

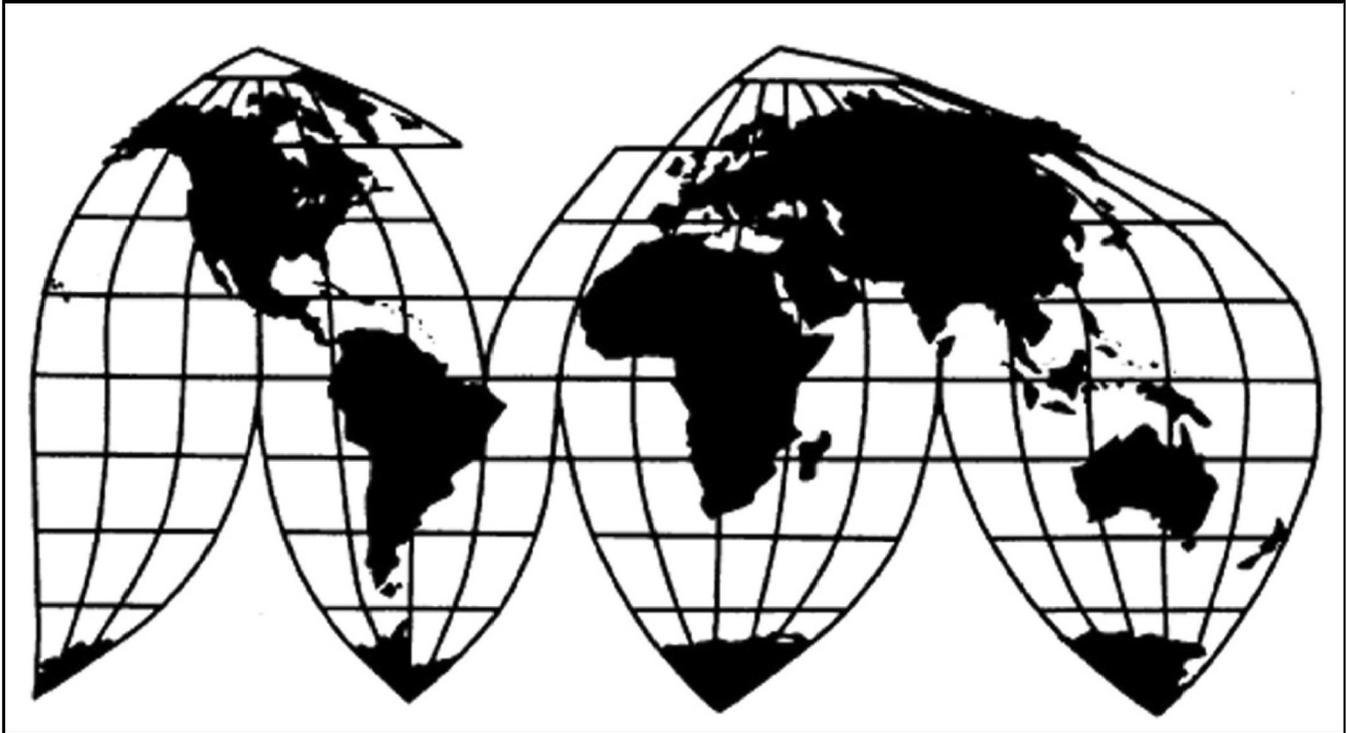
Non-Malleable Cast Iron Pipe Fittings from China

Investigation No. 731-TA-990 (Third Review)

Publication 4915

June 2019

U.S. International Trade Commission



Washington, DC 20436

U.S. International Trade Commission

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Note.—Information that would reveal confidential operations of individual concerns may not be published. Such information is identified (including by brackets or by parallel lines) in confidential reports and is deleted and replaced with asterisks (***) in public reports.

UNITED STATES INTERNATIONAL TRADE COMMISSION

Investigation No. 731-TA-990 (Third Review)
Non-Malleable Cast Iron Pipe Fittings from China

DETERMINATION

On the basis of the record¹ developed in the subject five-year review, the United States International Trade Commission (“Commission”) determines, pursuant to the Tariff Act of 1930 (“the Act”), that revocation of the antidumping duty order on non-malleable cast iron pipe fittings from China would 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, pursuant to section 751(c) of the Act (19 U.S.C. 1675(c)), instituted this review on January 2, 2019 (84 FR 14) and determined on April 12, 2019 that it would conduct an expedited review (84 FR 20659, May 10, 2019).

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 Tariff Act”), that revocation of the antidumping duty order on non-malleable cast iron pipe fittings (“NMPF”) from China would be likely to lead to continuation or recurrence of material injury to an industry in the United States within a reasonably foreseeable time.

I. Background

Original Investigation: On February 21, 2002, Anvil International, LLC (“Anvil”) and Ward Manufacturing, LLC (“Ward”) (collectively, the “domestic interested parties”), domestic producers of NMPF, filed an antidumping duty petition on imports of NMPF from China.¹ The Commission made its final affirmative determination in March 2003.² The U.S. Department of Commerce (“Commerce”) published an antidumping duty order on NMPF from China on April 7, 2003.³

First Review: The Commission instituted its first five-year review on March 3, 2008.⁴ After conducting an expedited review, the Commission reached an affirmative determination in July 2008.⁵ Commerce issued a continuation of the order on August 15, 2008.⁶

Second Review: The Commission instituted its second five-year review on July 1, 2013.⁷ After conducting an expedited review, the Commission reached an affirmative

¹ *Non-Malleable Cast Iron Pipe Fittings from China*, Inv. No. 731-TA-990 (Final), USITC Pub. 3586 (Mar. 2003) (“Original Determination”) at I-1.

² The Commission determined that the domestic industry was threatened with material injury by reason of the subject imports. *Non-Malleable Cast Iron Pipe Fittings from China*, 68 Fed. Reg. 15743 (Apr. 1, 2003); Original Determination, USITC Pub. 3586 at 3. (The Commission report in this review contains an inadvertent error characterizing the original determination as present injury. See Confidential Report, Memorandum INV-RR-015 at I-4 (Mar. 26, 2019) (“CR”); Public Report (“PR”) at I-3).

³ *Antidumping Duty Order: Non-Malleable Cast Iron Pipe Fittings from the People’s Republic of China*, 68 Fed. Reg. 16765 (Apr. 7, 2003).

⁴ *Non-Malleable Cast Iron Pipe Fittings From China*, 73 Fed. Reg. 11440 (Mar. 3, 2008).

⁵ *Non-Malleable Cast Iron Pipe Fittings From China*, 73 Fed. Reg. 45075 (Aug. 1, 2008); *Non-Malleable Cast Iron Pipe Fittings From China*, Inv. No. 731-TA-990 (Review), USITC Pub. 4023 (Jul. 2008) (“First Review Determination”).

⁶ *Continuation of Antidumping Duty Order on Non-Malleable Cast Iron Pipe Fittings from the People’s Republic of China*, 73 Fed. Reg. 47887 (Aug. 15, 2008).

⁷ *Non-Malleable Cast Iron Pipe Fittings From China: Institution of a Five-Year Review*, 78 Fed. Reg. 39321 (Jul. 1, 2013).

determination in January 2014.⁸ Commerce issued a continuation of the order on February 12, 2014.⁹

Current Review: The Commission instituted this third five-year review on January 2, 2019.¹⁰ The domestic interested parties jointly filed the sole response to the notice of institution on February 1, 2019.¹¹ On April 12, 2019, the Commission determined that the domestic interested party group response to the notice of institution was adequate and the respondent interested party group response to the notice of institution was inadequate.¹² Finding that no other circumstances warranted a full review, the Commission determined to conduct an expedited review.¹³

On May 21, 2019, the domestic interested parties submitted comments regarding the determination the Commission should reach in this expedited review pursuant to 19 C.F.R. § 207.62(d).¹⁴

U.S. industry data are based on information the domestic interested parties submitted in their response to the notice of institution. The domestic interested parties estimate that they accounted for 100 percent of domestic NMPF production in 2018.¹⁵ U.S. import data and related information are based on Commerce's official import statistics and information provided by Anvil in its capacity as importer of subject merchandise.¹⁶ Foreign industry data and related information are based on information the domestic interested parties submitted, information from the original investigation and prior reviews, and publicly available information gathered by staff.¹⁷

⁸ *Non-Malleable Cast Iron Pipe Fittings From China*, 79 Fed. Reg. 6923 (Feb. 5, 2014); *Non-Malleable Cast Iron Pipe Fittings From China*, Inv. No. 731-TA-990 (Second Review), USITC Pub. 4450 (Jan. 2014) ("Second Review Determination").

⁹ *Non-Malleable Cast Iron Pipe Fittings from China: Continuation of Antidumping Duty Order*, 79 Fed. Reg. 8437 (Feb. 12, 2014).

¹⁰ *Non-Malleable Cast Iron Pipe Fittings From China; Institution of a Five-Year Review*, 84 Fed. Reg. 14 (Jan. 2, 2019).

¹¹ Domestic Interested Parties' Response to the Notice of Institution, EDIS Doc. 665695 (Feb. 1, 2019) ("Domestic Interested Parties' Response").

¹² Explanation of Commission Determination on Adequacy, EDIS Doc. 675812 (Apr. 12, 2019) ("Explanation of Adequacy Determination"). The Commission determined that the respondent interested party group response was inadequate notwithstanding that Anvil filed a response as an importer of subject merchandise as well as a domestic producer. The Commission majority reasoned that because Anvil supported continuation of the order, its response should not count toward the sufficiency of the respondent group response. *Id.*

¹³ *Non-Malleable Cast Iron Pipe Fittings From China; Scheduling of an Expedited Five-Year Review*, 84 Fed. Reg. 20695 (May 10, 2019). Chairman Johanson determined the respondent group response to be adequate and voted for a full review. Commissioner Broadbent also voted for a full review. See Explanation of Adequacy Determination.

¹⁴ Domestic Interested Parties' Comments on Staff Report, EDIS Doc. 676565 (May 21, 2019).

¹⁵ CR at I-3, PR at I-2; CR/PR at Table I-1. Domestic Interested Parties' Response at 2.

¹⁶ CR/PR at Table I-5.

¹⁷ See generally CR at I-31-I-33, PR at I-22-I-23.

II. Domestic Like Product and Industry

A. Domestic Like Product

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

Commerce has defined the imported merchandise within the scope of the order under review as follows:

Finished and unfinished non-malleable cast iron pipe fittings with an inside diameter ranging from 1/4 inch to 6 inches, whether threaded or unthreaded, regardless of industry or proprietary specifications. The subject fittings include elbows, ells, tees, crosses, and reducers as well as flanged fittings. These pipe fittings are also known as “cast iron pipe fittings” or “gray iron pipe fittings.” These cast iron pipe fittings are normally produced to ASTM A-126 and ASME B.16.4 specifications and are threaded to ASME B1.20.1 specifications. Most building codes require that these products are Underwriters Laboratories (UL) certified. The scope does not include cast iron soil pipe fittings or grooved fittings or grooved couplings.

Fittings that are made out of ductile iron that have the same physical characteristics as the gray or cast iron fittings subject to the scope above or which have the same physical characteristics and are produced to ASME B.16.3, ASME B.16.4, or ASTM A-395 specifications, threaded to ASME B1.20.1 specifications and UL certified, regardless of metallurgical differences between gray and ductile iron, are also included in the scope of

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., Internal Combustion Industrial Forklift Trucks from Japan*, Inv. No. 731-TA-377 (Second Review), USITC Pub. 3831 at 8-9 (Dec. 2005); *Crawfish Tail Meat from China*, Inv. No. 731-TA-752 (Review), USITC Pub. 3614 at 4 (July 2003); *Steel Concrete Reinforcing Bar from Turkey*, Inv. No. 731-TA-745 (Review), USITC Pub. 3577 at 4 (Feb. 2003).

the order. These ductile fittings do not include grooved fittings or grooved couplings. Ductile cast iron fittings with mechanical joint ends (MJ), or push on ends (PO), or flanged ends and produced to the American Water Works Association (AWWA) specifications AWWA C110 or AWWA C153 are not included.²¹

NMPF are generally used for connecting the bores of two or more pipes or tubes, connecting a pipe to some other apparatus, changing the direction of fluid flow, or closing the pipe. The primary raw material for NMPF is cast iron, which is mainly composed of iron, carbon (more than 2 percent), and silicon. Non-malleable iron (also referred to as gray iron) is defined by the American Society for Testing and Materials (“ASTM”) as cast iron that has fine graphite flakes which are formed during cooling. Ductile iron is a cast iron that has a very small but definite amount of magnesium added in the liquid state so as to induce the formation of graphite as spheroids or nodules.²²

In the prior proceedings, the Commission defined a single domestic like product that was coextensive with Commerce’s scope.²³ In this review, the domestic interested parties agree with the Commission’s definition of the domestic like product from the prior proceedings.²⁴ The record does not suggest any changes to the pertinent characteristics of NMPF since the prior proceedings to warrant revisiting the definition.²⁵ Consequently, we again define the domestic like product as NMPF, coextensive with Commerce’s scope.

B. Domestic Industry

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

²¹ *Non-Malleable Cast Iron Pipe Fittings from the People’s Republic of China: Final Results of Expedited Third Sunset Review of Antidumping Order*, 84 Fed. Reg. 27088, 27089 (Jun. 11, 2019). Commerce explained that imports of covered merchandise are classifiable in the Harmonized Tariff Schedule of the United States (“HTSUS”) under item numbers 7307.11.0030, 7307.11.0060, 7307.19.3060, and 7307.19.3085, noting that HTSUS subheadings are provided for convenience and customs purposes and that the written description of the scope of the order is dispositive. *Id.* Commerce has previously excluded certain brake fluid tube connectors from the scope of this order. *See Non-Malleable Cast Iron Pipe Fittings From the People’s Republic of China: Continuation of Antidumping Duty Order*, 79 Fed. Reg. 8437 (Feb. 12, 2014).

²² CR at I-11-I-12, PR at I-9-I-10.

