

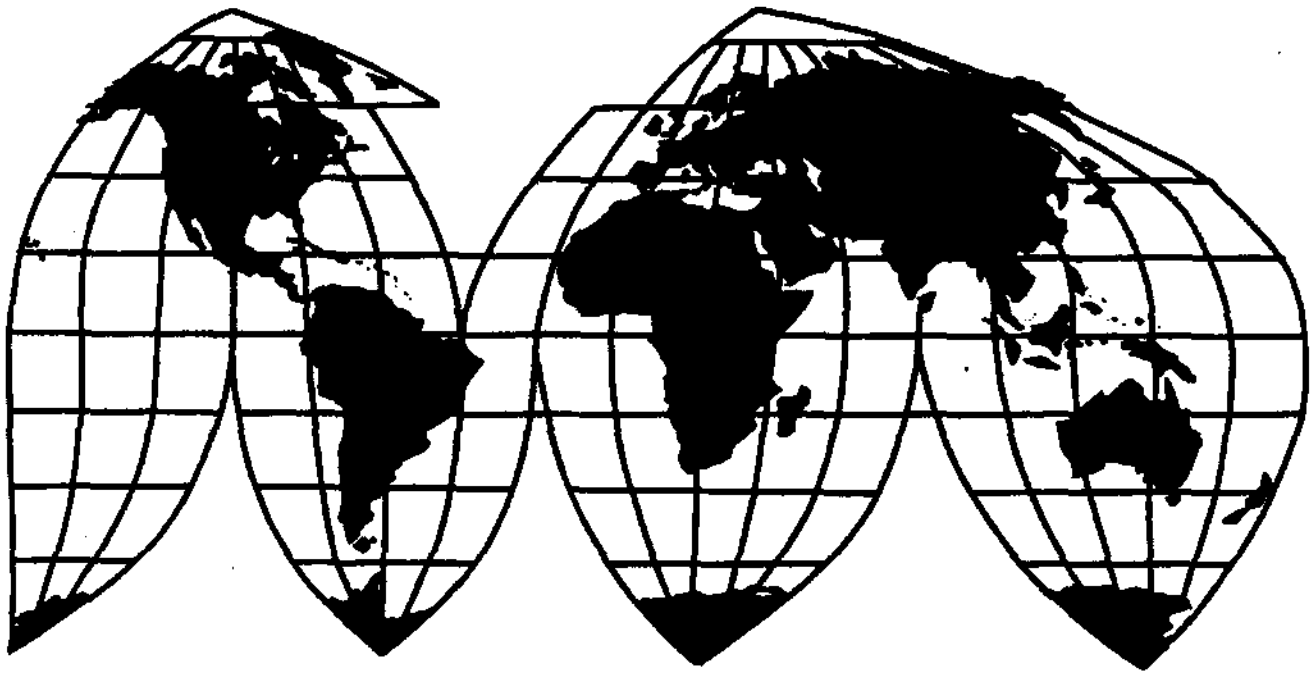
# Certain Ductile Iron Waterworks Fittings From China

Investigation No. TA-421-4

Publication 3657

December 2003

**U.S. International Trade Commission**



# U.S. International Trade Commission

## COMMISSIONERS

**Deanna Tanner Okun, Chairman**  
**Jennifer A. Hillman, Vice Chairman**

**Marcia E. Miller**

**Stephen Koplan**

**Charlotte R. Lane**

**Daniel R. Pearson**

---

**Robert A. Rogowsky**  
*Director of Operations*

---

*Staff assigned:*

**Fred Ruggles, Investigator**  
**William Greene, Industry Analyst**  
**John Benedetto, Economist**  
**David Boyland, Accountant**  
**William Gearhart, Attorney**

**Diane Mazur, Acting Supervisory Investigator**

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

# **U.S. International Trade Commission**

Washington, DC 20436

[www.usitc.gov](http://www.usitc.gov)

## **Certain Ductile Iron Waterworks Fittings From China**

Investigation No. TA-421-4



**Publication 3657**

**December 2003**



## CONTENTS

	<i>Page</i>
<b>Determination</b> .....	1
<b>Views of the Commission on market disruption</b> .....	3
<b>Views of the Commission on remedy</b> .....	31
<b>Separate and Additional Views of Vice Chairman Jennifer A. Hillman on remedy</b> .....	39
<b>Views of Commissioner Marcia E. Miller on remedy</b> .....	43
<b>Part I: Introduction</b> .....	I-1
Background .....	I-1
Previous investigations .....	I-2
Statutory criteria and organization of the report .....	I-2
Summary data .....	I-3
The subject product .....	I-3
The like or directly competitive domestic article .....	I-4
Physical properties and uses .....	I-4
Manufacturing process .....	I-6
Marketing channels .....	I-6
Customs treatment .....	I-7
Domestic like or directly competitive product considerations .....	I-7
The U.S. market .....	I-9
U.S. producers .....	I-9
U.S. importers .....	I-11
Apparent U.S. consumption .....	I-12
<b>Part II: The question of rapidly increasing U.S. imports</b> .....	II-1
U.S. imports .....	II-1
<b>Part III: The question of material injury</b> .....	III-1
U.S. production, capacity, and capacity utilization .....	III-1
U.S. producers' U.S. shipments, export shipments, and inventories .....	III-1
Imports and other purchases by U.S. producers .....	III-2
U.S. employment, wages, and productivity .....	III-2
Financial experience of U.S. producers .....	III-2
Background .....	III-2
Operations on DIWF .....	III-3
Capital expenditures, research and development expenses, and investment in productive assets .....	III-5
Capital and investment .....	III-5
<b>Part IV: The question of threat of material injury</b> .....	IV-1
The Chinese industry and market .....	IV-1
U.S. importers' inventories .....	IV-1
U.S. importers' current orders .....	IV-1

*Continued.*

**CONTENTS—Continued**

	<i>Page</i>
<b>Part V: The question of the causal relationship between the alleged injury and imports—Continued</b>	
Prices and related information .....	V-2
Market segments and channels of distribution .....	V-2
Supply considerations .....	V-3
Demand considerations .....	V-5
Substitutability issues .....	V-6
Factors affecting purchasing decisions .....	V-9
Elasticity estimates .....	V-11
Factors affecting pricing .....	V-12
Pricing practices .....	V-13
Price data .....	V-14
Lost sales and lost revenues .....	V-18
<b>Part VI: U.S. producers' efforts to compete and requested relief .....</b>	<b>VI-1</b>
Efforts by U.S. producers to compete .....	VI-1
Requested import relief .....	VI-1
<b>Appendices</b>	
A. <i>Federal Register</i> notices .....	A-1
B. Conference and hearing witnesses .....	B-1
C. Summary data .....	C-1
D. U.S. shipments by size and types .....	D-1
E. U.S. producers' company-by-company comparisons .....	E-1
F. Effects of imports of certain ductile iron waterworks fittings from China on U.S. firms' <i>existing development and production efforts, growth, investment, and ability</i> to raise capital .....	F-1
G. Pricing data by U.S. producer .....	G-1
H. U.S. importers' company-by-company comparisons of imports and shipments of imports ...	H-1

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

## GLOSSARY OF FIRMS

ACIPCO .....	American Cast Iron Pipe Co.
Clow .....	Clow Water Systems Co.
Griffin .....	Griffin Pipe Products Co.
Linx .....	Linx Ltd.
PCI .....	<i>Pipeline Components, Inc.</i>
SIGMA .....	SIGMA Corp.
Smith-Cooper .....	Smith-Cooper International
Star .....	Star Pipe Products, Inc.
SWOT .....	SWOT International, Inc.
Tyler .....	Tyler Pipe Co.
Union .....	Union Foundry Co.
U.S. Pipe .....	U.S. Pipe and Foundry Co.
UV Int'l. ....	UV International, LLC

## GLOSSARY OF TERMS

ANSI .....	American National Standards Institute
AUV .....	Average unit value
AWWA .....	American Waterworks Association
CDIWF .....	Compact ductile iron waterworks fittings
CMP .....	China National Metal Products Import and Export Corp.
COGS .....	Cost of goods sold
Commission .....	U.S. International Trade Commission
DIWF .....	Ductile iron waterworks fittings
FBDIWF .....	Full-bodied ductile iron waterworks fittings
F.o.b. ....	Free on board
<i>FR</i> .....	<i>Federal Register</i>
GIWF .....	Gray iron waterworks fittings
HTS .....	Harmonized Tariff Schedule of the United States
ISO .....	International Standards Organization
ND .....	Nominal diameter
PRWs .....	Production and related workers
R&D .....	Research and development expenses
SG&A .....	Selling, general, and administrative





# UNITED STATES INTERNATIONAL TRADE COMMISSION

## Investigation No. TA-421-4

### CERTAIN DUCTILE IRON WATERWORKS FITTINGS FROM CHINA

#### DETERMINATION

On the basis of information developed in the subject investigation, the United States International Trade Commission determines, pursuant to section 421(b)(1) of the Trade Act of 1974,<sup>1</sup> that certain ductile iron waterworks fittings<sup>2</sup> from the People's Republic of China are being imported into the United States in such increased quantities or under such conditions as to cause market disruption to the domestic producers of like or directly competitive products (68 FR 69421, December 12, 2003).

#### RECOMMENDATIONS ON PROPOSED REMEDIES

**Chairman Deanna Tanner Okun, Commissioner Stephen Koplan, Commissioner Charlotte R. Lane, and Commissioner Daniel R. Pearson** propose that the President impose a tariff-rate quota on imports of the subject ductile iron waterworks fittings from China as follows: in the first year, a tariff of 50 percent *ad valorem*, in addition to the current rate of duty, on imports over 14,324 short tons; in the second year, a tariff of 40 percent *ad valorem*, in addition to the current rate of duty, on imports that exceed 15,398 short tons; and in the third year of relief, a tariff of 30 percent *ad valorem*, in addition to the current rate of duty, on imports that exceed 16,553 short tons. They further recommend that, if applications are filed, the President direct the U.S. Department of Commerce and the U.S. Department of Labor to provide expedited consideration of trade adjustment assistance for firms and/or workers affected by the subject imports.

**Vice Chairman Jennifer A. Hillman** proposes that the President impose a quota, for a three-year period, on imports of the subject ductile iron waterworks fittings from China as follows: 14,324 short tons in the first year of relief, 15,398 short tons in the second year of relief, and 16,553 short tons in the third year of relief.

**Commissioner Marcia E. Miller** proposes that the President impose a duty, in addition to the current rate of duty, for a three-year period, on imports of the subject ductile iron waterworks fittings from China as follows: 50 percent *ad valorem* in the first year of relief, 40 percent *ad valorem* in the second year of relief, and 30 percent *ad valorem* in the third year of relief.

#### BACKGROUND

Following receipt of a petition, on September 5, 2003, on behalf of McWane, Inc.,<sup>3</sup> Birmingham, AL, the Commission instituted investigation No. TA-421-4, *Certain Ductile Iron Waterworks Fittings*

---

<sup>1</sup> 19 U.S.C. § 2451(b)(1).

<sup>2</sup> The products subject to this investigation are cast pipe or tube fittings of ductile iron (containing 2.5 percent carbon and over 0.02 percent magnesium or magnesium and cerium, by weight) with mechanical, push-on (rubber compression) or flanged joints attached. Included within this definition are fittings of all nominal diameters and of both full-bodied and compact designs. The imported products are provided for in statistical reporting number 7307.19.3070 of the Harmonized Tariff Schedule of the United States (HTS).

<sup>3</sup> McWane operates three subsidiaries that produce the subject products including: Clow Water Systems Co., Coshocton, OH; Tyler Pipe Co., Tyler, TX; and Union Foundry Co., Anniston, AL.

*from China*, under section 421(b) of the Act to determine whether certain ductile iron waterworks fittings from China are being imported into the United States in such increased quantities or under such conditions as to cause market disruption to the domestic producers of like or directly competitive products. The petition also alleged under section 421(i)(1)(A) of the Act, that critical circumstances exist with respect to imports of the subject product from China, and on October 20, 2003, the Commission made a negative determination<sup>4 5</sup> with respect to whether delay in taking action under this section would cause damage to the relevant domestic industry which would be difficult to repair (68 FR 61013, October 24, 2003).

Notice of the institution of the Commission's investigation and of the scheduling of a public hearing to be held in connection therewith was given by posting a copy of the notice on the Commission's website (*www.usitc.gov*) and by publishing the notice in the *Federal Register* of September 15, 2003 (68 FR 54010). The hearing was held on November 6, 2003 in Washington, DC; all persons who requested the opportunity were permitted to appear in person or by counsel.

The views of the Commission are contained in USITC Publication 3657 (December 2003), entitled *Certain Ductile Iron Waterworks Fittings from China: Investigation No. TA-421-4*.

---

<sup>4</sup> Commissioner Lane made an affirmative critical circumstances determination.

<sup>5</sup> Commissioner Pearson did not participate in the critical circumstances determination.

## VIEWS OF THE COMMISSION ON MARKET DISRUPTION

### I. INTRODUCTION

#### A. Determination

Pursuant to section 421(b)(1) of the Trade Act of 1974 (19 U.S.C. § 2451(b)(1)) and on the basis of the information obtained in this investigation, the Commission determines that certain ductile iron waterworks fittings (DIWF) from China are being imported into the United States in such increased quantities or under such conditions as to cause market disruption to the domestic producers of DIWF.

#### B. Summary

The petition in this investigation was filed on September 5, 2003, by McWane, Inc., which owns either directly or indirectly three (Clow Water Systems Co. (Clow), Tyler Pipe Industries (Tyler), and Union Foundry Co. (Union)) of the six firms that produced DIWF in the United States during all or part of the period examined. The other two remaining domestic producers are American Cast Iron Pipe Co. (ACIPCO) and U.S. Pipe and Foundry Co. (U.S. Pipe).<sup>1</sup> The remaining principal parties to the investigation include Chinese producers and exporters and three U.S. importers of DIWF from China: Pipeline Components (Pipeline), SIGMA Corporation (SIGMA), and Star Pipe Products, Inc. (Star).

Waterworks fittings are used to join pipes, valves, and hydrants in straight lines and to change, divert, divide, or direct the flow of raw or treated water (primarily in municipal water distribution systems). The vast majority of DIWF are sold through waterworks distributors to contractors or municipal or regional water authorities. The Chinese and domestic DIWF are used interchangeably, as all are made to the same U.S. specifications, and most purchasers rated the domestic and Chinese products comparable in quality. Demand for DIWF is associated with housing starts and other construction starts, has been strong since 1998, and has risen each year, reflecting a strong construction market for new homes.

The record before the Commission establishes that imports of DIWF from China are increasing rapidly, both absolutely and relative to production and consumption, whether one uses 1998, the first year of the period examined, as a base year, or 2000, the year prior to the most significant increase in imports of DIWF from China. The rapid increase has not abated in 2003.

