

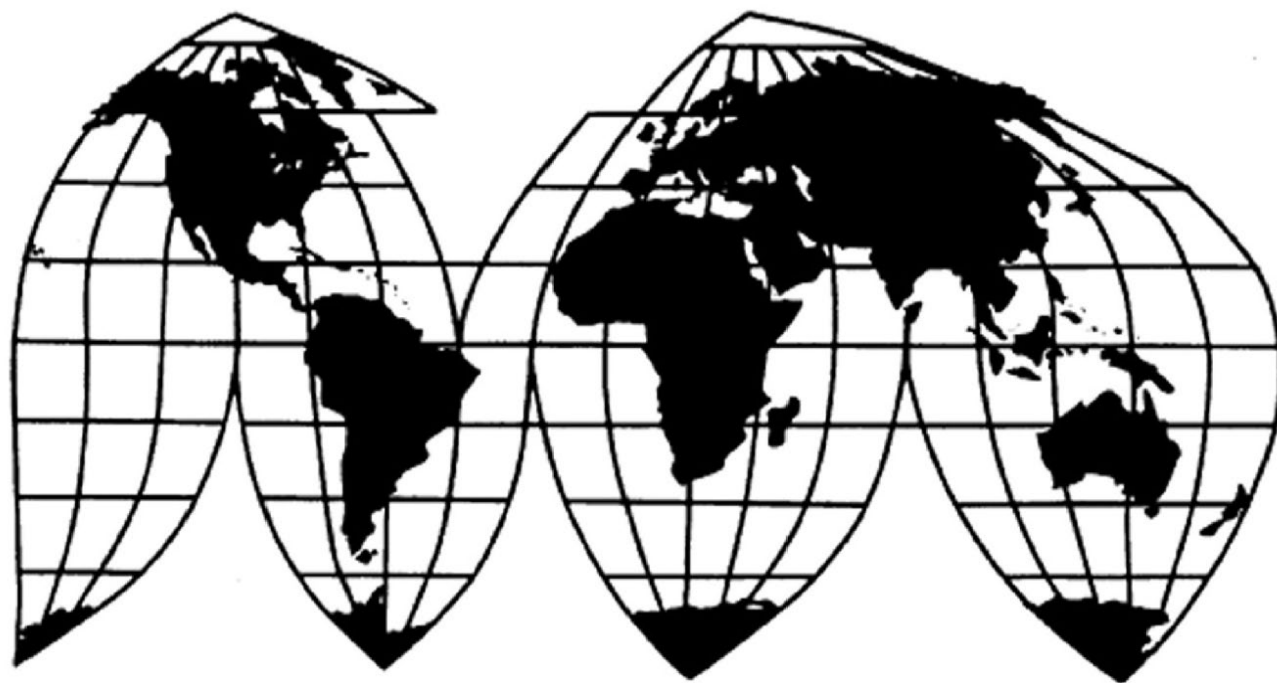
Non-Malleable Cast Iron Pipe Fittings from China

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

Publication 5576

January 2025

U.S. International Trade Commission



Washington, DC 20436

U.S. International Trade Commission

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UNITED STATES INTERNATIONAL TRADE COMMISSION

Investigation No. 731-TA-990 (Fourth 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.²

BACKGROUND

The Commission instituted this review on June 3, 2024 (89 FR 47610, June 3, 2024) and determined on September 6, 2024, that it would conduct an expedited review (89 FR 84932, October 24, 2024).

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

² Commissioners Jason E. Kearns and Rhonda K. Schmidlein not participating.

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

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.

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).

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”).

Third Review: The Commission instituted its third five-year review on January 2, 2019.¹⁰ After conducting an expedited review, the Commission reached an affirmative determination June 25, 2019.¹¹ Commerce issued a continuation of the order on July 9, 2019.¹²

Current Review: The Commission instituted this fourth five-year review on June 3, 2024.¹³ ASC Engineered Solutions, LLC (“ASC”) and Ward (collectively, the “domestic interested parties”), jointly filed the sole response to the notice of institution on July 1, 2024.¹⁴ The domestic interested parties submitted a supplemental response on July 25, 2024,¹⁵ and filed comments on adequacy on August 8, 2024.¹⁶ On September 6, 2024, 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.¹⁷ Finding that no other circumstances warranted a full review, the Commission determined to conduct an expedited review.¹⁸

(...Continued)

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 *Non-Malleable Cast Iron Pipe Fittings From China*, 84 Fed. Reg. 31349 (July 1, 2019); *Non-Malleable Cast Iron Pipe Fittings From China*, Inv. No. 731-TA-990 (Third Review), USITC Pub. 4915 (June 2019) (“Third Review Determination”).

¹² *Non-Malleable Cast Iron Pipe Fittings from China: Continuation of Antidumping Duty Order*, 84 Fed. Reg. 32722 (July 19, 2019).

¹³ *Non-Malleable Cast Iron Pipe Fittings From China; Institution of a Five-Year Review*, 89 Fed. Reg. 47610 (June 3, 2024).

¹⁴ Domestic Interested Parties’ Response to the Notice of Institution, EDIS Doc. 825029 (Confidential Version) & EDIS Doc. 825040 (Public Version) (July 3, 2024) (“Domestic Interested Parties’ Response”).

The domestic interested parties stated that Anvil merged with Smith-Cooper International in 2019 and began operating as ASC Engineered Solutions LLC (“ASC”) in 2021. Domestic Interested Parties’ Response at 1, n.1. The domestic interested parties also stated that ASC acquired Ward Manufacturing LLC in 2024 and that the two exist as separate corporate entities and currently are separate business units. *Id.*

¹⁵ Domestic Interested Parties’ Supplemental Response, EDIS Doc. 827181 (Confidential Version) & EDIS Doc. 827185 (Public Version) (July 25, 2024) (“Domestic Interested Parties’ Supplemental Response”).

¹⁶ Domestic Interested Parties’ Adequacy Comments, EDIS Doc. 829079 (Confidential Version) & EDIS Doc. 829082 (Public Version) (Aug. 8, 2024) (“Domestic Interested Parties’ Adequacy Comments”).

¹⁷ Explanation of Commission Determination on Adequacy, EDIS Doc. 832241 (Sep. 13, 2024) (“Explanation of Adequacy Determination”).

¹⁸ *Non-Malleable Cast Iron Pipe Fittings From China; Scheduling of an Expedited Five-Year Review*, 89 Fed. Reg. 84932 (Oct. 24, 2024). Commissioner David S. Johanson determined that, in light (Continued...)

On December 5, 2024, 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).¹⁹

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 *** percent of domestic NMPF production in 2023.²⁰ U.S. import data and related information are based on Commerce’s official import statistics.²¹ Foreign industry data and related information are based on information that the domestic interested parties submitted, information from the original investigation and prior reviews, and publicly available information gathered by staff.²²

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.”²³ 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.”²⁴ The Commission’s practice in five-year reviews is to examine the domestic like product definition from the original

(...Continued)

of the fact that there has not been a full review of this order since its imposition in 2003, and in light of recent changes in the composition of the domestic industry, conducting a full review was warranted.

¹⁹ Domestic Interested Parties’ Comments on Staff Report, EDIS Doc. 838582 (Public Document) (Dec. 5, 2024).

²⁰ See Confidential Report, Memorandum INV-WW-100 (Aug. 26, 2024) (“CR”) at Table I-2 and Note; *Non-Malleable Cast Iron Pipe Fittings from China*, Inv. No. 731-TA-990 (Fourth Review), USITC Pub. 5576 (Jan. 2025) (“PR”) at Table I-2 and Note.

²¹ CR/PR at Table I-6 (based on HTS Nos. 7307.11.0030 and 7307.11.0060). According to the domestic interested parties, subject imports are likely understated because subject merchandise may also enter under HTS Nos. 7307.19.3060 and 7307.19.3085. *Id.* at Table I-6, Note.

²² See generally CR/PR at I-18 to I-20.

²³ 19 U.S.C. § 1677(4)(A).

²⁴ 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).

investigation and consider whether the record indicates any reason to revisit the prior findings.²⁵

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

The products covered by the *Order* are finished and unfinished non-malleable cast iron pipe fittings with an inside diameter ranging from ¼ 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. Also, certain brake fluid tube connectors are excluded from the scope of the *Order*.

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 American Water Works Association (AWWA) specifications AWWA C110 or AWWA C153 are not included. Imports of covered merchandise are 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 and 7307.19.30.85.