²³ Original Determination, USITC Pub. 3586 at 5-8; First Review Determination, USITC Pub. 4023 at 5; Second Review Determination, USITC Pub. 4450 at 6.

²⁴ Domestic Interested Parties’ Response at 24.

²⁵ *See generally* CR at I-11-I-17, PR at I-9-I-13.

production of the product.”²⁶ 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. If appropriate circumstances exist, the Tariff Act provides the Commission with the authority to exclude from the domestic industry producers that are related to an exporter or importer of subject merchandise, or are themselves importers.²⁷

In the original investigation, the Commission defined the domestic industry as consisting of all U.S. NMPF producers. The Commission recognized that *** was a related party based on its importation of subject merchandise, but found that appropriate circumstances did not exist to exclude it from the domestic industry.²⁸

In the expedited first review, the Commission observed that Anvil purchased a major importer of subject pipe fittings in January 2004 and was *** a related party because it imported subject merchandise during the period of review. In 2007 (the only year of the review period for which data were available), Anvil accounted for *** percent of the subject imports from China and its subject imports were equivalent to *** percent of its domestic production. The Commission noted, however, that Anvil supported continuation of the order. Because the review was expedited with a limited record, the Commission declined to exclude Anvil from the industry, and again defined the domestic industry as including all U.S. NMPF producers.²⁹

In the expedited second review, Anvil was again a related party because it imported subject merchandise during the period of review. In 2012, Anvil accounted for *** percent of total subject imports from China and its subject imports were equivalent to *** percent of the quantity of its U.S. production. One of two domestic producers, Anvil accounted for *** percent of U.S. production. The Commission observed that, although Anvil accounted for *** of total subject imports from China in 2012 and its subject imports *** its domestic production,

²⁶ 19 U.S.C. § 1677(4)(A). The definitions in 19 U.S.C. § 1677 are applicable to the entire subtitle containing the antidumping and countervailing duty laws, including 19 U.S.C. §§ 1675 and 1675a. See 19 U.S.C. § 1677.

²⁷ 19 U.S.C. § 1677(4)(B). The primary factors the Commission examines in deciding whether appropriate circumstances exist to exclude a related party include the following: (1) the percentage of domestic production attributable to the importing producer; (2) the reason the U.S. producer has decided to import the product subject to investigation (whether the firm benefits from the LTFV sales or subsidies or whether the firm must import in order to enable it to continue production and compete in the U.S. market); (3) whether inclusion or exclusion of the related party will skew the data for the rest of the industry; (4) the ratio of import shipments to U.S. production for the imported product; and (5) whether the primary interest of the importing producer lies in domestic production or importation. *Changzhou Trina Solar Energy Co. v. USITC*, 100 F. Supp.3d 1314, 1326-31(Ct. Int’l. Trade 2015); see also *Torrington Co. v. United States*, 790 F. Supp. at 1168.

²⁸ Original Determination, USITC Pub. 3596 at 8 n.39; Original Determination Confidential Views, EDIS Doc. 668690 at 10 n.39.

²⁹ First Review Determination, USITC Pub. 4023 at 6; First Review Determination Confidential Views, EDIS Doc. 668692 at 7-8.

its share of total subject imports and the ratio of its imports to its U.S. production in that year were both *** than in the first review. Moreover, Anvil supported continuation of the order. Based on the foregoing and the limited record in the expedited review, the Commission found that appropriate circumstances did not exist to exclude Anvil from the industry.³⁰

In this expedited third review, Anvil is again a related party by virtue of its imports of subject merchandise during the period of review. Anvil imported *** short tons of subject merchandise from China in 2018.³¹ This volume accounted for approximately *** percent of subject imports that year.³² Anvil's subject imports in 2018 were equivalent to *** percent of its domestic production.³³ Anvil, which accounted for *** percent of domestic production in 2018,³⁴ states that it supports the continuation of the order, and represents that it imports subject merchandise because some customers insist on the lower prices available for such imports.³⁵

The record in this review is similar to those of the first and second reviews, in which the Commission found that appropriate circumstances did not exist to exclude Anvil from the domestic industry. Moreover, Anvil now accounts for *** of domestic production and it accounted for a smaller share of total subject imports than in prior reviews. Anvil also supports continuation of the orders. Based on the foregoing, we find that appropriate circumstances do not exist to exclude Anvil, and again define the domestic industry as consisting of all U.S. NMPF producers.³⁶

³⁰ Second Review Determination, USITC Pub. 4450 at 8; Second Review Determination Confidential Views, EDIS Doc. 668693 at 10.

³¹ CR at I-18, PR at I-13.

³² CR/PR at Table I-1.

³³ CR at I-18, PR at I-14.

³⁴ CR/PR at App. B.

³⁵ Domestic Interested Parties' Response at 22.

³⁶ Commissioner Broadbent notes that, since the imposition of the order in 2003, Anvil acquired a large U.S. importer and has since imported *** of subject imports from China. The volume of Anvil's imports from China *** as the domestic industry's U.S. production and shipments have decreased steadily since the original period of investigation. Despite being the *** U.S. producer in 2018, Anvil imported ***. Anvil states that it imports subject merchandise because some customers insist on the lower prices available for such imports. Anvil also had a ***. CR/PR at App. B.

The Commission has conducted three expedited reviews of this order but has never conducted a full review. Therefore, the Commission does not have a comprehensive record with which to examine Anvil's related party status, its greater focus on importation, or the effect of its imports on the domestic industry's declining output. The Commission also does not have information about the extent to which the domestic industry's employment has been affected by Anvil's imports, as this information is not collected in expedited reviews. She voted to conduct a full review in order to gather additional evidence on these factors and other changes in conditions of competition that have occurred since the original investigations.

III. Revocation of the Antidumping Duty Order Would Likely Lead to Continuation or Recurrence of Material Injury Within a Reasonably Foreseeable Time

A. Legal Standards

In a five-year review conducted under section 751(c) of the Tariff 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 Uruguay Round Agreements Act Statement of Administrative Action (“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

The statute states that “the Commission shall consider that the effects of revocation or termination may not be imminent, but may manifest themselves only over a longer period of time.”⁴¹ According to the SAA, a “‘reasonably foreseeable time’ will vary from

³⁷ 19 U.S.C. § 1675a(a).

³⁸ SAA, H.R. Rep. 103-316, vol. I at 883-84 (1994). 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 (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*, 26 CIT 1059, 1070 (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 19 U.S.C. § 1675a(a)(5).

case-to-case, but normally will exceed the ‘imminent’ timeframe applicable in a threat of injury analysis in original investigations.”⁴²

Although the standard in a five-year review is not the same as the standard applied in an original 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.”⁴³ 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 an order is revoked or a suspension agreement is terminated, and any findings by Commerce regarding duty absorption pursuant to 19 U.S.C. § 1675(a)(4).⁴⁴ 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.⁴⁵

In evaluating the likely volume of imports of subject merchandise if an order under review is revoked and/or a suspended investigation is terminated, the Commission is directed to consider whether the likely volume of imports would be significant either in absolute terms or relative to production or consumption in the United States.⁴⁶ 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.⁴⁷

In evaluating the likely price effects of subject imports if an order under review is revoked and/or a suspended investigation is terminated, 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

⁴² 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.*

⁴³ 19 U.S.C. § 1675a(a)(1).

⁴⁴ 19 U.S.C. § 1675a(a)(1). Commerce has not issued any duty absorption findings with respect to NMPF from China. CR at I-7, PR at I-6.

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

⁴⁶ 19 U.S.C. § 1675a(a)(2).

⁴⁷ 19 U.S.C. § 1675a(a)(2)(A-D).

the United States at prices that otherwise would have a significant depressing or suppressing effect on the price of the domestic like product.⁴⁸

In evaluating the likely impact of imports of subject merchandise if an order under review is revoked and/or a suspended investigation is terminated, 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.⁴⁹ 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 under review and whether the industry is vulnerable to material injury upon revocation.⁵⁰

No respondent interested party, other than Anvil in its capacity as importer of subject merchandise, participated in this expedited review. The record, therefore, contains limited new information with respect to the NMPF industry in China. There also is limited information on the domestic NMPF market during the period of review. Accordingly, for our determination, we rely as appropriate on the facts available from the prior proceedings and the limited new information on the record in this review.

B. Conditions of Competition and the Business Cycle

In evaluating the likely impact of the subject imports on the domestic industry if an order is revoked, 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.”⁵¹ The following conditions of competition inform our determination.

⁴⁸ 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.

⁴⁹ 19 U.S.C. § 1675a(a)(4).

⁵⁰ The SAA states that in assessing whether the domestic industry is vulnerable to injury if the order is revoked, the Commission “considers, in addition to imports, other factors that may be contributing to overall injury. While these factors, in some cases, may account for the injury to the domestic industry, they may also demonstrate that an industry is facing difficulties from a variety of sources and is vulnerable to dumped or subsidized imports.” SAA at 885.

⁵¹ 19 U.S.C. § 1675a(a)(4).

1. Demand Conditions

In the prior proceedings, the Commission observed that NMPF were mainly used in fire protection/sprinkler systems, and that demand was related to non-residential construction in which fire protection/sprinkler systems are installed.⁵² The record in the current review indicates that the drivers of NMPF demand in the U.S. market have not changed.⁵³

During the original investigation, U.S. demand for NMPF declined, with apparent U.S. consumption (measured by weight) falling by *** percent from 1999 to 2001; in 2001, apparent U.S. consumption was *** short tons.⁵⁴ Apparent U.S. consumption was *** percent lower in the first nine months of 2002 (“interim 2002”) than in the first nine months of 2001 (“interim 2001”).⁵⁵ During the first five-year review, apparent U.S. consumption was *** short tons in 2007.⁵⁶ During the second five-year review, the significant downturn in construction spending after 2008 reduced NMPF demand, and apparent U.S. consumption was *** short tons in 2012.⁵⁷ In this review, apparent U.S. consumption was *** short tons in 2018, lower than in the prior proceedings.⁵⁸

2. Supply Conditions

In the original investigation, Anvil and Ward accounted for the bulk of domestic production (*** percent in 2001) and two other companies, Frazier and Buck, accounted for most of the remainder.⁵⁹ In the first five-year review, Anvil and Ward continued to account for the large majority of domestic production, while Frazier accounted for a *** share of

⁵² Original Determination, USITC Pub. 3586 at 9, IV-3; First Review Determination, USITC Pub. 4023 at 9; Second Review Determination, USITC Pub. 4450 at 11.

⁵³ Domestic Interested Parties’ Response at 5.

⁵⁴ Original Determination Confidential Views at 12; Original Determination, USITC Pub. 3586 at 9.

⁵⁵ Original Determination Confidential Views at 12; Original Determination, USITC Pub. 3586 at 9.

⁵⁶ Confidential Report for First Five-Year review, Memorandum INV-FF-073 (Jun. 26, 2008) EDIS Doc. 668684 at Table I-10; CR/PR at Table I-8.

⁵⁷ Second Review Determination Confidential Views at 16-17; Second Review Determination, USITC Pub. 4450 at 12.

⁵⁸ CR/PR at Table I-8. To maintain consistency with prior proceedings, the Commission derived the import component of apparent U.S. consumption for 2018 using the same HTS statistical reporting numbers it used for this purpose in the prior reviews. *Id.* The domestic interested parties assert that in-scope merchandise also enters under two other HTS numbers, and that consequently subject import volume and apparent U.S. consumption may be understated. See Domestic Interested Parties’ Response at 13-15.

⁵⁹ Original Determination Confidential Views at 12; Original Determination, USITC Pub. 3586 at 9 and Table III-1; Confidential Report for Original Investigation, Memorandum INV-AA-022 (Feb. 27, 2003) EDIS Doc. 668681 at Table III-1.

domestic production.⁶⁰ In the second five-year review, Anvil and Ward accounted for all domestic production of NMPF, with Anvil accounting for *** percent and Ward for *** percent of total domestic production in 2012.⁶¹ In the current review, Anvil and Ward continue to represent all domestic NMPF production, with the former accounting for *** percent and the latter *** percent of total domestic production in 2018.⁶²

During the original investigation, the Commission found that the domestic industry's share of apparent U.S. consumption declined from *** percent in 2000 to *** percent in 2001.⁶³ The domestic industry's share of apparent U.S. consumption was *** percent in 2007 during the first review and *** percent in 2012 during the second review.⁶⁴ In this review, the domestic industry continued to be the largest supplier to the U.S. market, with a *** percent share of apparent U.S. consumption in 2018.⁶⁵

During the original investigation, the Commission found that subject imports' share of the U.S. market increased from *** percent in 1999, to *** percent in 2000, and to *** percent in 2001.⁶⁶ Subject imports' share of apparent U.S. consumption was *** percent in 2007 and *** percent in 2012.⁶⁷ In this review, subject imports' share of the U.S. market was *** percent in 2018, which is lower than their share in 2007 or 2011, but higher than their share in the original investigation.⁶⁸

Nonsubject imports accounted for *** percent of the U.S. market in 2001, *** percent in 2007, and *** percent in 2012.⁶⁹ In this review, nonsubject imports accounted for *** percent of the U.S. market in 2018, which is a higher percentage than during the prior proceedings.⁷⁰ India and Japan were the two leading sources for nonsubject imports in 2018.⁷¹

⁶⁰ First Review Determination Confidential Views at 12-13; First Review Determination, USITC Pub. 4023 at 9-10.

⁶¹ Second Review Determination Confidential Views at 18; Second Review Determination, USITC Pub. 4450 at 12.

⁶² CR/PR at App. B; Domestic Interested Parties' Response at Exh. 1.

⁶³ Original Determination Confidential Views at 18-19 n.79; Original Determination, USITC Pub. 3586 at 14 n.79; *see also* CR/PR at Table I-8.

⁶⁴ Second Review Determination Confidential Views at 18; Second Review Determination, USITC Pub. 4450 at 12; *see also* CR/PR at Table I-8.

⁶⁵ CR/PR at Table I-8.

⁶⁶ Original Determination Confidential Views at 15; Original Determination, USITC Pub. 3586 at 12.