The record before the Commission establishes in addition that the domestic industry is materially injured. U.S. producers reported \*\*\* and widening operating losses on their DIWF operations during the latter part of the period investigated, and their operating loss in interim 2003 was more than \*\*\* the operating loss in interim 2002. The industry is experiencing a sharp and recent drop in domestic output, a 2003 plant closing, and reductions in the operations of at least two other plants. McWane curtailed production and hours, reduced shifts, and laid off workers at its facilities, including the closure of its recently installed "GFD" molding line at its Union Foundry facility in August 2003. Despite an increase in domestic consumption of DIWF in each year of the period examined, domestic production and shipments of DIWF peaked in 1999 and have declined since. In the recent period, domestic producers have \*\*\* in an effort to regain market share. Finally, employment and hours worked both fell over the period examined, with the largest one-year decline occurring in 2002.

The record before the Commission indicates clearly that rapidly increasing imports of DIWF from China are a significant cause of market disruption to the domestic industry. We considered

---

<sup>1</sup> A sixth firm, Griffin Pipe Products (Griffin), produced DIWF in the United States through 1999.

information relevant to the three statutory factors that relate to our causation analysis, i.e., the volume of imports from China, the effect of these imports on prices, and the effect of these imports on the domestic industry.

Concerning volume, imports of DIWF from China and shipments of imports from China are rapidly increasing. Shipments of imports from China also have captured a rapidly increasing share of the domestic market, displacing domestic sales.

Concerning price, the rapid increase in imports of DIWF from China coincided with continuing significant underselling of the domestic products by the subject imports and declining prices of both. Domestic prices began to fall in the latter part of 2001 and continued to fall in 2002 as shipments of imports from China grew by 42.5 percent in 2001 and by an additional 12.7 percent in 2002. Domestic prices also were suppressed due to the effects of the rising volume of substitutable imports from China that prevented domestic producers from passing along increased costs in the form of higher prices.

Concerning the effect of imports on the domestic industry, we find a direct and significant connection between the rapidly increasing imports of DIWF from China since 2000 and the recent and sharp decline in industry indicators. While there was a rise in U.S. apparent consumption of DIWF in each year of the period examined, including since 2000, the industry is operating at a loss, and this loss is increasing. There is evidence of plant and production line shutdowns and worker layoffs, stagnant or declining production, shipments, employment, capacity, and capacity utilization, and falling domestic prices. The decline in these industry indicators has been greatest since 2000, and has coincided with the rapid increase in DIWF imports from China, which has also occurred since 2000. For example, as stated above, McWane halted production on its recently installed molding line at its Union Foundry facility in August 2003. McWane approved the plans to install this production capacity in 1999, premised in part on its view that the market would continue to expand and the new equipment would increase the efficiency of the Union facility. The production line began operating in 2000, the year before subject imports began their rapid increase. McWane closed this line as subject imports of that particular size began their increase. Moreover, the rising volumes of DIWF imports from China have displaced comparable domestic sales; this displacement has led to reduced domestic production, shipments, sales, and employment. *The lower volume of domestic sales also has contributed to the poor financial results by reducing the number of units over which domestic producers could spread their fixed costs.*

Finally, we considered other factors that may be contributing to the condition of the industry, including non-subject imports, the domestic industry's imports or purchases of non-subject imports, McWane's capital and other expenditures to address safety and environmental issues, the domestic industry's rising internal costs, and whether DIWF is considered by domestic producers to be a product of secondary importance to their operations. While several of these factors have had some negative impact on the domestic industry over the period examined, we do not find that these other factors, whether considered separately or together, sever the causal link between imports of DIWF from China and injury to the domestic industry.

### **C. Background and scope of investigation**

The Commission instituted this investigation effective September 5, 2003, following receipt of a petition filed by McWane, Inc., Birmingham, AL. The petition alleged that DIWF from China are being imported into the United States in such increased quantities or under such conditions as to cause or threaten to cause market disruption to the domestic producers of like or directly competitive products. The petition also alleged that critical circumstances exist and requested that provisional relief be provided. On October 20, 2003, the Commission made a negative critical circumstances determination,

and specifically determined that delay in taking action would not cause damage to the domestic industry which would be difficult to repair.<sup>2</sup>

The imported DIWF from China that are the subject of this investigation consist of the following:

cast pipe or tube fittings of ductile iron (containing 2.5 percent carbon and over 0.02 percent magnesium or magnesium and cerium, by weight) with mechanical, push-on (rubber compression) or flanged joints attached. Ductile iron waterworks fittings are used to join pipes, valves, and hydrants in straight lines or to change, divert, divide, or direct the flow of water or sewage in municipal utility and industrial piping systems. Included within this definition are fittings of all nominal diameters and of both full-bodied and compact designs.

Waterworks fittings are used to join pipes, valves, and hydrants in straight lines and to change, divert, divide, or direct the flow of raw or treated water (primarily in municipal water distribution systems).<sup>3</sup> Waterworks fittings are produced in a variety of shapes, including bends, tees, crosses, elbows, wyes, reducers, and adapters.<sup>4</sup> Ductile iron is the material of choice for fittings used in waterworks applications.<sup>5</sup> DIWF are produced in a range of sizes. The most common sizes sold in the U.S. market are 4 inches, 6 inches, and 8 inches in nominal diameter, and fittings of 30 inches and below account for approximately 90 percent of the domestic market.<sup>6</sup> Ductile iron waterworks fittings below 42 inches in nominal diameter are used primarily in municipal water distribution systems, while those above 42 inches are produced primarily for wastewater treatment plants.<sup>7</sup> DIWF are produced in both a lighter weight “compact” form and in a heavier weight “full-bodied” form.<sup>8</sup>

All waterworks fittings and accessories sold in the U.S. market must conform to standards set by the American Waterworks Association (AWWA) and the American National Standards Institute (ANSI).<sup>9</sup> Because all the subject waterworks fittings sold in the United States conform to AWWA/ANSI specifications, the domestic and imported products generally are recognized as interchangeable.<sup>10</sup>

Six firms produced DIWF in the United States during all or part of the period examined. Three of those firms, Clow Water Systems Co. (Clow), Tyler Pipe Industries (Tyler), and Union Foundry Co. (Union), are owned either directly or indirectly by McWane, Inc., the petitioner. Tyler is the largest U.S. producer of DIWF.<sup>11</sup> Two other firms also currently produce DIWF in the United States, American Cast

---

<sup>2</sup> *Certain Ductile Iron Waterworks Fittings from China*, Inv. No. TA-421-4 (Critical Circumstances Phase), USITC Pub. 3642 (October 2003). Commissioner Lane determined that delay in taking action *would* cause damage to the domestic industry which would be difficult to repair; Commissioner Pearson did not participate in the critical circumstances determination.

<sup>3</sup> Confidential Staff Report (CR) at I-5; Public Staff Report (PR) at I-4.

<sup>4</sup> CR at I-5; PR at I-4.

<sup>5</sup> CR at I-6; PR at I-4.

<sup>6</sup> CR at I-6-7; PR at I-5.

<sup>7</sup> CR at I-5, 7; PR at I-5.

<sup>8</sup> CR at I-6; PR at I-5.

<sup>9</sup> CR at I-7; PR at I-5. In general, state and local building codes require that pipes and fittings in connection waterworks meet standards established by AWWA and ANSI, as appropriate.

<sup>10</sup> CR at I-7; PR at I-5. AWWA/ANSI standards cover compact fittings of 3 to 36 inches and full-bodied fittings of 3 to 48 inches in nominal diameter. *Id.*

<sup>11</sup> CR at I-17-18; PR at I-10.

Iron Pipe Co. (ACIPCO), and U.S. Pipe and Foundry Co. (U.S. Pipe).<sup>12</sup> A sixth firm, Griffin Pipe Products (Griffin), produced DIWF in the United States through 1999. Griffin \*\*\*.<sup>13</sup> Clow, Tyler, and Union produce smaller sizes of DIWF, while U.S. Pipe produces a wide range of sizes, and ACIPCO produces mostly larger sizes.<sup>14</sup>

The vast majority of DIWF sold in the United States, whether domestically produced or imported from China, are sold through waterworks distributors, also known as “waterworks houses,” for sale to contractors or municipal or regional water authorities. Only a limited quantity of DIWF is sold directly to contractors, or to municipal or regional water authorities.<sup>15</sup>

The Commission obtained data from 14 Chinese firms that produce DIWF for sale in the U.S. market. As a practical matter, the only Chinese firms that may successfully compete in the U.S. market are those certified to produce DIWF to U.S. AWWA/ANSI standards. DIWF made in China to Chinese market standards are not sold in the U.S. market, and DIWF made in China to U.S. standards are not sold in China.<sup>16</sup> Other sources of DIWF imports include Brazil, Korea, India, and Mexico.<sup>17</sup>

#### **D. Statutory framework**

The determination that the Commission must make is set out in section 421(b)(1)<sup>18</sup> of the Trade Act, which states in part that the Commission, upon the filing of a petition or receipt of a request or resolution, shall promptly conduct an investigation –

to determine whether products of the People’s Republic of China are being imported into the United States in such increased quantities or under such conditions as to cause or threaten to cause market disruption to the domestic producers of like or directly competitive products.

This standard is satisfied if the following conditions are met –

- (1) there is market disruption or the threat of market disruption to domestic producers of the like or directly competitive products; and
- (2) imports from China are in such increased quantities or under such conditions as to cause or threaten to cause such market disruption.

---

<sup>12</sup> CR at I-19; PR at I-11.

<sup>13</sup> CR at I-19; PR at I-11.

<sup>14</sup> CR at I-17-20; PR at I-9-10. Clow produces DIWF ranging from 2 to 36 inches nominal diameter (ND) and in bend and tee shapes; Tyler produces DIWF ranging from 3 to 24 inches ND and in all standard shapes (bends, tees, reducers, sleeves, etc.); Union produces DIWF ranging from 3 to 24 inches ND and in all shapes (bends, tees, reducers, sleeves, etc.); ACIPCO produces DIWF ranging from 14 to 64 inches ND and in all shapes (bends, tees, reducers, sleeves, etc.); and U.S. Pipe produces DIWF ranging from 3 to 64 inches ND and in all standard shapes (bends, tees, reducers, sleeves, etc.). *Id.*

<sup>15</sup> CR at I-9; PR at I-6.

<sup>16</sup> CR at IV-1; PR at IV-1.

<sup>17</sup> CR at V-7; PR at V-5.

<sup>18</sup> 19 U.S.C. § 2451(b)(1).

The term “market disruption” is defined in section 421(c)(1)<sup>19</sup> to exist –

whenever imports of an article like or directly competitive with an article produced by a domestic industry are increasing rapidly, either absolutely or relatively, so as to be a significant cause of material injury, or threat of material injury, to the domestic industry.

Thus, in order to determine that market disruption exists, the Commission must find that each of three conditions is satisfied –

- (1) imports of the subject product from China are increasing rapidly, either absolutely or relatively;
- (2) the domestic industry is materially injured, or threatened with material injury; and
- (3) such rapidly increasing imports are a significant cause of the material injury or the threat of material injury.<sup>20</sup>

Section 421(d)<sup>21</sup> provides that the Commission, in determining whether market disruption exists, shall consider objective factors, including –

- (1) the volume of imports of the product which is the subject of the investigation;
- (2) the effect of imports of such product on prices in the United States for like or directly competitive articles; and
- (3) the effect of imports of such product on the domestic industry producing like or directly competitive articles.

Section 421(d) further provides that the presence or absence of any of these three factors “is not necessarily dispositive of whether market disruption exists.”

## **II. WHETHER MARKET DISRUPTION EXISTS**

### **A. Domestic industry**

Section 421(c) defines the domestic industry in terms of the producers of “like or directly competitive” products. In making its determination under section 421(c), the Commission follows a two-step practice of first determining what constitutes the product like or directly competitive with the imports subject to the investigation, and then identifying who produces it (the domestic industry).<sup>22</sup>

---

<sup>19</sup> 19 U.S.C. § 2451(c)(1).

<sup>20</sup> Section 421(c)(2) further states that the term “significant cause” refers “to a cause which contributes significantly to the material injury of the domestic industry, but need not be equal to or greater than any other cause.” 19 U.S.C. § 2451(c)(2).

<sup>21</sup> 19 U.S.C. § 2451(d).

<sup>22</sup> See e.g., *Certain Brake Drums and Rotors from China*, Inv. No. TA-421-3, USITC Pub. 3622 (Aug. 2003) at 7.

## 1. Like or directly competitive domestic article

### (a) *The statutory framework and Commission practice*

When assessing what constitutes the like or directly competitive product, the Commission applies the definitions of “like or directly competitive” in the legislative history of what is now section 202 of the Trade Act<sup>23</sup> and considers such factors as (1) the physical properties of the article, (2) its customs treatment, (3) its manufacturing process (i.e., where and how it is made), (4) its uses, and (5) the marketing channels through which the product is sold.<sup>24</sup> If the Commission finds that there is domestic production of a like product, it has not found it necessary to look further and determine whether there is also domestic production of directly competitive products.<sup>25</sup> The Commission considers the decision regarding the like or directly competitive product to be a factual determination.<sup>26</sup>

Once the Commission has identified the like or directly competitive goods, it then determines whether there are clear dividing lines between the domestic goods, and thus whether there are one or several domestic products like (or directly competitive with) the imported goods.<sup>27</sup>

Based on the information developed during the critical circumstances phase of this investigation, the Commission found, for purposes of the determination in that phase of the investigation, that domestically produced DIWF are like the imported Chinese DIWF described in the Commission’s Notice of Investigation. It made that finding based on consideration of the evidence relating to the five factors listed above.<sup>28</sup> The Commission considered arguments made by one of the respondents that it should find that large and small diameter DIWF are separate like products, but based on the evidence, found one like product, with the various diameters and types part of a continuum of products.<sup>29</sup>

### (b) *Arguments of the parties*

In their pre-hearing briefs and at the hearing the parties expressed general agreement with the findings made by the Commission during the critical circumstances phase with respect to the like or directly competitive product and the domestic industry. Petitioner expressed agreement.<sup>30</sup> At the November 6 hearing, counsel for the Chinese respondents stated that they did “not have an issue or disagreement” with the Commission’s findings on like product in the critical circumstances phase of the investigation.<sup>31</sup> Similarly, none of the other respondents expressed disagreement with the like product

---

<sup>23</sup> See e.g., *Certain Brake Drums and Rotors from China*, Inv. No. TA-421-3, USITC Pub. 3622 (Aug. 2003) at 7.

<sup>24</sup> See e.g., *Certain Ductile Iron Waterworks Fittings from China*, Inv. No. TA-421-4 (Critical Circumstances Phase), USITC Pub. 3642 (October 2003) at 5.

<sup>25</sup> See e.g., *Certain Ductile Iron Waterworks Fittings from China*, Inv. No. TA-421-4 (Critical Circumstances Phase), USITC Pub. 3642 (October 2003) at 5.

<sup>26</sup> See e.g., *Certain Brake Drums and Rotors from China*, Inv. No. TA-421-3, USITC Pub. 3622 (Aug. 2003) at 8.

<sup>27</sup> See e.g., *Certain Brake Drums and Rotors from China*, Inv. No. TA-421-3, USITC Pub. 3622 (Aug. 2003) at 8.

