferrovanadium and/or nitrided vanadium to be comparable to product from most nonsubject countries in most factors. Comparisons with Russian ferrovanadium and/or nitrided vanadium were more limited (see table), but suggest that purchasers may view U.S. and nonsubject country product as somewhat superior to Russian product.

Table II-8
Ferrovanadium and nitrided vanadium: Comparisons between U.S.-produced and subject and nonsubject countries, as reported by U.S. purchasers

Factor	U.S. vs. Russia[1]			U.S. vs. Other[2]			Russia vs. Other[3]		
	S	C	I	S	C	I	S	C	I
Availability	2	4	0	1	15	0	0	4	3
Delivery terms	3	3	0	0	16	0	0	4	3
Delivery time	3	3	0	5	11	0	0	4	3
Discounts offered	2	4	0	0	12	4	0	4	3
Extension of credit	3	3	0	0	16	0	0	4	3
Minimum quantity requirements	1	5	0	0	16	0	0	4	3
Packaging	1	5	0	1	15	0	0	4	3
Price	2	4	0	0	16	0	0	4	3
Product consistency	1	5	0	0	16	0	0	4	3
Quality meets industry standards	1	5	0	0	16	0	0	4	3
Quality exceeds industry standards	1	5	0	0	16	0	0	4	3
Product range	1	5	0	1	11	4	0	4	3
Reliability of supply	2	4	0	5	11	0	0	4	3
Technical support/service	2	4	0	1	11	4	0	4	3
U.S. transportation costs	2	4	0	1	15	0	0	4	3
Other[4]	0	0	0	0	0	0	0	0	0

[1] In a separate question, purchasers were asked to identify countries of origin for ferrovanadium and/or nitrided vanadium with which the responding purchasers were familiar. Only one of the five purchasers that compared U.S. and Russian product in this table also answered that it was familiar with Russian product.

[2] Other countries named included Australia, Austria, Canada, China, Czech Republic, Korea, and South Africa. Six purchasers submitted comparisons; some of these purchasers compared U.S. product to product from mulitple other countries, or expressed familiarity with product from multiple other countries.

[3] Other countries named included Australia, Canada, China, Czech Republic, Korea, and South Africa. In a separate question, purchasers were asked to identify countries of origin for ferrovanadium and/or nitrided vanadium with which the responding purchasers were familiar. Only one of the three purchasers that compared Russian and other country product in this table also answered that it was familiar with Russian product.

[4] Purchasers were given the opportunity to specify other purchasing factors and compare different country-origin product on that basis, but none did so.

Note.--S=first listed country's product is superior; C=both countries' products are comparable; I=first listed country's product is inferior. A rating of superior means that price/U.S. transportation cost is generally lower. For example, if a firm reported "U.S. superior," it meant that the price of U.S. product was generally lower than the price of the imported product.

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

To determine whether U.S.-produced ferrovanadium and/or nitrided vanadium can generally be used in the same applications as imports from Russia and other countries, U.S. producers, importers, and purchasers were asked whether the products can "always," "frequently," "sometimes," or "never" be used interchangeably. As shown in table II-9, most questionnaire respondents answered that U.S., Russian, and nonsubject product were "always" or "frequently" interchangeable.[54]

Table II-9
Ferrovanadium and nitrided vanadium: Perceived interchangeability between ferrovanadium and/or nitrided vanadium produced in the United States and in other countries, by country pairs

	Number of U.S. producers[1] reporting				Number of importers reporting				Number of purchasers reporting			
Country pair	**A**	**F**	**S**	**N**	**A**	**F**	**S**	**N**	**A**	**F**	**S**	**N**
U.S. vs. subject countries:												
U.S. vs. Russia	***	***	***	***	1	1	1	0	4	2	0	0
U.S. vs. nonsubject country comparisons:												
U.S. vs. Other	***	***	***	***	1	1	1	0	5	2	0	0
Subject country vs. nonsubject country comparisons:												
Russia vs. Other	***	***	***	***	1	1	1	0	4	2	0	0

[1] ***.

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

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

While not answering for any of the comparisons listed above, *** stated that U.S. and other country product routinely interchange for various applications.

To determine the significance of differences other than price between U.S.-produced ferrovanadium and/or nitrided vanadium and imports from Russia and other countries, U.S. producers and importers were asked how often differences other than price were a significant factor in their sales or purchases of ferrovanadium and/or nitrided vanadium. As shown in table II-10, market participants generally (though not always) described differences other than price as only "sometimes" or "never" a significant factor in the market for ferrovanadium and/or nitrided vanadium.

[54] This summary includes answers by purchasers that did not express familiarity with product from Russia in answer to another question, but compared the products from the United States and Russia here.

Table II-10
Ferrovanadium and nitrided vanadium: Differences other than price between ferrovanadium and/or nitrided vanadium produced in the United States and in other countries, by country pairs

Country pair	Number of U.S. producers[1] reporting				Number of importers reporting				Number of purchasers reporting			
	A	F	S	N	A	F	S	N	A	F	S	N
U.S. vs. subject countries:												
U.S. vs. Russia	***	***	***	***	***	***	***	***	1	2	1	3
U.S. vs. nonsubject country comparisons:												
U.S. vs. Other	***	***	***	***	***	***	***	***	1	1	1	4
Subject country vs. nonsubject country comparisons:												
Russia vs. Other	***	***	***	***	***	***	***	***	1	1	1	3

[1] ***.

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

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

In additional comments, *** indicated that availability and packaging are generally not an issue, but can sometimes be an issue for imported material. Purchaser *** stated that in the spot market, availability is sometimes a concern, and that Russian material was not always available while U.S. material was. Similarly, *** stressed the importance of quality and availability as important non-price differences.

As can be seen from table II-11, a majority of responding purchasers generally reported that U.S. and nonsubject-country ferrovanadium and/or nitrided vanadium "always" or "usually" meets minimum quality specifications. However, responding purchasers were generally not as familiar with Russian ferrovanadium and/or nitrided vanadium.

Table II-11
Ferrovanadium and nitrided vanadium: Ability to meet minimum quality specifications, by source

Country	Number of firms reporting[1]				
	Always	Usually	Sometimes	Never	Do not know
United States	8	4	0	0	0
Russia (subject)	1	1	0	0	8
Nonsubject	5	3	0	0	4

[1] Purchasers were asked how often domestically produced or imported ferrovanadium and/or nitrided vanadium meets minimum quality specifications for their own or their customers' uses.

Source: Compiled from responses to Commission questionnaires.

ELASTICITY ESTIMATES

This section discusses elasticity estimates; parties were encouraged to comment on these estimates in their prehearing or posthearing briefs. Counsel for Evraz agreed with staff's demand elasticity, and counsel for AMG agreed that ferrovanadium demand is price inelastic.[55]

U.S. Supply Elasticity[56]

The domestic supply elasticity for ferrovanadium and/or nitrided vanadium measures the sensitivity of the quantity supplied by U.S. producers to changes in the U.S. market price of ferrovanadium and/or nitrided vanadium. The elasticity of domestic supply depends on several factors including the level of excess capacity, the ease with which producers can alter capacity, producers' ability to shift to production of other products, the existence of inventories, and the availability of alternate markets for U.S.-produced ferrovanadium and/or nitrided vanadium. Staff analysis of these factors indicates that U.S. producers have a moderate-to-substantial ability to increase shipments to the U.S. market; an estimate in the range of 3 to 6 is suggested.

U.S. Demand Elasticity

The U.S. demand elasticity for ferrovanadium and/or nitrided vanadium measures the sensitivity of the overall quantity demanded to a change in the U.S. market price of ferrovanadium and/or nitrided vanadium. This estimate depends on factors discussed earlier such as the existence, availability, and commercial viability of substitute products, as well as the component share of the ferrovanadium and/or nitrided vanadium in the production of any downstream products. Based on the available information, staff estimates that the aggregate demand for ferrovanadium and/or nitrided vanadium is likely to be moderately-to-highly inelastic; a range of -0.2 to -0.5 is suggested.

Substitution Elasticity

The elasticity of substitution depends upon the extent of product differentiation between the domestic and imported products.[57] Product differentiation, in turn, depends upon such factors as quality (e.g., chemistry, appearance, etc.) and conditions of sale (e.g., availability, sales terms/discounts/ promotions, etc.). In this review, limited questionnaire information on substitutability suggests that U.S. and Russian product are highly substitutable, although there may be some differences in quality and packaging. In the original investigation, most purchasers described U.S. and Russian product as comparable.[58] Based on available information, the elasticity of substitution between U.S.-produced ferrovanadium and/or nitrided vanadium and imported ferrovanadium and/or nitrided vanadium is likely to be in the range of 4 to 6.

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[55] Hearing transcript, pp. 26 (Button) and 162-63 (Klett).

[56] A supply function is not defined in the case of a non-competitive market.

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

[58] *Ferrovanadium and Nitrided Vanadium from Russia, Inv. No. 731-TA-702 (Final)*, USITC Publication 2904, June 1995, p. II-33.

PART III: CONDITION OF THE U.S. INDUSTRY

OVERVIEW

Table III-1 summarizes important events that have taken place in the U.S. industry since January 1, 2006.

Table III-1
Ferrovanadium and nitrided vanadium: Survey of industry events since January 1, 2006

Period	Entity	Description of event (acquisition, bankruptcy, merger, shutdown)
2006	Bear and Gulf	First full year of operations by Bear as 100 percent owned by Gulf.
2006	Evraz Stratcor	"Stratcor significantly reduced its own shipments of vanadium pentoxide to Bear, concentrating almost exclusively on selling its products into the specialty vanadium chemical and titanium markets."[1]
August 2006	Evraz Stratcor	Evraz Group purchased a 73-percent share of Strategic Minerals Corporation (Stratcor).
2009	***	***.
November 2010	AMG	"Commissioned a new $6 million raw material storage building which has a dedicated railcar unloading system to increase operating efficiency and a unique subfloor liner system to ensure safety storage of spent refinery catalysts."[2]
April 2011	AMG	Installed a solar power system at its Cambridge plant that will produce 230,000 kilowatt hours of electricity annually. Also installed new emission control equipment on its existing roaster and both of its electric arc furnaces.[3]
May 2011	Commerce	In response to a request from AMG, Commerce initiated an anticircumvention inquiry to determine whether imports of vanadium pentoxide from Russia that is converted into ferrovanadium in the United States are circumventing the antidumping duty order on ferrovanadium and nitrided vanadium (ferrovanadium) from Russia.[4]
February 2012	Commerce	Commerce preliminarily determined that the importation of vanadium pentoxide by the Evraz Group, which is toll converted into ferrovanadium in the United States by Bear, prior to sale to unaffiliated customers in the United States, does not constitute circumvention.[5]
August 2012	Commerce	Commerce is scheduled to publish the final determination with respect to this anticircumvention inquiry.
2012	AMG	A new multi-hearth roaster is under construction that will enhance AMG's ability to process spent catalysts and significantly increase its ferrovanadium production.[2]

[1] Hearing transcript, p. 107 (Wiesler).
[2] Hearing transcript, p. 23 (Neal).
[3] Hearing transcript, p. 24 (Neal).
[4] *Initiation of Anticircumvention Inquiry on Antidumping Duty Order on Ferrovanadium and Nitrided Vanadium From the Russian Federation*, 76 FR 26243, May 6, 2011.
[5] *Preliminary Negative Determination and Extension of Time Limit for Final Determination of Circumvention of the Antidumping Duty Order on Ferrovanadium and Nitrided Vanadium From the Russian Federation*, 77 FR 6537, February 8, 2012.

Source: Compiled from American Metal Market, producer questionnaire responses, hearing transcript, and Federal Register.

Background

Information in this section is based on the questionnaire responses of two domestic producers of ferrovanadium (AMG and Bear) that accounted for all domestic production in 2011. Nitrided vanadium has not been produced in the United States since 1992 and is not included in this section. Because Gulf, which owns Bear, as well as tollees Evraz Stratcor, Glencore, and Minerais (during ***) utilize Bear's toll production services to convert purchases and imports of the intermediate material, vanadium pentoxide, into ferrovanadium, the discussion of production data and employment in this section is limited to the data for AMG and Bear to avoid double-counting, while the discussion of shipments, inventories, and purchases in this section includes data for producers and tollees of ferrovanadium.

Existing Operations

In the Commission's questionnaire, U.S. producers were asked if they had experienced any plant openings, relocations, expansions, acquisitions, consolidations, closures, or prolonged shutdowns because of strikes or equipment failure; curtailment of production because of shortages of materials; or any other change in the character of their operations or organization relating to the production of ferrovanadium since January 1, 2006. *** reported ***. *** reported that it converted from *** system to *** system. This new system ***.[1]

Anticipated Changes in Existing Operations

The Commission asked domestic producers to report anticipated changes in the character of their operations relating to the production of ferrovanadium. ***. ***.

U.S. CAPACITY, PRODUCTION, AND CAPACITY UTILIZATION

U.S. producers' capacity, production, and capacity utilization data for ferrovanadium and nitrided vanadium are presented in table III-2. From 2006 to 2011, U.S. ferrovanadium capacity and production increased, while capacity utilization declined overall, except in 2008 when capacity utilization temporarily exceeded ***.[2]

Table III-2
Ferrovanadium: U.S. capacity, production, and capacity utilization, 2006-11

* * * * * * *

[1] In the last few years, Gulf invested approximately $50 million in environmental improvements to its recycling facility in Freeport, TX, to improve air pollution control equipment, wastewater treatment, storm water retention and environmental monitoring systems. Hearing transcript, p. 45 (Carey)

[2] ***. The contracts that Bear has with most of its tollees are one year in length, and are renewed on an annual basis. Bear sets up its plant production schedule for the year by "taking a look at the market" and through "discussions with the tollees." Hearing transcript, p. 84-85 (Carey). In the past, Stratcor has had ongoing five-year contracts with Bear (with changes based on the volume of tolling); however, in recent years, contracts have been one year in length. Hearing transcript, p. 106 (Wiesler).

Constraints on Capacity

The Commission asked domestic producers to report constraints on their capacity to produce ferrovanadium. *** reported that its production is limited by the capacity of its two facilities and the availability and cost of particular types of raw materials affect its production capacity. *** reported that its production is constrained by the number of furnaces and the capacity of equipment to crush the material into correct sizes.