⁶⁷ Second Review Determination Confidential Views at 18; Second Review Determination, USITC Pub. 4450 at 12; *see also* CR/PR at Table I-8.

⁶⁸ CR/PR at Table I-8.

⁶⁹ Second Review Determination Confidential Views at 18; Second Review Determination, USITC Pub. 4450 at 12; *see also* CR/PR at Table I-8.

⁷⁰ CR/PR at Table I-8.

⁷¹ CR/PR at Table I-5.

3. Substitutability and Other Conditions

In the original investigation, the Commission observed that purchasers generally focused on quality, supply, and price considerations, and that a majority of purchasers viewed the domestic like product and subject imports as comparable in terms of supply and quality, while almost all purchasers ranked the subject imports as superior in terms of lower price. Most purchasers also reported that the domestic like product and the subject imports were used in the same applications. The Commission observed that use of the domestic product was sometimes required in government projects to which “Buy America” provisions applied and that there also may have been a strong preference for the domestic product in certain projects, particularly ones in which the workers were members of trade unions.⁷² The Commission found that, other than these factors, the record suggested a high degree of substitutability among subject imports and domestically produced NMPF.⁷³ In both prior reviews, the Commission found that there was no evidence on the record to suggest that these conditions had changed significantly since the original investigation.⁷⁴

In this expedited third review, there is no new information on the record to suggest any changes since the prior proceedings in substitutability between the domestic like product and subject imports, or in the importance of price in purchasing decisions.⁷⁵ Accordingly, we find that these conditions of competition are not likely to change significantly in the reasonably foreseeable future.

Imports of NMPF from China have been subject to an additional tariff under Section 301 of the Trade Act of 1974 since September 2018. At the time the record closed in this review, the applicable Section 301 tariff was 10 percent *ad valorem*.⁷⁶

⁷² Original Determination, USITC Pub. 3586 at 10.

⁷³ Original Determination, USITC Pub. 3586 at 10.

⁷⁴ First Review Determination, USITC Pub. 4023 at 10; Second Review Determination, USITC Pub. 4450 at 13.

⁷⁵ The domestic interested parties assert that “{t}he U.S. market remains characterized by a high degree of substitutability between subject imports and domestically produced NMPF, and price remains the primary consideration when choosing between domestic and imported NMPF.” Domestic Interested Parties’ Response at 7.

⁷⁶ *Notice of Modification of Section 301 Action: China’s Acts, Policies, and Practices Related to Technology Transfer, Intellectual Property, and Innovation*, 83 Fed. Reg. 47974 (Sep. 21, 2018); CR at I-10, PR at I-9. Subsequently, the rate of Section 301 tariffs was increased to 25 percent *ad valorem*. See *Notice of Modification of Section 301 Action: China’s Acts, Policies, and Practices Related to Technology Transfer, Intellectual Property, and Innovation*, 84 Fed. Reg. 20459 (May 9, 2019). Imports of NMPF from China are not subject to tariffs under Section 232 of the Trade Expansion Act of 1962. CR at I-10, PR at I-8-I-9.

C. Likely Volume of Subject Imports

1. The Prior Proceedings

In its original determination, the Commission found that subject import volume increased *** between 1999 and 2001, but that it was *** percent higher in interim 2002 than in interim 2001, even as apparent U.S. consumption fell by *** percent. Subject imports' market share increased from *** percent in 1999 to *** percent in 2000 and *** percent in 2001. Subject imports' market share was *** percent in interim 2001 and reached *** percent in interim 2002. The domestic industry's market share fell over the period of investigation. The Commission found the increase in the volume of subject imports, most notably during the interim period, to be significant.⁷⁷

In its analysis of threat of material injury, the Commission found that a significant increase in the volume and market share of subject imports from China was likely in the imminent future, given the accelerating rate of increase of subject imports toward the end of the period of investigation, the presence of large subject import inventories in the United States, the substantial and growing available capacity in China to produce subject merchandise, the reliance of the Chinese industry almost exclusively on the U.S. market, declining subject import prices, and increasing margins of underselling.⁷⁸

In the expedited first review, the Commission observed that, after the antidumping duty order was imposed in early 2003, the volume of subject imports declined for two years, then increased irregularly. The market share of subject imports was higher in 2007 than in 2001, the last full year of the original period of investigation. The Commission found that nothing in the record of that expedited review contradicted the Commission's earlier findings that Chinese producers of the subject merchandise had substantial excess capacity and that the United States was an important market for Chinese producers. Moreover, the Commission found that, because Chinese NMPF producers were also subject to an antidumping duty order on malleable pipe fittings, subject producers may have had an incentive to shift their production from malleable pipe fittings to NMPF if the order on the subject merchandise were revoked.⁷⁹ Therefore, the Commission found that the likely volume of subject imports, both in absolute terms and relative to production and consumption in the United States, would be significant if the order were revoked.⁸⁰

In the expedited second review, the Commission found that Chinese producers would have the ability and incentive to ship significant volumes of subject merchandise to the United States if the order were revoked. The Commission observed that the data available indicated that the subject industry was export oriented and suggested that its capacity and production

⁷⁷ Original Determination, USITC Pub. 3586 at 10-11; Original Determination Confidential Views at 14-16.

⁷⁸ Original Determination, USITC Pub. 3586 at 17.

⁷⁹ First Review Determination, USITC Pub. 4023 at 11.

⁸⁰ First Review Determination, USITC Pub. 4023 at 10-11.

levels had continued to increase.⁸¹ Moreover, the Commission found that the United States remained an attractive market to the industry in China, as data suggested that the United States was the largest export market for NMPF from China. In light of this information and its findings in the prior proceedings, the Commission found that the likely volume of subject imports, both in absolute terms and relative to production and consumption in the United States, would be significant if the order were revoked.⁸²

2. The Current Review

Subject imports maintained a substantial presence in the U.S. market over the entire period of review, totaling 6,566 short tons in 2013, 6,136 short tons in 2014, 4,514 short tons in 2015, 3,199 short tons in 2016, 3,625 short tons in 2017 and 3,681 short tons in 2018.⁸³ Subject imports had a *** percent share of the U.S. market in 2018.⁸⁴

While the record in this expedited review contains limited current information on the Chinese NMPF industry, the information available indicates that Chinese producers have the ability and incentive to export significant volumes of subject merchandise to the U.S. market within a reasonably foreseeable time if the antidumping duty order were revoked. The original investigation and prior reviews indicated that subject producers had substantial capacity.⁸⁵ There is no information in the current record suggesting any declines in subject producers' capacity, and the available data indicate considerable growth in Chinese global exports of NMPF over the period of review, consistent with increasing production capacity.⁸⁶ Furthermore, available information shows that several Chinese firms have recently either begun production of cast iron pipe fittings or have expanded their production capacity.⁸⁷ The industry in China is also the world's largest exporter of NMPF with exports to markets worldwide. The available data indicate that the Chinese industry is heavily export oriented, and has some ability to shift exports between markets and increase

⁸¹ This data indicated that total exports of NMPF from China increased substantially from 2008 to 2012. Second Review Determination, USITC Pub. 4450 at 15.

⁸² Second Review Determination, USITC Pub. 4450 at 14-15.

⁸³ CR/PR at Table I-5. Domestic interested parties assert that imports from China entering under HTS number 7307.19.3060, which are not included in the tabulation above, are predominantly subject merchandise. See domestic interested parties Response at 13. These imports rose over the period of review, increasing from 5,501 short tons in 2013 to 7,501 short tons in 2018. CR/PR at Table I-6.

⁸⁴ CR/PR at Table I-8.

⁸⁵ Original Determination, USITC Pub. 3586 at 17; First Review Determination, USITC Pub. 4023 at 11; Second Review Determination, USITC Pub. 4450 at 14-15.

⁸⁶ CR/PR at Table I-9. Available export data from the Global Trade Atlas (GTA) concern a product category broader than the scope definition, and likely overstate NMPF exports from China.

⁸⁷ Domestic Interested Parties' Response at 16. Domestic interested parties also indicate that because the same production facilities used to make malleable fittings – also subject to an antidumping duty order – can be used to produce NMPF, there is a potential for product shifting if the order on NMPF is revoked. *Id.* at 18.

them on an annual basis.⁸⁸ Consequently, the record indicates that producers would have the ability to ship significant volumes of subject merchandise to the United States upon revocation.

The record further indicates that subject producers would have incentive to direct significant amounts of subject imports to the U.S. market upon revocation. As explained above, subject imports were consistently present in the U.S. market over the entire period of review, despite the antidumping duty order. Indeed, in 2017, China was the largest source of NMPF imports in the U.S. market.⁸⁹ Moreover, the United States is the largest export market for NMPF from China.⁹⁰ These facts clearly indicate that the U.S. NMPF market remains attractive and important for subject producers.⁹¹

In light of the foregoing, we conclude that the volume of subject imports, both in absolute terms and relative to U.S. consumption, would likely be significant if the order were revoked.⁹²

D. Likely Price Effects

1. The Prior Proceedings

In the original determination, the Commission found that the domestic like product and subject imports were largely substitutable and that price was an important factor in purchasing decisions. The Commission observed that the price comparisons showed underselling by the subject merchandise in each quarter examined and that the margins of underselling increased markedly toward the end of the period of investigation. Nonetheless, the Commission found that the record did not indicate that subject imports depressed or suppressed domestic prices, because the prices for the domestic product rose over the period and it did not appear that the domestic industry would have been able to make additional price increases given the weak market conditions. Accordingly, the Commission did not find significant price effects over that period of investigation.⁹³

In its analysis of threat of material injury, the Commission found that the domestic industry's apparent strategy of not matching the prices of subject imports would likely change and that the growing volume and margins of underselling of subject imports could

⁸⁸ CR/PR at Table I-9. As previously discussed, the available GTA export data concern a broader product category than NMPF.

⁸⁹ CR/PR at Table I-5.

⁹⁰ CR/PR at table I-9.

⁹¹ None of the purchasers responding to the Commission's questionnaires reported that Section 301 tariffs have impacted the conditions of competition for NMPF, or that they anticipate such impact in the future. See CR/PR at App. D.

⁹² The record indicates that there are no third country antidumping or countervailing duty orders on NMPF. CR at I-32, PR at I-23. Because of the expedited nature of this review, the record does not contain information about inventories of the subject merchandise.

⁹³ Original Determination, USITC Pub. 3586 at 12-13.

cause the domestic industry to lower its prices, or refrain from raising its prices, in order to limit its loss of additional sales.⁹⁴

In both the expedited first and second reviews, the Commission observed that the record did not include any new product-specific pricing information and also did not include any other information that would suggest that price was no longer an important factor in purchasing decisions. In each review, the Commission found, as in the original investigation, that subject imports would likely undersell the domestic like product to gain market share.⁹⁵ The Commission also found that, if the order were revoked, the likely significant volume of low-priced subject imports would likely have significant adverse effects on prices for the domestic like product.⁹⁶

2. The Current Review

The record does not contain current pricing data due to the expedited nature of the review. We continue to find, for the reasons stated in section III.B.3. above, that the domestic like product and subject imports are largely substitutable and that price is an important factor in purchasing decisions. Consequently, if the order were revoked, subject imports would again likely undersell the domestic like product to gain market share, as occurred during the original period of investigation.

Because of the substitutability between the domestic like product and subject imports and because price continues to be an important factor in purchasing decisions, the likely significant volume of subject imports, which would likely undersell the domestic like product, would likely force the domestic industry to lower prices or lose sales. In light of these considerations, we conclude that subject imports would likely have significant depressing or suppressing effects on prices for the domestic like product, or cause the domestic industry to lose market share, upon revocation of the order.

E. Likely Impact

1. The Prior Proceedings

In its original determination, the Commission found that the subject imports did not have a significant current impact on the domestic industry's performance. Although a number of the performance indicators for the domestic industry declined, the Commission found that the declines resulted mainly from declining apparent U.S. consumption. The

⁹⁴ Original Determination, USITC Pub. 3586 at 18.

⁹⁵ First Review Determination, USITC Pub. 4023 at 12; Second Review Determination, USITC Pub. 5540 at 16-17.

⁹⁶ First Review Determination, USITC Pub. 4023 at 12; Second Review Determination, USITC Pub. 5540 at 16-17.

Commission also found, however, that the domestic industry was vulnerable to the effects of subject imports in the imminent future in light of its weakened state.⁹⁷

In making its affirmative determination of threat of material injury, the Commission found that the significantly increased volume and market share of imports in the imminent future would have a significant negative impact on the domestic industry's production, capacity utilization, employment, revenues, and profitability. It further found that, given the already weakened condition of the domestic industry, this negative impact would be such that the industry would be materially injured.⁹⁸

In both prior reviews, given the likely significant increase in the volume of subject imports and the likely adverse price effects, the Commission found the domestic industry would likely experience significant declines in production, shipments, sales, and revenue levels, which would have a direct adverse impact on profitability.⁹⁹ The limited information on the record was insufficient to enable the Commission to determine whether the domestic industry was vulnerable. Nonetheless, the Commission concluded that revocation of the order would likely have a significant impact on the domestic industry within a reasonably foreseeable time.¹⁰⁰

2. The Current Review

In this expedited review, the information available on the domestic industry's condition is limited. In 2018, the domestic industry's capacity was *** short tons, its production was *** short tons, and its capacity utilization rate was *** percent.¹⁰¹ The industry's domestic shipments were *** short tons,¹⁰² accounting for a *** percent share of apparent U.S. consumption by quantity.¹⁰³ Its net sales revenue was \$***, and its operating income was \$***, resulting in an operating margin of *** percent.¹⁰⁴ The limited evidence in this expedited review is insufficient for us to make a finding on whether the domestic

⁹⁷ Original Determination, USITC Pub. 3586 at 13-15.

⁹⁸ Original Determination, USITC Pub. 3586 at 18.

⁹⁹ In the first review, the Commission additionally found that these declines would have a direct adverse impact on the domestic industry's employment levels, its ability to raise capital and maintain capital investments, and its research and development expenditures. First Review Determination, USITC Pub. 4023 at 13-14.