²⁵ 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).

HTSUS subheadings are provided for convenience and customs purposes.²⁶

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 a pipe.²⁷ The primary raw material for NMPF is cast iron, which is mainly composed of iron, carbon (more than 2 percent), and silicon.²⁸ Non-malleable iron (also referred to as gray iron) is defined by ASTM International as cast iron that has fine graphite flakes that are formed during cooling.²⁹ 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.³⁰

In the prior proceedings, the Commission defined a single domestic like product that was coextensive with Commerce's scope.³¹ In this review, the domestic interested parties agree with the Commission's definition of the domestic like product from the prior proceedings.³² The record in this proceeding does not suggest any changes to the pertinent characteristics of NMPF since the prior proceedings that would warrant revisiting the definition.³³ 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 production of

²⁶ *Non-Malleable Cast Iron Pipe Fittings from the People's Republic of China: Final Results of Expedited Fourth Sunset Review of Antidumping Order*, 89 Fed. Reg. 81424 (Oct. 8, 2024) and accompanying Issues and Decision Memorandum at 2-3, EDIS Doc. 835592.

²⁷ CR/PR at I-7.

²⁸ CR/PR at I-7 to I-8.

²⁹ CR/PR at I-8.

³⁰ CR/PR at I-9.

³¹ Original Determination, USITC Pub. 3586 at 5-8; First Review Determination, USITC Pub. 4023 at 5; Second Review Determination, USITC Pub. 4450 at 6; Third Review Determination, USITC Pub. 4915 at 6.

³² Domestic Interested Parties' Response at 42.

³³ See *generally* CR/PR at I-14-I-15.

the product.”³⁴ 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.³⁵

In the original investigation, the Commission defined the domestic industry as consisting of all U.S. NMPF producers. The Commission recognized that *** qualified as 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.³⁶

In the first review, the Commission observed that Anvil purchased a major importer of subject pipe fittings in January 2004 and qualified as 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.³⁷

In the second review, Anvil again qualified as a related party because it imported subject merchandise during the period of review. In 2012, Anvil accounted for *** percent of total

³⁴ 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.

³⁵ 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.

³⁶ Original Determination, USITC Pub. 3596 at 8 n.39; Original Determination Confidential Views, EDIS Doc. 827530 at 10 n.39.

³⁷ First Review Determination, USITC Pub. 4023 at 6; First Review Determination Confidential Views, EDIS Doc. 827532 at 7-8.

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, 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.³⁸

In the third review, Anvil again qualified as a related party because it imported subject merchandise during the period of review. Anvil accounted for approximately *** percent of subject imports that year.³⁹ Anvil's subject imports in 2018 were equivalent to *** percent of its domestic production.⁴⁰ Anvil accounted for *** percent of domestic production in 2018 and supported continuation of the order.⁴¹ In view of the fact that Anvil accounted for *** of domestic production and accounted for a smaller share of total subject imports than in prior reviews, the Commission found that appropriate circumstances did not exist to exclude Anvil from the industry.⁴²

In this review, ASC qualifies as a related party because it imported *** short tons of subject merchandise from China in 2023,⁴³ which represented approximately *** percent of subject imports in 2023.⁴⁴ Its subject imports were equivalent to *** percent of its *** short tons of domestic production of NMPF in 2023.⁴⁵ ASC was the *** responding producer in 2023, accounting for *** percent of domestic production, and supports continuation of the order.⁴⁶

³⁸ Second Review Determination, USITC Pub. 4450 at 8; Second Review Determination Confidential Views, EDIS Doc. 827535 at 10.

³⁹ Third Review Determination, USITC Pub. 4915 at 8; Third Review Determination Confidential Views, EDIS Doc. 827545 at 10.

⁴⁰ Third Review Determination, USITC Pub. 4915 at 8; Third Review Determination Confidential Views at 10.

⁴¹ Third Review Determination, USITC Pub. 4915; Third Review Determination Confidential Views at 8.

⁴² Third Review Determination, USITC Pub. 4915; Third Review Determination Confidential Views at 11.

⁴³ CR/PR at Table B-4. As noted above, Anvil merged with Smith-Cooper International in 2019. In 2021, the merged entity started operating as ASC.

⁴⁴ CR/PR at Table B-4.

⁴⁵ *Derived from* CR/PR at Tables B-2 and B-4.

⁴⁶ CR/PR at I-2 n.5, I-15, and Table B-2; Domestic Interested Parties' Response at 9.

ASC's imports of subject merchandise were low relative to its domestic production, and it supports continuation of the order, indicating that its primary interest is in domestic production. There is no indication that ASC's imports of subject merchandise benefitted its domestic production operations to the extent that its inclusion in the domestic industry would mask injury to the domestic industry. In light of these facts, and in the absence of any contrary argument, we conclude that appropriate circumstances do not exist to exclude ASC from the domestic industry.

In sum, consistent with our definition of the domestic like product, we again define the domestic industry as all producers of NMPPF.

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."⁴⁷ 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."⁴⁸ Thus, the likelihood standard is prospective in nature.⁴⁹ The U.S. Court of International Trade has found that "likely," as used in the five-year

⁴⁷ 19 U.S.C. § 1675a(a).

⁴⁸ SAA, H.R. Rep. 103-316, vol. I at 883-84 (1994). The SAA states that "the 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.

⁴⁹ 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 (Continued...)"

review provisions of the Act, means “probable,” and the Commission applies that standard in five-year reviews.⁵⁰

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.”⁵¹ According to the SAA, a “‘reasonably foreseeable time’ will vary from case-to-case, but normally will exceed the ‘imminent’ timeframe applicable in a threat of injury analysis in original investigations.”⁵²

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.”⁵³ 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).⁵⁴ The statute further provides

(...Continued)

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.

⁵⁰ 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’”).

⁵¹ 19 U.S.C. § 1675a(a)(5).

⁵² 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.*

⁵³ 19 U.S.C. § 1675a(a)(1).

⁵⁴ 19 U.S.C. § 1675a(a)(1). Commerce has not issued any duty absorption findings with respect to NMPF from China. *Non-Malleable Cast Iron Pipe Fittings from the People’s Republic of China: Final Results of Expedited Fourth Sunset Review of Antidumping Order*, 89 Fed. Reg. 81424 (Oct. 8, 2024).

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.⁵⁵

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.⁵⁶ 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.⁵⁷

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 the United States at prices that otherwise would have a significant depressing or suppressing effect on the price of the domestic like product.⁵⁸

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

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

⁵⁶ 19 U.S.C. § 1675a(a)(2).

⁵⁷ 19 U.S.C. § 1675a(a)(2)(A-D).

⁵⁸ 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.

more advanced version of the domestic like product.⁵⁹ 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.⁶⁰

No respondent interested party 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.”⁶¹ The following conditions of competition inform our determination.

1. Demand Conditions

Original Investigations and Prior Reviews. In prior proceedings the Commission found that NMPF were mainly used in fire protection/sprinkler systems, and demand was related to non-residential construction in which fire protection/sprinkler systems are installed.⁶²

During the original investigation, U.S. demand for NMPF declined, with apparent U.S. consumption, by quantity, falling by *** percent from 1999 to 2001, the last full year of the original period of investigation; in 2001, apparent U.S. consumption was *** short tons.⁶³ Apparent U.S. consumption was *** percent lower in the first nine months of 2002 (“interim

⁵⁹ 19 U.S.C. § 1675a(a)(4).

⁶⁰ 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.

⁶¹ 19 U.S.C. § 1675a(a)(4).

⁶² 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; Third Review Determination, USITC Pub. 4915 at 12.

⁶³ Original Determination Confidential Views at 12; Original Determination, USITC Pub. 3586 at 9.

2002”) than in the first nine months of 2001 (“interim 2001”).⁶⁴ During the first five-year review, apparent U.S. consumption was *** short tons in 2007, the last year of the review period.⁶⁵ The Commission noted that demand might weaken in the second half of 2008 and in 2009 if non-residential spending declined.⁶⁶ 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, the last year of the review period.⁶⁷ During the third five-year review, apparent U.S. consumption was *** short tons in 2018, the last year of the review period.⁶⁸

Current Review. There is no new information on the record of this review indicating that the factors influencing demand have changed since the original investigation and prior reviews.⁶⁹ The record indicates that NMPF continue to be used primarily in fire/sprinkler systems with demand driven primarily by non-residential construction activity.⁷⁰ ASC claims that demand fluctuated during the period of review but is expected to increase in the foreseeable future.⁷¹

In 2023, apparent U.S. consumption was *** short tons, *** percent lower than the *** short tons of apparent U.S. consumption recorded in 2018 and the lowest level compared with the final years in all prior proceedings.⁷²

2. Supply Conditions

Original Investigations and Prior Reviews. In the original investigation, Anvil and Ward accounted for the bulk of domestic production (*** percent in 2001) and two other companies,

⁶⁴ Original Determination Confidential Views at 12; Original Determination, USITC Pub. 3586 at 9.