Alternative Products

*** reported producing other products on the same equipment and machinery used in the production of ferrovanadium. *** produced *** using the same equipment and machinery used in ferrovanadium production, but did not *** from its ferrovanadium production. As such, ***. *** produced *** using the same equipment and machinery used in ferrovanadium production and allocated *** of its capacity and employment to the production of ***. *** reported that it is 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.[3]

U.S. PRODUCERS'/TOLLEES' SHIPMENTS

Table III-3 presents U.S. and export shipments of ferrovanadium during 2006-11.[4] During the period for which data were collected in the review, 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 peak levels in 2008, increasing by *** percent from 2007, before declining sharply in 2009. The increase in 2008 reflects the steep increase in the average unit value of ferrovanadium at $*** per pound while the average unit value for the other years under review fluctuated from a high of $*** per pound in 2006 to a low of $*** per pound in 2009.[5] The small volume of the transfers to a related firm was reported by ***.

Table III-3
Ferrovanadium: U.S. producers'/tollees' shipments, by types, 2006-11

* * * * * * *

Table III-4 presents U.S. shipments of ferrovanadium produced and sold by AMG and Bear; produced by Bear and sold by its owner, Gulf; and produced by Bear and sold by tollees Evraz Stratcor, Glencore, and Minerais. Evraz Stratcor, Glencore, and Gulf accounted for *** percent of U.S. producers'/tollees' U.S. shipments in 2011. *** of Evraz Stratcor's, Glencore's, Gulf, Minerais' shipments of ferrovanadium were produced in a toll agreement with Bear. When considering 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 was *** during the 2006-11 period.

---

[3] ***.

[4] U.S. shipment data are understated to the extent that they do not include any shipments of product toll-produced by Bear on behalf of its tollees: *** Staff attempted to collect such data, but did not receive a response from the firms. Such shipments are believed to be relatively small.

[5] One reason for the steep decline in the average unit value for ferrovanadium from 2008 to 2009 may be the global economic crisis in 2008 and 2009 which resulted in the demand and prices for ferrovanadium in the United States to collapse. AMG's posthearing brief, p. 18 and Bear/Gulf's posthearing brief, p. 18.

Table III-4
Ferrovanadium: U.S. producers' and tollees' U.S. shipments, by firms, 2006-11

* * * * * * *

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 AMG and Bear, including those end-of-period inventories of ferrovanadium that were reported by Evraz Stratcor, Glencore, Gulf, and Minerais but that were toll-produced for these firms by Bear.

Table III-5
Ferrovanadium: U.S. producers'/tollees' end-of-period inventories, by firms, 2006-11

* * * * * * *

U.S. TOLLEES' IMPORTS AND PURCHASES[6]

Given that there are no imports of the subject product from Russia, no tollee or U.S. producer had any purchases or imports of ferrovanadium or nitrided vanadium from Russia. All three tollees reported purchases of ferrovanadium during the review period.[7] ***. Stratcor identified the reasons for these purchases as ***. ***. ***. All of Gulf's purchases were from ***.

U.S. EMPLOYMENT, WAGES AND PRODUCTIVITY

The employment data presented in table III-6 show data for the two U.S. producers of ferrovanadium, AMG and Bear (including Bear's activities as a toller). During 2006-11, the number of PRWs fluctuated, with and overall increase of *** percent from 2006 to 2011. Wages paid to PRWs and hourly wages increased irregularly while productivity fluctuated, but declined overall from 2006 to 2011.

Table III-6
Ferrovanadium: U.S. producers' employment-related data, 2006-11

* * * * * * *

[6] U.S. producer ***. U.S. producer ***. ***.

[7] Minerais did not provide a full tollee questionnaire response, but reported in its importer questionnaire response that it imported ferrovanadium from *** during the review period.

FINANCIAL EXPERIENCE OF U.S. FIRMS

Background

AMG, Bear, Evraz, Glencore, and Gulf[8] provided financial data on their operations either producing or selling ferrovanadium. As noted earlier in this report, the operations of the individual firms differ somewhat, leading to a distinction between producer and tollee. In the original investigation, the Commission determined that AMG (then Shieldalloy), ***, Stratcor (then USV) and Bear (which toll-produces ferrovanadium on behalf of other firms)[9] were engaged in the production of ferrovanadium and comprised the domestic industry; in previous reviews of orders on this and related products, the Commission determined that tollees, Gulf and Stratcor were not engaged in the production of ferrovanadium, and were therefore not part of the domestic industry producing ferrovanadium.

In this review, AMG is an integrated producer and sold its own-produced ferrovanadium in every period. Bear continued to produce ferrovanadium on a toll basis on behalf of other firms, including its parent, Gulf, and other tollees such as Evraz Stratcor/Evraz East Metals (which filed a single questionnaire response), and Glencore.[10] In effect, the Eramet companies (subsidiaries Gulf and Bear) operate as an integrated producer in which Gulf recycles vanadium oxides from oil catalysts and Bear produces ferrovanadium on behalf of and for sale by Gulf.[11] Reportedly, because *** capability Bear

[8] Commission staff verified the shipment and sales data of Gulf. EDIS document 484205, June 28, 2012. Sales, as reported in Gulf's questionnaire, reconciled to its accounting records for ferrovanadium except for $***. Additionally, Gulf ***.

[9] In the relationship between toller and tollee, the tollee provides the raw material inputs (here, vanadium pentoxide) to the toller, retaining title to the inputs, and the toller returns a guarantee percentage of the input as finished product (here, ferrovanadium) to the tollee. The toller converts the input to the finished product and charges a tolling fee, which differs in concept and unit value from sales, and may arrange packaging and shipment on behalf of the tollee. Bear provided a list of firms on whose behalf it tolled during 2006-11, by yearly period. Bear's questionnaire response, exh. 1. At the request of staff, Bear also provided a breakout, by quantity and value (of tolling fees), for each of the firms in 2008. From these data, it can be seen that ***. Bear also provided a revision to its questionnaire response and provided the data on its tolling operations on behalf of firms other than Gulf. EDIS document 480924, May 22, 2012. The deductions of ***.

[10] Tollee *** provided limited historical trade data and no financial data.

[11] Gulf acquired 100 percent of Bear in December 2005. This represented an increase over the 49.5 percent share Gulf previously had during January 2002 to November 2005 in the previous review. Subsequent to Gulf's purchase of Bear, Gulf was purchased by Eramet. On Eramet North America's organization chart, both are included in Eramet's "Business Unit Manganese Chemicals/Recycling" and shown as "GCMC (USA)–recycling of oil catalysts" and "Bear Metallurgical (USA)–producer of ferrovanadium and ferromolybde." The production arrangement, in which Gulf sells ferrovanadium produced by Bear from Gulf-produced vanadium oxide, continued during the period reviewed. Additionally, ***. Staff telephone interview with ***, May 17, 2012; ***; Gulf Chemical News Release, December 13, 2005; and Eramet organization chart. Answers to questions regarding the relationship between Bear and Gulf were provided in Bear/Gulf's posthearing brief, exh. A, pp. 2-3 and in the verfication report, att. A.

toll-produces ferrovanadium on behalf of other firms, including Evraz[12] and Glencore, from vanadium oxides produced or imported by these firms. For a more detailed description of the domestic producers' manufacturing processes, including a discussion of the vanadium-bearing inputs, see the discussion in Part I of this report.

The data presented in this section of the report consolidates the operations of the Eramet subsidiaries' establishments (tables III-7 and III-8) while separately presenting data for all five companies (tables III-11 and III-12). In other words, the commercial operations of AMG and Gulf, and Bear's tolling are presented in tables III-7 and III-8.[13] This presentation consolidates the tolling of Bear for Gulf with Gulf's sales of the tolled product, resulting in a fair presentation of the single entity's commercial sales matched with its production costs (the combined raw material and conversion costs of Gulf and Bear); in this consolidation, the profit on tolling reported by Bear was subtracted from the tolling fees reported by Gulf. Bear's tolling operations on behalf of other firms also is presented in these tables. In tables III-11 and III-12, the commercial sales of AMG, Gulf, Evraz, and Glencore are presented; in these tables, the volume of sales that Evraz and Glencore reported was subtracted from Bear's tolling and the remainder is presented as Bear's residual tolling. An exact match could not be made because the timing of commercial sales and tolling differed from period to period and because of changes in inventory held by the commercial seller.

Ferrovanadium Operations of AMG, Gulf/Bear, and Bear

Aggregate income-and-loss data on AMG's, Gulf/Bear's, and Bear's production and sale of ferrovanadium are presented in table III-7. Demand for ferrovanadium is derived from the demand for certain types of microalloyed steels; hence, sales changed, at least in part, with the demand for those steels in construction, the automobile industry, and others as described in Part II of this report. From 2006 to 2011, total sales quantities increased irregularly while unit sales values and sales increased from 2006 to 2008 and then irregularly fell between 2008 and 2011.[14] Unit raw materials costs followed a similar pattern as unit sales values. The very steep decline in unit sales values and sales quantities between 2008 and 2009 led to an operating loss in 2009 of $*** percent of net sales/tolling, which represented a distinct break in the pattern of other years during the period for which data were gathered. Operating income as a share of net sales value decreased from *** in 2006 to *** in 2011.[15]

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[12] USV became Stratcor in 2004. The Evraz Group, S.A. purchased a *** interest in Strategic Minerals Corp. (the parent company of Stratcor, Inc.) in 2006. The relationship with Bear in which the ferrovanadium that Statcor/Evraz sells is toll-produced by Bear from Stratcor-produced vanadium oxide began in 1993 and continued during the period for which data were collected. This tolling arrangement was joined by East Metals AG, which has sold ferrovanadium in North America that was produced by Bear from Evraz Group vanadium oxide. Evraz submitted a single questionnaire response that combined the operations of East Metals and Stratcor. A witness for Evraz Stratcor stated that one of its sources of vanadium pentoxide, a power generation plant in Texas, shut down and "significantly reduced" that source of feedstock. Hearing transcript, p. 140 (Wiesler).

[13] Table C-2 presents the results of AMG's commercial sales, Bear's commercial sales and transfers, and Bear's tolling.

[14] For example, the large change in the average unit value of industry shipments between 2008 and 2009 was explained by the collapse in demand from the steel industry for ferrovanadium in September-October 2008 and that 2009 was a devastating year for the steel industry. Hearing transcript, p. 60 (Carter).

[15] Domestic interested parties indicated that the drivers of unit shipments and costs in 2008 and 2009 were the onset of a United States and global economic crisis and the fall in demand for ferrovanadium; prices failed subsequently to recover to pre-recession levels. Bear/Gulf's posthearing brief, exh. A, p. 21; and AMG's posthearing brief, responses to questions, p. 18. AMG attributed the increase in unit COGS from 2010 to 2011 to ***. AMG's posthearing brief, responses to questions, pp. 19-20.

Table III-7
Ferrovanadium: Results of operations of U.S. firms, fiscal years 2006-11

* * * * * * *

Selected company-by-company financial data are presented in table III-8. AMG's sales quantities varied during the period for which data were collected. The company's sales values increased from 2006 to 2008 with the *** increase in unit sales values, were *** lower in 2009 compared with 2008, and then increased again in 2010 and 2011, the result of *** swings in the unit sales prices. The changes in unit sales prices were *** to changes in unit raw materials costs while other unit operating costs *** from 2006 to 2011.[16]

Bear's sales/tolling quantities increased during the period for which data were gathered (the amount tolled *** from 2006 to 2011). Tolling fees ***. As noted in tables III-7 and III-8, Bear's revenues, costs, and profits consist of its operations toll converting raw materials into ferrovanadium ***.

Gulf's sales quantities trended downward from 2006 to 2011. Its sales values rose *** from 2006 to 2008 because its unit sales values ***. Its raw material costs also *** as a ratio to sales and increased by *** percent (on a per unit basis) during this period.[17] Thereafter raw material costs[18] varied ***.

Table III-8
Ferrovanadium: Company-by-company results of U.S. firms, fiscal years 2006-11

* * * * * * *

Given the *** in unit sales values and cost structure between Gulf/Bear and AMG, 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 tables III-7 and III-8, that is not the case.

Capital Expenditures and Research and Development Expenses

Bear's and AMG's capital expenditures and research and development (R&D) expenses are presented in table III-9. Capital expenditures fell in 2009 but then increased as the firms' collective

[16] Staff revised AMG's questionnaire response in section III-10 to deduct sales of by-products from raw material costs instead of other factory costs. This revision was based on the firm's data provided as a breakout in its questionnaire response.

[17] A witness for Gulf explained why raw material costs rose during the review period. Gulf obtains its vanadium feedstock by recycling hazardous spent refinery catalysts. Gulf was able to obtain these catalysts in prior years at little or no cost but as vanadium prices increased, the oil refiners began to demand compensation for the metal content of their catalysts in the form of metal credits to offset the recycling services provided by Gulf. "This has significantly driven up the cost of raw materials to Gulf." Hearing transcript, p. 43 (Carey). The metal credit is ***. Prehearing brief of Gulf and Bear, p. 13. ***. Additionally, Gulf's costs increased due to the firm's investment in environmental improvements (stated to be approximately $50 million) at Gulf's Freeport, TX facility in its air pollution control equipment, wastewater treatment, stormwater retention, and environmental monitoring systems to maintain compliance with EPA and TCEQ environmental regulations. Hearing transcript, p. 45 (Carey).

[18] Gulf provided a breakout of the ***. The firm stated that the cost that is shown as ***. Gulf also explained its ***. EDIS document 480924, May 22, 2012. Gulf explained its costing methodology. EDIS document 481729, June 1, 2012.

profitability increased.[19] A witness for AMG stated that the firm's capital investment has been focused on expanding production capacity and improving operational efficiency.[20] *** R&D expenses were ***.

Table III-9
Ferrovanadium: Capital expenditures and research and development expenses of U.S. firms, fiscal years 2006-11

* * * * * * *

Assets and Return on Investment

The assets of *** and the return on investment by *** are presented in table III-10. Return on investment mirrored the trends of the operating income to sales ratio in table III-7.