¹⁰⁰ First Review Determination, USITC Pub. 4023 at 13-14; Second Review Determination, USITC Pub. 4450 at 28. In the second review, the Commission also found that there were no factors other than the subject imports known to be a likely cause of material injury. Second Review Determination, USITC Pub. 4450 at 28.

¹⁰¹ CR/PR at Table I-4.

¹⁰² CR/PR at Table I-4.

¹⁰³ CR/PR at Table I-8.

¹⁰⁴ CR/PR at Table I-4.

industry is vulnerable to the continuation or recurrence of material injury should the order be revoked.¹⁰⁵

Based on the information on the record, we find that, should the order be revoked, the likely significant volume and price effects of the subject imports would likely have a significant impact on the production, shipments, sales, market share, and revenues of the domestic industry. These declines would likely have a direct adverse impact on the domestic industry's profitability and employment levels, ability to raise capital and maintain capital investments, and research and development expenditures.

We have also considered the role of factors other than subject imports, including the presence of nonsubject imports, so as not to attribute likely injury from other factors to the subject imports. Nonsubject imports have increased their presence in the U.S. market since the second review,¹⁰⁶ and accounted for an appreciable share of consumption – *** percent – in 2018.¹⁰⁷ Nevertheless, because the domestic industry supplies the majority of the U.S. market, and subject imports would likely compete head-to-head with the domestic like product upon revocation, the likely increase in subject imports would likely take market share away from the domestic industry as well as from nonsubject imports. Consequently, the subject imports would likely have adverse effects distinct from any that may be caused by nonsubject imports.

Accordingly, we conclude that revocation of the antidumping duty order on NMPF from China would likely have a significant impact on domestic NMPF producers within a reasonably foreseeable time.

IV. Conclusion

For the reasons discussed above, we determine that revocation of the antidumping duty order on imports of NMPF from China would be likely to lead to continuation or recurrence of material injury to an industry in the United States within a reasonably foreseeable time.

¹⁰⁵ We observe that production, U.S. shipment quantities, and capacity utilization were all lower in 2018 than in 2001 or in either of the prior reviews. Conversely, average unit values and operating margins were both higher in 2018 than in the prior proceedings.

¹⁰⁶ Nonsubject imports totaled 2,606 short tons in 2012, and 3,243 short tons in 2018. See CR/PR at Table I-7.

¹⁰⁷ CR/PR at Table I-5.

INFORMATION OBTAINED IN THIS REVIEW

BACKGROUND

On January 2, 2019, the U.S. International Trade Commission (“Commission”) 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 non-malleable cast iron pipe fittings (“NMPF”) from China would likely lead to the continuation or recurrence of material injury to a domestic industry.² All interested parties were requested to respond to this notice by submitting certain information requested by the Commission.^{3 4} The following tabulation presents information relating to the background and schedule of this proceeding:

Date	Action
January 1, 2019	Notice of initiation by Commerce (84 FR 1705, February 5, 2019)
January 2, 2019	Notice of institution by Commission (84 FR 14, January 2, 2019)
April 12, 2019	Commission’s vote on adequacy (84 FR 20659, May 10, 2019)
June 5, 2019	Commerce’s results of its expedited review
June 25, 2019	Commission’s determination and views

¹ 19 U.S.C. 1675(c).

² *Non-Malleable Cast Iron Pipe Fittings From China; Institution of a Five-Year Review*, 84 FR 14, January 2, 2019. 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, *Initiation of Five-Year (Sunset) Reviews*, 84 FR 1705, February 5, 2019. Pertinent *Federal Register* notices are referenced in app. A, and may be found at the Commission’s website (www.usitc.gov).

³ As part of their response to the notice of institution, interested parties were requested to provide company-specific information. That information is presented in app. B. Summary data compiled in prior proceedings is presented in app. C.

⁴ Interested parties were also requested to provide a list of three to five leading purchasers in the U.S. market for the subject merchandise. Presented in app. D are the responses received from purchaser surveys transmitted to the purchasers identified in the adequacy phase of this review.

RESPONSES TO THE COMMISSION’S NOTICE OF INSTITUTION

Individual responses

The Commission received one submission in response to its notice of institution in the subject review. It was filed on behalf of Anvil International, LLC (“Anvil”) and Ward Manufacturing LLC (“Ward”), domestic producers of NMPF (collectively referred to herein as “domestic interested parties”).⁵

A complete response to the Commission’s notice of institution requires that the responding interested party submit to the Commission all the information listed in the notice. Responding firms are given an opportunity to remedy and explain any deficiencies in their responses. A summary of the number of responses and estimates of coverage for each is shown in table I-1.

Table I-1
NMPF: Summary of responses to the Commission’s notice of institution

Type of interested party	Completed responses	
	Number	Coverage
U.S. producer	1	100% ¹
U.S. importer (domestic producer Anvil)	1	***% ²

¹ The coverage figure is the estimated share of total U.S. production of NMPF in 2018 accounted for by responding firms. In their response to the notice of institution, domestic interested parties estimated that they account for this share of total U.S. production of NMPF during 2018. Domestic interested parties have based their computation on their belief that Anvil and Ward are the only currently operating U.S. producers of NMPF. Domestic interested parties’ response to the notice of institution, February 1, 2019, p. 22.

² The coverage figure is the estimated share of the quantity of total U.S. imports of NMPF from China in 2018 accounted for by the responding firm. The estimate was calculated by domestic interested parties as the quantity of reported imports (** short tons) divided by the quantity of total U.S. imports from China reported for 2018 in Commerce’s official import statistics (estimating December 2018 imports and using HTS reporting numbers 7307.11.0030, 7307.11.0060, and 7307.19.3060 (10,568 short tons)). Domestic interested parties’ response to cure letter, February 21, 2019, pp. 2-3.

Party comments on adequacy

The Commission received one submission from parties commenting on the adequacy of responses to the notice of institution and whether the Commission should conduct an expedited or full review. This submission was filed on behalf of domestic interested parties Anvil and Ward.

⁵ Anvil also provided data on its imports of NMPF from China in its domestic interested party response to the notice of institution. In the second five-year review, the Commission did not count Anvil’s share of imports toward the sufficiency of the respondent interested party group response because Anvil did not support revocation. *Non-Malleable Cast Iron Pipe Fittings From China, Inv. No. 731-TA-990 (Second Review)*, USITC Publication 4450, January 2014, p. 4.

Domestic interested parties argued that the Commission should find the respondent interested party group response to be inadequate since there was no complete submission by any respondent interested party. Furthermore, domestic interested parties state that domestic producers accounting for all domestic production filed an adequate response. Therefore, because of the inadequate response by the respondent interested parties and the fact that there have been no major changes in the conditions of competition in the market, they request that the Commission conduct an expedited review of the antidumping duty order on NMPF.⁶

THE ORIGINAL INVESTIGATION AND SUBSEQUENT REVIEWS

The original investigation

The original investigation resulted from a petition filed on February 21, 2002, with Commerce and the Commission by Anvil International, Inc., Portsmouth, New York, and Ward Manufacturing, Inc., Blossburg, Pennsylvania. On February 18, 2003, Commerce determined that imports of NMPF from China were being sold at less than fair value (“LTFV”).⁷ The Commission determined on March 24, 2003, that the domestic industry was materially injured by reason of LTFV imports of NMPF from China.⁸ On April 7, 2003, Commerce issued its antidumping duty order with final weighted-average dumping margins ranging from 6.34 to 75.50 percent.⁹

The first five-year review

On June 6, 2008, the Commission determined that it would conduct an expedited review of the antidumping duty order on NMPF from China.¹⁰ On July 10, 2008, Commerce published its determination that revocation of the antidumping duty order on NMPF from China would be likely to lead to continuation or recurrence of dumping.¹¹ On July 24, 2008, the Commission notified Commerce of its determination that material injury would be likely to continue or recur to a U.S. industry within a reasonably foreseeable time.¹² Following affirmative determinations in the five-year reviews by Commerce and the Commission, effective, August 15, 2008,

⁶ Domestic interested parties’ comments on adequacy, March 5, 2019, pp. 1-3.

⁷ *Notice of Final Determination of Sales at Less Than Fair Value: Non-Malleable Cast Iron Pipe Fittings from the People’s Republic of China*, 68 FR 7765, February 18, 2003.

⁸ *Non-Malleable Cast Iron Pipe Fittings From China*, 68 FR 15743, April 1, 2013.

⁹ *Notice of Antidumping Duty Order: Non-Malleable Cast Iron Pipe Filings(sic.) From the People’s Republic of China*, 68 FR 16765, April 7, 2003.

¹⁰ *Non-Malleable Cast Iron Pipe Fittings From China*, 73 FR 34325, June 17, 2008.

¹¹ *Non-Malleable Cast Iron Pipe Fittings from the People’s Republic of China; Final Results of the Expedited Sunset Review of the Antidumping Duty Order*, 73 FR 39656, July 10, 2008.

¹² *Non-Malleable Cast Iron Pipe Fittings From China*, 73 FR 45075, August 1, 2008.

Commerce issued a continuation of the antidumping duty order on imports of NMPF from China.¹³

The second five-year review

On October 21, 2013, the Commission determined that it would conduct an expedited review of the antidumping duty order on NMPF from China.¹⁴ On December 3, 2013, Commerce published its determination that revocation of the antidumping duty order on NMPF from China would be likely to lead to continuation or recurrence of dumping.¹⁵ On January 29, 2014, the Commission notified Commerce of its determination that material injury would be likely to continue or recur to a U.S. industry within a reasonably foreseeable time.¹⁶ Following affirmative determinations in the five-year reviews by Commerce and the Commission, effective, February 12, 2014, Commerce issued a continuation of the antidumping duty order on imports of NMPF from China.¹⁷

PREVIOUS AND RELATED INVESTIGATIONS

NMPF has been the subject of several Commission investigations. A listing of these investigations is presented in table I-2.

¹³ *Continuation of Antidumping Duty Order on Non-Malleable Cast Iron Pipe Fittings from the People's Republic of China*, 73 FR 47887, August 15, 2008.

¹⁴ *Non-Malleable Cast Iron Pipe Fittings From China; Scheduling of an Expedited Five-Year Review Concerning the Antidumping Duty Order on Non-Malleable Cast Iron Pipe Fittings From China*, 78 FR 68474, November 14, 2013.

¹⁵ *Non-Malleable Cast Iron Pipe Fittings From the People's Republic of China: Final Results of the Expedited Second Sunset Review of the Antidumping Duty Order*, 78 FR 72639, December 3, 2013.

¹⁶ *Non-Malleable Cast Iron Pipe Fittings From China*, 79 FR 6923, February 5, 2014.

¹⁷ *Non-Malleable Cast Iron Pipe Fittings From the People's Republic of China: Continuation of Antidumping Duty Order*, 79 FR 8437, February 12, 2014.

Table I-2
NMPF: Previous and related Commission proceedings

Product	Inv. No.	Year	Country	Original determination	Current status of the order
Malleable cast iron pipe and tube fittings ¹	TA-201-26	1977	Global Safeguard	Negative	NA
Certain malleable cast iron pipe fittings ²	701-TA-9	1980	Japan	Terminated	NA
Certain cast iron pipe fittings ³	701-TA-221	1984	Brazil	Negative	NA
Certain cast iron pipe fittings ⁴	701-TA-222	1984	India	Terminated	NA
Malleable cast iron pipe fittings ⁵	731-TA-278-280	1986	Brazil, Korea, and Taiwan	Affirmative	Revoked (2000), except for Korea ⁶
Non-malleable cast iron pipe fittings ⁷	731-TA-281	1986	Taiwan	Terminated	NA
Malleable cast iron pipe fittings ⁸	731-TA-347-348	1987	Japan and Thailand	Affirmative	Revoked (2000), except for Japan ⁶
Malleable iron pipe fittings ⁹	731-TA-1021	2003	China	Affirmative	In effect ¹⁰

¹ *Malleable cast iron pipe and tube fittings, Report to the President on Investigation No. TA-201-26, USITC Publication 835, September 1977.*

² *Malleable Pipe Fittings From Japan; Termination of Investigation and Cancellation of Hearing, 45 FR 21753, April 2, 1980.*

³ *Certain Cast-Iron Pipe Fittings from Brazil, Inv. No. 701-TA-221 (Final), USITC Publication 1681, April 1985.*

⁴ *Certain Cast-Iron Pipe Fittings From India, 49 FR 40676, October 17, 1984.*

⁵ *Certain Cast-Iron Pipe Fittings from Brazil, the Republic of Korea, and Taiwan, Inv. Nos. 731-TA-278-280 (Final), USITC Publication 1845, May 1986.*

⁶ *Revocation of Antidumping Duty Orders: Malleable Cast Iron Pipe Fittings From Brazil, Taiwan, and Thailand, 65 FR 10470, February 28, 2000.*

⁷ *Certain Cast-Iron Pipe Fittings from Brazil, the Republic of Korea, and Taiwan, Inv. Nos. 731-TA-278-281 (Preliminary), USITC Publication 1753, September 1985; and Nonmalleable Cast Iron Pipe fittings From Taiwan: Termination of Antidumping Duty Investigation, 51 FR 10648, March 28, 1986.*

⁸ *Certain Malleable Cast-Iron Pipe Fittings from Japan, Inv. No. 731-TA-347 (Final), USITC Publication 1987, June 1987 and Certain Malleable Cast-Iron Pipe Fittings from Thailand, Inv. No. 731-TA-348 (Final), USITC Publication 2004, August 1987.*

⁹ *Malleable Iron Pipe Fittings From China, Inv. No. 731-TA-1021 (Final), USITC Publication 3649, December 2003.*

¹⁰ *Malleable Iron Pipe Fittings from China, Inv. No. 731-TA-1021 (Second Review), USITC Publication 4484, August 2014.*

Source: Cited publications.

ACTIONS AT COMMERCE

Commerce has not conducted any changed circumstances reviews or critical circumstances reviews or issued anti-circumvention findings since the completion of the last five-year review. In addition, Commerce has not issued any duty absorption findings since the imposition of the order.