⁶⁵ Confidential Report for First Five-Year Review, Memorandum INV-FF-073 (Jun. 26, 2008) EDIS Doc. 827494 at Table I-10; CR/PR at Table I-8.

⁶⁶ First Review Determination, USITC Pub. 4023 at 9.

⁶⁷ Second Review Determination Confidential Views at 16-17; Second Review Determination, USITC Pub. 4450 at 12.

⁶⁸ Third Review Confidential Views at 17; Third Review Determination, USITC Pub. 4915 at 12.

⁶⁹ Domestic Interested Parties’ Response at 15.

⁷⁰ Domestic Interested Parties’ Response at 15.

⁷¹ Domestic Interested Parties’ Response at 15.

⁷² CR/PR at Table I-7. To maintain consistency with prior proceedings, the Commission derived the import component of apparent U.S. consumption for 2023 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 28, n.148.

Frazier and Buck, accounted for most of the remainder.⁷³ 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 domestic production.⁷⁴ In the second and third five-year reviews, Anvil and Ward accounted for all domestic production of NMPF.⁷⁵

In the original investigation and prior reviews, the domestic industry was the largest supplier to the U.S. market, although its share of apparent U.S. consumption had fluctuated lower. In 2001, the last year of the POI, the domestic industry's share of apparent U.S. consumption was *** percent.⁷⁶ The domestic industry's share of apparent U.S. consumption was substantially lower in the first review, at *** percent, than it was in the original investigation.⁷⁷ U.S. producers' market share in the second review declined to *** percent, but was higher in the third review, at *** percent.⁷⁸

During the original investigation, the Commission found that subject imports' share of apparent U.S. consumption was *** percent.⁷⁹ Subject imports' share of apparent U.S. consumption was *** percent in the first review and *** percent in the second review.⁸⁰ In the third review, subject imports' share of the U.S. market was *** percent in 2018; lower than in prior reviews but higher than in the original investigation.⁸¹

⁷³ 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. 827492 at Table III-1.

⁷⁴ First Review Determination Confidential Views at 12-13; First Review Determination, USITC Pub. 4023 at 9-10.

⁷⁵ Second Review Determination, USITC Pub. 4450 at 12; Third Review Determination, USITC Pub. 4915 at 13.

⁷⁶ 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.

⁷⁷ Second Review Determination Confidential Views at 18; Second Review Determination, USITC Pub. 4450 at 12; *see also* CR/PR at Table I-8.

⁷⁸ Second Review Determination Confidential Views at 18; Second Review Determination, USITC Pub. 4450 at 12; *see also* CR/PR at Table I-8; Third Review Determination Confidential Views at 18, Third Review Determination, USITC Pub. 4915 at 13.

⁷⁹ Original Determination Confidential Views at 15; Original Determination, USITC Pub. 3586 at 12.

⁸⁰ Second Review Determination Confidential Views at 18; Second Review Determination, USITC Pub. 4450 at 12; *see also* CR/PR at Table I-8.

⁸¹ CR/PR at Table I-8.

Nonsubject imports' share of apparent U.S. consumption was *** percent in the original investigation, *** percent in the first review, *** percent in the second review, and *** percent in the third review.⁸²

Current Review. In the current review, the domestic industry remained the largest supplier of NMPF to the U.S. market, followed by nonsubject imports, and subject imports.⁸³ The domestic industry's share of apparent U.S. consumption, by quantity, was *** percent in 2023, *** percentage points higher than in 2018.⁸⁴ Two U.S. producers accounted for the vast majority of domestic production in 2023.⁸⁵ In 2023, ASC accounted for *** percent of domestic NMPF production and Ward accounted for *** percent.⁸⁶

Subject imports were the third largest source of supply to the U.S. market during the period of review, accounting for *** percent of apparent U.S. consumption, by quantity, in 2023, *** percentage points lower than in 2018.⁸⁷ Nonsubject imports were the second largest source of supply to the U.S. market in 2023, accounting for *** percent of apparent U.S. consumption by quantity, an increase of *** percentage points from 2018.⁸⁸ India and South Korea were the leading sources of nonsubject imports during the period of review.⁸⁹

3. Substitutability and Other Conditions

Original Investigation and Prior Reviews. 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

⁸² Second Review Determination Confidential Views at 18; Second Review Determination, USITC Pub. 4450 at 12; *see also* CR/PR at Table I-8.

⁸³ CR/PR at Table I-7.

⁸⁴ CR/PR at Table I-7.

⁸⁵ CR/PR at Table I-2; *see also* Domestic Interested Parties' Supplemental Response at 1.

⁸⁶ CR/PR at Table B-2.

⁸⁷ CR/PR at Table I-7.

⁸⁸ CR/PR at Table I-7.

⁸⁹ CR/PR at Table I-6.

were members of trade unions.⁹⁰ The Commission found that, other than these factors, the record suggested a high degree of substitutability among subject imports and domestically produced NMPF.⁹¹ In the three prior reviews, the Commission found that there was no evidence on the record to suggest that the above conditions had changed significantly since the original investigation.⁹²

Current Review. The record in this fourth review contains no new information to indicate that the degree of substitutability between the domestic like product and subject imports has changed since the last review. The domestic interested parties assert that price continues to be an important factor in purchasing decisions and that given the high degree of substitutability between the domestic like product and subject imports, price will typically be the determining factor in purchasing decisions.⁹³ Based on the available information in this review, and the absence of any evidence suggesting that conditions have changed, we again find that subject imports and the domestic like product are highly substitutable and that price remains important in purchasing decisions.

Effective September 24, 2018, NMPF from China have been subject to an additional tariff of 10 percent *ad valorem* under Section 301 of the Trade Act of 1974, which increased to 25 percent as of May 10, 2019.⁹⁴

C. Likely Volume of Subject Imports

1. The Original Investigation and Prior Five-Year Reviews

In the original investigation, the Commission found that the volume of subject imports 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

⁹⁰ Original Determination, USITC Pub. 3586 at 10.

⁹¹ Original Determination, USITC Pub. 3586 at 10.

⁹² First Review Determination, USITC Pub. 4023 at 10; Second Review Determination, USITC Pub. 4450 at 13; Third Review Determination, USITC Pub. 4915 at 14.

⁹³ Domestic Interested Parties' Response at 17.

⁹⁴ CR/PR at I-7. Goods exported from China to the United States prior to May 10, 2019, and entering the United States prior to June 15, 2019, were not subject to the escalated 25 percent duty. CR/PR at I-7, n.27.

Commission found the increase in the volume of subject imports, most notably during the interim period, to be significant.⁹⁵

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.⁹⁶

In the 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 them. 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.⁹⁷ 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.⁹⁸

In the 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 levels had continued to increase.⁹⁹ 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

⁹⁵ Original Determination, USITC Pub. 3586 at 10-12; Original Determination Confidential Views at 14-16.

⁹⁶ Original Determination, USITC Pub. 3586 at 17.

⁹⁷ First Review Determination, USITC Pub. 4023 at 11.

⁹⁸ First Review Determination, USITC Pub. 4023 at 10-11.

⁹⁹ This data indicated that total exports of NMPF from China increased substantially from 2008 to 2012. Second Review Determination, USITC Pub. 4450 at 15.