<sup>28</sup> *Certain Ductile Iron Waterworks Fittings from China*, Inv. No. TA-421-4 (Critical Circumstances Phase), USITC Pub. 3642 (October 2003) at 5.

<sup>29</sup> *Certain Ductile Iron Waterworks Fittings from China*, Inv. No. TA-421-4 (Critical Circumstances Phase), USITC Pub. 3642 (October 2003) at 5-6.

<sup>30</sup> See Petitioner’s pre-hearing brief at 2.

<sup>31</sup> Confidential hearing tr. at 313 (Mr. Loeb).



findings made by the Commission during the critical circumstances phase, or again argued that the Commission should find that large and small diameter DIWF are separate like products.

(c) *Analysis*

As during the critical circumstances phase, after considering the factors the Commission traditionally applies (i.e., physical properties, customs treatment, production processes and facilities, uses, and marketing channels), including additional information and arguments with respect to these factors, we find that domestically produced DIWF are like the imported DIWF from China described in the Notice of Investigation. We also find that the various types and sizes of domestic DIWF are part of a continuum, with no clear dividing line between them.

We begin our analysis by examining the imported product. Our Notice of Investigation describes the imported product as follows:

cast pipe or tube fittings of ductile iron (containing 2.5 percent carbon and over 0.02 percent magnesium or magnesium and cerium, by weight) with mechanical, push-on (rubber compression) or flanged joints attached. Ductile iron waterworks fittings are used to join pipes, valves, and hydrants in straight lines or to change, divert, divide, or direct the flow of water or sewage in municipal utility and industrial piping systems. Included within this definition are fittings of all nominal diameters and of both full-bodied and compact designs.

*Physical properties.* We find that the physical properties of the domestic products and the subject imports are substantially identical in that both possess chemical and physical properties that meet specifications for use in waterworks applications established by the AWWA and ANSI.<sup>32</sup> We find that the imported and domestic products are interchangeable because all the subject waterworks fittings sold in the United States must conform to AWWA/ANSI specifications.<sup>33</sup> We also find that DIWF are distinct in chemical and physical properties from other cast iron fittings in that the iron from which they are made includes magnesium, which gives the iron added strength, corrosion resistance, and ductility.<sup>34</sup>

*Customs treatment.* We find that the various types and sizes of DIWF fall within a single HTS statistical reporting number.

*Manufacturing process.* We find that domestic and imported DIWF are produced by the same manufacturing process. DIWF are produced in two principal stages, casting and finishing, which include machining and coating.<sup>35</sup> The evidence indicates that imported and domestic DIWF are produced in a similar manner, although the domestic manufacturing process may be more automated.<sup>36</sup> The evidence also indicates that domestic plants that produce DIWF can produce a wide range of diameters of DIWF in the same plant.<sup>37</sup> However, we note that the evidence indicates that no one domestic plant has the tooling

---

<sup>32</sup> Staff conference (SC), tr. at 69; see also petition at 5.

<sup>33</sup> CR at I-7; PR at I-5.

<sup>34</sup> Petitioner's post-conference brief at 4.

<sup>35</sup> Petition at 5; CR at I-8; PR at I-6.

<sup>36</sup> SC tr. at 73 (Mr. Green).

<sup>37</sup> SC tr. at 71 (Mr. Green).

to produce all 1,500 or so configurations of DIWF products,<sup>38</sup> and there is some tendency of plants to focus on smaller or larger size ranges of fittings.<sup>39</sup>

*Uses.* We find that the subject imports and domestic product have the same uses – i.e., as fittings that meet AWWA and ANSI specifications for use in waterworks applications.<sup>40</sup> This is further confirmed by responses to Commission questionnaires. All six producers and seven of 11 importers reported that U.S., Chinese, and non-subject DIWF are used interchangeably.<sup>41</sup>

*Marketing channels.* We find that the vast majority of imported and domestic products are sold through waterworks distributors known as “waterworks houses.” Waterworks houses account for more than 90 percent of all DIWF sold in the United States; only a limited quantity is sold directly to contractors or municipal or regional water authorities.<sup>42</sup>

In view of the similarity in physical properties, uses, manufacturing process, customs treatment, and marketing channels for the imported and domestically produced DIWF products, we find that domestically produced DIWF are “like” the imported DIWF. We also find one like product, with the various diameters and types part of a continuum of products. The various sizes and types of DIWF have the same physical attributes in terms of materials, general appearance, and finishing, are largely produced in the same plants and on the same equipment, are used for the same end uses (in waterworks), and are largely sold through the same marketing channels. There is no clear dividing line among domestic producers or plants. While no one domestic producer produces every size and type of DIWF,<sup>43</sup> the evidence indicates that domestic producers as a whole produce a full range of sizes,<sup>44</sup> and the range of sizes produced in one domestic plant overlaps, to at least some degree, with the sizes produced in other domestic plants. For example, U.S. Pipe produces both large and small diameter DIWF, and ACIPCO, which produces primarily larger diameter DIWF, produces DIWF that overlaps in diameter with the DIWF produced by McWane.<sup>45</sup>

## 2. The domestic industry

Neither section 421 nor its legislative history defines the term “domestic industry.” However, the term is defined in other statutory authorities. Section 202(c)(6)(A)(i) of the Trade Act (19 U.S.C. § 2252(c)(6)(A)(i)) defines the term “domestic industry” to mean –

with respect to an article, the domestic producers as a whole of the like or directly competitive article or those producers whose collective production of the like or directly competitive article constitutes a major proportion of the total domestic production of such article.

---

<sup>38</sup> SC tr. at 72 (Mr. Waugaman).

<sup>39</sup> See exhibit 4 to SIGMA post-conference brief.

<sup>40</sup> CR at V-10; PR at V-6.

<sup>41</sup> CR at V-10; PR at V-6.

<sup>42</sup> CR at I-9; PR at I-6.

<sup>43</sup> CR at I-17-20; PR at I-9-11.

<sup>44</sup> CR and PR, Table I-3.

<sup>45</sup> CR at I-17-20; PR at I-9-11.

In previous section 421 investigations, having found domestic production of a like product, the Commission found the domestic industry to consist of the domestic firms and workers producing that product.<sup>46</sup> We follow that practice here.

In the current case, the Commission identified five firms that currently produce DIWF: Clow, Tyler, Union, ACIPCO, and U.S. Pipe. The Commission collected financial and other data from them.<sup>47</sup> We find the domestic DIWF operations of these five firms and of Griffin during 1998-99 to constitute the relevant domestic industry.

## B. Rapidly increasing imports

**Statutory framework.** The first of the three statutory criteria for finding market disruption requires that the Commission find that imports of a product from China “are increasing rapidly, either absolutely or relatively.” Thus, under the statute, the increase must be occurring “rapidly,” in either absolute or relative terms. The statute suggests that the rapid increase should be recent or continuing, as opposed to in the distant past. Section 421 does not otherwise define “rapidly increasing” or the timing or circumstances of the increase.

**Arguments of the parties.** The parties disagree with respect to whether imports are increasing rapidly. Petitioner states that imports from China have increased rapidly in both absolute and relative terms, whether examined over the five-year period covered by the Commission’s investigation or a more recent period.<sup>48</sup> Petitioner states that imports, in absolute terms, increased by \*\*\* percent between 1998 and 2002, and by 67.9 percent between 2000 and 2002, and were higher in interim 2003 than in interim 2002.<sup>49</sup> Petitioner asserts that imports also increased rapidly relative to domestic production and domestic consumption.<sup>50</sup>

The Chinese respondents assert that the increasing rapidly test is not met in this case for two reasons: (1) imports are not increasing rapidly, and (2) the increase that did occur was outside the relevant time period for section 421. To evaluate whether imports are increasing rapidly, they assert that the Commission in this case should use 2001-2003 data.<sup>51</sup> They argue that the assessment of imports from China under section 421 begins with China’s WTO accession, which occurred in December 2001,<sup>52</sup> and that 2001 data should serve as a baseline for measuring the presence of rapidly increasing imports in 2002 and later.<sup>53</sup> They assert that the rate of increase in imports from China during the most recent 2-3 year period has been “moderate, not rapid” in both absolute and relative terms.<sup>54</sup>

---

<sup>46</sup> See, e.g., *Certain Brake Drums and Rotors from China*, Inv. No. TA-421-3, USITC Pub. 3622 (August 2003) at 14.

<sup>47</sup> The Commission also collected information from a sixth firm, Griffin Pipe Products, for part of the period examined. Griffin ceased domestic production in 1999.

<sup>48</sup> Petitioner’s pre-hearing brief at 8, 11.

<sup>49</sup> Petitioner’s pre-hearing brief at 7-8.

<sup>50</sup> Petitioner’s pre-hearing brief at 11-12.

<sup>51</sup> Chinese respondents’ pre-hearing brief at 11. To do so, they annualize first half 2003 data.

<sup>52</sup> Chinese respondents’ pre-hearing brief at 11-12.

<sup>53</sup> Chinese respondents’ pre-hearing brief at 13.

<sup>54</sup> Chinese respondents’ pre-hearing brief at 14.

Other respondents similarly argue that imports of DIWF from China are not rapidly increasing. They also argue that the Commission's analysis should focus on the period after China's accession to the WTO,<sup>55</sup> and that the increase since 2001 has been small.<sup>56</sup> One respondent attributes the increase in 2001 to the revocation in 2000 of an antidumping duty order on DIWF from China,<sup>57</sup> and another asserts that the apparent increase in market share of subject imports from China is likely the result of product mix changes between full-bodied and compact DIWF.<sup>58</sup>

**Finding.** We find that imports of DIWF from China are increasing rapidly, both absolutely and relative to production and consumption. Our finding is the same whether we use 1998, the first year of the period examined, as a base year, or use 2000 as the base year.

In making our finding, we considered the arguments of the parties with respect to the time period we should consider in deciding whether the subject imports are increasing rapidly. While the statute suggests that the increase should be a recent, continuing event, as we indicate above, neither the statute nor its legislative history provides express instruction on the matter. We disagree with respondents that the Commission is required to use 2001 as the base year for determining whether imports from China are rapidly increasing.<sup>59 60 61</sup>

---

<sup>55</sup> Pre-hearing brief of SIGMA at 4-5; pre-hearing brief of Star Pipe Products at 4; pre-hearing brief of Pipeline Components, Inc. (PCI), at 4.

<sup>56</sup> Pre-hearing brief of SIGMA at 3; pre-hearing brief of Star Pipe Products at 2; pre-hearing brief of PCI at 7.

<sup>57</sup> Pre-hearing brief of PCI at 8.

<sup>58</sup> Pre-hearing brief of Star Pipe Products at 5.

<sup>59</sup> Moreover, to use respondents' recommended time frame would require the Commission to rely upon annualized first-half 2003 data, something the Commission declines to do, given that the DIWF market exhibits some seasonal characteristics. CR at V-8; PR at V-5.

<sup>60</sup> In *Certain Brake Drums and Rotors from China*, Inv. No. TA-421-3, USITC Pub. 3622 (August 2003) at 16, n. 65, Chairman Okun and Commissioner Koplan stated that they would focus their analysis on the more recent time rather than the beginning of the period of investigation because it is more relevant to the purpose underlying the statute. Commissioner Pearson joins their analysis. First, the legislative history to section 421 states that the legislation "implements the anti-surge mechanism established under the U.S.-China Bilateral Trade Agreement." Second, Congress specifically designed the product specific safeguard to "address concerns about potential increased import competition from China in the future." U.S. House of Representatives, Committee on Ways and Means, *Permanent Normal Trade Relations with the People's Republic of China*, H.R. No. 106-632, 106<sup>th</sup> Cong., 2<sup>nd</sup> Sess., at 16, 19 (emphasis added). Chairman Okun and Commissioners Koplan and Pearson interpret the section 421 legislative history as providing relief only if market disruption occurs or continues after China's accession to the World Trade Organization (December 2001). At this early stage since China's WTO accession, they examine the time period after accession in the context of what has occurred preceding accession. Thus, Chairman Okun and Commissioners Koplan and Pearson use 2000, the recent time period before accession, as the base year for determining whether subject imports of DIWF from China have been increasing rapidly. They also note that the legislation implementing the bilateral accession agreement was enacted in October 2000, which precedes the large increase of DIWF imports that occurred in 2001.

<sup>61</sup> Vice Chairman Hillman and Commissioner Miller also focus their analysis on the most recent time rather than the beginning of the period of investigation. However, they do not view the date of China's WTO accession as relevant for determining the period for assessing whether imports are rapidly increasing. The statute does not link the Commission's analysis to the accession date. Section 421 replaced section 406 of the Trade Act (which pertains to Communist countries generally) as the safeguard mechanism for obtaining temporary China-specific import relief. Section 421 was not intended to make relief more difficult to obtain than it was under section 406. Section 406(e)(2)(B)(i) specified that imports are "increasing rapidly if there has been a significant increase in such imports

The data show that imports of DIWF from China, in absolute terms, increased in all but one year of the period investigated, were at their highest full year level in 2002, and were higher in interim 2003 than in interim 2002. Most of the increase has occurred since 2000; in 2002 imports of DIWF from China were 69.7 percent higher than the 2000 level, and in interim 2003 such imports were 1.8 percent higher than in interim 2002.<sup>62</sup>

The ratios of imports of DIWF from China to U.S. production and U.S. consumption also rose during the period examined, including between interim 2002 and interim 2003; as in the case of absolute imports, most of the increase took place between 2000 and 2002. The ratio of imports from China to U.S. production more than doubled between 1998 and 2002. Most of the increase has occurred since 2000, and the ratio was more than 10 percentage points higher in 2001 and 2002 than in 2000; the ratio was 4.8 percentage points higher in interim 2003 than in interim 2002.<sup>63</sup> The ratio of imports from China to U.S. apparent consumption showed similar trends, nearly doubling between 1998 and 2002. Most of the increase has occurred since 2000, and the ratio was higher in interim 2003 than in interim 2002.<sup>64</sup>

We acknowledge respondents' arguments that import increases have been small since 2001. In our view, the large size of the increase from 2000 to 2001 (65.2 percent), and the fact that the imports have continued to grow since 2001, satisfy the statutory requirement that imports are rapidly increasing. The increase in shipments of imports from China into the U.S. market lends further support to this conclusion. After increasing 42.5 percent in 2001, shipments grew an additional 12.7 percent in 2002 and grew by 9.5 percent between interim 2002 and interim 2003.

We also considered respondents' arguments concerning the effects of revocation of the antidumping order and a possible change in the mix of the Chinese product. With respect to respondents' argument that the increase in imports was the result of the revocation in 2000 of the antidumping order on DIWF from China, as the Commission has stated in earlier section 421 cases, the question before the Commission in deciding whether the first criterion is met is whether the subject imports are increasing rapidly, not the reason for the increase.<sup>65</sup> Accordingly, any effects of the revocation are not relevant to the issue of whether imports are "increasing rapidly." One respondent also claims that the increase in imports was due to a rising share of Chinese product that was heavier, full-bodied DIWF. With respect to the mix of the Chinese products between compact and full-bodied DIWF, Commission data show *significant increases in the share of U.S. commercial shipments for both compact and full-bodied Chinese DIWF since 1998, and particularly since 2000, and that the share of the U.S. market held by both types of*

---

(either actual or relative to domestic production) during a recent period of time." In this case, consistent with this provision, they have examined imports both since 1998 and since 2000, with particular emphasis on the latter.