Scope rulings

Commerce has conducted numerous scope rulings concerning the antidumping duty orders on imports of NMPF since the imposition of the orders. Table I-3 presents its rulings.

Table I-3
NMPF: Commerce's scope rulings

Requestor	Product to be excluded	Commerce ruling	Federal Register cite
Thomas and Betts Corporation	Certain electrical conduit fittings	Denied (November 5, 2004)	70 FR 24533 May 10, 2005
Taco Inc.	Black cast iron flange, green ductile iron flange and cast iron "Twin Tee"	Denied (September 18, 2008)	73 FR 72771 December 1, 2008
R.W. Beckett Corporation	Pipe fittings made of cast iron	Denied (May 14, 2013)	78 FR 59653 September 27, 2013
SIGMA Corporation	Various ductile iron pipe fittings	Denied (January 13, 2016)	82 FR 13794 March 15, 2017
Westinghouse Air Brake Technologies Corporation	Cast iron couplings	Granted (August 4, 2016)	82 FR 48799 October 20, 2017
Napac, Inc.	Gray iron flanged fittings, as well as the couplings, adapters, reducers, and converters (six inches inside diameter and smaller)	Denied (September 19, 2016)	82 FR 48799 October 20, 2017
SIGMA Corporation	Various sizes of ductile iron and stainless steel bolt rings	Granted (September 20, 2016)	82 FR 48799 October 20, 2017
Hydroflo Pumps USA, Inc.	Oil tube adapters	Granted (March 24, 2017)	83 FR 26257 June 6, 2018
U.V. International LLC	Ductile iron flanges	Denied (May 12, 2017)	83 FR 31733 July 9, 2018
Star Pipe Products	Ductile iron flanges	Denied (August 17, 2017)	84 FR 9295 March 14, 2019
Continental Automotive Systems, Inc.	EEGR Base	Granted (September 18, 2017)	84 FR 9295 March 14, 2019

Source: Cited *Federal Register* notices.

Current five-year review

Commerce is conducting an expedited review of the antidumping order with respect to NMPF from China and intends to issue the final results of this review based on the facts available not later than June 5, 2019.¹⁸

THE PRODUCT

Commerce's scope

In the current proceeding, Commerce has defined the scope as follows:

The products covered by the order are finished and unfinished non-malleable cast iron pipe fittings with an inside diameter ranging from 1/4 inch to 6 inches, whether threaded or unthreaded, regardless of industry or proprietary specifications. The subject fittings include elbows, ells, tees, crosses, and reducers as well as flanged fittings. These pipe fittings are also known as "cast iron pipe fittings" or "gray iron pipe fittings." These cast iron pipe fittings are normally produced to ASTM A-126 and ASME B.16.4 specifications and are threaded to ASME B1.20.1 specifications. Most building codes require that these products are Underwriters Laboratories (UL) certified. The scope does not include cast iron soil pipe fittings or grooved fittings or grooved couplings.

Fittings that are made out of ductile iron that have the same physical characteristics as the gray or cast iron fittings subject to the scope above or which have the same physical characteristics and are produced to ASME B.16.3, ASME B.16.4, or ASTM A-395 specifications, threaded to ASME B1.20.1 specifications and UL certified, regardless of metallurgical differences between gray and ductile iron, are also included in the scope of the order. These ductile fittings do not include grooved fittings or grooved couplings. Ductile cast iron fittings with mechanical joint ends (MJ), or push on ends (PO), or flanged ends and produced to the American Water Works Association ("AWWA")

¹⁸ Letter from Abdelali Elouaradia, Director, AD/CVD Operations, Enforcement and Compliance, U.S. Department of Commerce to Nannette Christ, March 20, 2019.

specifications AWWA C110 or AWWA C153 are not included. Additionally, certain brake fluid tube connectors are excluded from the scope of this order.¹⁹

Imports of subject merchandise are currently classifiable in the Harmonized Tariff Schedule of the United States (“HTSUS”) under item numbers 7307.11.00.30, 7307.11.00.60, 7307.19.30.60, 7307.19.30.85, 7326.90.8588. HTSUS subheadings are provided for convenience and customs purposes. The written description of the scope of the order is dispositive.²⁰

U.S. tariff treatment

Based upon the scope set forth by the Department of Commerce, information available to the Commission indicates that the merchandise subject to these investigations is imported under the following subheadings of the Harmonized Tariff Schedule of the United States (“HTS”): 7307.11.00 and 7307.19.30. The 2019 general rate of duty is 4.8 percent ad valorem for HTS subheading 7307.11.00. The 2019 general rate of duty is 5.6 percent ad valorem for HTS subheading 7307.19.30. Decisions on the tariff classification and treatment of imported goods are within the authority of U.S. Customs and Border Protection.

Section 232 and 301 tariff treatment

HTS subheadings 7307.11.00 and 7307.19.30 were not included in the enumeration of iron and steel articles subject to the additional 25 percent ad valorem national-security duties

¹⁹ “To be excluded, the connector must meet the following description: The connector is a “joint block” for brake fluid tubes and is made of non-malleable cast iron to Society of Automotive Engineers (SAE) automotive standard J431. The tubes have an inside diameter of 3.44 millimeters (0.1355 inches) and the inside diameters of the fluid flow channels of the connector are 3.2 millimeters (0.1260 inches) and 3.8 millimeters (0.1496 inches). The end of the tube is forced by pressure over the end of a flared opening in the connector also known as “flared joint.” The flared joint, once made fast, permits brake fluid to flow through channels that never exceed 3.8 millimeters (0.1496 inches) in diameter.” *Non-Malleable Cast Iron Pipe Fittings From the People’s Republic of China: Continuation of Antidumping Duty Order*, 79 FR 8437, February 12, 2014.

²⁰ On April 21, 2009, in consultation with U.S. Customs and Border Protection, Commerce added the following HTSUS classification to the anti-dumping duty module for non-malleable cast iron pipe fittings: 7326.90.8588. See Memorandum from Abdelali Elouaradia, Office Director, Import Administration, Office 4 to Stephen Claeys, Deputy Assistant Secretary, Import Administration regarding the Final Scope Ruling on Black Cast Iron Cast, Green Ductile Flange and Twin Tee, antidumping duty order on non-malleable iron cast pipe fittings from China, dated September 19, 2008. See also Memorandum to the file from Karine Gziryan, Financial Analyst, Office 4, regarding Module Update adding Harmonized Tariff Schedule Number for twin tin fitting included in the scope of antidumping order on non-malleable iron cast pipe fittings from China, dated April 22, 2009. *Non-Malleable Cast Iron Pipe Fittings From the People’s Republic of China: Continuation of Antidumping Duty Order*, 79 FR 8437, February 12, 2014.

under Section 232 of the *Trade Expansion Act of 1962*, as amended.²¹ See U.S. notes 16(a) and 16(b), subchapter III of chapter 99.²²

Products of China classified in HTS subheadings 7307.11.00 and 7307.19.30 are subject to an additional initial 10 percent ad valorem duty rate (annexes A and C 83 FR 47974), under Section 301 of the *Trade Act of 1974*.²³ Escalation of this duty to 25 percent ad valorem was rescheduled from January 1, 2019 (annex B of 83 FR 47947) to March 2, 2019 (83 FR 65198),²⁴ but was subsequently postponed until further notice.²⁵ See U.S. notes 20(e) and 20(f), subchapter III of chapter 99.²⁶

Description and uses²⁷

Pipe fittings are generally used for connecting the bores of two or more pipes or tubes, connecting a pipe to some other apparatus, changing the direction of fluid flow, or closing the pipe. The material from which the subject fittings are made, cast iron, is a general term for alloys, which are primarily composed of iron, carbon (more than 2 percent), and silicon.²⁸ Made to the American Society for Testing and Materials (“ASTM”) and the American Society of Mechanical Engineers (“ASME”) specifications, iron castings exhibit mechanical properties which are determined by the cooling rate during and after solidification, chemical composition, heat treatment, design, and the nature of the molding technique. During the cooling and solidification processes, carbon is segregated within the crystalline structure of the iron in the form of iron carbide or graphite, resulting in different types of cast irons with different physical properties. In practice, iron castings tend to be identified by their microstructures rather than by their chemical compositions.²⁹

²¹ *Adjusting Imports of Steel Into the United States*, Presidential Proclamation 9705, March 8, 2018, 83 FR 11625, March 15, 2018.

²² *HTSUS (2019) Basic* edition, USITC Publication No. 4862, January 2019, pp. 99-III-5 - 99-III-6.

²³ *Notice of Modification of Section 301 Action: China’s Acts, Policies, and Practices Related to Technology Transfer, Intellectual Property, and Innovation*, 83 FR 47974, September 21, 2018.

²⁴ *Notice of Action Pursuant to Section 301: China’s Acts, Policies, and Practices Related to Technology Transfer, Intellectual Property, and Innovation*, 83 FR 65918, December 19, 2018.

²⁵ *Notice of Modification of Section 301 Action: China’s Acts, Policies, and Practices Related to Technology Transfer, Intellectual Property, and Innovation*, 84 FR 7966, March 5, 2019.

²⁶ *HTSUS (2019) Basic* edition, USITC Publication No. 4862, January 2019, pp. 99-III-21 - 99-III-22, 99-III-40, 99-III-44, 99-III-71.

²⁷ Information presented in this section is from *Non-Malleable Cast Iron Pipe Fittings From China, Inv. No. 731-TA-990 (Second Review)*, USITC Publication 4450, January 2014, pp. I-9-I-10.

²⁸ *Iron Castings Handbook*, Charles F. Walton (Ed.), Gray and Ductile Iron Founder’s Society, 1971, pp. 94, 114.

²⁹ In normal iron casting, the ASTM/ASME standard specifications and the desirable mechanical properties of the castings, but not their chemical analyses, are specified to the manufacturer (or foundry) because the chemical compositions of these cast irons overlap.

There are three basic metallurgical types of cast iron pipe fittings: nonmalleable (or gray iron) fittings, ductile fittings, and malleable fittings. The scope of this review includes certain non-malleable and ductile fittings, but excludes malleable fittings. These three types of fittings and the cast iron from which they are made are discussed below.

Non-malleable fittings

Non-malleable iron (also referred to as gray iron³⁰) is defined by ASTM as cast iron that has fine graphite flakes which are formed during cooling. Gray iron has excellent machinability, wear resistance, and high hardness value. Yield strength, however, is not a significant property of gray iron.³¹ Gray iron exhibits no elastic behavior and is comparatively weak, with a tensile strength ranging from 20,000 to 58,000 pounds per square inch (“psi”).³² The graphite flakes dominate the properties of this material, weakening the metallic matrix and causing fractures under stress. The fire protection/sprinkler system market is by far the dominant use for these fittings in the United States, accounting for approximately 90 to 95 percent of shipments. The steam conveyance market represents another 5 percent of shipments, with other uses constituting less than 5 percent of shipments. These non-malleable cast iron pipe fittings are primarily produced to ASTM A-125 and ASME B.16.4 specifications.

Ductile fittings

Ductile iron is a cast iron that has a very small but definite amount of magnesium added in the liquid state so as to induce the formation of graphite as spheroids or nodules. Ductile iron fittings have exceptional tensile strength, good machinability, high impact resistance, and corrosion resistance. Ductile iron has the ductility of malleable iron and the corrosion resistance of alloy cast iron. It compares in strength and elastic properties with cast steel and can be stronger than malleable iron, with a tensile strength ranging from 60,000 to 100,000 psi. Ductile iron fittings are superior to gray iron fittings in elastic properties, impact resistance, yield strength/weight, and wear resistance; ductile fittings are inferior to gray fittings in ease of machine, vibration damping, and cost of manufacture. The subject ductile cast iron pipe fittings marketed in the United States are used in the same primary applications as gray cast iron pipe fittings, i.e., fire protection/sprinkler systems, and are typically produced to ASME B.16.3 specifications. Other nonsubject ductile cast iron pipe fittings are used in the United States for

³⁰ The term “gray” is given because of the gray color of the fractured surface of the cast iron.

³¹ Any time a piece of iron is pulled apart along its length by force, it will be elongated. The stress (or force per unit, measured in pounds per square inch (“psi”) of the cross section of the iron piece) that results in a specified limit of permanent strain (or the change per unit of length measured in percent) is called the yield strength. Yield strength is the maximum load that induces a permanent strain in a material, usually at 0.2 percent above the limit. *Iron Castings Handbook*, Charles F. Walton (Ed.), Gray and Ductile Iron Founder’s Society, 1971, pp. 205, 668.

³² Tensile strength is the maximum load a piece of metal will withstand prior to a fracture.

soil pipe and waterworks applications, such as fittings for underground water mains and main water supply fittings for buildings.³³

Malleable fittings

Malleable iron is characterized by the existence of graphite as irregularly shaped nodules in its microscopic structure. The overall production and heat treatment process performed on malleable cast iron pipe fittings distinguishes the product from NMPF in chemical composition, microstructure, material strength, size, and weight. Malleable cast iron pipe fittings are lighter, thinner, stronger, and less brittle than NMPF and are used when shock and vibration resistance are required and where fittings are subject to quick temperature changes. The principal uses of malleable cast iron pipe fittings are gas lines, piping systems of oil refineries, and building gas and water systems. In some applications, malleable cast iron pipe fittings may be substituted for NMPF, but due to the higher cost of the product, such substitution tends to be uneconomical. Malleable fittings are not included in the imported products subject to this review.

Products specifically excluded from the scope include soil pipe and grooved fittings and couplings. Also excluded from the scope are flanged ductile cast iron fittings and ductile fittings produced to AWWA C110 or AWWA C153 specifications.³⁴ Cast iron soil pipe and fittings, which are typically produced from gray iron, are used primarily in building construction for sanitary and storm drain, waste, and vent piping applications. The product is installed in residential construction, hospitals, schools, and commercial and industrial structures. Cast iron soil pipe and fittings are typically produced in accordance with ASTM A-888, ASTM A-74, or Cast Iron Soil Pipe Institute (“CISPI”) 301 specifications and are available in sizes ranging from 2 to 15 inches. Grooved fittings and couplings, which are produced from ductile or malleable cast iron, are different forms of fittings in which a split coupling attaches to a circumferential groove near the end of each piece to be joined.³⁵ A gasket inside the coupling serves as a seal for the pipe and the coupling. Flanged fittings are different from threaded fittings in that the flanged fittings are cast with an internal rim, or flange, at the end of the fitting. The flanged connection is made by inserting a gasket between the flanged ends of two separate pieces and securing the ends with several bolts.