Table III-10
Ferrovanadium: Assets and return on investment of U.S. firms, as of the end of fiscal years 2006-11

* * * * * * *

Consolidated Ferrovanadium Operations of AMG, Bear, Gulf, Evraz, and Glencore

The consolidated ferrovanadium operations of Bear, Gulf, AMG, Evraz, and Glencore 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, AMG, Evraz, and Glencore selling ferrovanadium to other parties. In other words, while table III-7 includes the revenues earned by Bear in toll-converting raw materials into ferrovanadium for Evraz and Glencore (***), table III-11 instead substitutes the revenues earned by Evraz and Glencore 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. As was done in table III-7, where the tolling profit of Bear was deducted from Gulf's tolling fees to consolidate the two firms, the profits that Bear earned on its tolling were deducted from the tolling conversion charges reported in the aggregate by tollees Evraz and Glencore. The sales quantities in table III-11 differ from the sales quantities in table III-7 because of timing differences in Bear's reporting versus the sales reporting by tollees. The amount that was not accounted for by reporting tollees is shown as Bear's residual tolling. As noted earlier, because of timing differences and changes in inventory, the sum of tollee's reported commercial shipments differ

[19] Hearing transcript, p. 23 (Neal). Likewise, Bear's capital investments reportedly have been focused on increasing capacity and the addition of improved technology to upgrade and expand its ferrovanadium production capability. Hearing transcript, p. 42 (Carey).

[20] AMG cited (1) the construction of a new multi-hearth roaster (an $*** investment in 2012) that will enhance the firm's ability to process spent catalysts and significantly increase its ferrovanadium production; (2) the commissioning of a new $6 million, 43,000-square foot raw material storage building, which has a dedicated railcar unloading system to increase operating efficiency, and a "unique" subfloor liner system to ensure safety storage of spent refinery catalysts in November 2010; (3) other environmental upgrades, including new emission control equipment on the existing roaster and both electric arc furnaces; and (4) installation of a solar power system at the Cambridge, OH plant that will produce "230,000 kilowatt hours of electicity annually". Hearing transcript, pp. 23-24 and AMG's prehearing brief, p. 32.

from the quantity reported by Bear as tolling. This amount, shown as a residual figure, ranges between yearly periods and was ***.

Selected company-by-company financial data for the consolidated operations of AMG, Bear, Gulf, Evraz, and Glencore are presented in table III-12. Data on capital expenditures, research and development expenses, and ROI data are not presented here. No firms other than AMG and Bear responded to those sections of the producers' questionnaire (see table III-9). The data presented reflect the ***. At the same time, ***, are also reflected in table III-12.

Table III-11
Ferrovanadium: Consolidated results of U.S. firms' operations, fiscal years 2006-11

* * * * * * *

Table III-12
Ferrovanadium: Selected financial data of the consolidated operations of U.S. firms, by firm, fiscal years 2006-11

* * * * * * *

PART IV: U.S. IMPORTS AND THE FOREIGN INDUSTRY

U.S. IMPORTS

Overview

As previously stated, there were no known U.S. imports of ferrovanadium and/or nitrided vanadium from Russia during 2006-11. The Commission issued questionnaires to 15 firms believed to have imported ferrovanadium and/or nitrided vanadium from other countries since 2006 and received responses from eight firms. Six firms provided data and information in response to the questionnaires, while two firms indicated that they had not imported ferrovanadium and/or nitrided vanadium during the period for which data were collected.[1] Based on official Commerce statistics for imports of ferrovanadium and nitrided vanadium (as adjusted, importers' questionnaire data accounted for the majority (***) of total U.S. imports in 2011.

In light of the data coverage by the Commission's questionnaires, import data in this report are based on adjusted official Commerce statistics for ferrovanadium and nitrided vanadium.[2] One importer, Evraz subsidiary East Metals ("Evraz East Metals"), accounted for *** percent of all imports of ferrovanadium and/or nitrided vanadium from nonsubject countries in 2011.[3] Evraz East Metals shares a parent company with tollee Evraz Stratcor, Russian producer Evraz Vanady Tula, South African producer Evraz Vametco, and Czech producer Evraz Nikom.

Imports from Nonsubject Countries

There have been no imports of ferrovanadium and/or nitrided vanadium from Russia since 1996; therefore, table IV-1 presents data on U.S. imports of ferrovanadium and nitrided vanadium from nonsubject countries during 2006-11. Data for South Africa, the largest source of imports during this period except in 2006 and 2008, reflects only U.S. imports of nitrided vanadium. Ferrovanadium from South Africa and China are subject to antidumping duty orders in the United States.

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[1] The responding importing firms are: ***.

[2] Official Commerce statistics are based on HTS statistical reporting number 7202.92.0000 (the only such number dedicated to ferrovanadium) for all countries and 2849.90.5000 for imports from South Africa. The HTS statistical reporting number 2849.90.5000 for nitrided vanadium is a mixed category that includes a number of metallic carbides and carbo-nitrides. This number is used only for imports from South Africa, which should be exclusively imports of nitrided vanadium. ***. The only other country known to produce nitrided vanadium is China and while there may have been some imports from China, staff believes that such imports were not substantial. Imports of nitrided vanadium from China and/or South Africa are not subject to any U.S. antidumping duty order (the scopes of the existing orders covering China and South Africa include only ferrovanadium and not nitrided vanadium).

[3] Evraz East Metals' imports are believed to be ***. Evraz East Metals stated that it ***.

Table IV-1
Ferrovanadium and nitrided vanadium: U.S. imports from nonsubject countries, by sources, 2006-11

Source	Calendar year					
	2006	2007	2008	2009	2010	2011
	Quantity (*1,000 pounds of contained vanadium*)					
South Africa[1]	2,838	2,347	2,197	897	2,254	2,609
Canada	560	974	1,427	434	1,051	1,677
Korea	527	1,777	3,772	223	820	1,369
Austria	316	382	710	108	995	1,303
Czech Republic[2]	3,208	1,608	109	0	0	410
All other	109	143	162	13	88	136
Total	7,558	7,230	8,376	1,675	5,208	7,503
	Value (*1,000 dollars*)[3]					
South Africa[1]	30,889	37,137	48,153	10,069	28,170	31,443
Canada	12,556	14,579	34,493	7,397	15,116	22,244
Korea	9,689	30,478	102,875	3,994	11,232	20,546
Austria	5,992	7,552	19,426	1,238	15,036	17,460
Czech Republic[2]	63,699	29,271	2,611	0	0	5,172
All other	2,163	2,804	5,009	324	1,323	1,490
Total	124,988	121,822	212,567	23,022	70,877	98,355

Table continued on next page.

Table IV-1--*Continued*
Ferrovanadium and nitrided vanadium: U.S. imports from nonsubject countries, by sources, 2006-11

Source	Calendar year					
	2006	2007	2008	2009	2010	2011
	Unit value (*dollars per pound*)					
South Africa[1]	10.88	15.83	21.92	11.22	12.50	12.05
Canada	22.43	14.97	24.17	17.05	14.39	13.26
Korea	18.38	17.15	27.27	17.88	13.70	15.00
Austria	18.98	19.78	27.38	11.51	15.11	13.40
Czech Republic[2]	19.86	18.21	23.91	([4])	([4])	12.62
All other	19.89	19.58	30.95	25.48	15.06	10.99
Total	16.54	16.85	25.38	13.75	13.61	13.11
	Share of quantity (*percent*)					
South Africa[1]	37.6	32.5	26.2	53.6	43.3	34.8
Canada	7.4	13.5	17.0	25.9	20.2	22.4
Korea	7.0	24.6	45.0	13.3	15.7	18.3
Austria	4.2	5.3	8.5	6.4	19.1	17.4
Czech Republic[4]	42.4	22.2	1.3	0.0	0.0	5.5
All other	1.4	2.0	1.9	0.8	1.7	1.8
Total	100.0	100.0	100.0	100.0	100.0	100.0
	Share of value (*percent*)					
South Africa[1]	24.7	30.5	22.7	43.7	39.7	32.0
Canada	10.0	12.0	16.2	32.1	21.3	22.6
Korea	7.8	25.0	48.4	17.4	15.8	20.9
Austria	4.8	6.2	9.1	5.4	21.2	17.8
Czech Republic[4]	51.0	24.0	1.2	0.0	0.0	5.3
All other	1.7	2.3	2.4	1.4	1.9	1.5
Total	100.0	100.0	100.0	100.0	100.0	100.0

[1] Imports from South Africa are nitrided vanadium only (quantity of contained vanadium estimated at 80 percent). Imports of ferrovanadium from South Africa are subject to an antidumping duty order.
[2] ***. See Part II for more details.
[3] Landed, duty-paid.
[4] Not applicable.

Source: Compiled adjusted official Commerce statistics (HTS 7202.92.0000 for imports from all countries plus HTS 2849.90.5000 for imports from South Africa).

U.S. IMPORTERS' IMPORTS SUBSEQUENT TO DECEMBER 31, 2011

The Commission requested importers to indicate whether they had imported or arranged for the importation of ferrovanadium and/or nitrided vanadium from Russia for delivery in 2012. No importer reported any plans to import ferrovanadium and/or nitrided vanadium from Russia.

U.S. IMPORTERS' INVENTORIES

Because there were no imports of ferrovanadium and/or nitrated vanadium from Russia during the period for which data were collected, table IV-2 presents data for inventories of U.S. imports of ferrovanadium and nitrided vanadium from nonsubject sources held in the United States. Inventories were equivalent to less than *** percent of all nonsubject imports, except in 2008. Inventories fluctuated over the period, but declined overall by *** percent from 2006 to 2011.[4]

Table IV-2
Ferrovanadium and nitrided vanadium: U.S. importers' end-of-period inventories of imports, by source, 2006-11

* * * * * * *

[4] *** accounted for the majority of inventories in 2006, (***), but had very little inventory in 2007 (***), and no end-of-period inventory from 2008-11 (***). In addition, *** accounted for an unusually large amount of inventory in 2008, (***), and all the inventory in 2011. In the years 2006 (***), 2007 (***), 2009 (***), and 2010 (***), *** end-of-period inventory of ferrovanadium was less than half of total inventory.

THE INDUSTRY IN RUSSIA

Overview

Since the original investigation, there have been only two Russian producers of ferrovanadium and nitrided vanadium, Vanadium Tulachermet (now "Evraz Vanady Tula"), and Chusovskoy Metallurgical Works ("Chusovskoy").[5] In 1992 to 1994, Russian producers' exports of ferrovanadium to the United States fluctuated between *** to *** percent of total shipments, with the majority of shipments going to its home market. In the first five-year review, Russian producers reported decreasing production between 1995 and 1997 and increasing production between 1997 and 2000, resulting in similar trends in their capacity utilization, which began the period at *** percent, decreased to *** percent by 1997, but then reached *** percent in 2000.[6] According to Russian producers in the first review, major changes occurred in the Russian ferrovanadium industry from 1995-2000, including a distribution system for exports that now relies on the Russian producers' own agents rather than traders.[7] In the second expedited review, the domestic interested parties indicate that, "{t}o the best of {their} knowledge, the Russian ferrovanadium industry continues to have excess ferrovanadium capacity, remains export-oriented and flexible as to export markets."[8] One industry source indicates that, after increasing between 1998 and 2000, Russian production of vanadium-containing compounds remained constant between 2000 and 2002, but then decreased significantly in late 2002 and in 2003 due to "output problems" before returning to their 2000 to 2002 levels in 2004.[9]

Table IV-3 presents data on the Russian industry from the original investigation and the first five-year review.

Table IV-3
Ferrovanadium and nitrided vanadium: Capacity, production, inventories, and shipments in Russia, 1992-94 and 1995-2000

* * * * * * *

[5] In the original investigation, Russian production declined from *** pounds of ferrovanadium in 1992 to *** pounds in 1994, representing a decline in capacity utilization from *** percent in 1992 to *** percent in 1994. *Staff Report on Ferrovanadium and Nitrided Vanadium from Russia, Investigation No. 731-TA-702 (Final)*, INV-S-082 (June 15, 1995), table 12; USITC Publication 2904, table 12.

[6] *Staff Report on Ferrovanadium and Nitrided Vanadium from Russia, Investigation No. 731-TA-702 (Review)*, INV-Y-072 (April 13, 2001), table IV-3; USITC publication 3420, table IV-3. While the quantity data for the two periods were reported in different units (pounds in the original investigation, and pounds contained vanadium in the first review), a conversion based on the weight of vanadium within lower grade ferrovanadium (42 to 50 percent) indicates Russian production in 1994 (equal to approximately *** pounds contained vanadium at the 42 percent level to *** pounds contained vanadium at the 50 percent level). As most Russian ferrovanadium was of a grade containing 50 percent of contained vanadium, data submitted in the first review indicate a continual decrease in the production of ferrovanadium from Russia between 1992 and 1997. *Staff Report on Ferrovanadium and Nitrided Vanadium from Russia, Investigation No. 731-TA-702 (Second Review)*, INV–DD-134 (August 30, 2006), fn. 146.

[7] *Ferrovanadium and Nitrided Vanadium from Russia, Inv. No. 731-TA-702 (Review)*, USITC Publication 3420, May 2001, p. IV-1.

[8] *Ferrovanadium and Nitrided Vanadium from Russia, Inv. No. 731-TA-702 (Second Review)*, USITC Publication 3887, September 2006, p. I-23.

[9] "The Elasticity of Vanadium in a Surging Market," Stratcor, Robert M. Bunting, Ryan's Notes Ferroalloys Conference, Hollywood, Florida, October 26, 2004, http://www.stratcor.com.

In this third review, these two Russian producers have continued to operate. Vanadium Tulachermet was purchased by the Evraz group in 2009 and is the largest ferrovanadium producer in Russia today.[10] [11] Vanady Tula and Chusovskoy account for all known ferrovanadium and nitrided vanadium production in Russia today.