<sup>62</sup> CR and PR, Table V-2. Specifically, imports of DIWF from China increased from \*\*\* short tons in 1998 to \*\*\* short tons in 1999, fell to 14,768 short tons in 2000, and then increased to 24,404 short tons in 2001, and 25,070 short tons in 2002. Imports were 13,772 short tons in January-June 2002 (interim 2002), and 14,022 short tons in the same interim period of 2003.

<sup>63</sup> CR and PR, Table V-2. The ratio increased from \*\*\* percent in 1998, to \*\*\* percent in 1999, declined to \*\*\* percent in 2000, increased to \*\*\* percent in 2001, and then fell to \*\*\* percent in 2002. The ratio was \*\*\* percent in interim 2002 and \*\*\* percent in interim 2003.

<sup>64</sup> CR and PR, Table C-1. The ratio of imports from China to U.S. apparent consumption increased from \*\*\* percent in 1998, to \*\*\* percent in 1999, 11.4 percent in 2000, 16.0 percent in 2001, and 17.5 percent in 2002. The ratio was 17.2 percent in interim 2002 and 17.9 percent in interim 2003.

<sup>65</sup> See *Certain Steel Wire Garment Hangers from China*, Inv. No. TA-421-2, USITC Pub. 3575 (February 2003) at 11, where the Commission stated that the statute provides no authority for the Commission to adjust import data to exclude (in that case) imports by domestic producers, and stated that the more appropriate place to consider the circumstances of such imports, including whether they are injurious, is in the causation part of the Commission's analysis.

Chinese product was at its highest full-year level of the period examined in 2002, and higher in interim 2003 than in interim 2002.<sup>66</sup> Thus, the increase in imports from China is not the result of changes in product mix.

In sum, imports of the subject DIWF from China have increased rapidly under each of the three measures. Depending on the measure, they have nearly doubled or more than doubled since 1998, and most of the increase occurred in 2001 and 2002. The comparison of interim periods shows the rapid increase continued into 2003.

### C. Material injury

**Statutory criterion.** The second criterion concerns whether the domestic industry is materially injured or threatened with material injury. Neither section 421 nor its legislative history defines the terms “material injury” or “threat,” identifies economic factors to be considered, or cross-references any definitions, factors, or Commission practice under other statutory authorities to which the Commission might look for instruction. However, the term “material injury” appears in both section 406 of the Trade Act of 1974 and Title VII of the Tariff Act of 1930. Title VII of the Tariff Act defines “material injury” to mean “harm which is not inconsequential, immaterial, or unimportant.”<sup>67</sup> Section 406 does not define “material injury,” but its legislative history contrasts the term with “serious” injury used in section 201 –

*the market disruption test is intended to be more easily met than the serious injury tests in section 201. . . . the term “material injury” in section 406 is intended to represent a lesser degree of injury than the term “serious injury” standard employed in section 201.*<sup>68</sup>

In the absence of express direction in section 421, the Commission has found that “material injury” in section 421 cases represents a lesser degree of injury than “serious injury” under section 202 of the Trade Act.<sup>69</sup> This lesser degree of injury applies for both “present” injury and “threat” analyses. The Commission also has found it appropriate, in analyzing present material injury, to consider all relevant economic factors that have a bearing on the state of the industry, including the three broad factors in section 202(c)(1)(A) relating to idling of productive facilities, inability of firms to operate at a reasonable level of profitability, and unemployment or underemployment. The Commission also has considered other relevant economic factors, such as production, sales, inventories, capacity and capacity utilization, market share, employment, wages, productivity, profits, capital expenditures, and research and development expenditures. It has not viewed any single factor as necessarily dispositive, and has considered all relevant factors within the context of the relevant business cycle and conditions of competition that are distinctive to the affected industry.<sup>70</sup>

---

<sup>66</sup> CR and PR, Table D-1.

<sup>67</sup> Section 771(7)(A); 19 U.S.C. § 1677(7)(A).

<sup>68</sup> Trade Act of 1974, Senate Report No. 93-1298, 93<sup>rd</sup> Cong., 2<sup>nd</sup> Sess., reprinted in 1974 U.S.C.A.A.N. 7186, 7343-44.

<sup>69</sup> See, e.g., *Certain Brake Drums and Rotors from China*, Inv. No. TA-421-3, USITC Pub. 3622 (August 2003) at 18.

<sup>70</sup> See, e.g., *Certain Brake Drums and Rotors from China*, Inv. No. TA-421-3, USITC Pub. 3622 (August 2003) at 18.

**Arguments of the parties.** The parties disagree as to whether this criterion is satisfied, with the petitioner arguing that the domestic industry is materially injured and threatened with further material injury, and the respondents arguing that it is not.

Petitioner asserts that most of the factors that the Commission considers show that the domestic industry is materially injured. Specifically, petitioner cites recent declines in U.S. production;<sup>71</sup> idling of domestic productive facilities, including low capacity utilization rates and a sharp decline in the utilization rate between interim 2002 and interim 2003, and several plant closures and workforce reductions;<sup>72</sup> and declining sales and financial performance, including \*\*\* operating losses by all three<sup>73</sup> domestic producers on their DIWF operations in 2002 and interim 2003.<sup>74</sup> Petitioner also cites declining industry sales,<sup>75</sup> declining employment,<sup>76</sup> parallel reductions in hours worked and wages paid to industry production and related workers,<sup>77</sup> and a rise in domestic industry inventories.<sup>78</sup>

Chinese respondents assert that the domestic industry's negative financial performance does not, alone, qualify as material injury. They assert that the "operational"<sup>79</sup> indicators – production, capacity utilization, shipments, and employment – are all "quite favorable" and all \*\*\*.<sup>79</sup>

**Finding.** For the reasons set forth below, we find that the domestic industry producing DIWF is materially injured.

#### *Overview of the domestic industry*

As indicated above, the domestic DIWF industry currently consists of five domestic producers, including the three subsidiaries of petitioner McWane; a sixth firm, Griffin, ceased domestic production in 1999. The Commission collected financial and other data from the five firms, including consolidated financial data from McWane for Clow, Union, and Tyler, for calendar years 1998 through 2002, and the interim periods January-June 2002 and January-June 2003, and also collected data from Griffin through 1999. U.S. DIWF producers also produce other products (including ductile iron mechanical joint glands, valve and hydraulic castings, and flanges) on the same equipment that they use for producing DIWF; however, the majority of their DIWF production equipment is devoted to DIWF.<sup>80</sup> Domestic producers sell the vast majority of their DIWF to distributors known as waterworks houses, which resell to

---

<sup>71</sup> Petitioner's pre-hearing brief at 14.

<sup>72</sup> Petitioner's pre-hearing brief at 14-15.

<sup>73</sup> McWane reported consolidated financial data for its three subsidiaries.

<sup>74</sup> Petitioner's pre-hearing brief at 15-16.

<sup>75</sup> Petitioner's pre-hearing brief at 16-17.

<sup>76</sup> Petitioner's pre-hearing brief at 17.

<sup>77</sup> Petitioner's pre-hearing brief at 17-18.

<sup>78</sup> Petitioner's pre-hearing brief at 18.

<sup>79</sup> Chinese respondents' pre-hearing brief at 18. For example, they assert that Commission data show that domestic production in 2002 was \*\*\* percent higher than the 1998 level and only \*\*\* percent \*\*\*; that capacity utilization in 2002 was slightly higher than the 1998 level and only \*\*\* percent below the \*\*\*. Pre-hearing brief at 20. We note that most of respondents' arguments pertained to whether imports of Chinese DIWF were a significant cause of injury rather than whether the domestic industry was experiencing material injury.

<sup>80</sup> CR at V-5; PR at V-5.

contractors and municipal and regional water authorities; they also sell some DIWF directly to contractors and water authorities.<sup>81</sup>

Demand for DIWF is heavily associated with housing starts and other construction starts, as these new construction activities require water and water pipes.<sup>82</sup> DIWF are mostly used in underground pipe connections for water and sewer lines, but sewage treatment plants are also significant users.<sup>83</sup> Although some firms have reported a recent slowing of DIWF demand, producers and importers agreed that demand for DIWF has been strong since 1998, reflecting a strong construction market for new homes.<sup>84</sup> This strong demand is confirmed by our data on apparent U.S. consumption of DIWF, which show that it rose each year during the period examined, by 5.9 percent between 1998 and 1999, 2.2 percent between 1999 and 2000, 1.6 percent between 2000 and 2001, and 2.7 percent between 2001 and 2002; it was 4.9 percent higher in interim 2003 than in interim 2002.<sup>85</sup>

### *Analysis of factors*

We find that the domestic DIWF industry is materially injured. Despite strong and growing domestic demand for DIWF throughout the period examined, the domestic industry's financial performance and most other indicators have declined, particularly since 2000.

U.S. producers reported \*\*\* and widening operating losses on their DIWF operations during the latter part of the period investigated, and their operating loss in interim 2003 was more than \*\*\* the operating loss in interim 2002. While U.S. producers as a whole reported operating losses on their DIWF operations for each of the five years examined, those losses were \*\*\* and declining early in the period examined. Operating losses rose in 2000, rose again in 2001 to a level more than \*\*\* the 2000 level, and rose substantially again in 2002.<sup>86</sup> Whereas \*\*\* of the three reporting firms reported operating losses in 2001, \*\*\* firms reported a loss in 2002, interim 2002, and interim 2003.<sup>87</sup> The industry as a whole reported negative operating margins throughout the period examined, but its operating margins were the worst and fell most severely in the latter part of the period, after 2000.<sup>88</sup>

---

<sup>81</sup> CR at I-9; PR at I-6.

<sup>82</sup> CR at V-8; PR at V-5.

<sup>83</sup> CR at V-8; PR at V-5.

<sup>84</sup> CR at V-8-9; PR at V-5-6.

<sup>85</sup> CR and PR, Table C-1.

<sup>86</sup> The industry reported operating losses of \$\*\*\* in 1998, \$\*\*\* in 1999, \$\*\*\* in 2000, \$\*\*\* in 2001, and \$\*\*\* in 2002; the industry reported operating losses of \$\*\*\* in interim 2002 and \$\*\*\* in interim 2003. On an overall basis, the industry would have reported an operating profit for 1999, but for the \*\*\*. CR and PR, Table E-2.

<sup>87</sup> CR and PR, Table III-7. McWane reported consolidated financial data for all three of its entities producing DIWF (Tyler, Union, and Clow).

<sup>88</sup> The domestic industry's operating losses, as a percentage of net sales, were as follows: \*\*\* percent in 1998, \*\*\* percent in 1999, \*\*\* percent in 2000, \*\*\* percent in 2001, \*\*\* percent in 2002, \*\*\* percent in interim 2002, and \*\*\* percent in interim 2003. CR and PR, Table III-6.



While domestic industry DIWF capacity and capacity utilization held relatively steady during most of the period examined,<sup>89</sup> there is evidence of a sharp and recent drop in domestic output as indicated by the most recent industry capacity utilization data, a plant closing, and reductions in the operations of at least two other plants. Capacity utilization declined sharply during interim 2003 as compared to interim 2002, falling by \*\*\* percentage points.<sup>90</sup> U.S. Pipe closed its Anniston, Alabama facility in April 2003, and reduced its workforce at its Chattanooga, Tennessee plant. McWane curtailed production and hours, reduced shifts, and laid off workers at its facilities, including the shutting down of its recently installed GFD molding line at its Union Foundry facility in August 2003.<sup>91</sup>

We also examined U.S. domestic production, U.S. producers' shipments, and U.S. producers' end-of-period inventories. Despite an increase in domestic consumption of DIWF in each year of the period examined, domestic production and shipments of DIWF peaked in 1999 and have declined since. Domestic production in 2002, although slightly above the 1998 level, was \*\*\* percent below the 2000 level, and domestic production in interim 2003 was \*\*\* percent below the interim 2002 level.<sup>92</sup> U.S. producers' shipments have declined each year since 1999, with most of the decline occurring after 2000, and were at their lowest level of the period examined in 2002. U.S. shipments in interim 2003 were slightly higher than in interim 2002, but remained at levels that on an annualized basis were well below the levels of the years examined preceding 2001.<sup>93</sup> Petitioner noted that in the recent period, domestic producers have \*\*\* in an effort to regain market share.<sup>94</sup> U.S. producers' end-of-period inventories rose each year during the period examined and were nearly 50 percent higher in 2002 than in 1998, but end-of-period inventories were lower in interim 2003 than in interim 2002.<sup>95</sup>

Employment and hours worked both fell over the period examined, and were lower in 2002 than in either 1998 or 2000. The largest one-year decline occurred in 2002, and both indicators were sharply lower in interim 2003 than in interim 2002.<sup>96</sup> Productivity increased in all but one year during the period examined, was at its highest level in 2002, and was slightly higher in interim 2003 than in interim 2002.<sup>97</sup>

---

<sup>89</sup> Capacity was \*\*\* short tons in 1998 and rose to \*\*\* short tons in 1999, fell to \*\*\* short tons in 2000, rose to \*\*\* short tons in 2001, and remained at that level in 2002; capacity was unchanged at \*\*\* short tons in interim 2002 and interim 2003. Capacity utilization increased from \*\*\* percent in 1998 to \*\*\* percent in 1999, and \*\*\* percent in 2000, declined to \*\*\* percent in 2001, and then rose to \*\*\* percent in 2002; the rate was \*\*\* percent in interim 2002 and fell to \*\*\* percent in interim 2003. CR and PR, Table III-1.

<sup>90</sup> CR and PR, Table III-1.

<sup>91</sup> Petitioner's pre-hearing brief at 14-15. David Green, President of Ransom Industries, the McWane subsidiary that manages Union and Tyler, testified that this production line "was designed to dramatically improve Union's productivity." Hearing tr. at 28 (Mr. Green).

<sup>92</sup> Domestic production increased from \*\*\* short tons in 1998 to \*\*\* short tons in 1999, fell to \*\*\* short tons in 2000 and to \*\*\* short tons in 2001, and then rose to \*\*\* short tons in 2002; production was \*\*\* short tons in interim 2002 and fell to \*\*\* short tons in interim 2003. CR and PR, Table III-1.

<sup>93</sup> U.S. producers' total shipments increased from \*\*\* short tons in 1998 to \*\*\* short tons in 1999, and then declined to \*\*\* short tons in 2000, \*\*\* short tons in 2001, and \*\*\* short tons in 2002; such total shipments were \*\*\* short tons in interim 2002 and rose to \*\*\* short tons in interim 2003. CR and PR, Table III-2.

<sup>94</sup> Confidential hearing tr. at 48-49.

<sup>95</sup> CR and PR, Table III-3.