³³ Fittings for use with soil pipe and ductile fittings for use in waterworks applications meeting AWWA C110 and AWWA C153 specifications are excluded from the scope of this review.

³⁴ Also excluded are ductile fittings with mechanical joint ends and push-on ends. These fittings are produced for waterworks applications and must meet AWWA C110 and AWWA C153 specifications.

³⁵ The vast majority of grooved fittings are manufactured using ductile iron.

Manufacturing process³⁶

Cast iron pipe fittings are manufactured using a technologically mature process. It begins with the making of molten iron in a foundry with fuel provided by foundry coke or an electric furnace. The raw materials are scrap steel, iron scrap, and other materials such as silicon carbide and carbon. The molten iron for cast iron fittings contains approximately 3.5 percent carbon, 2.5 percent silicon, and 0.5 percent manganese by weight, but may vary.

The casting process begins with the making of a pattern, which has the same external form and shape as the designed fitting. Sand casting is the predominant method used in the making of malleable fittings. Molding sand, after being mixed with a binder, is spread around the pattern in a mold, and then rammed by a machine to compact the sand. The pattern is then withdrawn, leaving a mold cavity in the sand. Solid molded sand cores are inserted to form the internal shape of the fitting. Two mold halves are put together with the core in the center. A system of gates, risers, and vents is provided in the casting cavity to ensure a smooth flow of the molten iron into the mold cavity under gravity.

To form the shape of the fittings, molten iron is poured into the mold cavity. After the iron solidifies, the red-hot fittings are shaken out of the sand on a shaker table or belt and allowed to cool for four to five hours.

The specific chemical compositions and manufacturing processes of malleable, non-malleable, and ductile iron fittings differ somewhat, although all are comprised mainly of iron. Many malleable, non-malleable, and cast iron pipe fittings are available in similar configurations and all are produced using sand casting; however, the specific molds for the individual castings are reportedly not interchangeable. After casting, the production of non-malleable and ductile cast iron pipe fittings is essentially complete, except for cooling, cleaning, and, if necessary, machining, threading, or finishing. In contrast, malleable fittings are subjected to an additional process of annealing and controlled cooling after casting.

A ductile cast iron fitting, because of its superior physical yield strength, is lighter and has thinner walls than a non-malleable cast iron fitting of the same inner diameter. Therefore, on the basis of weight, ductile iron is more expensive to produce than non-malleable iron because of the inoculation of magnesium during the production process, more tightly controlled conditions requiring a longer production process, and relative difficulties in finishing compared with non-malleable iron. Malleable iron castings are more expensive to produce per pound than both the ductile iron and non-malleable iron castings because of the additional heat treatment process required. On the basis of pieces, however, the stronger ductile fittings have been described as a cost-effective alternative to malleable fittings in that the ductile fittings cost less than the malleable fittings to manufacture, but are sold at prices similar to those of non-malleable fittings.

³⁶ Information presented in this section is from *Non-Malleable Cast Iron Pipe Fittings From China, Inv. No. 731-TA-990 (Second Review)*, USITC Publication 4450, January 2014, pp. I-10-I-11.

Manufacturing processes and technologies for iron castings are well established and are similar throughout the world. Differences lie mainly in the extent of the application of automatic equipment and ancillary operations such as environmental control facilities.³⁷

THE INDUSTRY IN THE UNITED STATES

U.S. producers

During the final phase of the original investigation, the Commission received U.S. producer questionnaires from three firms, which accounted for approximately all production of NMPF in the United States during 2001.³⁸ Production by petitioners Anvil and Ward accounted for *** percent of domestic production in 2001.³⁹

During the first five-year review, domestic interested parties indicated in their response to the Commission's notice of institution that there were three U.S. producers of NMPF: Anvil and Ward, as well as Frazier and Frazier Industries, Inc., a small "jobber" that has since ceased production of NMPF.⁴⁰ Anvil and Ward together accounted for *** percent of production of NMPF in the United States during 2007.⁴¹ In response to the Commission's notice of institution in the second five-year review, domestic interested parties indicated that there were two known producers of NMPF in the United States (Anvil and Ward) during that time.⁴²

During this current third five-year review, domestic interested parties Anvil and Ward once again indicated that they are the only two known and currently operating U.S. producers of NMPF.⁴³ Domestic interested parties also reported that domestic producer Anvil is an importer of subject merchandise, whose imports from China of *** short tons accounted for an estimated *** percent of total U.S. imports of NMPF from China in 2018. Anvil's U.S. production

³⁷ U.S. producers operate highly automated, state-of-the-art, high-volume plants, whereas the Chinese producers apparently have used a variety of production methods, some of which are reportedly not as technologically advanced nor as environmentally friendly as those used in the United States (e.g., "floor molding") and which were abandoned by U.S. producers decades ago. In addition, the U.S. foundry industry is heavily regulated and continued investment in pollution abatement is required of domestic producers as a condition of operations as new, more stringent standards are issued by the Environmental Protection Agency. The environmental regulations with which Chinese producers must comply are less strict.

³⁸ *Non-Malleable Cast Iron Pipe Fittings from China, Inv. No. 731-TA-990 (Final)*, USITC Publication 3586, March 2003, pp. I-2, II-1.

³⁹ *Investigation No. 731-TA-990 (Final): Non-Malleable Cast Iron Pipe Fittings From China—Staff Report*, INV-AA-022, February 27, 2003, pp. III-1-III-2.

⁴⁰ Domestic interested parties' response to the notice of institution, February 1, 2019, p. 9.

⁴¹ *Investigation No. 731-TA-990 (First Review): Non-Malleable Cast Iron Pipe Fittings From China—Staff Report*, INV-FF-073, June 26, 2008, pp. I-19-20.

⁴² *Non-Malleable Cast Iron Pipe Fittings From China, Inv. No. 731-TA-990 (Second Review)*, USITC Publication 4450, January 2014, p. I-13.

⁴³ Domestic interested parties' response to the notice of institution, February 1, 2019, p. 22.

of NMPF was *** short tons in 2018, which represented *** percent of total U.S. production in that year. The ratio of its imports of subject merchandise to its U.S. production was *** percent in 2018.⁴⁴

Recent developments

Since the Commission's last five-year review, domestic interested parties state that there have been no significant changes in the NMPF industry.⁴⁵

U.S. producers' trade and financial data

The Commission asked domestic interested parties to provide trade and financial data in their response to the notice of institution of the current five-year review.⁴⁶ Table I-4 presents a compilation of the data submitted from all responding U.S. producers, as well as trade and financial data submitted by U.S. producers in the original investigation and first and second five-year reviews.

Table I-4
NMPF: Trade and financial data submitted by U.S. producers, 2001, 2007, 2012, and 2018

* * * * *

Reported capacity decreased from *** short tons in 2001 to *** short tons in 2018. Similarly, total production declined during the same period by *** percent, from *** short tons in 2001 to *** short tons in 2018. Compared to 2012, U.S. producers reported an increase in capacity by *** percent from *** short tons in 2012 to *** short tons in 2018. In contrast, production fell by *** percent from *** short tons in 2012 to *** short tons in 2018. The declining capacity, coupled with the more rapidly declining production resulted in capacity utilization decreasing from *** percent in 2001 to *** percent in 2012, and to *** percent in 2018.

U.S. producers' U.S. commercial shipments also decreased from *** short tons in 2001 to *** short tons in 2012, and to *** short tons in 2018, while unit values increased during this time, from \$*** per short ton in 2001 to \$*** per short ton in 2018. U.S. producers reported ***.

From 2001 to 2018, U.S. producers' net sales, cost of goods sold, gross profit and selling, general and administrative expenses all declined. Although operating income declined from 2001 to 2007, it increased from \$*** in 2012 to \$*** in 2018. Operating income to net sales ratio also increased from *** percent in 2012 to *** percent in 2018.

⁴⁴ Domestic interested parties' response to cure letter, February 21, 2019, p. 3; and domestic interested parties' response to the notice of institution, February 1, 2019, exhs. 1 and 10.

⁴⁵ Domestic interested parties' response to the notice of institution, February 1, 2019, pp. 23-24; and domestic interested parties' comments on adequacy, March 5, 2019, p. 3.

⁴⁶ Individual company trade and financial data are presented in app. B.

DEFINITIONS OF THE DOMESTIC LIKE PRODUCT AND DOMESTIC INDUSTRY

The domestic like product is defined as 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. The domestic industry is defined as 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. Under the related parties provision, the Commission may exclude a related party for purposes of its injury determination if “appropriate circumstances” exist.⁴⁷

In its original determination, the Commission found that there was a single domestic like product consisting of non-malleable and ductile cast iron pipe fittings corresponding to the scope.⁴⁸ In its expedited first and second five-year reviews, the Commission determined that the record contained no new information suggesting that the like product definition should be revisited and defined a single domestic like product consisting of non-malleable and ductile cast iron pipe fittings corresponding to the scope.⁴⁹

In the original determination, the Commission defined the domestic industry as consisting of all U.S. producers of the non-malleable and ductile cast iron pipe fittings corresponding to the scope.⁵⁰ The Commission considered whether one domestic producer should be excluded from the domestic industry because it had imported subject merchandise from China. The Commission found that appropriate circumstances did not exist to exclude the domestic producer from the domestic industry because it found that the domestic producer was focused primarily on domestic production and that it did not appear to have obtained any special advantage from its related party status.⁵¹

In its first five-year review determination, the Commission continued to define the domestic industry as consisting of all U.S. producers of non-malleable cast iron pipe fittings.⁵² Despite circumstances appearing to “raise a significant issue” related to U.S. producer and

⁴⁷ Section 771(4)(B) of the Tariff Act of 1930, 19 U.S.C. § 1677(4)(B).

⁴⁸ *Non-Malleable Cast Iron Pipe Fittings from China, Inv. No. 731-TA-990 (Final)*, USITC Publication 3586, March 2003, p. 8.

⁴⁹ *Non-Malleable Cast Iron Pipe Fittings from China, Inv. No. 731-TA-990 (Second Review)*, USITC Publication 4450, January 2014, p. 6.

⁵⁰ *Non-Malleable Cast Iron Pipe Fittings from China, Inv. No. 731-TA-990 (Final)*, USITC Publication 3586, March 2003, p. 8.

⁵¹ *Non-Malleable Cast Iron Pipe Fittings from China, Inv. No. 731-TA-990 (Final)*, USITC Publication 3586, March 2003, p. 8.

⁵² *Non-Malleable Cast Iron Pipe Fittings from China, Inv. No. 731-TA-990 (First Review)*, USITC Publication 4023, July 2008, p. 5.

importer Anvil, due to the limited record in that expedited five-year review, the Commission “declined to exercise {its} discretion to exclude Anvil from the industry.”⁵³

In the second review, the Commission once again considered whether Anvil, a domestic producer, should be excluded from the domestic industry because it had imported subject merchandise from China. The Commission found that appropriate circumstances did not exist to exclude Anvil from the domestic industry.⁵⁴

In its notice of institution for this third five-year review, the Commission solicited comments from interested parties regarding what they deemed to be the appropriate definitions of the domestic like product and domestic industry and inquired as to whether any related parties issues existed. According to their response to the notice of institution, the domestic interested parties agreed with the Commission’s definition of the domestic like product as stated in the original investigation and subsequent reviews.⁵⁵ As was the case in the previous five-year review, Anvil is an importer of subject merchandise. However, domestic interested parties stated that Anvil continues to import subject NMPF because of the insistence of some customers for lower prices available with imports and explained that Anvil continues to support the continuation of the order. Domestic interested parties agreed with the Commission’s prior definition of the domestic industry, which included Anvil.⁵⁶

U.S. IMPORTS AND APPARENT U.S. CONSUMPTION

U.S. importers

During the final phase of the original investigation, the Commission received U.S. importer questionnaires from 11 firms, which accounted for greater than 90 percent of total U.S. imports of NMPF from China during 2001.⁵⁷

Although the Commission did not receive responses from any respondent interested parties in its first five-year review, the domestic interested parties provided a list of four firms that it believed were importers of NMPF from China both at the time of the first review and the

⁵³ “In the expedited first review, the Commission observed that in 2004, Anvil purchased a firm that was a major importer of subject pipe fittings and that Anvil was a related party because it imported subject merchandise during the period of review.” *Non-Malleable Cast Iron Pipe Fittings from China, Inv. No. 731-TA-990 (Second Review)*, USITC Publication 4450, January 2014, p. 7. See also, *Non-Malleable Cast Iron Pipe Fittings from China, Inv. No. 731-TA-990 (First Review)*, USITC Publication 4023, July 2008, p. 6.

⁵⁴ “The domestic industry maintains that Anvil imports some subject merchandise simply because some customers insist on the lower prices available for imports. Moreover, Anvil supports continuation of the order.” *Non-Malleable Cast Iron Pipe Fittings from China, Inv. No. 731-TA-990 (Second Review)*, USITC Publication 4450, January 2014, p. 8.

⁵⁵ Domestic interested parties’ response to the notice of institution, February 1, 2019, p. 24.

⁵⁶ Domestic interested parties’ response to the notice of institution, February 1, 2019, pp. 22, 24.