Evraz Vanady Tula described itself as the primary supplier in the Russian market, accounting for approximately*** of Russian consumption. Evraz Vanady Tula ***.[12]

Ferrovanadium and Nitrided Vanadium Operations

Table IV-4 presents data provided by Russia producers, Chusovskoy and Evraz Vanady Tula, on their ferrovanadium and nitrided vanadium operations in Russia from 2006 to 2011.[13] Vanady Tula uses a different production process than U.S. producers AMG and Bear.[14] Evraz Vanady Tula "processes ferrovanadium using the aluminothermic electric furnace procedure. This procedure consists of a four-stage melting process in an electric arc furnace with separate slag tipping into a slag cup and metal tipping into a steel mold. This procedure uses considerable amounts of electricity, as well as additional refractory materials and graphite electrodes not required in the aluminothermic ladle procedure."[15]

Allocated production and capacity *** from 2006 to 2011.[16] [17] Home market shipments *** while export shipments *** from 2006 to 2011 and internal consumption fluctuated but increased overall from 2006 to 2011. *** reflects Evraz's purchase of Vanady Tula in 2009.[18] Neither Chusovskoy or Evraz Vanady Tula ***.[19] Inventory levels *** during the review period, from ***.

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[10] Evraz Vanady Tula is wholly owned by the Evraz Group (London, UK) with several affiliated companies involved in ferrovanadium: East Metals AG and Evraz Stratcor (importer and tollees of ferrovanadium in the United States), Nikom A.S. (producer of ferrovanadium in the Czech Republic), Vametco Holdings (Pty) Ltd. (producer of Nitrovan®, a form of nitrided vanadium, in South Africa). In addition, ***.

[11] Evraz describes its business model as "a coordinated global strategy calling for a diversified vanadium processing base that includes unrelated strategic partners and is distributed over four continents. The basis for this strategy is to minimize costs and maximize profits, as there exist differences in production costs, logistics, and transportation costs in supplying regional markets from alternative production platforms, including the availability of toll production. Evraz's decision to supply the U.S. market with toll production in the United State with exports of vanadium pentoxide from Russia is a rational business decision that will continue after revocation of the order, based on the cost-economics of toll-production of ferrovanadium in the United States compared to production of ferrovanadium by Evraz Vanady Tula for export to the United States." Evraz' posthearing brief, p. 2.

[12] Chusovskoy has a ***. Evraz Vanady Tula's foreign producer questionnaire, att. 1.

[13] Data in table IV-4 do not include ***. See ***.

[14] "The Russian producers use vanadium bearing iron slag that is a byproduct of their own steel producing affiliates. This iron slag provides the Russian producers with a distinct cost advantage over the U.S. industry. The high vanadium content of the iron ore used in Russia is unique to Russia and a few other regions around the world. Vanadium bearing iron slag is not available from U.S. steel producers because the iron ore used in the United States does not contain significant vanadium levels." Hearing transcript, p. 42-43 (Carey)

[15] Evraz's posthearing brief, app. 1, p. 4.

[16] Chusovskoy and Evraz Vanady Tula reported ***.

[17] Evraz Vanady Tula's reported capacities to produce ferrovanadium are based on using these operational equipment: ***. Evraz's posthearing brief, app. 1, p. 4-5.

[18] Evraz Vanady Tula reported that "***." Evraz Vanady Tula's foreign producer questionnaire, section II-11.

[19] Except for the antidumping duty order on ferrovanadium and nitrided vanadium in the United States, Chusovskoy and Evraz Vanady Tula reported ***.

Evraz Vanady Tula has the theoretical capability of *** (at an estimated cost of *** and time frame of ***).[20] [21]

Constraints on Capacity

As a producer of ferrovanadium, Evraz Vanady Tula ***. As a result, production capacity for Evraz Vanady Tula is constrained by the capacity to produce vanadium pentoxide.[22] In addition, Evraz Vanady Tula ***. Chusovskoy reported ***. In 2008, Chusovskoy's ***.[23]

Table IV-4
Ferrovanadium and nitrided vanadium: Russian capacity, production, shipments, and inventories, 2006-11

* * * * * * *

[20] "***. To operate this new equipment, Evraz Vanady Tula would also have to increase its existing ferrovanadium processing workforce of ***; hiring these additional workers would take approximately *** and training the new staff on the necessary production and safety procedures would take an additional ***. The company reported that, "in light of the relative cost disadvantages of the Tula facility and the lack of available vanadium pentoxide, no such capacity improvements have been planned or included in Evraz'ss investment budget." Evraz's posthearing brief, app. 1, p. 4-5.

[21] The theoretical capacity of Vanady Tula to produce ferrovanadium was given in metric tons of contained vanadium and converted by staff into thousand pounds of contained vanadium. The capacity reported: *** metric tons of contained vanadium in 2006, *** metric tons of contained vanadium in 2007, *** metric tons of contained vanadium in 2008, *** metric tons of contained vanadium in 2009, *** metric tons of contained vanadium in 2010, and *** metric tons of contained vanadium in 2011. Evraz's posthearing brief, app. 1, p. 4-5, and app. 4. Thus, Evraz Vanady Tula's historical production, allocated capacity, and theoretical capacity are as follows (in pounds of contained vanadium):

	Actual production	Allocated capacity	Theoretical capacity
● 2006	***	***	***
● 2007	***	***	***
● 2008	***	***	***
● 2009	***	***	***
● 2010	***	***	***
● 2011	***	***	***

[22] Evraz Vanady Tula's production of vanadium pentoxide is at full capacity. Evraz Vanady Tula has exported slag because it does not have the capacity to process ferrovanadium out of the slag. Hearing transcript, p. 125 (Montalbine) and Evraz's posthearing brief, app. 1, p. 3.

[23] Evraz Vanady Tula estimates that "***." Evraz's posthearing brief, app. 1, p. 19. Chusovskoy's ***. Evraz's posthearing brief, app. 19.

GLOBAL MARKET FOR FERROVANADIUM AND NITRIDED VANADIUM[24]

Supply

World production of vanadium likely grew more than seven percent per year from 2003 to 2008, and additional supply could come from the anticipated re-opening of Australia's Windimurra facility, as well as from potential new production in Brazil, China, South Africa, and the United States.[25]

The Ferrovanadium and Nitrided Vanadium Industry in Russia

Evraz Vanady Tula described itself as the primary supplier in the Russian market, accounting for approximately *** percent of Russian consumption. It described the only other producer, Chusovskoy, as having *** production capacity and operating now primarily ***. Chusovskoy offered a similar characterization of the Russian market. ***.

The Ferrovanadium and Nitrided Vanadium Industry in Canada

Canada has no restrictions on imports of ferrovanadium from any sources. The sole producer of ferrovanadium in Canada, Masterloy, toll processes imported vanadium pentoxide into ferrovanadium, which it ships to various domestic and foreign markets including to the United States.[26]

The Ferrovanadium and Nitrided Vanadium Industry in South Africa

South Africa is the leading producer of ferrovanadium and nitrided vanadium outside of China. The South African industry comprises at least three major producers: Evraz Vametco, which is a producer of nitrided vanadium that it markets under the trade name "Nitrovan;" Xstrata, and Duferco Vanchem Vanadium Products. Duferco Vanchem produces for its own account and manages a 50 percent owned subsidiary, South Africa Japan Vanadium (SAJV) that produces ferrovanadium exclusively for the Japanese market. Exports from South Africa of ferrovanadium are primarily to Europe and Japan. Reported production of ferrovanadium and nitrided vanadium in 2011 was:[27]

Evraz Vametco	3,960 short tons (nitrided vanadium)
Xstrata	4,357 short tons
Duferco Vanchem	4,575 short tons
Total	12,892 short tons

[24] In this section, the unit of measure is tons of alloy, rather than tons of contained vanadium.

[25] Roskill, *Vanadium: Global industry markets and outlook, 12th edition 2010.* http://www.roskill.com/reports/steel-alloys/vanadium.

[26] Evraz argues that Canada is an example of its business strategy, noting that "Evraz was serving the Canadian market with ferrovanadium toll-processed for it at Bear Metallurgical in Butler, PA, until AMG Vanadium filed a circumvention petition in the United States. Yet, even when Evraz was prevented from continuing its conversion business in the United States, it did not supply Canada with ferrovanadium from Russia. Instead, Evraz met its Canadian obligations principally by converting vanadium pentoxide into ferrovanadium in Canada and in the Czech Republic." Evraz's posthearing brief, p. 17.

[27] Annual reports of Evraz, Xstrata, and Duferco. Duferco data is for fiscal year ending September 30, 2011. All data reported in metric tons in source reports and converted to short tons. Vametco data were reported in quantity of vanadium content and were converted to quantity of alloy using estimated vanadium content of 80 percent.

The Ferrovanadium and Nitrided Vanadium Industry in Austria

Treibacher Industrie is an integrated producer of ferrovanadium in Austria. Treibacher has a joint venture, Hochvanadium AG, with Evraz Highveld, and processes vanadium slag from Highveld to produce ferrovanadium and other vanadium products.[28]

The Ferrovanadium and Nitrided Vanadium Industry in China

China has two major producers of ferrovanadium and possibly hundreds of small producers and converters. Although vanadium consumption per ton of steel production is much lower in China than in the rest of the world–about 0.05 pounds per ton in comparison to about 0.17 pounds per ton in the United States and about 0.14 pounds per ton in Western Europe, consumption of ferrovanadium and nitrided vanadium in China during 2011 could have been nearly 25,000 tons, based upon steel production of 750 million tons.[29]

The Ferrovanadium and Nitrided Vanadium Industry in Czech Republic

Evraz Nikom is the only known producer of ferrovanadium or nitrided vanadium in the Czech Republic. Nikom was acquired by Evraz in 2007.[30] Nikom can produce more than *** pounds per year of contained vanadium.[31] Nikom converts vanadium pentoxide from Evraz Vanady Tula into ferrovanadium, primarily for the EU market.[32] Nikom uses ***.[33]

The Ferrovanadium and Nitrided Vanadium Industry in Korea

There are at least two producers of ferrovanadium in Korea: Korvan and Woojin. Both convert vanadium pentoxide imported primarily from China, into ferrovanadium.

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[28] Evraz web site. http://evraz.com/busibess/vanadium/?factory=10680. Accessed May 31, 2012.

[29] Consumption rates based on Robert M Bunting, *The Recession's Effect on Vanadium*, Presentation at Metal Bulletin Asian Ferro-Alloys Conference, March 27, 2009.

[30] Evraz web site http://www.evraz.com/business/vanadium/?factory=10136. Accessed July 12, 2012.

[31] Evraz's posthearing brief, Appendix 5.

[32] "Evraz Vanady Tula is the only Evraz company that produces significant amounts of vanadium. From its production, it must supply its own needs for material to be converted into ferrovanadium for the Russian market and those of Nikom for material to be converted into ferrovanadium for the EU market, as well as material supplied to third-party processors to be converted into ferrovanadium for the North American market." Evraz's posthearing brief, app. 1, p. 2.

[33] Evraz's posthearing brief, Appendices 4, 6, and 7.

Global Exports of Ferrovanadium

Reported data on exports of ferrovanadium and nitrided vanadium are presented in table IV-5. Although China is the largest producer of ferrovanadium and nitrided vanadium, its exports are less than those from South Africa and Austria because a greater share of the Chinese product is consumed in its home market. South Africa and Austria, however, have relatively small home markets for ferrovanadium and nitrided vanadium and are primarily exporters. South Africa was the leading exporting nation and accounted for *** percent of world exports in 2011. Austria was the second-largest exporter and accounted for 21 percent. Other leading countries were Czech Republic, Korea, Canada, and Russia.

Table IV-5
Ferrovanadium and nitrided vanadium: Reporting country exports, 2006-11

Reporting country	Calendar year					
	2006	2007	2008	2009	2010	2011
	Quantity (*short tons*)					
South Africa	***	***	***	***	***	***
Austria	12,125	11,023	12,125	6,614	9,921	8,818
China	5,176	2,292	6,458	2,760	6,613	7,469
Czech Republic	3,046	1,856	3,117	2,059	3,767	5,074
Korea	1,668	5,832	4,948	1,079	2,188	3,228
Canada	398	623	971	332	660	1,064
Russia	6,666	6,449	3,524	1,188	291	764
United States	719	368	575	1,190	999	617
All others	***	***	***	***	***	***
Total	44,595	43,521	43,469	23,880	39,020	41,028

Note.–Original data published in metric tons, which were converted to short tons using a conversion factor of 1.102311.
Note.--Data are for HTS 7202.92 from all countries, and include HTS 2849.90 from South Africa.
Note.–Export data are not reported by Austria. Data for Austria are import data for all countries of product from Austria (mirror exports.)

Source: Compiled from Global Trade Atlas. Reported data from South Africa contain obvious errors. Therefore, GTA data for South Africa exports were adjusted in consultation with ***. Substantial quantities of exports reported from Netherlands are not included in this table because they are believed to comprise re-exports of product imported from other sources.

Global Exports of Vanadium Pentoxide and Other Oxides of Vanadium

Vanadium pentoxide is not subject product in this review, but it is an important intermediate product used to produce ferrovanadium and nitrided vanadium as well as other vanadium products. Ferrovanadium and nitrided vanadium account for 90 percent or more of the usage of vanadium, and alloys for titanium account for about one-half of the remaining 10 percent. Vanadium chemicals that have a variety of uses, such as for catalysts, batteries, and many other uses account for the balance. Vanadium pentoxide is produced primarily in the countries that are the sources of vanadium resources. Table IV-6 shows reported exports of vanadium pentoxide and other vanadium oxides to all importing nations. China (32 percent in 2011), South Africa (29 percent), and Russia (27 percent) accounted for almost all of vanadium oxide exports.

Table IV-6
Vanadium oxides and hydroxides: Reporting country exports, 2006-11

Reporting country	Calendar year					
	2006	2007	2008	2009	2010	2011
	Quantity (*short tons*)					
China	11,497	21,528	16,598	4,737	7,788	9,913
South Africa	12,664	10,369	4,165	2,694	6,127	8,922
Russia	6,041	4,431	7,093	3,505	8,245	8,554
United States	1,375	1,231	1,709	1,205	1,743	509
All others	1,172	7,799	3,380	1,537	1,627	3,320
Total	32,749	45,359	32,944	13,677	25,530	31,219

Note.–Original data published in metric tons, which were converted to short tons using a conversion factor of 1.102311. Vanadium pentoxide contains about 56 percent vanadium.

Note.--Data are for HTS 2825.30 from all countries.