<sup>96</sup> Employment increased from 1,118 production and related workers (PRWs) in 1998 to 1,234 in 1999, and then fell to 1,118 in 2000, rose to 1,151 in 2001, and fell to 1,078 in 2002; the number of PRWs was 1,158 in interim 2002 and fell to 1,017 in interim 2003. Hours worked followed the same trend. CR and PR, Table III-5.

<sup>97</sup> CR and PR, Table III-5.

We also examined industry research and development (R&D) and capital expenditures. Reported industry R&D expenses rose each year of the period, and were higher in interim 2003 than in interim 2002,<sup>98</sup> but the amounts were insignificant relative to capital expenditures. Industry capital expenditures fluctuated during the period examined and were at their highest level in 2000; capital expenditures fell in 2001 and then rose in 2002, but were lower in interim 2003 than in interim 2002.<sup>99</sup> McWane accounted for more than half of all industry capital expenditures in all but one year, and in interim 2003.<sup>100</sup>

In view of the above declines in indicators relating to the condition of the domestic industry, in particular the declines since 2000 in the industry's financial condition, production, shipments, capacity utilization, and employment, and the recent plant closure and reductions in operations at other domestic plants, we find that the domestic industry is materially injured.

#### **D. A significant cause**

**Statutory framework.** The term "significant cause" is defined in section 421(c)(2) of the Trade Act to mean "a cause which contributes significantly to the material injury of the domestic industry, but need not be equal to or greater than any other cause."<sup>101</sup> Section 406 of the Trade Act uses the same causation test and definition.<sup>102</sup> The legislative history of section 406 describes the significant cause standard as follows:

Under this standard, the imports subject to investigation need not be the leading or most important cause of injury or more important (or even equal to) any other cause, so long as a direct and significant causal link exists. Thus, if the ITC finds that there are several causes of the material injury, it should seek to determine whether the imports subject to investigation are a significant contributing cause of the injury or are such a subordinate, subsidiary or unimportant cause as to eliminate a direct and significant causal relationship. . . .<sup>103</sup>

Section 421(d) includes a list of three criteria that the Commission is required to consider in determining whether market disruption exists and that relate to the Commission's causation analysis:

- (1) the volume of imports of the product which is the subject of the investigation;
- (2) the effect of imports of such product on prices in the United States for like or directly competitive articles; and

---

<sup>98</sup> R&D expenses rose from \$\*\*\* in 1998 to \$\*\*\* in 1999, to \$\*\*\* in 2000, to \$\*\*\* in 2001, and to \$\*\*\* in 2002, and were \$\*\*\* in interim 2003 as compared to \$\*\*\* in interim 2002. CR and PR, Table III-10.

<sup>99</sup> Capital expenditures were \$\*\*\* in 1998, rose to \$\*\*\* in 1999 and to \$\*\*\* in 2000, then fell to \$\*\*\* in 2001, and rose to \$\*\*\* in 2002; capital expenditures were \$\*\*\* in interim 2002, and fell to \$\*\*\* in interim 2003. CR and PR at Table III-9.

<sup>100</sup> CR at Table III-10. Safety and environmental-related capital expenditures accounted for less than \*\*\* percent of total capital expenditures except in 2002 and interim 2003, when they accounted for about \*\*\* percent and \*\*\* percent, respectively, of total capital expenditures. CR and PR at Table III-11.

<sup>101</sup> 19 U.S.C. § 2451(c)(2).

<sup>102</sup> Section 406(e)(2)(B)(ii), 19 U.S.C. § 2436(e)(2)(B)(ii).

<sup>103</sup> Omnibus Trade and Competitiveness Act of 1988, House Conf. Report No. 100-576, 100<sup>th</sup> Cong., 2<sup>nd</sup> Sess., reprinted in 1988 U.S.C.A.A.N. 1547, 1724.

- (3) the effect of imports of such product on the domestic industry producing like or directly competitive articles.<sup>104</sup>

The presence or absence of any of these factors is not necessarily dispositive of whether market disruption exists. The three factors are similar to a list of factors in section 406(e)(2)(C) of the Trade Act<sup>105</sup> and parallel the criteria in Title VII of the Tariff Act that the Commission must consider in determining whether a domestic industry is injured by reason of dumped imports.<sup>106</sup>

**Arguments of the parties.** Petitioner asserts that rapidly increasing imports from China are a significant cause of material injury to the domestic industry. While acknowledging that DIWF imports from other sources also increased, petitioner asserts that the increase from China was greater than that from non-subject sources between 1998 and 2002.<sup>107</sup> Petitioner also asserts that this injury occurred in the context of rising domestic demand throughout the period examined,<sup>108</sup> that the market share gained by imports from China came at the direct expense of the domestic industry, and was almost parallel and equivalent to declines in domestic market share.<sup>109</sup> Petitioner also asserts that severe price competition from imports from China forced the domestic industry to reduce prices and multipliers,<sup>110</sup> and that in the absence of these reductions, \*\*\*.<sup>111</sup> Petitioner states that the Commission's pricing data show that imports from China generally undersold the domestic products by significant margins,<sup>112</sup> and that the Commission confirmed several allegations of lost sales suffered by the domestic industry.<sup>113</sup> Finally, petitioner disputes claims made by respondents that Buy America and other preferences shelter the domestic industry from import competition.<sup>114</sup>

Respondents argue that imports from China have not had a volume or price effect and have not had an adverse effect on the domestic industry. With respect to volume effect, they assert that Chinese import volumes of the five products chosen for price comparisons \*\*\* with domestic producer volumes in virtually every quarter examined,<sup>115</sup> that the domestic industry's income performance is independent of import volumes,<sup>116</sup> and that imports by domestic producers are significant, and during the most recent full year (comparing 2002 with 2001) domestic shipments plus producer imports increased at three times the amount that imports from China increased (after subtracting out domestic purchases of imports from

---

<sup>104</sup> 19 U.S.C. § 2451(d).

<sup>105</sup> 19 U.S.C. § 2451(e)(2)(C).

<sup>106</sup> Section 771(7)(B)(i) of the Tariff Act of 1930, 19 U.S.C. § 1677(7)(B)(i).

<sup>107</sup> Petitioner's pre-hearing brief at 25.

<sup>108</sup> Petitioner's pre-hearing brief at 25.

<sup>109</sup> Petitioner's pre-hearing brief at 27.

<sup>110</sup> Domestic producers and importers usually quote pricing in terms of discounts off published price lists. "Multipliers" express the degree of the discounts. For example, a multiplier of 0.4 means a price equal to 40 percent of the list price. CR at V-19; PR at V-13.

<sup>111</sup> Petitioner's pre-hearing brief at 27-29.

<sup>112</sup> Petitioner's pre-hearing brief at 29.

<sup>113</sup> Petitioner's pre-hearing brief at 30.

<sup>114</sup> Petitioner's pre-hearing brief at 32-33.

<sup>115</sup> Chinese respondents' pre-hearing brief at 33.

<sup>116</sup> Pre-hearing brief of SIGMA at 12; pre-hearing brief of PCI at 17-18.

China).<sup>117</sup> With respect to price effects, they state that questionnaire responses show that price-related factors were not ranked as important, but rather well down on the list of 15 factors, in sixth and seventh place.<sup>118</sup> They assert that pricing of the Chinese product has been stable, and the evidence does not support a finding that imports led U.S. prices down.<sup>119</sup> They assert that both petitioner and importer/resellers were able to raise prices in 2002 and 2003.<sup>120</sup> They assert that, based on data pertaining to the average unit value of shipments, the petitioner has been \*\*\* in every product category in which it sells in virtually every year of the POI.<sup>121</sup> They also assert that Commission pricing data are of limited value because they pertain only to two basic sizes of smaller size fittings,<sup>122</sup> and that average unit shipment values are the better way to analyze prices;<sup>123</sup> the latter, they claim, show no consistent pattern of price underselling by the imports from China.<sup>124</sup>

Respondents argue that direct competition between imported and domestic DIWF is “attenuated,”<sup>125</sup> and that imports from China have had no adverse effect on the domestic industry. They assert that the largest \*\*\* for U.S. producers were in 2002, when subject imports share of the U.S. market \*\*\* percentage points.<sup>126</sup> They also assert that there is insufficient evidence of lost sales and lost revenue to support the finding of a link between \*\*\* and the \*\*\*.<sup>127</sup> They assert that the decline in domestic production is the result of \*\*\* by domestic producers (either imported or purchased), that \*\*\*.<sup>128</sup> They assert that \*\*\* domestic capacity and \*\*\* of third country DIWF contributed to the industry’s \*\*\* capacity utilization rate,<sup>129</sup> and that \*\*\*.<sup>130</sup> Two respondents attributed the industry’s \*\*\* to the fact that DIWF is a secondary product for domestic manufacturers, which complements their sales of ductile iron pipe and other waterworks products.<sup>131</sup> With respect to McWane, the largest domestic producer, they assert that the firm’s problems are not related to DIWF imports from China, but rather to costly efforts to correct problems relating to environmental protection and worker safety.<sup>132</sup> They also assert that the subject imports have not eroded McWane’s position as the dominant supplier of DIWF in the U.S. market; that the firm maintains a great marketing advantage, particularly in jurisdictions where Buy America laws apply,<sup>133</sup> and that the firm’s position in the domestic market is reinforced by its ability to

---

<sup>117</sup> Pre-hearing brief of PCI at 17-18.

<sup>118</sup> Pre-hearing brief of PCI at 19.

<sup>119</sup> Chinese respondents’ pre-hearing brief at 32; pre-hearing brief of SIGMA at 19.

<sup>120</sup> Pre-hearing brief of PCI at 22-23.

<sup>121</sup> Chinese respondents’ pre-hearing brief at 34-35.

<sup>122</sup> Pre-hearing brief of PCI at 20-21.

<sup>123</sup> Pre-hearing brief of PCI at 20.

<sup>124</sup> Pre-hearing brief of PCI at 21-22.

<sup>125</sup> Chinese respondents’ pre-hearing brief at 32.

<sup>126</sup> Pre-hearing brief of Star Pipe Products at 11.

<sup>127</sup> Pre-hearing brief of SIGMA at 20; *see also* pre-hearing brief of PCI at 27-29.

<sup>128</sup> Pre-hearing brief of Star Pipe at 10.

<sup>129</sup> Pre-hearing brief of PCI at 12-13.

<sup>130</sup> Pre-hearing brief of PCI at 13.

<sup>131</sup> Pre-hearing brief of PCI at 14-16; final comments of Star Pipe at 3.

<sup>132</sup> Pre-hearing brief of PCI at 29; pre-hearing brief of SIGMA at 23-29. *See also* Chinese respondents’ pre-hearing brief at 24-27, citing \*\*\*.

<sup>133</sup> Chinese respondents’ pre-hearing brief at 35-36; PCI pre-hearing brief at 25-26.

supply all components needed in a water system and its “rebate scheme” for customers who purchase both pipe and fittings.<sup>134</sup> They assert that ACIPCO and U.S. Pipe similarly are not adversely affected by DIWF from China, and note that \*\*\*.<sup>135</sup>

**Finding.** We find that imports of DIWF from China are increasing rapidly so as to be a significant cause of material injury to the domestic DIWF industry.

### *Conditions of competition*

DIWF is produced in a wide range of diameters and shapes, and in compact and full-bodied sizes and weights. There are about 1,500 possible configurations of DIWF. U.S. and Chinese producers are present in all market segments.<sup>136</sup> The Chinese and domestic DIWF are used interchangeably, since all are made to the same AWWA specifications,<sup>137</sup> and most purchasers rated the domestic and Chinese products as comparable in quality.<sup>138</sup> Demand for DIWF is heavily associated with housing starts and other construction starts, since these new construction activities require water and water pipes. Demand for DIWF has been strong since 1998 and has risen each year, reflecting a strong construction market for new homes; however, there are some reports of a recent slowing in demand in connection with slowing construction nationally.<sup>139</sup> The vast majority of DIWF sold in the United States, whether domestically produced or imported from China, is sold through distributors that specialize in distributing pipe products for water projects.<sup>140</sup> Since the ultimate end user of DIWF is usually a governmental body such as a municipality, some DIWF are bought under “Buy American” provisions. However, petitioner stated that *some localities have been moving away from such provisions lately, and that often such provisions do not apply when the price difference exceeds a certain range.*<sup>141</sup>

Imports of non-subject DIWF also increased during the period examined. Such imports increased in each year of the period examined, but were lower in interim 2003 than in interim 2002. DIWF imports from China accounted for more than 50 percent of total imports throughout the period examined, except in 2002, when they accounted for \*\*\* percent. DIWF imports from China accounted for \*\*\* percent of total DIWF imports in interim 2003 (as compared to \*\*\* percent in interim 2002).<sup>142</sup> India, Mexico, Korea, and Brazil are the principal sources of non-subject DIWF imports.<sup>143</sup>

Throughout the period examined, McWane accounted for the largest share of sales reported by U.S. producers, in terms of both volume and value.<sup>144</sup> Respondents stated that any financial hardship experienced by the petitioner is due solely to the costs associated with safety and environmental-related facility upgrades, which they claim are an outgrowth of petitioner’s “apparent historical disregard” for

---

<sup>134</sup> Pre-hearing brief of PCI at 26-27.

<sup>135</sup> Pre-hearing brief of PCI at 27.

<sup>136</sup> CR at V-4; PR at V-2-3; CR and PR, Table D-1.

<sup>137</sup> CR at V-10; PR at V-6.

<sup>138</sup> CR and PR, Table V-5.

<sup>139</sup> CR at V-8; PR at V-5.

<sup>140</sup> CR at V-4; PR at V-3.

<sup>141</sup> CR at V-10; PR at V-6.

<sup>142</sup> CR and PR, Table II-1.

<sup>143</sup> CR and PR, Table II-2.

<sup>144</sup> CR at III-6; PR at III-4.

occupational safety and environmental protection, and not due to imports from China.<sup>145</sup> While McWane acknowledged “past mistakes and problems” with regard to safety and environmental issues and expressed the firm’s commitment to rectifying them,<sup>146</sup> it stated that expenses relating to addressing these issues \*\*\*.<sup>147</sup> The president of the United Steel Workers of America, which represents many of McWane’s workers, confirmed and expressed support for McWane’s efforts, in cooperation with his union, at addressing safety and environmental issues.<sup>148 149</sup>

### *Analysis*

In performing our analysis, we first considered information relevant to the three statutory factors that relate to our causation analysis – i.e., the volume of imports, the effect of imports on prices, and the effect of imports on the domestic industry. As the data cited above show, imports of DIWF from China are rapidly increasing in absolute terms. Such imports increased in all but one year of the period examined, \*\*\*, with most of the absolute increase occurring at the end of the period.<sup>150</sup> Imports of DIWF from China were \*\*\* short tons in 1998, rose to \*\*\* short tons in 1999, and then fell to 14,768 short tons in 2000. Such imports then increased by 65.2 percent to 24,404 short tons in 2001 and by an additional 2.7 percent to 25,070 short tons in 2002. Imports were 1.8 percent higher in interim 2003 (14,022 short tons) than in interim 2002 (13,772 short tons),<sup>151</sup> indicating that the higher levels of imports in 2001 and 2002 were continuing in 2003.