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.¹⁰⁰

In the third review, the Commission found that subject imports maintained a substantial presence in the U.S. market over the entire period of review.¹⁰¹ The Commission also found that Chinese producers had 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, given the Chinese industry's substantial and increasing capacity and the considerable growth in Chinese global exports of NMPF over the period of review.¹⁰² In addition, the Commission found that Chinese industry remained export-oriented and that the U.S. market remained attractive.¹⁰³

2. Current Review

Subject imports maintained a continuing presence in the U.S. market over the period of review, with subject imports recorded in every year of the period of review. The volume of subject imports in 2023 was 2,753 short tons compared to 3,681 short tons in 2018.¹⁰⁴

The record in these five-year reviews contains limited information on the NMPF industry in China. The available information indicates that subject producers have the means to export significant volumes of subject merchandise to the United States if the order was revoked.¹⁰⁵ The domestic interested parties provided a list of 18 possible producers of NMPF in China.¹⁰⁶

The information available, including that submitted by the domestic interested parties, indicates that the subject industry in China consisted of several producers with substantial capacity during the POR. AJA, a distributor, reports on its website that the Meide Group is a large Chinese producer of pipe fittings with an annual production capacity for NMPF of over two million metric tons.¹⁰⁷ According to information the domestic interested parties submitted,

¹⁰⁰ Second Review Determination, USITC Pub. 4450 at 14-15.

¹⁰¹ Third Review Determination, USITC Pub. 4915 at 16.

¹⁰² Third Review Determination, USITC Pub. 4915 at 16-17.

¹⁰³ Third Review Determination, USITC Pub. 4915 at 17.

¹⁰⁴ CR/PR at Table I-7. The volume of subject imports during the period of review was 2,894 short tons in 2019, 2,317 short tons in 2020, 3,293 short tons in 2021, 3,775 short tons in 2022, and 2,753 short tons in 2023. *Id.* at Table I-6.

¹⁰⁵ CR/PR at I-18 to I-20; Domestic Industry Response at 22-28 and Exhibits 2-4.

¹⁰⁶ CR/PR at I-18.

¹⁰⁷ Domestic Interested Parties' Response at 25 and Exhibit 4.

another Chinese producer, Shangong Dunliang Fire Technology Co., Ltd., has production capacity of 200,000 metric tons.¹⁰⁸ On its website, Hebei Dikai Pipe Manufacturing Co., Ltd. indicates it has an annual casting production capacity of 100,000 metric tons.¹⁰⁹ Information on the website of Eathu Casting and Forging, Ltd., another Chinese producer, reported its production capacity as 70,000 metric tons for iron pipe fittings.¹¹⁰ Chinese producer Jingmen Zhengyuan Gunghua Pipe Co., Ltd. reports its annual production capacity for epoxy ceramic-lined ductile iron pipes as 50,000 tons annually.¹¹¹

The information available also indicates that the subject industry remains a large exporter. Global Trade Atlas (“GTA”) data covering Chinese exports of merchandise under Harmonized Schedule (“HS”) subheading 7307.11, which also includes out-of-scope products, show that China was the world’s largest exporter of such merchandise in 2023 and throughout the entire period of review.¹¹²

The information available also indicates that the U.S. market remains attractive to subject producers in China. Subject imports maintained a presence in the U.S. market throughout the period of review, accounting for *** percent of apparent U.S. consumption in 2023, reflecting both continued interest in the U.S. market and the ready availability of distribution networks in the United States that would enable them to quickly expand their presence in the U.S. market for NMPF after revocation.¹¹³ Based on GTA data, the United States was the largest destination market for Chinese exports of merchandise under HS subheading 7307.11 throughout the entire period of review.¹¹⁴ According to the GTA data, Chinese exports to the United States declined irregularly during the period of review from 110,152 short tons in 2019, to 99,271 short tons in 2020, increasing to 101,282 short tons in 2021, then declining to 88,791 short tons in 2022, and 56,735 short tons in 2023.¹¹⁵

Given the foregoing, including the volume and market share of subject imports during the original investigation, the continued presence of subject imports in the U.S. market in the

¹⁰⁸ Domestic Interested Parties’ Response at 26 and Exhibit 4. The reported figure may include nonsubject merchandise and, thus, may be overstated. *Id.*

¹⁰⁹ Domestic Interested Parties’ Response at 25.

¹¹⁰ Domestic Interested Parties’ Response at 25 and Exhibit 4. The reported figure may include nonsubject merchandise and, thus, may be overstated. *Id.*

¹¹¹ Domestic Interested Parties’ Response at 26 and Exhibit 4. The reported figure may include nonsubject merchandise and, thus, may be overstated. *Id.*

¹¹² CR/PR at Table I-9.

¹¹³ CR/PR at Table I-7.

¹¹⁴ CR/PR at Table I-9.

¹¹⁵ CR/PR at Table I-8.

current period of review as well as in all prior review periods, the Chinese industry's substantial and increasing capacity, including excess capacity, its large volume of exports, and the attractiveness of the U.S. market, we find that the volume of subject imports from China would likely be significant, both in absolute terms and relative to consumption in the United States, if the order were revoked.¹¹⁶

D. Likely Price Effects

1. The Original Investigation and Prior Five-Year Reviews

In the original investigation, 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 the period of investigation.¹¹⁷

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 cause the domestic industry to lower its prices, or refrain from raising its prices, in order to limit its loss of additional sales.¹¹⁸

¹¹⁶ The record indicates that there are no third country antidumping or countervailing duty orders on NMPF. CR/PR at I-19. The record of this five-year review does not contain information concerning product shifting or inventories of subject merchandise. Although subject imports from China are currently subject to a 25 percent *ad valorem* duty under Section 301, the domestic interested parties do not indicate that this duty would prevent subject imports from entering the U.S. market at significant levels if the orders were revoked. Domestic Interested Parties' Response at 22-30; Domestic Interested Parties' Comments on Staff Report at 8. Given the Chinese industry's substantial capacity and large volume of exports of NMPF, the continuing presence of Chinese NMPF in the U.S. market despite the imposition of the Section 301 duties, and the attractiveness of the U.S. market, we find that the section 301 duties would not likely prevent subject imports from increasing to significant levels if the orders were revoked.

¹¹⁷ Original Determination, USITC Pub. 3586 at 12-13.

¹¹⁸ Original Determination, USITC Pub. 3586 at 18.

There was limited pricing data in the prior reviews. The Commission found that the record did not include any information that would suggest that price was no longer an important factor in purchasing decisions and that any preference by certain purchasers for the domestic like product would erode in the face of likely underselling by subject imports.¹¹⁹ In view of these considerations, the Commission found that revocation of the order would likely result in significant price effects, including significant underselling by the subject imports, as well as significant price depression and suppression in the reasonably foreseeable future.¹²⁰

2. Current Review

As discussed in Section III.B.3 above, we have found that the domestically produced NMPF and subject imports are highly substitutable, and that price is an important factor in purchasing decisions.

The record in this five-year review does not contain new product-specific pricing information. Based on the available information, including the high degree of substitutability between the domestic like product and subject imports and the continuing importance of price in purchasing decisions, we find that if the order were revoked, significant volumes of subject imports would likely undersell the domestic like product to a significant degree.¹²¹ Absent the discipline of the order, the likely significant volume of low-priced subject imports would force the domestic industry to lower prices or forgo needed price increases, or else lose sales and market share to subject imports, and would have a depressive or suppressive effect on domestic prices. Consequently, we find that subject imports would likely have significant price effects on the domestic like product if the order were revoked.

E. Likely Impact

1. The Original Investigation and Prior Five-Year Reviews

In the original investigation, the Commission found that the subject imports did not have a significant current impact on the domestic industry's performance. Although a number

¹¹⁹ First Review Determination, USITC Pub. 4023 at 12; Second Review Determination, USITC Pub. 5540 at 16-17; Third Review Determination, USITC Pub. 4915 at 18.

¹²⁰ First Review Determination, USITC Pub. 4023 at 12; Second Review Determination, USITC Pub. 5540 at 16-17; Third Review Determination, USITC Pub. 4915 at 18.

¹²¹ The domestic interested parties contend that price continues to be an important factor in purchasing decisions. Domestic Interested Parties' Response at 17.

of the performance indicators for the domestic industry declined, the Commission found that the declines resulted mainly from declining apparent U.S. consumption. The 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.¹²²

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.¹²³

In the 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.¹²⁴ 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.¹²⁵

2. Current Review

The record in this five-year review contains limited information concerning the domestic industry's performance since the prior five-year review of the subject order.

¹²² Original Determination, USITC Pub. 3586 at 13-15.

¹²³ Original Determination, USITC Pub. 3586 at 18.

¹²⁴ 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.

¹²⁵ First Review Determination, USITC Pub. 4023 at 13-14; Second Review Determination, USITC Pub. 4450 at 28; Third Review Determination, USITC Pub. 4915 at 20. 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.