Source: Compiled from Global Trade Atlas.

Demand

Table IV-7 presents global imports of ferrovanadium by country and region. The United States is the third-largest importer of ferrovanadium, behind the EU and Japan in 2011. Global ferrovanadium imports have grown from 2009 lows through 2011, but remain below 2008 levels.

Table IV-7
Ferrovanadium: Reporting country imports, 2006-11

Reporting country	Calendar year					
	2006	2007	2008	2009	2010	2011
	Quantity (*short tons*)					
EU27 (External Trade)	9,254	9,700	7,685	3,254	6,337	6,027
Japan	6,303	6,055	7,046	2,991	5,056	5,282
United States	2,980	3,085	3,935	525	1,892	3,165
South Korea	805	667	856	2,777	3,549	2,973
Ukraine	2,409	2,183	1,367	1,209	1,319	2,118
Taiwan	916	1,165	1,413	897	1,403	1,668
Brazil	1,799	1,886	2,093	577	1,567	1,301
Turkey	532	520	583	356	288	651
Switzerland	91	79	57	90	604	600
Canada	926	540	718	252	577	575
All others	2,508	3,619	3,980	4,842	3,530	1,853
Total	28,522	29,500	29,735	17,770	26,123	26,213

Note.–Original data published in metric tons, which were converted to short tons using a conversion factor of 1.102311.

Note.--Data are for HTS 7202.92 from all countries. All other includes estimates for nonreporting countries and obviously incorrect data. Data do not include nitrided vanadium.

Source: Compiled from Global Trade Atlas.

Atlantic Ltd. estimated that global ferrovanadium consumption will be approximately *** in 2012.[34] ***.[35] Market participants often describe recent and future demand for ferrovanadium as being driven by China, which is both the world's largest producer and consumer of vanadium.[36]

U.S. and Russian producers, as well as importers, were asked to describe demand for ferrovanadium and/or nitrided vanadium in Russian and other foreign markets. Most described global demand as fluctuating or increasing, with trends tied to trends in global demand for steel, especially in developing Asia.

[34] "Australia's Atlantic sees 14,000 mt ferrovanadium deficit in US market." Metals Week, February 6, 2012, and ***.

[35] ***.

[36] "Australia's Atlantic sees 14,000 mt ferrovanadium deficit in US market." Metals Week, February 6, 2012, and Roskill, *Vanadium: Global industry markets and outlook, 12th edition 2010.* http://www.roskill.com/reports/steel-alloys/vanadium.

***. However, *** reported increased global demand for ferrovanadium and/or nitrided vanadium due to increased global demand for HSLA steel. *** also described increased demand for vanadium in China. Similarly, *** indicated that demand outside the United States had grown since 2006, both because of increased demand due to Chinese infrastructure growth and because of increased demand for HSLA steel from China and India. *** added that increased intensity of vanadium in steel added to this growth in demand for ferrovanadium and/or nitrided vanadium.

*** anticipated increasing demand for ferrovanadium and/or nitrided vanadium in Russia and third countries due to an anticipated increase in steel production and (***) increased demand for structural steel using vanadium alloys. *** also forecast increased demand for ferrovanadium and/or nitrided vanadium outside the United States due to increased use of steel that requires vanadium and increased amounts of vanadium in steel. *** anticipated fluctuating global demand for ferrovanadium and/or nitrided vanadium based on global steel production. In Russia in particular, Evraz anticipated higher demand for ferrovanadium as Russian steel consumption grows due to infrastructure investments, and as vanadium intensity in Russian steel increases.[37] Evraz also anticipates growth in steel production in CIS countries, along with *** vanadium intensity.[38]

Among purchasers, three described fluctuating demand outside the United States since 2006, attributing the fluctuations to fluctuations (e.g., the economic crisis in 2009) in the global economy and global steel demand. Three other purchasers reported no change in demand outside the United States, and one other described increasing demand from China and India even with fluctuations in the wider global economy. Two purchasers anticipated increasing global demand (due to increasing demand for *** and increased demand from the developing world), two anticipated fluctuating global demand (due to steel demand), and three anticipated no change in global demand.

Prices

Producers and importers were asked to compare prices of ferrovanadium and/or nitrided vanadium in U.S. and foreign markets. Producers were more likely than importers to describe U.S. prices as higher than foreign prices. ***.

Among importers and foreign producers, *** described U.S. and non-U.S. prices as basically the same when duty and freight costs are taken into account. *** stated that prices in *Ryan's Notes* (for the North American market) and *Metal Bulletin* (for the European and other world markets) tended to fluctuate in tandem with one another. However, *** indicated that U.S. antidumping duty orders on product from China, Russia, and South Africa had left U.S. prices "clearly at a premium," and cited the difference between prices in *Ryan's Notes* and *Metal Bulletin*. ***. *** stated that there was no difference in price between the European, Ukrainian, and Russian markets.

Parties disagreed over relative pricing between the U.S. and Canadian ferrovanadium markets. AMG described the Canadian market as much smaller than the U.S. market,[39] while Evraz described it as nonetheless "significant" at approximately 20-25 percent of the size of the U.S. market.[40] Gulf/Bear stated that the lack of Canadian antidumping orders on Chinese and South African ferrovanadium subjects that market to "intense competition."[41] AMG also noted that ***.[42] However, Evraz noted that Canada

[37] Prehearing brief of Evraz, p. 4, and hearing transcript, pp. 113-14 (Klett).

[38] Prehearing brief of Evraz, p. 8.

[39] Posthearing brief of AMG, p. 16.

[40] Posthearing brief of Evraz, p. 4.

[41] Posthearing brief of Bear/Gulf, response to questions, p. 8.

[42] Posthearing brief of AMG, p. 16.

has no restrictions on imports of Russian ferrovanadium, but described prices as "the same as U.S. prices," and often also based on formulas off of *Ryan's Notes* prices (see Part V).[43]

Regarding pricing in the European market, Evraz stated that over *** percent of its sales to EU customers over 2010-12 took place under "framework" agreements (contractual commitments) that usually last ***.[44] Evraz also provided a comparison of U.S. and EU ferrovanadium prices that alleged that differences in published prices between the two regions were "largely illusory." It stated that when factoring in transportation costs from Europe to the United States, resizing and repackaging costs, and U.S. duties (not antidumping duties), the price discrepancy between the U.S. and EU markets is reduced to near zero.[45]

Figure IV-1 shows North American and European ferrovanadium prices from *Ryan's Notes*. Appendix E contains the data for these series. The two series follow the same general pattern, with European prices often (though not always) somewhat lower.

Figure IV-1
Ferrovanadium: North American and European prices for ferrovanadium, January 2006-March 2012

* * * * * * *

[43] Posthearing brief of Evraz, p. 4 and appendix 18, and hearing transcript, p. 106 (Wiesler).

[44] Posthearing brief of Evraz, response to questions, p. 24, and appendix 21.

[45] Prehearing brief of Evraz, pp. 30-31 and exhibit 11.

PART V: PRICING AND RELATED INFORMATION

FACTORS AFFECTING PRICES

Raw Material Costs

Raw materials accounted for nearly *** of U.S. producers'[1] costs of goods sold during 2006-11, making them a key component in the pricing of ferrovanadium. The basic raw materials for producing ferrovanadium and nitrided vanadium depend on the producer. Some companies use vanadium ore to produce vanadium pentoxide, from which they then produce ferrovanadium. Others, like AMG and Gulf, use spent catalysts from oil refineries and/or ash from power plants that refine or burn petroleum that contain vanadium.[2] Still others (such as Evraz Vanady Tula)[3] make vanadium pentoxide (or even ferrovanadium directly) from steel slag.

*** described raw materials prices as a significant factor in its ferrovanadium and/or nitrided vanadium selling prices since 2006. *** indicated that there is some indirect correlation between the price of its raw materials and the selling price of its ferrovanadium because ***.

Similarly, *** described selling prices for ferrovanadium and/or nitrided vanadium as not affected substantially by changes in raw material costs, but rather by price indexes of ferrovanadium as reported by *Ryan's Notes* or *Metal Bulletin*. Importer *** stated that it had not seen any effect of raw materials on the price of ferrovanadium and/or nitrided vanadium and did not anticipate any. However, *** stated that an increase in commodity prices has caused proportional changes in its selling prices of ferrovanadium and/or nitrided vanadium.

*** forecast that continued strong demand in the aerospace industry for vanadium would keep the price of vanadium (and thus also ferrovanadium and/or nitrided vanadium) high. Australia's Atlantic Ltd. forecast that vanadium pentoxide prices could even exceed ferrovanadium prices due to high and growing demand for vanadium pentoxide in the civil aircraft and battery industries.[4] ***.[5]

Figure V-1 shows ferrovanadium prices and vanadium pentoxide prices from *Ryan's Notes* and *American Metal Market*.

Figure V-1
Ferrovanadium and vanadium pentoxide: U.S. prices of ferrovanadium and vanadium pentoxide, January 2006-April 2012

* * * * * * *

[1] For purposes of this chapter, unless otherwise indicated (***), producers include all firms that submitted producer questionnaires, ***.

[2] *Ferrovanadium from China and South Africa, Inv. Nos. 731- TA-986-987 (Final),* USITC Publication 3570, January 2003, p. V-1.

[3] Prehearing brief of Bear/Gulf, p. 13.

[4] "Australia's Atlantic sees 14,000 mt ferrovanadium deficit in US market." Metals Week, February 6, 2012.

[5] ***.

U.S. Inland Transportation Costs

U.S. producers reported that U.S. inland transportation costs were *** percent of the cost of ferrovanadium and/or nitrided vanadium, while importers were unable to report transportation costs due to a lack of imports from Russia. *** reported arranging transportation to *** customers' locations, while *** reported that *** customers arranged transportation.

Transportation Costs to the U.S. Market

In 2011, transportation costs for ferrovanadium were 2.0 percent from Austria to the U.S. market and 0.6 percent from the Czech Republic to the U.S. market.[6] No estimates are available for Russia because there have been no U.S. imports of ferrovanadium from Russia in recent years.

PRICING PRACTICES

Pricing Methods

Price Determination

*** reported that they determined their prices mostly through transaction-by-transaction negotiation and contracts. *** used only transaction-by-transaction negotiation. Four importers reported that they determined their prices through a combination of contracts and transaction-by-transaction negotiations, while *** used only transaction-by-transaction negotiations.

Prices are often determined by negotiating formula discounts off of published price lists, such as *Ryan's Notes*.[7] For example, ***.[8] AMG stated that the discount is often off of the previous month's data from *Ryan's Notes*, which collects data on spot pricing for ferrovanadium.[9] Prices are based on the vanadium content of the ferrovanadium, with differences between "grades" (see Part II) of ferrovanadium "really not relevant" for pricing.[10]

Negotiations

Four purchasers generally reported making purchases annually, one reported quarterly, four reported monthly, one reported weekly, and one reported spot purchases. However, two purchasers that purchased annually and another purchaser that reported monthly both reported being in annual supply agreements but purchasing monthly. Eleven purchasers expected this purchasing pattern to continue in 2012-13, with *** stating that it would renew its annual contract with *** if it were economical to do so. Purchasers contacted 1-12 suppliers before making purchases or purchase contracts, with six purchasers contacting 1-5 suppliers while four others contacted six or more.

Nine purchasers reported negotiations with their suppliers, while three did not. The nine that did conduct negotiations reported soliciting quotes and usually selecting the lowest bidder.

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[6] Staff compared customs and c.i.f. values for HTS statistical subheading 7202.92.

[7] Hearing transcript, p. 16 (Carter).

[8] Posthearing brief of Bear/Gulf, p. 12.

[9] Hearing transcript, p. 65 (Carter).

[10] Hearing transcript, p. 77 (Carey).

Varying Purchases Based on Price

Ten purchasers did not vary their purchases from a given supplier based on price, while two stated that they did. Among those that did, *** described the market for ferrovanadium and/or nitrided vanadium as a price-driven, commodity market. *** indicated that its typical purchase was for three months. Among those that did not vary their purchases, *** described itself as purchasing ferrovanadium and/or nitrided vanadium when it needed it, and not trying to buy more at low prices "to go long on vanadium."

Five purchasers indicated that they had not changed suppliers since 2006, but seven indicated that they had. *** reported moving from ***. Two purchasers reported adding Glencore Ltd. as a supplier, and three reported shifting suppliers due to price or value issues. *** stated that it had switched suppliers from *** to *** due to issues not only of price, but also ***.[11]

Contracts and Spot Sales

American Metal Market described the ferrovanadium market as usually divided about 90 percent under contract and 10 percent under spot.[12] *** sold *** on the spot market,[13] but *** sold *** of *** ferrovanadium and/or nitrided vanadium under short-term contracts, with the rest sold in the spot market, as included in the following tabulation.[14]

Supplier	Shares of 2011 U.S. commercial shipments *(percent)*		
	Spot sales	Short-term contract	Long-term contract
U.S. producers	***	***	***
Source: Compiled from data submitted in response to Commission questionnaires.			

For ***, short-term contracts usually did not allow price renegotiation, usually fixed price (***), and usually did not have a meet-or-release clause. Short-term contracts were ***.[15]

Importers did not import from Russia, and so could not report contract information for imports from Russia.[16] Evraz later reported that *** percent of its sales of nonsubject ferrovanadium in the U.S. market in 2011 was under contract, with the remainder as spot sales. Most of its contracts are for ***, with contracts of *** for *** customers.[17]

Sales Terms and Discounts

Three producers and three importers reported that typical sales terms for ferrovanadium and/or nitrided vanadium were on a net 30 days basis. *** required cash on delivery of documents, and *** had a variety of sales terms.

*** quoted prices on a delivered basis, while *** did so on an f.o.b. plant basis. Five importers quoted prices on a delivered basis.

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[11] ***.

[12] Thorsten Schier, "Ferroalloy contract trend causes spot to suffer," *American Metal Market*, July 3, 2012.

[13] ***.

[14] This calculation includes ***.

[15] ***.

[16] Nonetheless, ***.

[17] Posthearing brief of Evraz, appendix 1, p. 24 and appendix 22.

*** importers did not offer discounts, while ***. Additionally, importer *** used annual total volume discounts, and importer *** also reported some negotiated discounts.