U.S. shipments of DIWF imports from China, which indicate the quantity of imports absorbed by the U.S. market (as opposed to the quantity imported, including imports placed in inventory), increased in each year of the period examined, and between interim 2002 and interim 2003. Such U.S. shipments data show a somewhat lower level of increase between 2000 and 2001 than data for U.S. DIWF imports from China, but show higher levels of increase between 2001 and 2002, and between the interim periods. U.S. shipments of DIWF imports from China increased by 42.5 percent, from 14,324 short tons to 20,416 short tons, between 2000 and 2001, and by a further 12.7 percent to 23,010 short tons in 2002. U.S. shipments of DIWF from China were 9.5 percent higher in interim 2003 (12,233 short tons) than in interim 2002 (11,174 short tons).<sup>152</sup>

Shipments of DIWF imports from China have captured a rapidly increasing share of the domestic market. As a share of U.S. apparent consumption, U.S. shipments of DIWF imports from China increased in each year of the period examined and nearly \*\*\* between 1998 and 2002, with most of the increase occurring since 2000. Shipments of the subject imports increased from \*\*\* percent of U.S.

---

<sup>145</sup> Pre-hearing brief of SIGMA at 23-29.

<sup>146</sup> Petitioner’s post-hearing brief at 29.

<sup>147</sup> Petitioner’s post-hearing brief at 49.

<sup>148</sup> Hearing tr. at 43-46, 90, 98 (Mr. Gerard). Mr. Gerard also contrasted conditions at the modernized McWane facilities with the “abysmal” conditions at foundries in China. Hearing tr. at 43-45.

<sup>149</sup> In making our determination, we did not consider new information contained in the November 26, 2003 final comments submitted by SIGMA. The deadline for submitting new information, as specified in the Commission’s notice of investigation, was November 12, 2003. Moreover, unlike other information submitted by parties and placed on the record after November 12, the information in SIGMA’s November 25 submission was not specifically requested by the Commission.

<sup>150</sup> Imports, as measured in absolute terms, increased by \*\*\* percent over the period examined; almost \*\*\* of that increase has occurred between 2000 and 2002. CR and PR, Table II-1.

<sup>151</sup> CR and PR, Table II-1.

<sup>152</sup> CR and PR, Table C-1.

apparent consumption in 1998 to \*\*\* percent in 1999 and to 11.4 percent in 2000, and then increased sharply to 16.0 percent in 2000 and to 17.5 percent in 2001; the subject imports accounted for 17.2 percent of U.S. apparent consumption in interim 2002, and this share rose to 17.9 percent in interim 2003.<sup>153</sup> Shipments of DIWF imports from China captured 6.1 percentage points of the 10.4 percentage points – nearly 60 percent – of the share of U.S. apparent consumption lost by U.S. producers since 2000.<sup>154</sup> Information supplied by purchasers who reported purchases of both domestic and Chinese DIWF showed a shift toward the Chinese product.<sup>155</sup> Thus, not only have imports of DIWF from China increased rapidly, particularly since 2000, but they have continued to displace domestically produced DIWF in the U.S. market.

The rapid increase in imports from China coincided with continuing significant underselling of the domestic products by the Chinese products, and declining prices for the imported and domestic products over the period examined. As noted above, the domestic and imported products are substitutable, and most purchasers rated them as comparable in quality.<sup>156</sup> Price was ranked high by purchasers on the list of purchasing factors, along with quality and availability.<sup>157</sup>

The Commission gathered pricing data on five products from U.S. producers and importers of the Chinese product. Those data show that each of the Chinese products surveyed undersold their domestic counterpart product in every quarter for every product during the period examined.<sup>158</sup> Moreover, the margin of underselling exceeded 20 percent in 23 of the 50 quarters (for all five products) since 2001.<sup>159</sup> These underselling results were confirmed by purchasers, more than two-thirds of whom indicated that Chinese DIWF is lower priced than domestic DIWF.<sup>160</sup>

Our data indicate that domestic prices fell, particularly in the latter portion of the period examined. Table V-11 shows declining prices for four of the five domestic products examined between the second quarter of 2001 and the second quarter of 2003, and declines for all five Chinese products.<sup>161</sup> More recent data focusing just on the period between the second quarter of 2002 and the second quarter of 2003 show similar declines for four of the five products examined.<sup>162</sup>

We find a direct and significant link between the rising volumes of DIWF imports from China, which are readily substitutable for domestic DIWF and sold at prices that were consistently below domestic prices, and the falling domestic prices observed over the period examined. The market effects of the lower prices of Chinese DIWF are further demonstrated by the fact that five of the domestic industry's allegations of lost sales were confirmed; in these instances domestic producers lost business to imports from China due in substantial part to the imports low prices.

---

<sup>153</sup> CR and PR, Table C-1.

<sup>154</sup> CR and PR, Table C-1.

<sup>155</sup> CR at V-14; PR at V-9.

<sup>156</sup> CR and PR, Table V-5.

<sup>157</sup> CR and PR, Table V-3. In view of the fact that both the imported and domestic products must meet AWWA specifications and are substitutable, quality should not be an issue, and thus price arguably ranks second as a purchasing factor, after availability.

<sup>158</sup> CR and PR, Tables V-6 through V-10.

<sup>159</sup> CR and PR, Tables V-6 through V-10.

<sup>160</sup> CR and PR, Table V-5. The remaining purchasers indicated that domestic and Chinese DIWF prices were comparable.

<sup>161</sup> CR and PR, Table V-11. The table showed a price increase of \*\*\* percent for domestic product 5.

<sup>162</sup> CR and PR, Table V-11. The table showed price increases of \*\*\* percent for domestic product 2 and \*\*\* percent for Chinese product 5.

We further find that domestic prices were suppressed due to the effects of the rising volume of substitutable imports from China. Domestic producers were not able to pass along increased costs in the form of higher prices; indeed, as noted above, domestic prices fell. As a result, the ratio of the industry's cost of goods sold (COGS) grew from \*\*\* percent in 2000 to \*\*\* percent in 2002, and reached \*\*\* percent in interim 2003.<sup>163</sup>

Respondents challenge several aspects of the price data collected by the Commission. First, respondents claim that the five products selected by the Commission for price comparison purposes were inappropriate because they were not representative of the market as a whole. However, the evidence does not support respondents' contention. The Commission collected data on pricing of smaller diameter fittings because they represent the largest volume fittings in the market. Fittings of nominal diameter 30 inches and below comprise the vast preponderance (\*\*\* percent) of U.S. commercial shipments of domestically produced and imported DIWF.<sup>164</sup>

Second, we have considered respondents' claim that the data overstate underselling because they include domestic prices from areas of the country in which there is limited import competition, where domestic prices are higher than in other areas.<sup>165</sup> In fact, it is not unusual in Commission investigations that there would not be a uniform level of competition throughout the United States. As noted above, purchasers generally confirmed that the prices of Chinese DIWF were lower than the prices of U.S. made DIWF. We also note that respondents' claims would tend to confirm the fact that import competition has resulted in lower domestic prices.

Third, respondents claim that the domestic price data are flawed because they include domestic sales to end users (made by U.S. Pipe), whereas import price data are limited to prices for sales to distributors.<sup>166</sup> In light of respondents' claim, we have revised our data to exclude U.S. Pipe's sales to end users. The revised data continue to show consistent underselling.

Respondents also urge the Commission to rely on alternate price data rather than our product-specific pricing data. We have examined data on shipment average unit values (AUVs), but do not find it appropriate to place weight on those data as a basis for determining underselling. The several product groupings for which we have AUV data (fittings above and below 30 inches nominal diameter, compact vs. full-bodied) are broad categories that include hundreds of different sizes and configurations. Thus, it is impossible to determine whether or not the AUV differences reflect relative price levels for comparable products. By contrast, our product-specific pricing data ensure an apples-to-apples comparison of comparable domestic and imported Chinese products.<sup>167</sup> Respondents also seek to have the Commission rely on multiplier comparisons from particular states, as adjusted by respondents, purportedly to reflect rebates.<sup>168</sup> While such comparisons may possibly show instances in which domestic prices were lower than prices of Chinese DIWF, we do not place primary reliance on this information as an indication of relative prices in lieu of the actual pricing data collected by the Commission, as confirmed by purchaser questionnaires.

---

<sup>163</sup> CR and PR, Table III-6.

<sup>164</sup> CR and PR, Table I-3. In fact, respondents' main economic witness indicated that the "vast majority" of fittings are 12-inch nominal diameter and below. Hearing tr. at 266 (Mr. Reilly).

<sup>165</sup> Hearing tr. at 211-12 (Mr. Bhattacharji); 242-46 (Messrs. Loeb, Saha, McCutcheon).

<sup>166</sup> Hearing tr. at 281-82 (Mr. Reilly); Chinese respondents' post-hearing brief at 29-33.

<sup>167</sup> The AUV data show a mixed pattern. Depending on the year and the product category, the AUVs of Chinese DIWF are sometimes higher and sometimes lower than the AUVs of domestic DIWF. The combined AUVs of imported Chinese DIWF are higher than the AUVs of domestic DIWF from 1998 to 2000, and lower in 2001, 2002, and the interim periods. CR and PR, Table D-1.

<sup>168</sup> Post-hearing brief of SIGMA at 11-14; post-hearing brief of Star Pipe at 10.



Respondents also contest the existence of any correlation between subject import volume and domestic prices. First, respondents assert that import volume did not affect domestic prices because domestic prices were highest in 2001, the year in which imports grew the most, then fell in 2002 even though imports increased only modestly that year.<sup>169</sup> We disagree. Although domestic prices did increase somewhat during early 2001, prices began to fall in the latter part of that year and continued to fall into 2002. *Shipments of imports grew by 42.5 percent in 2001 and a further 12.7 percent in 2002.* The pricing trend observed is consistent with the rise in import shipments in 2001 and the further rise in 2002. Second, respondents assert that underselling had little effect because the relative market shares of domestic and Chinese DIWF for the five pricing products did not change significantly over the period examined. In fact, the data do show an increase in the market share of Chinese DIWF for each of the products over the period examined.<sup>170</sup> Moreover, as described above, the data show falling domestic prices; domestic price reductions may well have prevented an even larger shift in market share for these products.

Nor does the evidence support respondents' contention that "Buy American" preferences protected domestic producers from the effects of low-priced DIWF imports from China. To the extent that such provisions apply, they apply only to a small and declining share of U.S. DIWF shipments. Petitioner estimated the percentage at 10 percent, and respondent SIGMA at 10-20 percent of the market.<sup>171</sup> Moreover, the evidence indicates that such preferences apply in relatively few jurisdictions at the state level,<sup>172</sup> and that many of the local preferences apply only when the price difference is within a certain range.<sup>173</sup>

We also considered respondents' claims relating to McWane's allegedly aggressive pricing practices, including the firm's rebate policies.<sup>174</sup> While it is not disputed that McWane provides loyalty rebates, if these rebates and other practices were as significant as alleged, McWane should be gaining market share at the expense of imports and other domestic producers. However, this is not the case; McWane's market share and that of domestic producers as a whole are not rising, but rather continuing to fall.

Nor is there a basis to conclude, as alleged by respondents, that aggressive pricing by domestic producer U.S. Pipe on its sales to distributors, rather than the volume and prices of Chinese DIWF, is responsible for falling domestic prices.<sup>175</sup> Prices of Chinese DIWF generally undersold U.S. Pipe's prices on its sales to distributors, and the quantities of sales of Chinese DIWF of the pricing products substantially exceeded the quantity of U.S. Pipe's sales of the pricing products to distributors.<sup>176</sup>

We find that there is a direct and significant connection between the rapidly increasing imports of DIWF from China and the falling domestic prices of DIWF and the material injury to the domestic industry. There is a strong correlation between the recent and sharp decline in industry indicators and the

---

<sup>169</sup> Pre-hearing brief of SIGMA at 16; pre-hearing brief of Star Pipe at 11.

<sup>170</sup> Staff calculations based on CR and PR, Tables V-6 to V-10.

<sup>171</sup> CR at V-10-11; PR at V-6-7.

<sup>172</sup> Petitioner contends that only one state, Pennsylvania, has a Buy American requirement that applies to purchases of DIWF at various levels of government in the state, and that Michigan has a requirement that applies only to state-funded jobs, and New Jersey has one that applies to road construction projects. Petitioner's pre-hearing brief at 33-34.

<sup>173</sup> CR at V-10; PR at V-6.

<sup>174</sup> See post-hearing brief of SIGMA at 1-5; post-hearing brief of Star Pipe at 10-15.

<sup>175</sup> See Chinese respondents' post-hearing brief at 32-33.

<sup>176</sup> CR and PR, Tables V-6 through V-10; App. G.

rapid increase in DIWF imports from China since 2000. The rise in U.S. apparent consumption of DIWF in each year of the period examined, including since 2000, would be expected, in the absence of one or more intervening factors, to lead to stable and rising domestic prices and a domestic industry experiencing improved profitability, production, shipments, employment, and capacity (or capacity utilization). However, as indicated in the material injury section of these views, the opposite is true. The industry is operating at a loss, and this loss is increasing. There is evidence of plant and production line shutdowns and worker layoffs, stagnant or declining production, shipments, employment, capacity, and capacity utilization, and falling domestic prices. The decline in these industry indicators has been greatest since 2000, and has coincided with the rapid increase in DIWF imports from China, which has also occurred since 2000.

For example, as noted in the material injury section, McWane halted production on its recently installed molding line at its Union Foundry facility in August 2003.<sup>177</sup> McWane approved the plans to install this new production capacity in 1999, premised in part on its view that the market would continue to expand and the new equipment would increase the efficiency of the Union facility.<sup>178</sup> The production line began operating in 2000, the year before subject imports began their rapid increase. McWane closed this line as subject imports captured increased market share in 2003.

As discussed above, the rising volumes of DIWF imports from China have displaced comparable domestic sales; this displacement has led to reduced domestic production, shipments, sales, and employment. The price depression and suppression caused by the growing imports of low-priced DIWF has manifested itself in sales revenues that have been insufficient to enable the domestic industry to operate profitably. The lower volume of domestic sales also has contributed to the poor financial results by reducing the number of units over which domestic producers could spread their fixed costs. In short, imports of DIWF from China have had a significant negative impact on the domestic industry.

We considered other factors that may be contributing to the condition of the industry. First, we observe that imports of DIWF from non-subject countries were a growing presence in the market over the period examined. Imports from non-subject countries, considered collectively, grew by a somewhat larger percentage than imports from China from 1998 to 2002 (\*\*% percent versus \*\*% percent), and from 2000 to 2002 (\*\*% percent versus \*\*% percent).<sup>179</sup> The market share of the imports from non-subject countries grew, from \*\*% percent in 1998 to \*\*% percent in 2002, and grew from \*\*% percent in interim 2002 to \*\*% percent in interim 2003. Like imports from China, purchasers generally indicated that imports from non-subject countries were lower priced than domestically produced DIWF. This indicates that imports from non-subject countries likely had some effect on the volume and prices of domestic sales, which in turn likely had some impact on the domestic industry's performance in terms of such factors as production, shipments, capacity utilization, employment, sales, and profitability.