⁵⁷ *Non-Malleable Cast Iron Pipe Fittings from China, Inv. No. 731-TA-990 (Final)*, USITC Publication 3586, March 2003, p. IV-1.

original investigation.⁵⁸ During the second five-year review, the domestic interested parties listed five companies believed to be U.S. importers of subject merchandise.⁵⁹

In its response to the Commission's notice of institution in this current third five-year review, the domestic interested parties provided a list of five known and currently operating U.S. importers of NMPF. They also noted that the 11 importers that responded to the Commission's questionnaire in the original investigation would "likely continue or resume importation if the order is revoked."⁶⁰

U.S. imports

Table I-5 presents the quantity, value, and unit value for imports from China, as well as India and Japan, the other top sources of U.S. imports for comparison, during the period of review. Overall, U.S. imports from China decreased by 43.9 percent in quantity terms (28.3 percent in value terms) from 6,566 short tons (\$14.2 million) in 2013 to 3,681 short tons (\$10.2 million) in 2018. The quantity of nonsubject imports increased from 2013 to 2015, before declining to 3,243 short tons in 2018. The value of nonsubject imports increased from \$9.4 million in 2013 to \$14.3 million in 2015, before declining to \$13.4 million in 2018. The leading sources of nonsubject imports in 2018 were India and Japan, representing 23.5 percent and 10.8 percent of total imports in quantity terms and 15.2 percent and 20.5 percent in value terms, respectively.

The unit value of U.S. imports increased irregularly from 2013 to 2018 for imports from China, India, and all other sources, while the unit value of U.S. imports from Japan decreased in every annual period from 2013 to 2018. During each annual period from 2013 to 2018, unit values of U.S. imports from China were at least \$330 per short ton higher than unit values of U.S. imports from India. Conversely, unit values of NMPF from Japan were 2 to 6 times larger than unit values of U.S. imports from China during 2013-18. Unit values from all other nonsubject sources combined were also larger than the unit values of NMPF from China between 2013 and 2018.

⁵⁸ *Non-Malleable Cast Iron Pipe Fittings from China, Inv. No. 731-TA-990 (First Review)*, USITC Publication 4023, July 2008, pp. I-3 and I-18.

⁵⁹ *Non-Malleable Cast Iron Pipe Fittings From China, Inv. No. 731-TA-990 (Second Review)*, USITC Publication 4450, January 2014, p. I-16.

⁶⁰ Domestic interested parties' response to the notice of institution, February 1, 2019, p. 22 and exh. 7.

Table I-5
NMPF: U.S. imports, 2013-18

Item	2013	2014	2015	2016	2017	2018
	Quantity (short tons)					
China (subject)	6,566	6,136	4,514	3,199	3,625	3,681
Nonsubject sources:						
India	1,113	1,689	1,729	1,399	1,478	1,624
Japan	246	276	419	407	607	747
All other imports	838	1,029	2,266	1,119	1,349	871
Subtotal, nonsubject	2,197	2,994	4,414	2,924	3,434	3,243
Total imports	8,762	9,129	8,928	6,123	7,059	6,923
	Landed, duty-paid value (\$1,000)					
China (subject)	14,164	12,913	11,164	7,206	7,964	10,156
Nonsubject sources:						
India	1,999	2,997	3,348	2,528	2,674	3,597
Japan	4,240	3,897	4,508	3,874	4,540	4,826
All other imports	3,164	4,358	6,414	4,731	6,359	5,011
Subtotal, nonsubject	9,403	11,252	14,270	11,133	13,573	13,434
Total imports	23,567	24,165	25,435	18,339	21,537	23,589
	Unit value (dollars per short ton)					
China (subject)	2,157	2,104	2,473	2,253	2,197	2,759
Nonsubject sources:						
India	1,796	1,774	1,936	1,807	1,809	2,214
Japan	17,247	14,129	10,750	9,529	7,474	6,457
All other imports	3,776	4,235	2,831	4,228	4,714	5,754
Subtotal, nonsubject	4,280	3,758	3,233	3,807	3,953	4,143
Total imports	2,690	2,647	2,849	2,995	3,051	3,407

Note.--Because of rounding, figure may not add to total shown.

Source: Official statistics of Commerce for HTS statistical reporting numbers 7307.11.0030 and 7307.11.0060.

The domestic interested parties noted in their response to the notice of institution that the Commission has historically relied on the two primary HTS statistical reporting numbers for its data presentations, 7307.11.0030 and 7307.11.0060, even though four HTS numbers are included in the scope. They argued further that since most of the imports under the third HTS statistical reporting number, 7307.19.3060, are believed to be in-scope merchandise and since a portion of the imports under the fourth HTS statistical reporting number, 7307.19.3085, are believed to be in-scope merchandise, reliance on only the first two HTS statistical reporting numbers “greatly understates the full volume of subject imports.”⁶¹ For consistency, U.S.

⁶¹ Domestic interested parties’ response to the notice of institution, February 1, 2019, pp. 13-14 and exh. 4.

import data, as well as the import component of apparent U.S. consumption and market shares, presented in this report, again are compiled from official Commerce import statistics for HTS statistical reporting numbers 7307.11.0030 and 7307.11.0060. U.S. import data from China for the two secondary HTS statistical reporting numbers are presented in Table I-6 and decreased irregularly between 2013 and 2018 in both quantity and value terms.

Table I-6
NMPF: U.S. imports from China, 2013-18

Item	2013	2014	2015	2016	2017	2018
Quantity (short tons)						
HTS statistical reporting number:						
7307.19.3060	5,501	5,854	6,798	7,321	8,393	7,501
7307.19.3085	6,080	3,661	3,549	2,458	1,566	3,643
Total imports from China	11,581	9,515	10,346	9,779	9,959	11,144
Landed, duty-paid value (\$1,000)						
HTS statistical reporting number:						
7307.19.3060	12,408	13,448	16,093	16,903	19,222	18,498
7307.19.3085	15,141	8,033	8,699	5,991	3,445	7,116
Total imports from China	27,549	21,481	24,792	22,894	22,667	25,614
Unit value (dollars per short ton)						
HTS statistical reporting number:						
7307.19.3060	2,255	2,297	2,367	2,309	2,290	2,466
7307.19.3085	2,490	2,195	2,451	2,437	2,200	1,953
Total imports from China	2,379	2,258	2,396	2,341	2,276	2,298

Note.--Because of rounding, figure may not add to total shown.

Source: Official statistics of Commerce for HTS statistical reporting numbers 7307.19.3060 and 7307.19.3085.

Apparent U.S. consumption and market shares

Table I-7 presents data on U.S. producers' U.S. shipments, U.S. imports, and apparent U.S. consumption. By quantity, apparent U.S. consumption decreased overall by *** percent from *** short tons in 2001 to *** short tons in 2018. Apparent U.S. consumption in value terms decreased irregularly on a percentage basis by considerably less, increasing from \$*** in 2001 to \$*** in 2007 before declining to \$*** in 2018, for an overall decrease of *** percent.

Table I-7**NMPF: U.S. producers' U.S. shipments, U.S. imports, and apparent U.S. consumption, 2001, 2007, 2012, and 2018**

Item	2001	2007	2012	2018
	Quantity (short tons)			
U.S. producers' U.S. shipments	***	***	***	***
U.S. imports from—				
China	***	12,832	6,838	3,681
Nonsubject sources	***	5,340	2,606	3,243
Total imports	***	18,171	9,444	6,923
Apparent U.S. consumption	***	***	***	***
	Value (1,000 dollars)			
U.S. producers' U.S. shipments	***	***	***	***
U.S. imports from—				
China	***	15,538	15,521	10,156
Nonsubject sources	***	14,532	11,306	13,434
Total imports	***	30,070	26,827	23,589
Apparent U.S. consumption	***	***	***	***

Source: For the years 2001, 2007, and 2012, U.S. producers' data are compiled using data submitted in the Commission's original investigation and first and second five-year reviews. See *app. C*. For the year 2018, U.S. producers' U.S. shipments are compiled from the domestic interested parties' response to the Commission's notice of institution in this third five-year review. For the years 2007, 2012, and 2018, U.S. imports are compiled using official Commerce statistics under HTS statistical reporting numbers 7307.11.0030 and 7307.11.0060. For 2001, the import component of apparent consumption was derived from U.S. shipments of U.S. imports from questionnaire response submitted during the original investigation.

Following an increase of *** short tons between 2001 and 2007, U.S. imports from China declined in 2018 to 3,681 short tons in quantity terms, while U.S. producers' shipments declined since 2001, the final period examined in the original investigation, by *** to *** in 2018. U.S. producers' domestic shipments were *** percent lower in quantity terms in 2012 than in 2018. The value of U.S. imports from China was \$*** in 2001, \$15.5 million in 2007 and 2012, and \$10.1 million in 2018. In terms of quantity, U.S. imports from nonsubject sources were *** percent higher in 2018 than in 2001, while in value terms, U.S. imports from nonsubject sources were *** percent higher.

Table I-8 presents data on U.S. market shares of apparent U.S. consumption. Overall, U.S. producers' market share was *** percentage points lower in 2018 than in 2001 in quantity terms, but was *** percentage points higher in 2018 than in 2012. In contrast, the share of the U.S. market held by U.S. imports from China in quantity terms was *** percentage points higher in 2018 than in 2001, but was *** percentage points lower in 2018 when compared with 2012. Between 2001 and 2018, the share of the U.S. market held by nonsubject imports increased by *** percentage points, from *** percent in 2001 to *** percent in 2018 in quantity terms.

Table I-8

NMPF: Apparent U.S. consumption and U.S. market shares, 2001, 2007, 2012, and 2018

* * * * *

THE INDUSTRY IN CHINA

During the final phase of the original investigation, the Commission received foreign producer/exporter questionnaires from five firms, whose exports to the United States accounted for greater than *** percent of total U.S. imports of NMPF from China during 2001.⁶²

During the first five-year review, the Commission did not receive responses from any respondent interested parties although, the domestic interested parties provided a list of five firms that they believed had exported NMPF from China to the United States since the 2003 determination.⁶³ In response to the Commission’s notice of institution in the second five-year review, the domestic industry identified 13 producers of NMPF in China.⁶⁴

In response to the Commission’s notice of institution in this third five-year review, the domestic industry identified 19 producers of NMPF in China.⁶⁵ Domestic interested parties also presented in their response to the notice of institution data regarding new production and capacity expansions in China by Shanxi Kaikuo Castings Co., Ltd.; Zezhou Golden Autumn Foundry; Shandong Ding Liang Fire Technology Co., Ltd.; Tiagu County Tianhe Foundry Co., Ltd.; Hebei Dikai Pipe Manufacturing Co., Ltd.; and Shijiazhuang Changan Dongsheng Pipe Fittings Factory. According to their response, these firms were either new producers or have recently invested or planned to invest in new plants and technology and are examples of the excess capacity in China and the “Chinese producers’ ability to ramp up exports to the U.S. market upon revocation.”⁶⁶ There were no data regarding Chinese capacity, production, and exports to the United States submitted in response to the notice of institution for this current review or previous five-year reviews.

⁶² These five firms were Beijing JDH Metal Products, Ltd. (“JDH”); GMS Pipe Fittings Industries, Inc. (“GMS”); Jinan Meide Casting Co., Ltd. (“JMC”); Linyi Luozhuang Yongli Casting Steel Foundry; and Shanghai Padong Malleable Iron Plant. Only one Chinese producer/exporter (JDH) provided a response to the Commission’s questionnaire in the final phase of the investigation. Therefore, data received in the preliminary phase of the investigation were presented in the Commission’s final phase staff report. *Investigation No. 731-TA-990 (Final): Non-Malleable Cast Iron Pipe Fittings From China—Staff Report*, INV-AA-022, February 27, 2003, pp. VII-1—VII-3.

⁶³ *Non-Malleable Cast Iron Pipe Fittings from China, Inv. No. 731-TA-990 (First Review)*, USITC Publication 4023, July 2008, p. I-25.

⁶⁴ *Non-Malleable Cast Iron Pipe Fittings From China, Inv. No. 731-TA-990 (Second Review)*, USITC Publication 4450, January 2014, p. I-19.

⁶⁵ Domestic interested parties’ response to the notice of institution, February 1, 2019, ex. 8.

⁶⁶ Domestic interested parties’ response to the notice of institution, February 1, 2019, pp. 16-17.

Table I-9 presents export data during 2013-18 for NMPF from China. These data are overstated for in-scope NMPF because they include out-of-scope items such as cast iron soil pipe fittings. China's largest export market for NMPF was the United States, receiving almost 40 percent of China's total exports of NMPF in 2018, followed by South Korea and Hong Kong at approximately 4 percent of China's total exports. The top nine export markets for Chinese NMPF, excluding the United States, accounted for 26.4 percent of exports of NMPF from China in 2018. During 2013-18, total exports of NMPF from China ranged from 285,918 short tons (2013) to 365,138 short tons (2017).

Table I-9
NMPF: Exports from China, by destination, 2013-18

Item	Calendar year					
	2013	2014	2015	2016	2017	2018
	Quantity (short tons)					
United States	118,251	135,351	126,048	129,858	146,440	141,628
South Korea	4,830	6,263	6,603	6,995	12,209	13,476
Hong Kong	10,238	12,590	14,468	12,492	15,332	12,670
Canada	7,963	9,151	10,806	9,817	10,327	11,043
Spain	6,878	8,827	11,223	9,174	10,962	10,345
Taiwan	12,937	12,941	16,552	14,951	17,890	10,292
Australia	6,237	6,133	6,036	6,714	7,955	9,836
Japan	10,306	11,290	9,717	10,253	10,534	9,484
United Kingdom	7,284	8,174	6,858	7,253	7,435	8,585
United Arab Emirates	7,451	5,907	9,053	8,892	10,434	8,104
All other	93,541	101,845	110,140	113,874	115,620	119,855
Total	285,918	318,471	327,504	330,272	365,138	355,319

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

Source: Global Trade Information Services, Inc., Global Trade Atlas, HTS subheading 7307.11. These data may be overstated as HTS 7307.11 contains products outside the scope of this review.

ANTIDUMPING OR COUNTERVAILING DUTY ORDERS IN THIRD-COUNTRY MARKETS

There are no trade remedy orders on NMPF from China in a third country market.

THE GLOBAL MARKET

Table I-10 presents the largest global export sources of NMPF during 2013-18. China and India were the largest exporters in 2018, and accounted for 85.2 percent and 6.5 percent of total global exports by quantity, respectively.