U.S. Prices

Purchasers were asked to identify price leaders in the ferrovanadium and/or nitrided vanadium market. Six purchasers stated that there were no price leaders or that the question was not applicable. Three purchasers named price leaders, with all three listing Evraz East Metals. *** described Evraz East Metals as leading through its large market share and aggressive pricing. In addition to listing Evraz East Metals, *** listed ***, and *** listed ***. *** described price leaders as leading by offering heavy market price discounts against formula-driven contracts. *** described its listed price leaders as doing so through offering low prices.

Purchasers were asked to characterize how, since 2006, U.S. prices of ferrovanadium and/or nitrided vanadium have changed relative to the prices of ferrovanadium and/or nitrided vanadium imported from Russia. Four purchasers stated that U.S. and Russian prices had changed by the same amount. Five purchasers indicated that they did not know how Russian prices had changed. *** indicated that U.S. prices were now relatively lower than Russian prices.

PRICE DATA

The Commission requested U.S. producers and importers of ferrovanadium and/or nitrided vanadium to provide quarterly data for the total quantity and value of ferrovanadium and/or nitrided vanadium that was shipped to unrelated customers in the U.S. market. Data were requested for the period January 2006 to December 2011. The products for which pricing data were requested are as follows: (1) produced and sold by your firm, or (2) sold by your firm as a tollee.

***Product 1*.—Grade 40-60 percent ferrovanadium, 2" by down**

***Product 2*.—Grade 75-85 percent ferrovanadium, 2" by down**

***Product 3*.—Nitrided vanadium, 2" by down**

Four U.S. producers[18] and no importers provided pricing data for sales of the requested products, although not all firms reported pricing for all products for all quarters. Pricing data reported by these firms accounted for *** percent of U.S. producers' commercial shipments of ferrovanadium and/or nitrided vanadium in 2011.

*** was the *** to provide pricing data for product 1, ***. *** provided data for product 2. No producers nor importers provided data for U.S.- or Russian-produced product 3.

Pricing data are presented in tables V-1 through V-2 and figure V-2. Table V-3 presents a summary of price movements during the period for which data were collected.

[18] ***.

Price Trends

All the U.S. pricing data series, for all products and from both producers and tollees, show the same trends. Prices were stable from 2006 to early 2008, before increasing sharply in mid 2008. That sharp increase was followed by an even sharper decrease in late 2008 and 2009. From early 2009 until late 2011, prices increase steadily, although not enough to return to 2006 levels.

When pricing data for product 2 are separated into data from *** versus U.S. tollees ***, there are few differences in price levels or price trends. However, ***.

Table V-1
Ferrovanadium and nitrided vanadium: Weighted-average f.o.b. prices and quantities of domestic product 1, by quarters, January 2006-December 2011

* * * * * * *

Table V-2
Ferrovanadium and nitrided vanadium: Weighted-average f.o.b. prices and quantities of domestic product 2, by quarters, January 2006-December 2011

* * * * * * *

Figure V-2
Ferrovanadium and nitrided vanadium: Weighted-average f.o.b. prices and quantities of products 1 and 2, January 2006- December 2011

* * * * * * *

Table V-3
Ferrovanadium and nitrided vanadium: Summary of weighted-average f.o.b. prices for products 1 and 2 from the United States

* * * * * * *

Price Comparisons

There have not been any price comparisons available in any of the reviews of the orders on ferrovanadium and nitrided vanadium from Russia. Table V-4 presents margins of underselling and overselling for the period January 1992-December 1994 (the period for which pricing data were requested in the original investigations).

Table V-4
Ferrovanadium and nitrided vanadium: Instances of underselling/overselling and the range and average of margins, January 1992-December 1994

	Underselling			Overselling		
	Number of instances	Range (*percent*)	Average margin (*percent*)	Number of instances	Range (*percent*)	Average margin (*percent*)
Russia	5	***	***	9	***	***
Total	**5**	*******	*******	**9**	*******	*******

Source: Staff Report to the Commission, Investigations Nos. 731-TA-702 (Final), June 15, 1995, p. I-58.

Recent Price Announcements

Vanadium prices have a reputation for being volatile.[19] In January 2012, *Metal Bulletin* reported that the spot market for ferrovanadium was showing more activity than in 2011, a year in which most producers were locked in contracts. On the other hand, "one large southern steelmaker" had not put as much material under contract in 2012 as it normally did, resulting in higher anticipated activity in the spot market.[20] By March 2012, *American Metal Market* was attributing a price rise from $13-14 per pound up to $15-16 per pound to this steelmaker purchasing more in the spot market, possibly including a rare half-truckload purchase.[21] In April 2012, *American Metal Market* reported that the U.S. ferrovanadium market may be developing a two-tiered pricing structure in which South Korean product sells at approximately $14 per pound while product from other sources sells at higher prices.[22]

[19] Roskill, *Vanadium: Global industry markets and outlook, 12th edition 2010.* http://www.roskill.com/reports/steel-alloys/vanadium

[20] "US ferrovanadium spot market outlook brightens," *Metal Bulletin*, January 21, 2012. ***.

[21] Thorsten Schier, "Ferrovanadium prices rise on brisk spot mart activity." *American Metal Market*, March 23, 2012.

[22] Thorsten Schier, "Fissures seen in FeV, pricing structure develops dual tiers." *American Metal Market*, April 12, 2012.

APPENDIX A

FEDERAL REGISTER NOTICES AND THE COMMISSION'S STATEMENT ON ADEQUACY

INTERNATIONAL TRADE COMMISSION

[Investigation No. 731–TA–702; Third Review]

Ferrovanadium and Nitrided Vanadium From Russia; Institution of a Five-Year Review Concerning the Antidumping Duty Order on Ferrovanadium and Nitrided Vanadium From Russia

AGENCY: United States International Trade Commission.

ACTION: Notice.

SUMMARY: The Commission hereby gives notice that it has instituted a review 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 order on ferrovanadium and nitrided vanadium from Russia 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 consideration, the deadline for responses is October 3, 2011. Comments on the adequacy of responses may be filed with the Commission by November 10, 2011. For further information concerning the conduct of this review 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), as most recently amended at 74 FR 2847 (January 16, 2009).

DATES: *Effective Date:* September 1, 2011.

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 this review may be viewed on the Commission's electronic docket (EDIS) at *http://edis.usitc.gov.*

SUPPLEMENTARY INFORMATION:

Background.—On July 10, 1995, the Department of Commerce (''Commerce'') issued an antidumping duty order on imports of ferrovanadium and nitrided vanadium from Russia (60 FR 35550). Following first five-year reviews by Commerce and the Commission, effective June 7, 2001, Commerce issued a continuation of the antidumping duty order on imports of ferrovanadium and nitrided vanadium from Russia (66 FR 30694). Following second five-year reviews by Commerce and the Commission, effective October 13, 2006, Commerce issued a continuation of the antidumping duty order on imports of ferrovanadium and nitrided vanadium from Russia (71 FR 60475). The Commission is now conducting a third review to determine whether revocation of the order would be likely to lead to

[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. 11–5–256, expiration date June 30, 2014. Public reporting burden for the request is estimated to average 15 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.

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 a full review or an expedited review. The Commission's determination in any expedited review will be based on the facts available, which may include information provided in response to this notice.

Definitions.—The following definitions apply to this review:

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

(2) The *Subject Country* in this review is Russia.

(3) The *Domestic Like Product* is the domestically produced product or products which are like, or in the absence of like, most similar in characteristics and uses with, the *Subject Merchandise.* In its original determination, the Commission found one *Domestic Like Product* including both ferrovanadium and nitrided vanadium. Noting in its full first five-year review determination and its expedited second five-year review determination that nitrided vanadium had not been produced in the United States since 1992, the Commission determined that, based on the record, the product most like ferrovanadium and most similar in characteristics and uses to nitrided vanadium that was produced in the United States was ferrovanadium. Accordingly, the Commission found one *Domestic Like Product* consisting of ferrovanadium. One Commissioner defined the *Domestic Like Product* differently in the first and second five-year review determinations.

(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 determination, the Commission found one *Domestic Industry* consisting of ferrovanadium and nitrided vanadium producers, including toll producer Bear Metallurgical Corp. (''Bear''). In its full first five-year review determination, the Commission found one *Domestic Industry* consisting of ferrovanadium producers Bear and Metallurg Vanadium Corp. (''MVC'') (formerly Shieldalloy Metallurgical Corp.). The Commission, however, did not include tollees Gulf Chemical & Metallurgical Corp. and U.S. Vanadium Corp. in the *Domestic Industry* because those firms produced vanadium pentoxide, an intermediate product, not ferrovanadium, the *Domestic Like Product.* Two Commissioners defined the *Domestic Industry* differently in the first five-year review determination. In its expedited second five-year review determination, the Commission once again defined the *Domestic Industry* as the domestic producers of ferrovanadium: Bear and MVC.

(5) 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 review 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 review 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 review.

Former Commission employees who are seeking to appear in Commission five-year reviews are advised that they may appear in a review even if they participated personally and substantially in the corresponding underlying original investigation. The Commission's designated agency ethics official has advised that a five-year review is not considered the ''same particular matter'' as the corresponding underlying original investigation for purposes of 18 U.S.C. § 207, the post employment statute for Federal employees, and Commission rule 201.15(b) (19 CFR § 201.15(b)), 73 FR 24609 (May 5, 2008). This advice was developed in consultation with the Office of Government Ethics. Consequently, former employees are not required to seek Commission approval to appear in a review under Commission rule 19 CFR § 201.15, even if the corresponding underlying original investigation was pending when they were Commission employees. For further ethics advice on this matter, contact Carol McCue 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) of the Commission's rules, the Secretary will make BPI submitted in this review available to authorized applicants under the APO issued in the review, 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 review. 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 this review 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 October 3, 2011. Pursuant to section 207.62(b) 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 an expedited or full review. The deadline for filing such comments is November 10, 2011. 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 FR 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 review must be served on all other parties to the review (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 review 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 determination in the review.

Information To Be Provided in Response to This Notice of Institution: 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) 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 this review by providing information requested by the Commission.

(4) A statement of the likely effects of the revocation of the antidumping duty order 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 Country* that currently export or have exported *Subject Merchandise* to the United States or other countries after 2005.

(7) A list of 3–5 leading purchasers in the U.S. market for the *Domestic Like Product* and the *Subject Merchandise* (including street address, World Wide Web address, and the name, telephone number, fax number, and e-mail address of a responsible official at each firm).

(8) A list of known sources of information on national or regional prices for the *Domestic Like Product* or the *Subject Merchandise* in the U.S. or other markets.

(9) 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 2010, except as noted (report quantity data in pounds of contained vanadium and value data in U.S. dollars, f.o.b. plant). If you are a union/worker group or trade/business association, provide the information, on an aggregate basis, for the firms in which your workers are employed/ which are members of your association.

(a) Production (quantity) and, if known, an estimate of the percentage of total U.S. production of the *Domestic Like Product* accounted for by your firm's(s') production;

(b) Capacity (quantity) of your firm to produce the *Domestic Like Product* (*i.e.,* the level of production that your establishment(s) could reasonably have expected to attain during the year, assuming normal operating conditions (using equipment and machinery in place and ready to operate), normal operating levels (hours per week/weeks per year), time for downtime, maintenance, repair, and cleanup, and a typical or representative product mix);

(c) The quantity and value of U.S. commercial shipments of the *Domestic Like Product* produced in your U.S. plant(s);

(d) The quantity and value of U.S. internal consumption/company transfers of the *Domestic Like Product* produced in your U.S. plant(s); and

(e) The value of (i) Net sales, (ii) cost of goods sold (COGS), (iii) gross profit, (iv) selling, general and administrative (SG&A) expenses, and (v) operating income of the *Domestic Like Product* produced in your U.S. plant(s) (include both U.S. and export commercial sales, internal consumption, and company transfers) for your most recently completed fiscal year (identify the date on which your fiscal year ends).

(10) If you are a U.S. importer or a trade/business association of U.S. importers of the *Subject Merchandise* from the *Subject Country,* provide the following information on your firm's(s') operations on that product during calendar year 2010 (report quantity data in pounds of contained vanadium and value data in U.S. dollars). If you are a trade/business association, provide the information, on an aggregate basis, for the firms which are members of your association.

(a) The quantity and value (landed, duty-paid but not including antidumping duties) of U.S. imports and, if known, an estimate of the percentage of total U.S. imports of *Subject Merchandise from the Subject Country* accounted for by your firm's(s') imports;

(b) The quantity and value (f.o.b. U.S. port, including antidumping duties) of U.S. commercial shipments of *Subject Merchandise* imported from the *Subject Country;* and

(c) The quantity and value (f.o.b. U.S. port, including antidumping duties) of U.S. internal consumption/company transfers of *Subject Merchandise* imported from the *Subject Country.*

(11) If you are a producer, an exporter, or a trade/business association of producers or exporters of the *Subject Merchandise* in the *Subject Country,* provide the following information on your firm's(s') operations on that product during calendar year 2010 (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 the *Subject Country* accounted for by your firm's(s') production;

(b) Capacity (quantity) of your firm to produce the *Subject Merchandise* in the *Subject Country (i.e.,* the level of production that your establishment(s) could reasonably have expected to attain during the year, assuming normal operating conditions (using equipment and machinery in place and ready to operate), normal operating levels (hours per week/weeks per year), time for downtime, maintenance, repair, and cleanup, and a typical or representative product mix); and

(c) 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 the *Subject Country* accounted for by your firm's(s') exports.

(12) 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 the *Subject Country* after 2005, and significant changes, if any, that are likely to occur within a reasonably foreseeable time. Supply conditions to consider include technology; production methods; 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 the *Subject Country,* and such merchandise from other countries.

(13) (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: This review is 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.

Issued: August 25, 2011.

James R. Holbein,

Secretary to the Commission.

[FR Doc. 2011–22274 Filed 8–31–11; 8:45 am]

BILLING CODE 7020–02–P

DEPARTMENT OF COMMERCE

International Trade Administration

Initiation of Five-Year (''Sunset'') Review

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

SUMMARY: In accordance with section 751(c) of the Tariff Act of 1930, as amended (''the Act''), the Department of Commerce (''the Department'') is automatically initiating a five-year review (''Sunset Review'') of the antidumping duty orders listed below. The International Trade Commission (''the Commission'') is publishing concurrently with this notice its notice of *Institution of Five-Year Review* which covers the same orders.