Nevertheless, despite the growth of DIWF imports from non-subject countries, their market share remained below the market share of DIWF imports from China in every period for which we collected data.<sup>180</sup> From 2000 to 2002, non-subject imports gained \*\*% percentage points of market share, compared to \*\*% points gained by imports from China. Of the few purchasers who expressed a view on the relative prices of Chinese and non-subject DIWF, half indicated that the Chinese product was lower priced, and none indicated that the non-subject product was lower priced. Taken as a whole, therefore, the record information indicates that imports from China had a larger impact on the domestic industry than did imports from non-subject countries over the period examined, by virtue of their consistently higher

---

<sup>177</sup> Petitioner's pre-hearing brief at 14-15.

<sup>178</sup> Petitioner's post-hearing brief at 41, Exh. 7.

<sup>179</sup> CR and PR, Table II-1.

<sup>180</sup> CR and PR, Table V-1.

market share and, if anything, lower prices.<sup>181</sup> Accordingly, we conclude that imports from non-subject countries do not sever the causal link between imports of DIWF from China and the material injury experienced by the domestic industry.

Second, we considered the related argument made by respondents that domestic producers' own direct imports, or purchases of imports, of DIWF from non-subject countries were responsible for its injury. Domestic producers' combined non-subject imports and purchases of non-subject imported DIWF began in 1999, peaked in 2000, fell in 2001, then rose in 2002 to a level below the level in 2000.<sup>182</sup> U.S. producers' purchases of imports and their direct imports grew between interim 2002 and interim 2003 to a level equivalent to \*\*\* percent of production in the same period.<sup>183</sup> The substitution of non-subject imports for domestic production likely had the effect of lowering, to some degree, domestic production, shipments, sales, employment and, as pointed out by respondents, capacity utilization. However, as described above, the negative effects of non-subject DIWF imports were significantly less than the negative effects of DIWF from China and, as such, do not eliminate the relationship of cause-and-effect between Chinese DIWF and the industry's material injury.

Third, we considered the extent to which recent capital and other expenditures by McWane to address safety and environmental issues may have contributed to the decline in the industry's financial condition. These expenditures have increased, particularly since 2000.<sup>184</sup> Since these expenditures are capitalized and not immediately recognized in the period when they are made, the impact on DIWF financial results is largely through depreciation over time. Only a small fraction of the industry's operating losses in 2001 and 2002 can be attributed to increased depreciation expenses.<sup>185</sup> While capital expenditures result in added costs beyond depreciation, the relatively small impact that increased depreciation expenses had on DIWF operating results indicates that capital expenditures in general cannot explain the significant DIWF operating losses reported. \*\*\* of the McWane companies reported certain environmental, safety, and workers' compensation items that were included in its operating costs for 2000 and 2001. The increase in these costs from 2000 to 2001 therefore had some negative impact on the industry's operating profits, although the increase accounts for only a very small portion of the deterioration in the industry's operating results from 2000 to 2001.<sup>186</sup> Moreover, any increased costs by

---

<sup>181</sup> We note that section 421 does not require us to find that the imports from China are greater than or even equal to any other cause of material injury, but that they "contribute significantly" to the injury. 19 U.S.C. § 2451(c)(2).

<sup>182</sup> CR and PR, Table III-4.

<sup>183</sup> CR and PR, Table III-4. Combined producers' purchases and imports increased from \*\*\* short tons in interim 2002 to \*\*\* short tons in interim 2003. *Id.*

<sup>184</sup> With respect to safety-related capital expenditures, McWane reported \$\*\*\* in such expenditures in fiscal year 1998, \$\*\*\* in 1999, \$\*\*\* in 2000, \$\*\*\* in 2001, \$\*\*\* in 2002, \$\*\*\* in interim 2002, and \$\*\*\* in interim 2003. McWane accounted for \*\*\* of the reported industry safety-related expenditures \*\*\*. With respect to environmental-related capital expenditures, McWane reported \$\*\*\* in 1998, \$\*\*\* in 1999, \$\*\*\* in 2000, \$\*\*\* in 2001, \$\*\*\* in 2002, \$\*\*\* in interim 2002, and \$\*\*\* in interim 2003. As a percent of overall industry environmental-related capital expenditures, McWane accounted for \*\*\* percent in 1998, \*\*\* percent in 1999, \*\*\* percent in 2000, \*\*\* percent in 2002, \*\*\* percent in interim 2002, and \*\*\* percent in interim 2003. CR and PR, Table III-11.

<sup>185</sup> The industry's depreciation/amortization figures were as follows: \$\*\*\* in 1998, \$\*\*\* in 1999, \$\*\*\* in 2000, \$\*\*\* in 2001, \$\*\*\* in 2002, \$\*\*\* in interim 2002, and \$\*\*\* in interim 2003. The \$\*\*\* increase in depreciation/amortization from 2000 to 2001 is in stark contrast with the \$\*\*\* increase in industry operating losses from 2000 to 2001. Likewise, the \$\*\*\* decrease in depreciation/amortization from 2001 to 2002 is also in stark contrast with the further \$\*\*\* increase in industry operating losses from 2001 to 2002. A comparison using interim 2002 and interim 2003 figures yields a similar comparative result. CR and PR, Table III-6.

<sup>186</sup> CR at III-15, n. 15; PR at III-4, n. 15. The increase in these costs was just under \$\*\*\*, compared to the industry's increased operating losses of over \$\*\*\* from 2000 to 2001. CR and PR, Table III-6.

McWane do not account for why all domestic producers experienced falling profitability from 2000 to 2002, and between interim 2002 and interim 2003. Therefore, McWane's environmental and safety expenditures do not sever the causal link between the subject imports from China and material injury to the domestic industry.

Fourth, we have examined respondents' claim that rising internal costs, especially other factory costs, explain the industry's declining profitability.<sup>187</sup> While the industry incurred some additional costs unrelated to imports that affected its financial performance, we have described above how DIWF imports from China have suppressed domestic prices and have thereby prevented domestic producers from passing on higher costs in the form of higher prices. Moreover, imports of Chinese DIWF have themselves contributed to higher industry unit costs by taking market share and thereby reducing the volume of domestic sales over which to spread costs. Accordingly, we do not find that rising industry costs sever the causal link between imports of DIWF from China and injury to the domestic industry.

Fifth, we considered respondents' arguments that the industry's poor performance is due to the fact that several domestic producers consider DIWF to be a product of secondary importance to their operations. It is true that two domestic producers indicated to the Commission that DIWF is a relatively less important product to them than ductile iron pipe.<sup>188</sup> However, it is not unusual for a manufacturing firm to make multiple products of varying significance to the firm's overall operations. The fact that some producers do not consider DIWF to be their primary product does not explain why their performance relating to the production of DIWF, and the DIWF performance of each domestic producer generally, declined substantially over the period examined, particularly from 2000 to 2002, and between the interim periods. Accordingly, we find this factor to have had a very minor impact, if any, on the domestic industry.

In sum, several other factors have had some negative impact on the domestic industry over the period examined. We have described those effects above and have not attributed them to the subject imports of DIWF from China. Our overall conclusion is that, whether considered separately or together, these other factors do not break the direct and significant causal link between DIWF imports from China and the material injury experienced by the domestic DIWF industry. Accordingly, we find that the rapidly increasing imports of DIWF from China are a significant cause of material injury to the domestic industry.

### III. CONCLUSION

As explained above, we find that market disruption exists in that rapidly increasing imports from China are a significant cause of material injury to the domestic industry producing DIWF. We find, as noted above, that the subject DIWF imports from China are "in such increased quantities" as to cause market disruption to domestic producers.<sup>189</sup> The greatest increase in volume and shipments of such imports coincided with the continuing significant underselling of the domestic products by the subject imports and declining prices of both. It also coincided with the recent and sharp decline in industry indicators. The rising volumes of DIWF imports from China have displaced comparable domestic sales, and this displacement has led to reduced domestic production, shipments, sales, and employment, and contributed to the industry's poor and declining financial results.

---

<sup>187</sup> Chinese respondents' post-hearing brief at 21-29.

<sup>188</sup> CR at III-14, and PR at III-4; CR at III-16, n. 19, and PR at III-5, n. 19.

<sup>189</sup> For purposes of this determination we consider the "domestic producers" to be the domestic industry as defined earlier in these views.

We therefore make an affirmative determination that certain DIWF from China are being imported into the United States in such increased quantities or under such conditions as to cause market disruption to the domestic producers of DIWF.



## IEWS OF THE COMMISSION ON REMEDY

### Remedy Proposal<sup>1</sup>

For the reasons set forth below, we propose the following action to remedy the market disruption we find to exist –

We propose that the President impose a tariff-rate quota, for a three-year period, on imports of the subject DIWF from China as follows: in the first year, a tariff of 50 percent *ad valorem*, in addition to the current rate of duty, on imports over 14,324 short tons; in the second year, a tariff of 40 percent *ad valorem*, in addition to the current rate of duty, on imports that exceed 15,398 short tons; and in the third year, a tariff of 30 percent *ad valorem*, in addition to the current rate of duty on imports that exceed 16,553 short tons.

<b>TRQ Form of Relief</b>	<b>Year 1 Level</b>	<b>Year 2 Level</b>	<b>Year 3 Level</b>
In-Quota Amount	14,324 short tons	15,398 short tons	16,553 short tons
Additional Duties Above Quota	50 percent	40 percent	30 percent

We find that this action is the relief that will remedy the market disruption we have found to exist.

We also propose that the President direct the U.S. Department of Commerce and U.S. Department of Labor to provide expedited consideration of petitions for trade adjustment assistance filed by domestic firms or workers producing the subject DIWF.

### Statutory Framework

Section 421(f) of the Trade Act of 1974 (19 U.S.C. § 2451(f)) provides that the Commission, upon making an affirmative determination, “shall propose the amount of increase in, or imposition of, any duty or other import restrictions necessary to prevent or remedy the market disruption.” It provides that only those Commissioners who agreed in the affirmative determination are eligible to vote on remedy. Neither the statute nor its legislative history provides any further guidance or instruction on *remedy*.

Section 421(f) thus authorizes the Commission to propose as a remedy any import restriction. The Commission’s proposed remedy could take the form of increased duties, a tariff-rate quota, a quantitative restriction, or other import restriction.<sup>2</sup>

Section 421(g)(2)(D)<sup>3</sup> requires that the Commission’s report to the President and the U.S. Trade Representative include a description of–

---

<sup>1</sup> Chairman Okun and Commissioners Koplan, Lane, and Pearson. Vice Chairman Hillman and Commissioner Miller, having proposed different forms of remedy, do not join in the majority’s Remedy Proposal and only join in the Statutory Framework and Conditions of Competition sections of the majority’s views on remedy. See separate and additional views on remedy of Vice Chairman Hillman and Commissioner Miller, respectively, that follow these views.

<sup>2</sup> 19 U.S.C. § 2481.

<sup>3</sup> 19 U.S.C. § 2451(g)(2)(D).

- (i) the short- and long-term effects that implementation of the action recommended . . . is likely to have on the petitioning domestic industry, on other domestic industries, and on consumers; and
- (ii) the short- and long-term effects of not taking the recommended action on the *petitioning domestic industry, its workers, and the communities where production facilities of such industry are located*, and on other domestic industries.

### Conditions of Competition

We considered the conditions of competition in the domestic market and likely developments affecting such conditions during the next several years in evaluating the various remedy options. DIWF are sold primarily through waterworks houses (distributors) to contractors working for municipalities. Producers and importers generally keep a large inventory of DIWF so as to be able to respond quickly to customer needs. There are many varieties of DIWF across a broad range of diameters and shapes, but most are available from at least one U.S. producer.

DIWF from different country sources are used interchangeably, as they are all made to the same independent American Waterworks Association (AWWA) standard.<sup>4</sup> Importers described mixing Chinese and non-subject country DIWF in their U.S. shipments to the point that they could not always separate the two.<sup>5</sup> Some ultimate end users (municipalities) were not able to state definitively the country source for the DIWF that they had purchased.<sup>6</sup> Overall, purchasers described U.S., Chinese, and non-subject country DIWF as comparable in all purchasing factors except price.<sup>7</sup>

### Demand Conditions

Demand for DIWF comes primarily from the residential construction and water treatment sectors, both of which have been strong and growing since 1998.<sup>8</sup> DIWF account for a small share of the overall cost of a water project,<sup>9</sup> and there are few comparably priced substitutes for DIWF.<sup>10</sup> Because DIWF represents a small part of the overall cost of municipal and residential water projects, DIWF consumption is not likely to change significantly in response to changes in price.<sup>11</sup>

U.S. apparent consumption of DIWF increased steadily from 1999 through 2002, with an annual percentage rate increase of 2.2 percent from 1999 to 2000, 1.6 percent from 2000 to 2001, and 2.7 percent from 2001 to 2002.<sup>12</sup> Parties indicated some demand slowing, with one importer stating that

---

<sup>4</sup> CR at V-10; PR at V-6.

<sup>5</sup> CR at V-22, n. 57; PR at V-15, n. 57.

<sup>6</sup> CR at V-37-38; PR at V-19.

<sup>7</sup> CR and PR, Table V-5.

<sup>8</sup> CR at V-8; PR at V-5.

<sup>9</sup> CR at V-8; PR at V-5.

<sup>10</sup> CR at V-9; PR at V-6.

<sup>11</sup> CR at V-8, V-17; PR at V-5, V-11.

<sup>12</sup> CR and PR, Table C-1.



demand from the private development sector had slowed, while government-owned treatment plant demand has remained strong.<sup>13</sup>

### **Domestic Supply Conditions**

*Domestic producers had significant unused capacity from January 1998 through June 2003. The domestic industry maintained substantial inventories during the period January 1998 through June 2003, which increased in absolute terms and as a ratio to U.S. and total shipments from 1999 to 2002.*

*Domestic producers manufacture other products on the same equipment that they use for producing DIWF, but the majority of their DIWF foundry capacity is devoted to DIWF.<sup>14</sup> U.S. producers export only a small part of their production. Thus, high inventories and low capacity utilization should allow U.S. producers to increase shipments in response to higher prices.*

*After imports of Chinese DIWF increased and took market share from U.S. producers in 2001 and 2002, U.S. producers responded in 2002 and the first half of 2003 by lowering prices to maintain market share. Thus, U.S. producers slowed their loss of market share, but at the cost of lower average unit values in the first half of 2003 than in any annual period since 1998.*

### **Import Supply Conditions**

*China is the largest source of DIWF imports in the U.S. market. Imports of DIWF from China have increased significantly since 1998, and most of this increase has occurred since 2000.<sup>15</sup> Capacity utilization rates reported by Chinese producers who responded to Commission questionnaires showed considerable fluctuation from year to year except at the end of the period examined, when they showed capacity utilization at 73.4 percent in 2001 and 72.8 percent in 2002. They reported lower capacity utilization in interim 2003 (66.3 percent) as compared to interim 2002 (77.3 percent). They project full year 2003 capacity utilization at 64.4 percent and 2004 capacity utilization at 63.3 percent.<sup>16</sup> These data suggest that Chinese DIWF producers currently have significant unused capacity and expect the amount of unused capacity to increase through 2004. In addition, Chinese producers reported that their end-of-period inventories increased \*\*\* of the period examined, and while they project that such end-of-period inventories will decline in 2003, the projected level for 2003 is \*\*\* the levels reported for each of the years 1998 through 2000, and they project an increase in 2004.<sup>17</sup> Third-country markets do not appear to provide much of an outlet for such inventories, as Chinese producers reported few exports to countries other than the United States.<sup>18</sup> In view of the large increase in DIWF imports from China since 2000, the recent increases in Chinese DIWF capacity and production, recent increases in Chinese producer inventories, and significant unused Chinese production capacity, it appears that Chinese DIWF producers have the capability to continue to increase shipments of DIWF to the United States even though they*

---

<sup>13</sup> CR at V-8-9; PR at V-5-6.