Table I-10
NMPF: Global exports by major sources, 2013-18

Item	Calendar year					
	2013	2014	2015	2016	2017	2018
	Quantity (short tons)					
China	285,918	318,471	327,504	330,272	365,138	355,319
India	47,894	30,191	26,858	28,116	58,229	26,959
United Kingdom	7,782	8,592	8,060	7,519	7,190	7,612
France	4,659	3,758	4,511	3,755	4,122	4,176
Czech Republic	3,788	5,309	4,630	4,652	4,342	4,038
United States	10,140	7,616	6,122	4,792	4,535	3,642
Brazil	3,928	4,251	5,501	4,886	3,862	3,306
Turkey	1,188	1,935	1,075	794	931	1,818
Portugal	1,354	1,601	784	781	652	1,618
Japan	2,655	1,176	3,992	3,375	1,274	1,565
All other	66,519	64,091	49,968	50,415	48,468	6,887
Total	435,824	446,991	439,005	439,355	498,744	416,941

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

Source: Global Trade Information Services, Inc., Global Trade Atlas, HTS subheading 7307.11. These data may be overstated as HTS 7307.11 contains products outside the scope of this review.

APPENDIX A

FEDERAL REGISTER NOTICES

The Commission makes available notices relevant to its investigations and reviews on its website, www.usitc.gov. In addition, the following tabulation presents, in chronological order, *Federal Register* notices issued by the Commission and Commerce during the current proceeding.

Citation	Title	Link
84 FR 14 January 2, 2019	<i>Non-Malleable Cast Iron Pipe Fittings From China; Institution of a Five-Year Review</i>	https://www.govinfo.gov/content/pkg/FR-2019-01-02/pdf/2018-28269.pdf
84 FR 1705 February 5, 2019	<i>Initiation of Five-Year (Sunset) Reviews</i>	https://www.govinfo.gov/content/pkg/FR-2019-02-05/pdf/2019-01271.pdf

APPENDIX B
COMPANY-SPECIFIC DATA

* * * * *

APPENDIX C

SUMMARY DATA COMPILED IN PRIOR PROCEEDINGS

Table C-1

Subject non-malleable/ductile cast iron pipe fittings: Summary data concerning the U.S. market, 1999-2001, January-September 2001, and January-September 2002

* * * * *

Table C-2

Subject non-malleable cast iron pipe fittings: Summary data concerning the U.S. market, 1999-2001, January-September 2001, and January-September 2002

* * * * *

Table C-3

Subject ductile cast iron pipe fittings: Summary data concerning the U.S. market, 1991-2001, January-September 2001, and January-September 2002

* * * * *

Table C-4

Non-malleable cast iron pipe fittings (with inside diameter > 6 inches): Summary data concerning the U.S. market, 1999-2001, January-September 2001, and January-September 2002

* * * * *

Table C-5

Non-malleable/ductile grooved cast iron pipe fittings: Summary data concerning the U.S. market, 1999-2001, January-September 2001, and January-September 2002

* * * * *

Table C-6

Flanged ductile pipe fittings: Summary data concerning the U.S. market, 1999-2001, January-September 2001, and January-September 2002

* * * * *

Ward

Ward indicated in its response to the Commission's notice of institution in this review that it accounted for an estimated *** percent of domestic production of non-malleable cast iron pipe fittings during 2007.⁴⁷ The company, which is located in Blossburg, PA, has been a wholly owned subsidiary of Hitachi Metals America, Ltd., which is wholly owned by Hitachi, Inc., a Japanese company, since 1990.⁴⁸ At its Blossburg facility, Ward produces a full line of malleable pipe fittings and unions, cast iron pipe fittings, and nipples, along with a corrugated stainless steel gas piping system (called Wardflex). The company sells its products to professional wholesalers through an established distributor network of sales representative agencies across the United States. Ward recently announced price increases of approximately nine percent for its malleable and non-malleable cast iron pipe fittings (effective June 2, 2008). The company explained that the increase in price was necessary "due to continuing increases in our raw material and energy costs."⁴⁹ As indicated in its response to the Commission's notice of institution in this review, Ward does not import or otherwise purchase the subject Chinese fittings.⁵⁰

U.S. Producers' Trade, Employment, and Financial Data

Data reported by U.S. producers of non-malleable cast iron pipe fittings in the Commission's original investigation and in response to its five-year review institution notice are presented in table I-4. Company-specific data reported by Anvil and Ward are presented in tables I-5 and I-6. During the period examined in the final phase of the Commission's original investigation, the domestic industry's capacity, production, capacity utilization, sales (U.S. shipments), market share, and employment and financial indicia generally were stable or decreased modestly between 1999 and 2000, then declined more noticeably in 2001 and in January-September 2002 (relative to January-September 2001). In its determination, the Commission found that, while sales lost to imports from China were a factor in the domestic industry's decline, a large majority of the decline in domestic producers' performance indicators resulted from a reduction in total consumption.⁵¹

Table I-4

Non-malleable cast iron pipe fittings: U.S. producers' trade, employment, and financial data, 1999-2001, January-September 2001, January-September 2002, and 2007

* * * * *

Table I-5

Non-malleable cast iron pipe fittings: Anvil's trade data, 1999-2001 and 2007

* * * * *

⁴⁷ *Supplemental Response* of domestic interested parties, May 8, 2008, p. 1.

⁴⁸ *Ward Manufacturing website* at <http://www.wardmfg.com/>; and *Hitachi Metals America, Ltd. website* at <http://www.hitachimetals.com/>.

⁴⁹ *Ward website* at <http://www.wardmfg.com/>.

⁵⁰ Anvil was the only related party ***. ***.

⁵¹ *Non-Malleable Cast Iron Pipe Fittings From China: Investigation No. 731-TA-990 (Final)*, USITC Publication 3586, March 2003, pp. 14-15.

Table I-10

Non-malleable cast iron pipe fittings: U.S. producers' U.S. shipments, U.S. shipments of imports, and apparent U.S. consumption, 1999-2001, January-September 2001, January-September 2002, and 2007

Item	1999	2000	2001	Jan.-Sept.		2007
				2001	2002	
Quantity (short tons)						
U.S. producers' U.S. shipments	***	***	***	***	***	***
U.S. shipments of imports from-- China	***	***	***	***	***	12,832 ¹
Other sources	***	***	***	***	***	5,340 ¹
Total import shipments	***	***	***	***	***	18,171 ¹
Apparent U.S. consumption	***	***	***	***	***	*** ²
Value (1,000 dollars)						
U.S. producers' U.S. shipments	***	***	***	***	***	***
U.S. shipments of imports from-- China	***	***	***	***	***	15,538 ¹
Other sources	***	***	***	***	***	14,532 ¹
Total import shipments	***	***	***	***	***	30,070 ¹
Apparent U.S. consumption	***	***	***	***	***	*** ²
Share of consumption based on quantity (percent)						
U.S. producers' U.S. shipments	***	***	***	***	***	***
U.S. shipments of imports from-- China	***	***	***	***	***	*** ¹
Other sources	***	***	***	***	***	*** ¹
Total import shipments	***	***	***	***	***	*** ¹
Apparent U.S. consumption	100.0	100.0	100.0	100.0	100.0	100.0
Share of consumption based on value (percent)						
U.S. producers' U.S. shipments	***	***	***	***	***	***
U.S. shipments of imports from-- China	***	***	***	***	***	*** ¹
Other sources	***	***	***	***	***	*** ¹
Total import shipments	***	***	***	***	***	*** ¹
Apparent U.S. consumption	100.0	100.0	100.0	100.0	100.0	100.0
<p>¹ U.S. imports are presented for 2007 because U.S. shipments of imports are not available for that period.</p> <p>² Apparent U.S. consumption presented for 2007 may be understated by the amount of U.S. imports of non-malleable cast iron pipe fittings entering the United States under HTS statistical reporting numbers other than 7307.11.0030 and 7307.11.0060.</p>						
<p>Source: <i>Staff Report on Non-Malleable Cast Iron Pipe Fittings From China, Investigation No. 731-TA-990 (Final)</i>, February 27, 2003 (INV-AA-022), tables III-1, III-2, III-3, III-4, III-5, IV-2, and VI-1; <i>Response of domestic interested parties</i>, April 21, 2008, pp. 9-10 and ex. II; <i>Supplemental Response of domestic interested parties</i>, May 8, 2008, p. 1 and ex. I; and official Commerce statistics, HTS statistical reporting numbers 7307.11.0030 and 7307.11.0060.</p>						

Table I-2
Non-malleable cast iron pipe fittings: U.S. producers' locations and company shares of total domestic production, 2001, 2007, and 2012

Firm	Location	Share of domestic production (percent)		
		2001	2007	2012
Anvil	Exeter, NH	***	***	***
Buck	Quarryville, PA	(¹)	(²)	(²)
Frazier	Coolidge, TX	***	***	(²)
Ward	Blossburg, PA	***	***	***

¹Buck's production of the subject fittings for Ward during 2001 accounted for *** percent of total reported domestic production in that year.

²The domestic interested parties did not identify this firm as a current domestic producer.

Source: *Non-Malleable Cast Iron Pipe Fittings From China Investigation No. 731-TA-990 (Review)*, USITC Publication 4023, July 2008, table I-3; *Response of domestic interested parties*, July 31, 2013, exh. 7.

U.S. producers' trade and financial data

Table I-3 presents data on U.S. producers' select trade and financial data in 1999-2001, 2007, and 2012. Table I-4 presents data on the domestic interested parties' NMPF operations in 2012.

Table I-3
Non-malleable cast iron pipe fittings: U.S. producers' trade and financial data, 1999-2001, 2007, and 2012

* * * * *

Table I-4
Non-malleable cast iron pipe fittings: domestic interested parties NMPF operations for 2012

* * * * *

The domestic interested parties contend that the domestic industry is vulnerable, with an operating income margin of *** percent in 2012,⁴⁸ and capacity utilization of *** percent in 2012.⁴⁹ The domestic interested parties indicated that the industry remains vulnerable given that nonresidential construction has declined since the end of the first review period and nonresidential spending has been flat.⁵⁰

Related party issues

In both the original investigation and first five-year review, the Commission defined the domestic industry as consisting of all producers of non-malleable and ductile cast iron pipe

⁴⁸ *Response of domestic interested parties*, July 31, 2013, p. 20.

⁴⁹ *Ibid.*, p. 20.

⁵⁰ *Ibid.*, p. 20.

Apparent U.S. consumption and market shares

In their response to the Commission's notice of institution for this review, the domestic interested parties indicated that competitive conditions in the domestic industry have not changed significantly since either the original investigation or the first review.⁶¹ Data on U.S. producers' U.S. shipments, U.S. shipments of imports, and apparent U.S. consumption are presented in table I-8.

Table I-8
Non-malleable cast iron pipe fittings: U.S. producers' U.S. shipments, U.S. shipments of imports, and apparent U.S. consumption, 1999-2001, 2007, and 2012

Item	1999	2000	2001	2007	2012
Quantity (short tons)					
U.S. producers' U.S. shipments	***	***	***	***	***
U.S. shipments of imports from:					
China	5,469	6,221	6,432	12,832 ¹	6,838 ¹
Other sources	***	***	***	5,340 ¹	2,606 ¹
Total import shipments	***	***	***	18,171 ¹	9,444 ¹
Apparent U.S. consumption	***	***	***	***	***
Value (1,000 dollars)					
U.S. producers' U.S. shipments	***	***	***	***	***
U.S. shipments of imports from:					
China	6,828	7,630	7,575	15,538 ¹	15,521 ¹
Other sources	***	***	***	14,532 ¹	11,306 ¹
Total import shipments	***	***	***	30,070 ¹	26,827 ¹
Apparent U.S. consumption	***	***	***	***	***
Share of consumption based on quantity (percent)					
U.S. producers' U.S. shipments	***	***	***	***	***
U.S. shipments of imports from:					
China	***	***	***	***	***
Other sources	***	***	***	***	***
Total import shipments	***	***	***	***	***
Apparent U.S. consumption	100.0	100.0	100.0	100.0	100.0
Share of consumption based on value (percent)					
U.S. producers' U.S. shipments	***	***	***	***	***
U.S. shipments of imports from:					
China	***	***	***	***	***
Other sources	***	***	***	***	***
Total import shipments	***	***	***	***	***
Apparent U.S. consumption	100.0	100.0	100.0	100.0	100.0

¹ Data for U.S. imports are presented for 2007 and 2012 because data for U.S. shipments of imports are not available for those years.

² Apparent U.S. consumption presented for 2007 and 2012 may be understated by the amount of U.S. imports of NMPF entering the United States under HTS statistical reporting numbers other than 7307.11.0030 and 7307.11.0060.

Source: *Staff Report to the Commission on Investigation No. 731-TA-990 (Review)*, June 26, 2008 (INV-FF-073), tables I-10 for 1999-2001 and 2007; *Response of domestic interested parties*, July 31, 2013, exh. 7 for 2012 U.S. producers' U.S. shipments; and 2012 import data compiled from official Commerce statistics, HTS statistical reporting numbers 7307.11.0030 and 7307.11.0060.

⁶¹ *Response of domestic interested parties*, July 31, 2013, p. 4.

APPENDIX D

PURCHASER QUESTIONNAIRE RESPONSES

As part of their response to the notice of institution, interested parties were asked to provide a list of three to five leading purchasers in the U.S. market for the domestic like product. A response was received from domestic interested parties ***, and the following eight firms were named as the top purchasers of non-malleable cast iron pipe fittings: **. Purchaser questionnaires were sent to these eight firms and three firms (***) provided responses, which are presented below.

1. Have there been any significant changes in the supply and demand conditions for non-malleable cast iron pipe fittings that have occurred in the United States or in the market for non-malleable cast iron pipe fittings in China since January 1, 2014?

Purchaser	Changes that have occurred
***	No
***	No
***	Yes- the domestic economy has improved which has increased demand

2. Do you anticipate any significant changes in the supply and demand conditions for non-malleable cast iron pipe fittings in the United States or in the market for non-malleable cast iron pipe fittings in China within a reasonably foreseeable time?

Purchaser	Anticipated changes
***	No
***	No
***	Yes- Assuming a strong economy for the next few years