DATES: *Effective Date:* September 1, 2011.

FOR FURTHER INFORMATION CONTACT: The Department official identified in the *Initiation of Review* section below at AD/CVD Operations, Import Administration, International Trade Administration, U.S. Department of Commerce, 14th Street and Constitution Avenue, NW., Washington, DC 20230. For information from the Commission contact Mary Messer, Office of Investigations, U.S. International Trade Commission at (202) 205–3193.

SUPPLEMENTARY INFORMATION:

Background

The Department's procedures for the conduct of Sunset Reviews are set forth in its Procedures for Conducting Five-Year (''Sunset'') Reviews of Antidumping and Countervailing *Duty Orders,* 63 FR 13516 (March 20, 1998) and 70 FR 62061 (October 28, 2005). Guidance on methodological or analytical issues relevant to the Department's conduct of Sunset Reviews is set forth in the Department's Policy Bulletin 98.3—*Policies Regarding the Conduct of Five-year (''Sunset'') Reviews of Antidumping and Countervailing Duty Orders: Policy Bulletin,* 63 FR 18871 (April 16, 1998).

Initiation of Review

In accordance with 19 CFR 351.218(c), we are initiating the Sunset Review of the following antidumping duty orders:

DOC Case No.	ITC Case No.	Country	Product	Department contact
A–821–807	731–TA–702	Russia	Ferrovanadium and Nitrided Vanadium (3rd Review).	David Goldberger (202) 482–4136.
A–570–831	731–TA–683	PRC	Fresh Garlic (3rd Review)	Dana Mermelstein (202) 482–1391.
A–570–835	731–TA–703	PRC	Furfuryl Alcohol (3rd Review)	Julia Hancock (202) 482–1394.

Filing Information

As a courtesy, we are making information related to Sunset proceedings, including copies of the pertinent statute and Department's regulations, the Department schedule for Sunset Reviews, a listing of past revocations and continuations, and current service lists, available to the public on the Department's Internet Web site at the following address: *http://ia.ita.doc.gov/sunset/.* All submissions in these Sunset Reviews must be filed in accordance with the Department's regulations regarding format, translation, and service of documents. These rules can be found at 19 CFR 351.303.

This notice serves as a reminder that any party submitting factual information in an AD/CVD proceeding must certify to the accuracy and completeness of that information. *See* section 782(b) of the Act. Parties are hereby reminded that revised certification requirements are in effect for company/government officials as well as their representatives in all AD/CVD investigations or proceedings initiated on or after March 14, 2011. *See Certification of Factual Information to Import Administration During Antidumping and Countervailing Duty Proceedings: Interim Final Rule,* 76 FR 7491 (February 10, 2011) (''*Interim Final Rule*'') amending 19 CFR 351.303(g)(1) & (2). The formats for the revised certifications are provided at the end of the *Interim Final Rule.* The Department intends to reject factual submissions in investigations/proceedings initiated on or after March 14, 2011 if the submitting party does not comply with the revised certification requirements.

Pursuant to 19 CFR 351.103(d), the Department will maintain and make available a service list for these proceedings. To facilitate the timely preparation of the service list(s), it is requested that those seeking recognition as interested parties to a proceeding contact the Department in writing within 10 days of the publication of the Notice of Initiation.

Because deadlines in Sunset Reviews can be very short, we urge interested parties to apply for access to proprietary information under administrative protective order (''APO'') immediately following publication in the **Federal Register** of this notice of initiation by filing a notice of intent to participate. The Department's regulations on submission of proprietary information and eligibility to receive access to business proprietary information under APO can be found at 19 CFR 351.304–306.

Information Required From Interested Parties

Domestic interested parties defined in section 771(9)(C), (D), (E), (F), and (G) of the Act and 19 CFR 351.102(b) wishing to participate in a Sunset Review must respond not later than 15 days after the date of publication in the **Federal Register** of this notice of initiation by filing a notice of intent to participate. The required contents of the notice of intent to participate are set forth at 19 CFR 351.218(d)(1)(ii). In accordance with the Department's regulations, if we do not receive a notice of intent to participate from at least one domestic interested party by the 15-day deadline, the Department will automatically revoke the order without further review.

See 19 CFR 351.218(d)(1)(iii).

If we receive an order-specific notice of intent to participate from a domestic interested party, the Department's regulations provide that *all parties* wishing to participate in the Sunset Review must file complete substantive responses not later than 30 days after the date of publication in the **Federal Register** of this notice of initiation. The required contents of a substantive response, on an order-specific basis, are set forth at 19 CFR 351.218(d)(3). Note that certain information requirements differ for respondent and domestic parties. Also, note that the Department's information requirements are distinct from the Commission's information requirements. Please consult the Department's regulations for information regarding the Department's conduct of Sunset Reviews.[1] Please consult the Department's regulations at 19 CFR part 351 for definitions of terms and for other general information concerning antidumping and countervailing duty proceedings at the Department.

This notice of initiation is being published in accordance with section 751(c) of the Act and 19 CFR 351.218(c).

Dated: August 25, 2011.

Christian Marsh,

Deputy Assistant Secretary for Antidumping and Countervailing Duty Operations.

[FR Doc. 2011–22465 Filed 8–31–11; 8:45 am]

BILLING CODE 3510–DS–P

[1] In comments made on the interim final sunset regulations, a number of parties stated that the proposed five-day period for rebuttals to substantive responses to a notice of initiation was insufficient. This requirement was retained in the final sunset regulations at 19 CFR 351.218(d)(4). As provided in 19 CFR 351.302(b), however, the Department will consider individual requests to extend that five-day deadline based upon a showing of good cause.

DEPARTMENT OF COMMERCE

International Trade Administration

[A–821–807]

Final Results of Expedited Sunset Review: Ferrovanadium and Nitrided Vanadium From Russia

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

SUMMARY: On September 1, 2011, the Department of Commerce (the Department) initiated the third sunset review of the antidumping duty order on ferrovanadium and nitrided vanadium from the Russian Federation (Russia), pursuant to section 751(c) of the Tariff Act of 1930, as amended (the Act). The Department has conducted an expedited (120-day) sunset review for this order pursuant to section 751(c)(3)(B) of the Act and 19 CFR 351.218(e)(1)(ii)(C)(2). As a result of this sunset review, the Department finds that revocation of the antidumping duty order would be likely to lead to continuation or recurrence of dumping.

FOR FURTHER INFORMATION CONTACT: David Goldberger, AD/CVD Operations, Office 2, Import Administration, International Trade Administration, U.S. Department of Commerce, 14th Street and Constitution Avenue NW., Washington, DC 20230; telephone: (202) 482–4136.

SUPPLEMENTARY INFORMATION:

Background

On September 1, 2011, the Department published the notice of initiation of the third sunset review of the antidumping duty order on ferrovanadium and nitrided vanadium from Russia, pursuant to section 751(c) of the Act. *See Initiation of Five-Year (''Sunset'') Review,* 76 FR 54430 (September 1, 2011).

The Department received notices of intent to participate from the following domestic parties within the deadline specified in 19 CFR 351.218(d)(1)(i): AMG Vanadium Inc., and Gulf Chemical and Metallurgical Corporation and its wholly owned subsidiary, Bear Metallurgical Corporation (collectively ''the domestic interested parties''). The domestic interested parties claimed interested party status under section 771(9)(C) of the Act, as manufacturers or wholesalers of a domestic like product in the United States.

The Department received complete substantive responses to the notice of initiation from the domestic interested parties within the 30-day deadline specified in 19 CFR 351.218(d)(3)(i). We received no response from any respondent interested parties. As a result, pursuant to section 751(c)(3)(B) of the Act and 19 CFR 351.218(e)(1)(ii)(C)(2), the Department conducted an expedited (120-day) sunset review of the antidumping duty order.

Scope of the Order

The products covered by the order are ferrovanadium and nitrided vanadium, regardless of grade, chemistry, form or size, unless expressly excluded from the scope of the order. Ferrovanadium includes alloys containing ferrovanadium as the predominant element by weight (*i.e.,* more weight than any other element, except iron in some instances) and at least 4 percent by weight of iron. Nitrided vanadium includes compounds containing vanadium as the predominant element, by weight, and at least 5 percent, by weight, of nitrogen.

Excluded from the scope of the order are vanadium additives other than ferrovanadium and nitrided vanadium, such as vanadium-aluminum master alloys, vanadium chemicals, vanadium waste and scrap, vanadium-bearing raw materials, such as slag, boiler residues, fly ash, and vanadium oxides.

The products subject to the order are currently classifiable under subheadings 2850.00.20, 7202.92.00, 7202.99.5040, 8112.40.3000, and 8112.40.6000 of the Harmonized Tariff Schedule of the United States (''HTSUS''). Although the HTSUS subheadings are provided for convenience and customs purposes, our written description of the scope is dispositive.

Analysis of Comments Received

All issues raised in this review are addressed in the ''Issues and Decision Memorandum for the Expedited Sunset Review of the Antidumping Duty Order on Ferrovanadium and Nitrided Vanadium from Russia'' from Christian Marsh, Deputy Assistant Secretary for Antidumping and Countervailing Duty Operations, to Paul Piquado, Assistant Secretary for Import Administration (Decision Memorandum), which is hereby adopted by, and issued concurrently with, this notice. The issues discussed in the Decision Memorandum include the likelihood of continuation or recurrence of dumping and the magnitude of the margins likely to prevail if the order were revoked. The Decision Memorandum is a public document and is on file electronically via Import Administration's Antidumping and Countervailing Duty Centralized Electronic Services System (''IA ACCESS''). Access to IA ACCESS is available in the Central Records Unit, room 7046 of the main Department of Commerce building. In addition, a complete version of the Decision Memorandum can be accessed on the Internet at *http://www.trade.gov/ia/.* The signed Decision Memorandum and the electronic versions of the Decision Memorandum are identical in content.

Final Results of Review

We determine that revocation of the antidumping duty order on ferrovanadium and nitrided vanadium from Russia would be likely to lead to continuation or recurrence of dumping at the following weighted-average percentage margins:

Exporter/Manufacturer	*Margin Percentage*
Galt Alloys, Inc	3.75
Gesellschaft für Elektrometallurgie m.b.H. (and its related companies Shieldalloy Metallurgical Corporation and Metallurg, Inc.)	11.72
Odermet	10.10
All Other Russian Manufacturers and Exporters[1]	108.00

[1] Prior to Russia's graduation to market-economy status, this rate was referred to as the Russia-wide rate.

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

We are issuing and publishing the results and notice in accordance with sections 751(c), 752(c), and 777(i)(1) of the Act.

Dated: December 13, 2011.

Paul Piquado,

Assistant Secretary for Import Administration.

[FR Doc. 2011–32552 Filed 12–19–11; 8:45 am]

BILLING CODE 3510–DS–P

INTERNATIONAL TRADE COMMISSION

[Investigation No. 731–TA–702 (Third Review)]

Ferrovanadium and Nitrided Vanadium From Russia; Determination To Conduct a Full Five-Year Review

AGENCY: United States International Trade Commission.

ACTION: Notice

SUMMARY: The Commission hereby gives notice that it will proceed with a full review 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 order on ferrovanadium and nitrided vanadium from Russia would be likely to lead to continuation or recurrence of material injury within a reasonably foreseeable time. A schedule for the review will be established and announced at a later date. For further information concerning the conduct of this review 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).

DATES: *Effective Date:* December 5, 2011.

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 this review may be viewed on the Commission's electronic docket (EDIS) at *http://edis.usitc.gov.*

SUPPLEMENTARY INFORMATION: On December 5, 2011, the Commission determined that it should proceed to a full review in the subject five-year review pursuant to section 751(c)(5) of the Act. The Commission found that both the domestic and respondent interested party group responses to its notice of institution (76 FR 54490, September 1, 2011) were adequate. 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: This review is 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: December 15, 2011.

James R. Holbein,

Secretary to the Commission.

[FR Doc. 2011–32594 Filed 12–20–11; 8:45 am]

BILLING CODE 7020–02–P

INTERNATIONAL TRADE COMMISSION

[Investigation No. 731–TA–702 (Third Review)]

Ferrovanadium and Nitrided Vanadium From Russia; Scheduling of a Full Five-Year Review

AGENCY: United States International Trade Commission.

ACTION: Notice.

SUMMARY: The Commission hereby gives notice of the scheduling of a full review 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 order on ferrovanadium and nitrided vanadium from Russia would be likely to lead to continuation or recurrence of material injury within a reasonably foreseeable time. For further information concerning the conduct of this review 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).

DATES: *Effective Date:* February 2, 2012.

FOR FURTHER INFORMATION CONTACT: Joanna Lo ((202) 205–1888), Office of Investigations, U.S. International Trade Commission, 500 E Street SW., Washington, DC 20436. Hearing-impaired persons can obtain information on this matter by contacting the Commission's TDD terminal on (202) 205–1810. Persons with mobility impairments who will need special assistance in gaining access to the Commission should contact the Office of the Secretary at (202) 205–2000. General information concerning the Commission may also be obtained by accessing its Internet server (*http://www.usitc.gov*). The public record for this review may be viewed on the Commission's electronic docket (EDIS) at *http://edis.usitc.gov.*

SUPPLEMENTARY INFORMATION:

Background. On December 5, 2011, the Commission determined that responses to its notice of institution of the subject five-year review were such that a full review pursuant to section 751(c)(5) of the Act should proceed (76 FR 79214, December 21, 2011). 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 review 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 this review 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 review 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 review.

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 this review available to authorized applicants under the APO issued in the review, 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 review. A party granted access to BPI following publication of the Commission's notice of institution of the review 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 review will be placed in the nonpublic record on June 1, 2012, and a public version will be issued thereafter, pursuant to section 207.64 of the Commission's rules.