In the third review, the Commission also considered the role of factors other than subject imports so as not to attribute likely injury from other factors to the subject imports. The Commission found that despite the increased presence of nonsubject imports in the U.S. market since the second review, the domestic industry was the leading supplier to the U.S. market and subject imports, therefore, would likely compete head to head with the domestic like product upon revocation, and the likely increase in the volume of subject imports would likely take market share away from the domestic industry as well as nonsubject imports. Third Review Determination, USITC Pub. 4915 at 20.

The information available indicates that the domestic industry's performance in terms of trade measures was mixed while its financial performance was generally stronger in 2023 as compared to the last year of the period examined in the original investigation and prior reviews. In 2023, the domestic industry's capacity was *** short tons, its production was *** short tons, and its capacity utilization was *** percent, all of which were at or near their second lowest levels compared to prior proceedings.¹²⁶

The average unit value ("AUV") of the domestic industry's U.S. shipments was higher in 2023, at \$*** per short ton, than in prior proceedings.¹²⁷ The quantity of the domestic industry's U.S. shipments, at *** short tons in 2023, was lower than in any of the prior proceedings, while its share of apparent U.S. consumption, at *** percent in 2023, was the highest since the original investigation, albeit well below that level.¹²⁸ The value of the domestic industry's U.S. shipments, at \$*** in 2023, was lower than it was in the original investigation and first review but higher than it was in the second and third reviews.¹²⁹

The domestic industry's net sales value, at \$*** in 2023, was lower than in the original investigation and first review but higher than in the second and third reviews.¹³⁰ The domestic industry's gross profit, at \$***, operating income, at \$***, and operating income to net sales ratio, at *** percent, were higher in 2023 than in any prior proceedings.¹³¹ This limited

¹²⁶ CR/PR at Table I-5. The domestic industry's capacity was *** short tons in 2001, *** short tons in 2007, *** short tons in 2012, and *** short tons in 2018. *Id.* The domestic industry's production was *** short tons in 2001, *** short tons in 2007, *** short tons in 2012, and *** short tons in 2018. *Id.* The domestic industry's capacity utilization was *** percent in 2001, *** percent in 2007, *** percent in 2012, and *** percent in 2018. *Id.*

¹²⁷ CR/PR at Table I-5. The domestic industry's AUV was \$*** per short ton in 2001, \$*** per short ton in 2007, \$*** per short ton in 2012, and \$*** per short ton in 2018. *Id.*

¹²⁸ CR/PR at Table I-7. The quantity of the domestic industry's U.S. shipments was *** short tons in 2001, *** short tons in 2007, *** short tons in 2012, and *** short tons in 2018. *Id.* The domestic industry's share of apparent U.S. consumption was *** percent in 2001, *** percent in 2007, *** percent in 2012, and *** percent in 2018. *Id.*

¹²⁹ CR/PR at Table I-5. The value of the domestic industry's U.S. shipments was \$*** in 2001, \$*** in 2007, \$*** in 2012, and \$*** in 2018. *Id.*

¹³⁰ CR/PR at Table I-5. The domestic industry's net sales value was \$*** in 2001, \$*** in 2007, \$*** in 2012, and \$*** in 2018. *Id.* The domestic interested parties explained that the difference between the value of U.S. shipments and net sales value was due to the inclusion of *** in net sales values. Domestic Interested Parties' Response at Exhibit 1, Worksheet 9, Row 79.

¹³¹ CR/PR at Table I-5. The domestic industry's gross profit was \$*** in 2001, \$*** in 2012, and \$*** in 2018. *Id.* The domestic industry's gross profit for 2007 was ***. *Id.* The domestic industry's operating income was \$*** in 2001, \$*** in 2012, and \$*** in 2018. *Id.* The domestic industry reported an operating loss of \$*** in 2007. *Id.* The domestic industry's operating income to net sales (Continued...)

information is insufficient for us to make a finding as to whether the domestic industry is vulnerable to the continuation or recurrence of material injury in the event of revocation of the order.

Based on the information available on the record, we find that revocation of the order would likely result in a significant volume of subject imports that likely would undersell the domestic like product to a significant degree. Given the high degree of substitutability between the domestic like product and subject imports and the importance of price in purchasing decisions, significant volumes of low-priced subject imports would likely capture sales and market share from the domestic industry and/or depress or suppress prices to a significant degree for the domestic like product. The likely significant volume of low-priced subject imports and their adverse price effects would likely have a significant adverse impact on the production, shipments, sales, market share, and revenues of the domestic industry, which, in turn, would have a direct adverse impact on the industry's profitability and employment, as well as its ability to raise capital and make and maintain necessary capital investments. We thus conclude that, if the order were revoked, subject imports from China would be likely to have a significant adverse impact on the domestic industry within a reasonably foreseeable time.

We have also considered the role of factors other than subject imports, including the presence of nonsubject imports. Nonsubject imports have increased their presence in the U.S. market since the last review, accounting for *** percent of apparent U.S. consumption in 2023 as compared to *** percent in 2018.¹³² The record provides no indication, however, that the presence of nonsubject imports would prevent subject imports from China from significantly increasing their presence in the U.S. market after revocation. In light of the high degree of substitutability between subject imports and the domestic like product and the importance of price to purchasers, it is likely that, since the domestic industry holds the largest share of the U.S. market, the increase in low-priced subject imports would come at least in part at the expense of the domestic industry. Consequently, we find that any future effects of nonsubject imports would be distinct from the likely effects attributable to subject imports and that nonsubject imports would not prevent subject imports from having a significant impact on the domestic industry.

(...Continued)

ratio was *** percent in 2001, *** percent in 2012, and *** percent in 2018. *Id.* The domestic industry reported an operating income to net sales loss of *** percent in 2007. *Id.*

¹³² CR/PR at Table I-7.

We recognize that apparent U.S. consumption of NMPF was *** percent lower in 2023 than in 2018, the last year of the third five-year review.¹³³ Given the high degree of substitutability between subject imports and the domestic like product and the importance of price to purchasers, the significant volume of low-priced subject imports that is likely after revocation would exacerbate any effects of slowing demand on the domestic industry, by further reducing the industry's sales and placing additional downward pressure on domestic prices.¹³⁴ Given these considerations, we find that the likely effects attributable to subject imports are distinguishable from any likely effects of demand if the order were revoked.

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.

¹³³ Calculated from CR/PR at Table I-7.

¹³⁴ The domestic interested parties indicate that demand for NMPF is expected to increase in the reasonably foreseeable future which would attract large volumes of subject imports from China if the order were to be revoked. Domestic Interested Parties' Response at 15.

Information obtained in this review

Background

On June 3, 2024, 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 be likely to lead to continuation or recurrence of material injury.² All interested parties were requested to respond to this notice by submitting certain information requested by the Commission.³ ⁴ Table I-1 presents information relating to the background and schedule of this proceeding:

Table I-1
NMPF: Information relating to the background and schedule of this proceeding

Effective date	Action
June 3, 2024	Notice of initiation by Commerce (89 FR 47525, June 3, 2024)
June 3, 2024	Notice of institution by Commission (89 FR 47610, June 3, 2024)
September 6, 2024	Commission’s vote on adequacy
October 8, 2024	Commerce’s results of its expedited review
January 3, 2025	Commission’s determination and views

¹ 19 U.S.C. 1675(c).

² 89 FR 47610, June 3, 2024. 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 duty order. 89 FR 47525, June 3, 2024. 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 the original investigation and subsequent full reviews are 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 domestic like product and the subject merchandise. Presented in app. D are the responses received from purchaser surveys transmitted to the purchasers identified in this proceeding.

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 ASC Engineered Solutions, LLC (“ASC”) (formerly known as Anvil International, LLC (“Anvil”)), and Ward Manufacturing, LLC (“Ward”) (collectively referred to herein as “domestic interested parties”), domestic producers of NMPF. ASC is also a U.S. importer of NMPF from China.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 or explain deficiencies in their responses and to provide clarifying details where appropriate. A summary of the number of responses and estimates of coverage for each is shown in table I-2.

Table I-2
NMPF: Summary of responses to the Commission’s notice of institution

Interested party type	Number	Coverage
U.S. producer	2	***%
U.S. importer	1	***%

Note: The U.S. producer coverage figure presented is the domestic interested parties’ estimate of their share of total U.S. production of NMPF during 2023. Domestic interested parties’ supplemental response to the notice of institution, July 25, 2024, p. 1.