Hearing. The Commission will hold a hearing in connection with the review beginning at 9:30 a.m. on June 21, 2012, 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 June 14, 2012. 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 June 18, 2012, 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 review 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 June 12, 2012. 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 June 29, 2012; 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 review may submit a written statement of information pertinent to the subject of the review on or before June 29, 2012. On July 30, 2012, the Commission will make available to parties all information on which they have not had an opportunity to comment. Parties may submit final comments on this information on or before August 1, 2012, 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. Please be aware that the Commission's rules with respect to electronic filing have been amended. The amendments took effect on November 7, 2011. See 76 FR 61937 (Oct. 6, 2011) and the newly revised Commission's Handbook on E-Filing, available on the Commission's web site at *http://edis.usitc.gov.*

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 review must be served on all other parties to the review (as identified by either the public or BPI service list), and a certificate of service must be timely filed. The Secretary will not accept a document for filing without a certificate of service.

Authority: This review is 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.

Issued: February 2, 2012.

By order of the Commission.

James R. Holbein,

Secretary to the Commission.

[FR Doc. 2012–2823 Filed 2–7–12; 8:45 am]

BILLING CODE 7020–02–P

EXPLANATION OF COMMISSION DETERMINATIONS ON ADEQUACY

in

Ferrovanadium and Nitrided Vanadium from Russia
Inv. No. 731-TA-702 (Third Review)

On December 5, 2011, the Commission determined that it should proceed to a full review in the subject five-year review pursuant to section 751(c)(5) of the Tariff Act of 1930 (19 U.S.C. § 1675(c)(5)).[1]

The Commission received individually adequate responses, containing company-specific information, from Gulf Chemical and Metallurgical Corp. ("Gulf"), a wholesaler of ferrovanadium; Bear Metallurgical Co. ("Bear"), a wholly owned subsidiary of Gulf and U.S. producer of ferrovanadium; and AMG Vanadium, Inc. ("AMG Vanadium"), a U.S. producer of ferrovanadium. Because Gulf, Bear, and AMG Vanadium account for a significant percentage of domestic ferrovanadium production, the Commission determined that the domestic interested party group response was adequate.

The Commission received individually adequate responses from the EVRAZ Group, S.A. and from its subsidiaries OAO Vanady-Tula (a foreign producer of the subject merchandise) and East Metals AG, East Metals (North America), LLC, and Stratcor, Inc. (U.S. wholesalers of the domestic like product). Because these respondents account for a significant share of the production of subject merchandise in Russia, the Commission found that the respondent interested party group response was adequate.

Because both group responses were adequate, the Commission determined to conduct a full review in this proceeding.

A record of the Commissioners' votes is available from the Office of the Secretary and on the Commission's website (http://www.usitc.gov).

[1] Chairman Deanna Tanner Okun did not participate.

APPENDIX B

HEARING WITNESSES

CALENDAR OF PUBLIC HEARING

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

Subject:	Ferrovanadium and Nitrided Vanadium from Russia
Inv. No.:	731-TA-702 (Third Review)
Date and Time:	June 21, 2012 - 9:30 a.m.

Sessions were held in connection with this review in the Main Hearing Room, 500 E Street (room 101), S.W., Washington, D.C.

OPENING REMARKS:

In Support of Continuation of Order (**William D. Kramer**, DLA Piper LLP (US)
In Opposition to Continuation of Order (**J. Kevin Horgan**, DeKieffer & Horgan, PLLC)

In Support of Continuation of Antidumping Duty Order:

DLA Piper LLP (US)
Washington, D.C.
on behalf of

AMG Vanadium, Inc.

Jane Neal, Senior Vice President and General, Manager, AMG Vanadium, Inc.
R. James Carter, Vice President, International Sales, AMG Vanadium, Inc.
Kenneth R. Button, Ph.D., Senior Vice President,
Economic Consulting Services, LLC
Jennifer Lutz, Senior Economist, Economic Consulting Services, LLC

William D. Kramer)
) – OF COUNSEL
Martin Schaefermeier)

In Support of Continuation of Antidumping Duty Order (continued):

Squire Sanders (US) LLP
Washington, D.C.
on behalf of

Bear Metallurgical Company; Gulf Chemical and Metallurgical Corporation ("Bear/Gulf")

David F. Carey, Plant Manager, Bear Metallurgical Company
Gregory D. Timmons, General Counsel, Americas, Eramet North America, Inc.

Iain R. McPhie) – OF COUNSEL

In Opposition to Continuation of Antidumping Duty Order:

DeKieffer & Horgan, PLLC
Washington, D.C.
on behalf of

Evraz Group, S.A. and it subsidiaries; OAO Vandy-Tula; East Metals AG; East Metals (North America), LLC; and Stratcor, Inc.

Richard P. Wiesler, Director, Sales and Marketing, Evraz Stractor Inc.
Brad Ewers, Director, Sales, Evraz East Metals North America
John Joseph Scholtz, Head of Vanadium Sales, Evraz East Metals AG
Robert Bunting, Consultant, Evraz Stratcor, Inc.
Daniel Klett, Economist, Capital Trade Incorporated

J. Kevin Horgan)
Marc E. Montalbine) – OF COUNSEL
Judith Holdsworth)

REBUTTAL/CLOSING REMARKS:

In Support of Continuation of Order (**William D. Kramer**,
DLA Piper LLP (US); *and* **Kenneth R. Button**,
Economic Consulting Services LLC)
In Opposition to Continuation of Order (**J. Kevin Horgan**,
DeKieffer & Horgan, PLLC)

APPENDIX C

SUMMARY DATA

Table C-1
Ferrovanadium Summary data concerning the U.S. market, 2006-11

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

	Reported data						Period changes					
Item	2006	2007	2008	2009	2010	2011	2006-11	2006-07	2007-08	2008-09	2009-10	2010-11
U.S. consumption quantity:												
Amount	***	***	***	***	***	***	***	***	***	***	***	***
Producers' share (1)	***	***	***	***	***	***	***	***	***	***	***	***
Importers' share (1):												
Russia	***	***	***	***	***	***	***	***	***	***	***	***
Other sources	***	***	***	***	***	***	***	***	***	***	***	***
Total imports	***	***	***	***	***	***	***	***	***	***	***	***
U.S. consumption value:												
Amount	***	***	***	***	***	***	***	***	***	***	***	***
Producers' share (1)	***	***	***	***	***	***	***	***	***	***	***	***
Importers' share (1):												
Russia	***	***	***	***	***	***	***	***	***	***	***	***
Other sources	***	***	***	***	***	***	***	***	***	***	***	***
Total imports	***	***	***	***	***	***	***	***	***	***	***	***
U.S. imports from:												
Russia:												
Quantity	0	0	0	0	0	0	(2)	(2)	(2)	(2)	(2)	(2)
Value	0	0	0	0	0	0	(2)	(2)	(2)	(2)	(2)	(2)
Unit value	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)
Ending inventory quantity	0	0	0	0	0	0	(2)	(2)	(2)	(2)	(2)	(2)
Other sources:												
Quantity	7,558	7,230	8,376	1,675	5,208	7,503	-0.7	-4.3	15.9	-80.0	211.0	44.1
Value	124,988	121,822	212,567	23,022	70,877	98,355	-21.3	-2.5	74.5	-89.2	207.9	38.8
Unit value	$16.54	$16.85	$25.38	$13.75	$13.61	$13.11	-20.7	1.9	50.6	-45.8	-1.0	-3.7
Ending inventory quantity	***	***	***	***	***	***	***	***	***	***	***	***
All sources:												
Quantity	7,558	7,230	8,376	1,675	5,208	7,503	-0.7	-4.3	15.9	-80.0	211.0	44.1
Value	124,988	121,822	212,567	23,022	70,877	98,355	-21.3	-2.5	74.5	-89.2	207.9	38.8
Unit value	$16.54	$16.85	$25.38	$13.75	$13.61	$13.11	-20.7	1.9	50.6	-45.8	-1.0	-3.7
Ending inventory quantity	***	***	***	***	***	***	***	***	***	***	***	***
U.S. producers':												
Average capacity quantity	***	***	***	***	***	***	***	***	***	***	***	***
Production quantity	***	***	***	***	***	***	***	***	***	***	***	***
Capacity utilization (1)	***	***	***	***	***	***	***	***	***	***	***	***
U.S. producers' and tollees':												
U.S. shipments												
Quantity	***	***	***	***	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***	***	***	***	***
Unit value	***	***	***	***	***	***	***	***	***	***	***	***
Export shipments												
Quantity	***	***	***	***	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***	***	***	***	***
Unit value	***	***	***	***	***	***	***	***	***	***	***	***
Ending inventory quantity	***	***	***	***	***	***	***	***	***	***	***	***
Inventories/total shipments (1)	***	***	***	***	***	***	***	***	***	***	***	***
U.S. producers':												
Production workers	***	***	***	***	***	***	***	***	***	***	***	***
Hours worked (1,000s)	***	***	***	***	***	***	***	***	***	***	***	***
Wages paid ($1,000)	***	***	***	***	***	***	***	***	***	***	***	***
Hourly wages	***	***	***	***	***	***	***	***	***	***	***	***
Productivity (pounds per hour)	***	***	***	***	***	***	***	***	***	***	***	***
Unit labor costs	***	***	***	***	***	***	***	***	***	***	***	***
U.S. producers' and tollees':												
Net sales:												
Quantity	***	***	***	***	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***	***	***	***	***
Unit value	***	***	***	***	***	***	***	***	***	***	***	***
Cost of goods sold (COGS)	***	***	***	***	***	***	***	***	***	***	***	***
Gross profit or (loss)	***	***	***	***	***	***	***	***	***	***	***	***
SG&A expenses	***	***	***	***	***	***	***	***	***	***	***	***
Operating income or (loss)	***	***	***	***	***	***	***	***	***	***	***	***
Capital expenditures	***	***	***	***	***	***	***	***	***	***	***	***
Unit COGS	***	***	***	***	***	***	***	***	***	***	***	***
Unit SG&A expenses	***	***	***	***	***	***	***	***	***	***	***	***
Unit operating income or (loss)	***	***	***	***	***	***	***	***	***	***	***	***
COGS/sales (1)	***	***	***	***	***	***	***	***	***	***	***	***
Operating income or (loss)/ sales (1)	***	***	***	***	***	***	***	***	***	***	***	***

(1) "Reported data" are in percent and "period changes" are in percentage points.
(2) Not applicable.

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 and from official statistics of the U.S. Department of Commerce.

Table C-2
Income-and-loss experience of AMG and Bear on their operations producing ferrovanadium, fiscal years 2006-11

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APPENDIX D

RESPONSES OF U.S. PRODUCERS, U.S. IMPORTERS, U.S. PURCHASERS, AND FOREIGN PRODUCER CONCERNING THE SIGNIFICANCE OF THE ANTIDUMPING DUTY ORDER AND THE LIKELY EFFECTS OF REVOCATION

U.S. PRODUCERS/TOLLEES' COMMENTS

The Commission requested U.S. producers/tollees to describe any anticipated changes in their operations or organization relating to the production of ferrovanadium and/or nitrided vanadium in the future if the antidumping duty order was to be revoked. (Question II-4)

* * * * * * *

The Commission requested U.S. producers/tollees' to describe the significance of the antidumping duty order on their 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-14)

* * * * * * *

The Commission asked U.S. producers/tollees whether they anticipated changes in their production capacity, production, U.S. shipments, inventories, purchases, employment, revenues, costs, profits, cash flow, capital expenditures, research and development expenditures, or asset values relating to the production of ferrovanadium and/or nitrided vanadium in the future if the antidumping duty order were to be revoked. (Question II-15)

* * * * * * *

U.S. IMPORTERS' COMMENTS REGARDING THE EFFECTS OF THE ORDERS AND THE LIKELY EFFECTS OF REVOCATION

The Commission asked U.S. importers if they anticipated any changes in the character of their operations or organization relating to the importation of ferrovanadium and/or nitrided vanadium in the future if the antidumping duty order was to be revoked (Question II-4).

* * * * * * *

The Commission requested U.S. importers to describe the significance of the existing antidumping duty order covering imports of ferrovanadium and/or nitrided vanadium in terms of their effect on their firms' imports, U.S. shipments of imports, and inventories. (Question II-10)

* * * * * * *

The Commission requested U.S. importers if they would anticipate any changes in their imports, U.S. shipments of imports, or inventories of ferrovanadium and/or nitrided vanadium in the future if the antidumping duty order was to be revoked. (Question II-11)

* * * * * * *

U.S. PURCHASERS' COMMENTS REGARDING THE LIKELY EFFECTS OF REVOCATION OF THE ANTIDUMPING DUTY ORDERS

What do you think will be the likely effects of any revocation of the antidumping duty order for imports of ferrovanadium and nitrided vanadium from Russia? As appropriate, please discuss any potential effects of revocation of the antidumping duty order on (1) the future activities of your firm and (2) the U.S. market as a whole. Please note the future time period to which you are referring.

(1) Activities of your firm:

* * * * * * *

(2) Entire U.S. market:

* * * * * * *

Please identify and discuss any improvements/changes in the U.S. ferrovanadium and/or nitrided vanadium industry since 2006 and explain the factors, including the order(s) under review, that were responsible for each improvement/change.

* * * * * * *

Please discuss any improvements/changes that you anticipate in the future in the U.S. ferrovanadium and/or nitrided vanadium industry. Identify the time period and causes for these improvements/changes.

* * * * * * *

FOREIGN PRODUCERS' COMMENTS REGARDING THE EFFECTS OF THE ORDERS AND THE LIKELY EFFECTS OF REVOCATION

The Commission asked foreign producers whether they anticipated any changes in the character of their operations or organization relating to the production of ferrovanadium and/or nitrided vanadium in the future if the antidumping duty order was to be revoked (Question II-4).

* * * * * * *

The Commission asked foreign producers to describe significance of the existing antidumping duty order covering imports of ferrovanadium and nitrided vanadium from Russia in terms of its effect on your firm's production capacity, production, home market shipments, exports to the United States and other markets, and inventories. (Question II-12)

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APPENDIX E

ADDITIONAL PRICE DATA

Table E-1
Prices of ferrovanadium and ferromolybdenum from *American Metal Market*, January 2006-March 2012

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Table E-2
Prices of U.S. and European ferrovanadium from *Ryan's Notes*, January 2006-May 2012

* * * * * * *