Note: The U.S. importer coverage figure is the estimated share of the quantity of total U.S. imports of NMPF from China in 2023 accounted for by U.S. producer and importer ASC. The estimate was calculated as the quantity of reported imports (** short tons) divided by the quantity of total U.S. imports from China reported for 2023 in Commerce’s official import statistics (2,753 short tons).

Party comments on adequacy

The Commission received party comments on the adequacy of responses to the notice of institution and whether the Commission should conduct an expedited or full review from the domestic interested parties. The domestic interested parties request that the Commission conduct an expedited review of the antidumping duty order on NMPF.⁶

⁵ ASC supports the continuation of the order covering imports of NMPF from China.

⁶ Domestic interested parties’ comments on adequacy, August 8, 2024, p. 2.

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 Hampshire, and Ward Manufacturing, Inc., Blossburg, Pennsylvania.⁷ On February 18, 2003, Commerce determined that imports of NMPF from China were being sold at less than fair value (“LTFV”).⁸ The Commission determined on March 24, 2003, that the domestic industry was threatened with material injury by reason of LTFV imports of NMPF from China.⁹ On April 7, 2003, Commerce issued its antidumping duty order with final weighted-average dumping margins ranging from 6.34 to 75.50 percent.¹⁰

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.¹¹ On July 10, 2008, Commerce determined that revocation of the antidumping duty order on NMPF from China would be likely to lead to continuation or recurrence of dumping.¹² On July 24, 2008, the Commission determined that material injury would be likely to continue or recur within a reasonably foreseeable time.¹³ Following affirmative determinations in the five-year reviews by Commerce and the Commission, effective August 15, 2008, Commerce issued a continuation of the antidumping duty order on imports of NMPF from China.¹⁴

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.¹⁵ On December 3, 2013, Commerce determined that revocation of the antidumping duty order on NMPF from China would be likely

⁷ Non-Malleable Cast Iron Pipe Fittings From China, Inv. No. 731-TA-990 (Final), USITC Publication 3586, March 2003 (“Original publication”), p. I-1.

⁸ 68 FR 7765, February 18, 2003.

⁹ 68 FR 15743, April 1, 2003.

¹⁰ 68 FR 16765, April 7, 2003.

¹¹ 73 FR 34325, June 17, 2008.

¹² 73 FR 39656, July 10, 2008.

¹³ 73 FR 45075, August 1, 2008.

¹⁴ 73 FR 47887, August 15, 2008.

¹⁵ 78 FR 68474, November 14, 2013.

to lead to continuation or recurrence of dumping.¹⁶ On January 29, 2014, the Commission determined that material injury would be likely to continue or recur within a reasonably foreseeable time.¹⁷ 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.¹⁸

The third five-year review

On April 12, 2019, the Commission determined that it would conduct an expedited review of the antidumping duty order on NMPF from China.¹⁹ On June 5, 2019, Commerce determined that revocation of the antidumping duty order on NMPF from China would be likely to lead to continuation or recurrence of dumping.²⁰ On June 25, 2019, the Commission determined that material injury would be likely to continue or recur within a reasonably foreseeable time.²¹ Following affirmative determinations in the five-year reviews by Commerce and the Commission, effective July 9, 2019, Commerce issued a continuation of the antidumping duty order on imports of NMPF from China.²²

Previous and related investigations

The Commission has conducted a number of previous import relief investigations on NMPF or similar merchandise, as presented in table I-3.

¹⁶ 78 FR 72639, December 3, 2013.

¹⁷ 79 FR 6923, February 5, 2014.

¹⁸ 79 FR 8437, February 12, 2014.

¹⁹ 84 FR 20659, May 10, 2019.

²⁰ 84 FR 27088, June 11, 2019.

²¹ 84 FR 31349, July 1, 2019.

²² 84 FR 32722, July 9, 2019.

Table I-3
NMPF: Previous and related Commission proceedings and current status

Date	Number	Country	ITC original determination	Current status
1977	TA-201-26	Global Safeguard	Negative	No safeguard measure imposed
1980	701-TA-9	Japan	Terminated	---
1984	701-TA-221	Brazil	Negative	No order imposed
1984	701-TA-222	India	Terminated	---
1986	731-TA-278	Brazil	Affirmative	Order revoked after first review, 2000
1986	731-TA-279	South Korea	Affirmative	Order revoked after termination of second review, 2005
1986	731-TA-280	Taiwan	Affirmative	Order revoked after first review, 2000
1986	731-TA-281	Taiwan	ITA Negative	---
1987	731-TA-347	Japan	Affirmative	Order revoked after termination of second review, 2005
1987	731-TA-348	Thailand	Affirmative	Order revoked after first review, 2000
2003	731-TA-1021	China	Affirmative	Order continued after third review, 2019

Source: U.S. International Trade Commission publications and Federal Register notices.

Note: These cases cover NMPF, in whole or in part, as well as out-of-scope malleable cast iron pipe fittings.

Commerce's five-year review

Commerce announced that it would conduct an expedited review with respect to the order on imports of NMPF from China with the intent of issuing the final results of this review based on the facts available not later than October 1, 2024.²³ Commerce publishes its Issues and Decision Memoranda and its final results concurrently, accessible upon publication at <https://access.trade.gov/public/FRNoticesListLayout.aspx> and subsequently on the Commission's Electronic Document Information System ("EDIS"). Issues and Decision Memoranda contain complete and up-to-date information regarding the background and

²³ Letter from Alex Villanueva, Senior Director, Office I, AD/CVD Operations, Enforcement and Compliance, U.S. Department of Commerce to Nannette Christ, Director of Investigations, July 23, 2024.

history of the order, including scope rulings, duty absorption, changed circumstances reviews, and anticircumvention, as well as any decisions that may have been pending at the issuance of this report. Any foreign producers/exporters that are not currently subject to the antidumping duty order on imports of NMPF from China are noted in the sections titled “The original investigation” and “U.S. imports,” if applicable.

The product

Commerce’s scope

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 American Water Works Association (AWWA) specifications AWWA C110 or AWWA

C153 are not included. Additionally, certain brake fluid tube connectors are excluded from the scope of this order.^{24 25}

U.S. tariff treatment

NMPF are currently imported under Harmonized Tariff Schedule of the United States (“HTS”) statistical reporting numbers 7307.11.0030, 7307.11.0060, 7307.19.3060, and 7307.19.3085. The general rate of duty is 4.8 percent ad valorem for HTS subheading 7307.11.00 and 5.6 percent for HTS subheading 7307.19.30.²⁶ Decisions on the tariff classification and treatment of imported goods are within the authority of U.S. Customs and Border Protection.

Effective September 24, 2018, NMPF originating in China were subject to an additional 10 percent ad valorem duty under section 301 of the Trade Act of 1974. Effective May 10, 2019, the section 301 duty for NMPF was increased to 25 percent.²⁷

Description and uses²⁸

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

²⁴ 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. 77 FR 31577, May 29, 2012. Following a changed circumstances review, Commerce revoked the order, in part, effective April 1, 2011, and amended the scope of the order. *Ibid.*

²⁵ 77 FR 31577, May 29, 2012; 79 FR 8437, February 12, 2014; and 84 FR 32722, July 9, 2019.

²⁶ USITC, HTS (2024) Basic Revision 5, Publication 5525, July 2024, pp. 73-21, 73-45.

²⁷ 83 FR 47974, September 21, 2018; 84 FR 20459, May 9, 2019. See also HTS heading 9903.88.03 and U.S. notes 20(e)–20(f) to subchapter III of chapter 99 and related tariff provisions for this duty treatment. USITC, HTS (2024) Basic Revision 5, Publication 5525, July 2024, pp. 99-III-28–99-III-29, 99-III-47, 99-III-311.

Goods exported from China to the United States prior to May 10, 2019, and entering the United States prior to June 15, 2019, were not subject to the escalated 25 percent duty. 84 FR 21892, May 15, 2019; and 84 FR 26930, June 10, 2019).

²⁸ Unless otherwise noted, this information is based on Non-Malleable Cast Iron Pipe Fittings from China, Investigation No. 731-TA-990 (Third Review), USITC Publication 4915, June 2019 (“Third review publication”), pp. I-9-I-11.

alloys, which are primarily composed of iron, carbon (more than 2 percent), and silicon.²⁹ 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.³⁰

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 iron³¹) 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.³² Gray iron exhibits no elastic behavior, with a weak tensile strength ranging from 20,000 to 58,000 pounds per square inch (“psi”).³³ 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

²⁹ *Iron Castings Handbook*, Charles F. Walton (Ed.), Gray and Ductile Iron Founder’s Society, 1971, pp. 94, 114.

³⁰ 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.

³¹ The term “gray” is given because of the gray color of the fractured surface of the cast iron.

³² 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.

³³ Tensile strength is the maximum load a piece of metal will withstand prior to a fracture.

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 NMPF in elastic properties, impact resistance, yield strength/weight, and wear resistance; ductile fittings are inferior to NMPF in ease of machining, 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 NMPF, 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 soil pipe and waterworks applications, such as fittings for underground water mains and main water supply fittings for buildings.³⁴

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.

Other excluded fittings

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

³⁴ 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.

produced to AWWA C110 or AWWA C153 specifications.³⁵ 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.³⁶ 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.

Manufacturing process³⁷

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.

³⁵ 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.

³⁶ The vast majority of grooved fittings are manufactured using ductile iron.

³⁷ Unless otherwise noted, this information is based on the third review publication, pp. I-12-I-13.

The specific chemical compositions and manufacturing processes of malleable, nonmalleable, 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.

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.³⁸

³⁸ 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.

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 almost all production of NMPF in the United States during 2001.³⁹ During the first five-year review, domestic interested parties provided a list of three known and currently operating U.S. producers of NMPF. Two responding firms accounted for 90 to 95 percent of production of NMPF in the United States during 2007.⁴⁰ During the second and third five-year reviews, two responding firms accounted for all known production of NMPF in the United States during 2012 and 2018.⁴¹

In response to the Commission's notice of institution in this current review, domestic interested parties provided a list of three known and currently operating U.S. producers of NMPF. Two firms providing U.S. industry data in response to the Commission's notice of institution accounted for approximately *** percent of production of NMPF in the United States during 2023.⁴²

³⁹ Original publication, pp. I-2, III-1.

⁴⁰ Non-Malleable Cast Iron Pipe Fittings from China, Inv. No. 731-TA-990 (First Review), USITC Publication 4023, July 2008 ("First review publication"), pp. I-13-I-14.

⁴¹ Non-Malleable Cast Iron Pipe Fittings From China, Inv. No. 731-TA-990 (Second Review), USITC Publication 4450, January 2014, p. I-13 ("Second review publication"); and third review publication, p. I-13.

⁴² Domestic interested parties' response to the notice of institution, July 3, 2024, exh. 1; and Domestic interested parties' supplemental response to the notice of institution, July 25, 2024, p. 1.

Recent developments

Table I-4 presents events in the U.S. industry since the Commission’s last five-year review.⁴³

Table I-4
NMPF: Developments in the U.S. industry

Item	Firm	Event
Merger	ASC	Anvil International, LLC (Exeter, NH) merged with Smith-Cooper International (Commerce, CA) in 2019. In 2021, the merged entity started operating as ASC Engineered Solutions, LLC (Oak Brook, IL).
Acquisition	ASC and Ward	ASC acquired Ward (Blossburg, PA) from Proterial America, Ltd. (February 2024). ASC and Ward are separate corporate entities and operate as separate business units.
Closure	Ward	Ward closed its West Allis, WI facility in May 2024.

Source: Domestic interested parties’ response to the notice of institution, July 3, 2024, pp. 1, 8-9. PHCPPROS, “Anvil and Smith-Cooper Relaunch as ASC Engineered Solutions,” March 30, 2021, <https://www.phcppros.com/articles/13121-anvil-and-smith-cooper-relaunch-as-asc-engineered-solutions>, accessed July 19, 2024. Wellsboro Gazette, “ASC acquires Ward Manufacturing,” February 19, 2024, https://www.tiogapublishing.com/the_wellsboro_mansfield_gazette/community/asc-acquires-ward-manufacturing/article_3081dcae-cf67-11ee-bf41-7b2e2638a09e.html, accessed July 19, 2024. Torres, R. Milwaukee Journal Sentinel, “9 companies including BRP, Charter Communications, Kalmbach Media lay off workers,” June 3, 2024, <https://www.jsonline.com/story/money/business/2024/06/03/nine-companies-announced-worker-layoffs-at-wisconsin-operations-in-may/73895466007/>, accessed July 19, 2024.

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 in the current five-year review.⁴⁴ Table I-5 presents a compilation of the trade and financial data submitted from all responding U.S. producers in the original investigation and subsequent five-year reviews.

⁴³ For recent developments, if any, in tariff treatment, please see “U.S. tariff treatment” section.

⁴⁴ Individual company trade and financial data are presented in app. B.

Table I-5
NMPF: Trade and financial data submitted by U.S. producers, by period

Quantity in short tons; value in 1,000 dollars; unit value in dollars per short ton; ratio in percent

Item	Measure	2001	2007	2012	2018	2023
Capacity	Quantity	***	***	***	***	***
Production	Quantity	***	***	***	***	***
Capacity utilization	Ratio	***	***	***	***	***
U.S. shipments	Quantity	***	***	***	***	***
U.S. shipments	Value	***	***	***	***	***
U.S. shipments	Unit value	***	***	***	***	***
Net sales	Value	***	***	***	***	***
COGS	Value	***	***	***	***	***
COGS to net sales	Ratio	***	***	***	***	***
Gross profit or (loss)	Value	***	***	***	***	***
SG&A expenses	Value	***	***	***	***	***
Operating income or (loss)	Value	***	***	***	***	***
Operating income or (loss) to net sales	Ratio	***	***	***	***	***

Source: For the years 2001, 2007, 2012, and 2018, data are compiled using data submitted in the Commission's original investigation and prior five-year reviews. For the year 2023, data are compiled using data submitted by the domestic interested parties. Domestic interested parties' response to the notice of institution, July 3, 2024, exh. 1.

Note: For a discussion of data coverage, please see "U.S. producers" section.

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 U.S. producer from the domestic industry for purposes of its injury determination if "appropriate circumstances" exist.⁴⁵

In its original determination and its expedited first, second, and third five-year review determinations, the Commission defined a single domestic like product consisting of NMPF corresponding to Commerce's scope. In its original determination and its expedited first,

⁴⁵ Section 771(4)(B) of the Tariff Act of 1930, 19 U.S.C. § 1677(4)(B).

second, and third five-year review determinations, the Commission defined the domestic industry as all domestic producers of NMPF.⁴⁶ In 2023, U.S. producer ASC 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 of NMPF. One of two domestic producers of NMPF, ASC accounted for *** percent of U.S. production in 2023.⁴⁷

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 2001.⁴⁸ Import data presented in the original investigation are based on questionnaire responses.

The Commission did not receive responses from any respondent interested parties in its prior five-year reviews. During the first five-year review, the domestic interested parties provided a list of four firms that may have imported NMPF from China.⁴⁹ Import data presented in the first review are based on official Commerce statistics. During the second and third five-year reviews, the domestic interested parties provided a list of five firms that may have imported NMPF from China.⁵⁰ Import data presented in the second and third reviews are also based on official Commerce statistics.

In their response to the Commission's notice of institution for this current review, the domestic interested parties provided a list of 13 firms that may currently import subject merchandise.⁵¹ In addition, U.S. producer and importer ASC provided data regarding its U.S. imports and U.S. shipments of the subject merchandise (see appendix B).

⁴⁶ 89 FR 47610, June 3, 2024.

⁴⁷ Domestic interested parties' supplemental response to the notice of institution, July 25, 2024, pp. 1-2; Domestic interested parties' response to the notice of institution, July 3, 2024, exh. 1.

⁴⁸ Original publication, p. IV-1.

⁴⁹ First review publication, p. I-18.

⁵⁰ Second review publication, p. I-16.

⁵¹ Domestic interested parties' response to the notice of institution, July 3, 2024, exh. 1.

U.S. imports

Table I-6 presents the quantity, value, and unit value of U.S. imports from China as well as the other top sources of U.S. imports (shown in descending order of 2023 imports by quantity).

Table I-6
NMPF: U.S. imports, by source and period

Quantity in short tons; value in 1,000 dollars; unit value in dollars per short ton

U.S. imports from	Measure	2019	2020	2021	2022	2023
China	Quantity	2,894	2,317	3,293	3,775	2,753
India	Quantity	1,899	1,238	2,006	2,209	1,630
South Korea	Quantity	26	84	99	180	349
Mexico	Quantity	84	53	33	121	202
All other sources	Quantity	1,564	2,525	1,190	1,369	877
Nonsubject sources	Quantity	3,573	3,900	3,328	3,879	3,058
All import sources	Quantity	6,467	6,216	6,620	7,655	5,811
China	Value	10,089	7,553	11,839	14,824	10,838
India	Value	4,413	2,671	5,714	7,737	5,026
South Korea	Value	165	606	1,356	1,982	2,598
Mexico	Value	635	426	345	584	1,008
All other sources	Value	8,513	14,130	6,604	9,635	8,612
Nonsubject sources	Value	13,727	17,833	14,019	19,939	17,244
All import sources	Value	23,816	25,386	25,858	34,763	28,082
China	Unit value	3,486	3,260	3,596	3,926	3,937
India	Unit value	2,324	2,158	2,849	3,503	3,084
South Korea	Unit value	6,378	7,223	13,742	10,986	7,436
Mexico	Unit value	7,528	8,073	10,417	4,839	4,983
All other sources	Unit value	5,444	5,595	5,549	7,037	9,823
Nonsubject sources	Unit value	3,842	4,573	4,213	5,140	5,639
All import sources	Unit value	3,683	4,084	3,906	4,541	4,833

Source: Compiled from official Commerce statistics for HTS statistical reporting numbers 7307.11.0030 and 7307.11.0060, accessed July 18, 2024.

Note: The domestic interested parties noted that subject imports are likely understated as product may also enter under two other HTS statistical reporting numbers. Domestic interested parties' response to the notice of institution, July 3, 2024, p. 28, n.148.

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

Apparent U.S. consumption and market shares

Table I-7 presents data on U.S. producers' U.S. shipments, U.S. imports, apparent U.S. consumption, and market shares.

Table I-7
NMPF: Apparent U.S. consumption and market shares, by source and period

Quantity in short tons; value in 1,000 dollars; shares in percent

Source	Measure	2001	2007	2012	2018	2023
U.S. producers	Quantity	***	***	***	***	***
China	Quantity	***	12,832	6,838	3,681	2,753
Nonsubject sources	Quantity	***	5,340	2,606	3,243	3,058
All import sources	Quantity	***	18,171	9,444	6,923	5,811
Apparent U.S. consumption	Quantity	***	***	***	***	***
U.S. producers	Value	***	***	***	***	***
China	Value	***	15,538	15,521	10,156	10,838
Nonsubject sources	Value	***	14,532	11,306	13,434	17,244
All import sources	Value	***	30,070	26,827	23,589	28,082
Apparent U.S. consumption	Value	***	***	***	***	***
U.S. producers	Share of quantity	***	***	***	***	***
China	Share of quantity	***	***	***	***	***
Nonsubject sources	Share of quantity	***	***	***	***	***
All import sources	Share of quantity	***	***	***	***	***
U.S. producers	Share of value	***	***	***	***	***
China	Share of value	***	***	***	***	***
Nonsubject sources	Share of value	***	***	***	***	***
All import sources	Share of value	***	***	***	***	***

Source: For the years 2001, 2007, 2012, and 2018, data are compiled using data submitted in the Commission's original investigation and prior five-year reviews. For the year 2023, U.S. producers' U.S. shipments are compiled from the domestic interested parties' response to the Commission's notice of institution and U.S. imports are compiled using official Commerce statistics under HTS statistical reporting numbers 7307.11.0030 and 7307.11.0060, accessed July 18, 2024.

Note: Share of quantity is the share of apparent U.S. consumption by quantity in percent; share of value is the share of apparent U.S. consumption by value in percent.

Note: For 2001, apparent U.S. consumption is derived from U.S. shipments of imports, rather than U.S. imports.

Note: For a discussion of data coverage, please see "U.S. producers" and "U.S. importers" sections.

The industry in China

Producers in China

During the original investigation, the Commission received foreign producer/exporter questionnaires from five firms, which accounted for greater than *** percent of reported U.S. imports of NMPF from China during 2001.⁵²

The Commission did not receive responses from any respondent interested parties in its prior five-year reviews. During the first five-year review, the domestic interested parties provided a list of five possible producers of NMPF in China.⁵³ During the second five-year review, the domestic interested parties provided a list of 13 possible producers of NMPF in China.⁵⁴ During the third five-year review, the domestic interested parties provided a list of 19 possible producers of NMPF in China.

Although the Commission did not receive responses from any respondent interested parties in this five-year review, the domestic interested parties provided a list of 18 possible producers of NMPF in China.⁵⁵

Recent developments

There were no major developments in China's industry since the continuation of the order identified by interested parties in the proceeding and no relevant information from outside sources was found.

Exports

Table I-8 presents export data for pipe or tube fittings, cast, of nonmalleable iron, a category that includes NMPF and out-of-scope products, from China (by export destination in descending order of quantity for 2023).

⁵² Original confidential report, pp. VII-1—VII-3.

⁵³ First review publication, p. I-25.

⁵⁴ Second review publication, p. I-19.

⁵⁵ Domestic interested parties' response to the notice of institution, July 3, 2024, exh. 1.

Table I-8
Pipe or tube fittings, cast, of nonmalleable iron: Quantity of exports from China, by destination and period

Quantity in short tons

Destination market	2019	2020	2021	2022	2023
United States	110,152	99,271	101,282	88,791	56,735
South Korea	17,520	17,201	17,215	18,476	20,996
Hong Kong	10,677	11,446	16,170	15,238	14,584
Taiwan	12,066	13,502	11,888	16,009	13,710
Spain	12,292	11,194	10,923	11,592	11,365
Australia	10,127	10,577	11,087	10,622	11,048
Saudi Arabia	4,502	3,777	5,154	6,146	10,161
Canada	11,098	11,067	13,576	14,578	9,111
Singapore	8,095	3,717	5,902	7,844	8,836
Russia	3,020	4,946	4,350	6,468	8,223
All other markets	149,455	137,624	140,033	137,777	127,397
All markets	349,004	324,322	337,580	333,541	292,166

Source: Global Trade Information Services, Inc., Global Trade Atlas, HS subheading 7307.11, accessed July 18, 2024. These data may be overstated as HS subheading 7307.11 may contain products outside the scope of this review.

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

Third-country trade actions

Based on available information, NMPF from China has not been subject to other antidumping or countervailing duty investigations outside the United States.

The global market

Table I-9 presents global export data for pipe or tube fittings, cast of nonmalleable iron, a category that includes NMPF and out-of-scope products (by source in descending order of quantity for 2023).

Table I-9
Pipe or tube fittings, cast, of nonmalleable iron: Quantity of global exports by country and period

Quantity in short tons

Exporting country	2019	2020	2021	2022	2023
China	349,004	324,322	337,580	333,541	292,166
India	26,170	19,089	52,127	76,961	45,057
Netherlands	7,926	7,848	10,458	9,257	8,915
Malaysia	1,883	3,496	4,666	9,355	8,814
United Kingdom	7,624	6,537	7,518	7,509	6,690
Italy	9,841	6,255	6,500	7,283	5,401
Thailand	1,770	1,395	977	985	5,162
United States	3,805	2,757	2,711	3,347	4,144
France	4,061	3,894	5,274	4,637	3,811
Germany	3,920	4,115	4,247	4,355	3,486
All other exporters	45,181	40,076	35,020	30,857	21,762
All exporters	461,185	419,782	467,078	488,085	405,409

Source: Global Trade Information Services, Inc., Global Trade Atlas, HS subheading 7307.11, accessed July 18, 2024. These data may be overstated as HS subheading 7307.11 may contain products outside the scope of this review.

Note: Because of rounding, figures may not add to total shown.

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
89 FR 47610 June 3, 2024	Non-Malleable Cast Iron Pipe Fittings From China; Institution of a Five-Year Review	https://www.govinfo.gov/content/pkg/FR-2024-06-03/pdf/2024-11917.pdf
89 FR 47525 June 3, 2024	Initiation of Five-Year (Sunset) Reviews	https://www.govinfo.gov/content/pkg/FR-2024-06-03/pdf/2024-12097.pdf

APPENDIX B
COMPANY-SPECIFIC DATA

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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

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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

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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

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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

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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

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Table C-6

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

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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 it provided contact information for the following three firms as top purchasers of NMPF: ***. Purchaser questionnaires were sent to these three firms and no firms submitted a response to the Commission's request for information.