<sup>14</sup> CR at V-5; PR at V-3.

<sup>15</sup> CR and PR, Table II-1.

<sup>16</sup> CR and PR, Table IV-2.

<sup>17</sup> CR and PR, Table IV-2.

<sup>18</sup> CR and PR, Table IV-2.

project declines in their DIWF capacity, production, and shipments to the United States in full year 2003 and in 2004.<sup>19</sup>

Other sources of non-subject imports include Brazil, Korea, India, and Mexico. Some importers of DIWF from China are also significant importers of DIWF from non-subject countries, especially India. Like imports of DIWF from China, imports of DIWF from non-subject countries grew substantially over the period examined. However, the combined volume share of non-subject imports remained below the volume share of DIWF imports from China, except in 2002, when they totaled \*\*\* percent.<sup>20</sup>

### Proposed Relief<sup>21</sup>

As indicated above, the statute authorizes the Commission to “propose the amount of increase in, or imposition of, any duty or other import restrictions necessary to prevent or remedy the market disruption.” We find that imposition of a tariff-rate quota on imports of the subject DIWF from China, in the amount and for the duration proposed, as set forth below, is necessary to remedy the market disruption we find to exist.

In determining what remedy to propose, we took into account the submissions of the parties. The petitioner initially asked that the Commission impose an import quota on DIWF from China, but did not indicate a quota level in view of uncertainties about the actual level of DIWF imports from China.<sup>22</sup> Petitioner indicated at that time that a quota would provide the industry with the ability to forecast market conditions, while a tariff or tariff-rate quota would be “susceptible to manipulation” by Chinese producers or exporters.<sup>23</sup> In its pre-hearing brief filed on October 28, 2003, petitioner asked that the Commission propose a tariff for a five-year period in the amount of 95 percent *ad valorem* in the first year, to be phased down in annual stages during the remedy period. Petitioner explained that determining the amount of a quota or quota level of a tariff-rate quota would be “highly problematic” in view of the difficulty in determining the actual volume of DIWF imports from China, and also noted there were significant inventories of the subject imports already in the United States.<sup>24</sup> Respondents expressed opposition to petitioner’s proposed remedy on several grounds, including that it would be ineffective because third-country suppliers would capture any share taken from Chinese DIWF.<sup>25</sup> Respondents did not propose any alternative remedies.

In deciding what type and amount of relief was necessary to address the market disruption, we took into account the market disruption that we found to exist, the fact that China was a supplier at non-injurious levels earlier in the period examined, the fact that the surge in injurious imports occurred after

---

<sup>19</sup> CR and PR, Table IV-2. Based on the full-year reported data, which show increases in DIWF capacity and production in China in each year of the period examined as well as increased DIWF exports to the United States in each year of the period examined except 2000, we expect that DIWF imports from China will continue to increase despite these projected declines. Although Chinese producers reported lower capacity and production in interim 2003 than in interim 2002, capacity in interim 2003 was, on an annualized basis, higher than capacity reported for full year 2002, and production in interim 2003 was \*\*\* as in full year 2000 and on an annualized basis was only slightly below the levels reported for full years 2001 and 2002. Id.

<sup>20</sup> CR and PR, Table II-1.

<sup>21</sup> Vice Chairman Hillman and Commissioner Miller do not join in the remainder of these views. See their separate and additional views that follow.

<sup>22</sup> Petition at 33.

<sup>23</sup> Petition at 34.

<sup>24</sup> Petitioner’s pre-hearing brief at 36.

<sup>25</sup> See, e.g., post-hearing brief of Chinese respondents at 38 et seq.

2000, and the arguments of the parties. We considered a simple tariff, as urged by petitioner. However, we did not find a simple tariff to be the appropriate remedy in this case because it would have applied to all DIWF imports from China, including non-injurious levels, and it would have resulted in a remedy that went far beyond that which is necessary to remedy the market disruption we found to exist. We also considered a quota. However, we did not find a quota to be appropriate here because it would establish a rigid ceiling and might create shortages and other disruption, especially if petitioner is correct in its assertion that current import data significantly understate the level of DIWF imports from China. We find that a tariff-rate quota will be the most effective remedy in addressing the market disruption we have found because it will allow a non-injurious level of imports to enter without disrupting the U.S. market. This remedy will discourage over-quota imports, but allow such imports to enter at higher tariff rates if market conditions require them.

We chose an over-quota tariff of 50 percent *ad valorem* in the first year, which would be in addition to the current general rate of duty on the subject imports (5.6 percent *ad valorem*). Commission model runs show that a tariff of 50 percent (without any TRQ) would reduce Chinese imports to below their 2000 levels.<sup>26</sup> Thus, a TRQ with a 50 percent tariff and a quota at the 2000 import levels should be effective in keeping Chinese imports at or near their 2000 levels. Nonetheless, should demand increase beyond what the Commission has anticipated, the TRQ does allow some Chinese imports in above 2000 import levels. It also should encourage a reduction in the significant buildup of inventories of the subject imports. We propose that the increase in the rate of duty for over-quota imports be phased down to 40 percent *ad valorem* in the second year and to 30 percent *ad valorem* in the third year. By the second year, much of the inventory buildup should have been eliminated. The reductions in duty levels in the second and third years also are intended to encourage the industry to make the necessary adjustments to import competition and to help the market transition to the time when the remedy action ends.

We propose that the remedy be for a three-year period instead of the five years requested by the domestic industry. We do so because the industry indicated that it can implement most of the adjustments it has identified within that period, and several of the remaining adjustments appear to be more in the form of recurring items, including replacement and maintenance items.<sup>27</sup>

We base our first-year quota amount, 14,324 short tons, on U.S. shipments of DIWF from China in 2000, the year before the rapid increase in imports began. We base our quota amount on shipments because that is the amount of imported product from China that the U.S. market absorbed in 2000, without market disruption. We have set our quota at a somewhat lower level than we would otherwise have done because of the substantial likely inventories held by U.S. importers of DIWF from China. The likelihood that such inventories will be substantial at the time any remedy action is imposed is supported by trends in U.S. importers' reported end-of-period inventories, which show a steady increase during the period examined and that such inventories were at their \*\*\* level at the end of the period in June 2003;<sup>28</sup> by data showing that U.S. importers have arranged for delivery of an additional \*\*\* short tons for the period July-December 2003, an increase of 12.5 percent over the July-December 2002 level;<sup>29</sup> and by official statistics for the months of July through October showing monthly imports of DIWF from China that exceed levels for any month in the first half of 2003.<sup>30</sup> In addition, \*\*\*.<sup>31</sup> We would otherwise have

---

<sup>26</sup> See EC-AA-048, Table 5.

<sup>27</sup> CR and PR, Table VI-2.

<sup>28</sup> CR and PR, Table IV-3.

<sup>29</sup> CR and PR, Table IV-4.

<sup>30</sup> CR and PR, Table II-2 (revised).

<sup>31</sup> Final Comments on Remedy of SIGMA at 2-3.

set the quota at a somewhat higher level to reflect the expansion of the U.S. market since 2000, and the likely further modest expansion in 2004. Apparent U.S. consumption of DIWF has increased steadily since 2000, and in the most recent 12-month period for which the Commission has data (July 2002-June 2003), was 6.8 percent higher than in calendar year 2000. However, an upward adjustment in the quota level to reflect this expansion would permit the inventories to undercut the effectiveness of the relief in the first year.

We propose that the quota level be increased by 7.5 percent in each of the two subsequent years to take into account an expected rise in U.S. consumption and to liberalize the action. We believe that demand will increase approximately 2.5 percent in each of the coming years (based on the past three complete years of data revised upward slightly to account for higher demand growth in the first half of 2003). We propose that the quota be increased by an additional 5.0 percent to liberalize the action and encourage the domestic industry to make the necessary adjustments to meet import competition.

Finally, we recognize that there currently are significant imports of DIWF from third countries. However, our remedy seeks to address only the market disruption caused by DIWF imports from China. For that reason, it will not return the domestic industry to profitability or return other indicators of the industry's condition to healthy levels. Nor does our remedy proposal seek to address or offset any possible increase in imports from third countries that may result from a decline in imports from China if this remedy action is implemented. The remedy for any such increase would be outside the scope of this investigation.

#### **Short and Long-Term Effects of the Recommended Remedy**

We believe that the tariff-rate quota proposed will address the market disruption found to exist in the domestic DIWF industry and does not exceed the amount necessary to remedy the market disruption to domestic producers.

The proposed action is intended to remedy only the market disruption caused by the surge in DIWF imports from China since 2000. The industry was not profitable before the surge, and the remedy is not designed to return the industry to profitability per se, but rather to remedy the market disruption caused by the recent increase in DIWF imports from China. In addition, Chinese and non-subject DIWF are highly substitutable, and it is anticipated that shipments of non-subject DIWF will increase under our proposed remedy. Thus, U.S. producers will not capture all of the market share lost by Chinese imports. Because of the U.S. producers' non-import related difficulties, and because of potential substitution of non-subject imports, we do not believe that our remedy alone will return U.S. producers to profitability. However, because U.S. producers currently have a substantially larger U.S. market share than non-subject imports, the relief we propose will primarily benefit U.S. producers.

Although the statute does not address adjustment by the domestic industry producing DIWF, the reality is that the protection afforded by a trade remedy will be of short duration. Furthermore, we expect demand to continue to grow at approximately 2.5 percent each year. Accordingly, the proposed tariff level is reduced to 40 percent in year two and 30 percent in year three, while the quota level is increased to 15,398 short tons in year two and 16,553 short tons in year three. The increasing quota levels take into consideration both increasing demand and a liberalization of the quota. This liberalization is intended to encourage domestic producers to implement adjustment measures promptly and to complete the adjustment process by the time the action terminates at the end of three years. We believe that three years of remedy is sufficient for producers to fully implement the adjustments they have identified.

Based on available data, we assume that Chinese imports will be reduced approximately \*\*\* percent.<sup>32</sup> This reduction in Chinese imports should raise domestic prices between \*\*\* percent and \*\*\* percent. This may have a modest negative impact on U.S. purchasers. However, DIWF are a small part of the ultimate end users' costs, and distributors of U.S. DIWF should enjoy some increased prices on their sales of U.S. DIWF.

It is not possible to predict market effects with precision following the initial year of relief. However, if U.S. producers use the period of relief appropriately, they should be able to follow through on planned improvements and modernizations.<sup>33</sup>

In the absence of appropriate relief, we find it likely that the recent worsening operating losses experienced by the domestic industry will continue. Chinese DIWF have managed significant market share increases, enough that U.S. producers' shipments actually fell over 2001 to 2002, even at a time of higher demand for DIWF. There currently is no large home market in China for DIWF, and nearly all DIWF made in China to AWWA specifications is produced for the U.S. market. Thus, there is every reason to believe that, in the absence of appropriate relief, imports of Chinese DIWF will remain at disruptive levels, the domestic industry will be unable to implement additional needed investments and other adjustment measures, and the industry may be forced to close plants and lay off workers.

The effect of the proposed relief action on purchasers of DIWF is likely to be small, as DIWF represents only a small part of the cost of most municipal water projects and, in any event, there is substantial unused domestic capacity to offset a reduction in imports from China. Over the longer term, any significant reduction in domestic capacity that would occur in the absence of appropriate relief may decrease the number of alternative suppliers and could lead to increased delivery times and prices. We believe that both the short- and long-term benefit to the U.S. producers from our proposed relief will far outweigh any resulting effect on distributors and their customers.

**Table 1**  
**DIWF: Estimated effects of various TRQ levels**

\* \* \* \* \*

---

<sup>32</sup> See EC-AA-048, Table 8.

<sup>33</sup> CR and PR, Table VI-2.



## SEPARATE AND ADDITIONAL VIEWS OF VICE CHAIRMAN JENNIFER A. HILLMAN ON REMEDY

I join the description of the Commission majority of the statutory framework applicable to my remedy recommendation and the conditions of competition in the market for ductile iron waterworks fittings (DIWF) that form the backdrop for my consideration of remedy.

After considering the record information and the parties' arguments, I have decided to recommend that the President impose a temporary quota on imports of DIWF from China. Specifically, I propose that the President impose a quota on DIWF imports from China for a three-year period, at the following levels:

- 14,324 short tons in the first year of relief;
- 15,398 short tons in the second year of relief; and
- 16,553 short tons in the third year of relief.

While I normally favor *ad valorem* tariffs over quotas, I find that the unusual circumstances of this industry justify the use of a quota. First, the difference between the price paid by importers to acquire DIWF from China and the price at which the importers subsequently re-sell the DIWF to U.S. buyers is extremely large in this case. In most years of the period examined, the importers' re-sale price was \*\*\* their acquisition price. This large mark-up magnifies the potential, beyond the potential that typically exists in Commission investigations, for importers to absorb the tariffs rather than pass them on in the form of higher U.S. market prices for Chinese DIWF.<sup>1</sup> It also suggests that only high tariff levels are likely to have a significant effect on the level of imports from China.

Second, \*\*\* are related by ownership to \*\*\*.<sup>2</sup> These relationships provide an opportunity for the related China- and U.S.-based entities to structure their sales transactions so as to minimize the impact of any *ad valorem* duties on their volume of imports. While it is never possible to predict with certainty the impact that a particular tariff will have on the volume of imports, these relationships make such assessments even more difficult and are not taken into account in the economic models used by the Commission to try to estimate the effect of an increased tariff.

I also considered whether to recommend a tariff-rate quota (TRQ), as the majority has done. However, my concerns about the effectiveness of a tariff remedy would also apply to a TRQ. Typically the benefit of a TRQ is that it permits those who must have access to additional supply above the quota levels to import it, albeit at higher tariff levels. However, I do not view this market as one in which a strong need for additional imports from China above the quota level is at all likely. The steady and moderate growth in consumption over the period examined indicates to me that the DIWF market is not a type that experiences excessively large demand swings. I find that there would be ample available supply to accommodate any realistic increase in demand for DIWF. The domestic industry is operating at relatively low capacity utilization; the industry has substantial productive capacity available to increase supply to the market. Imports from several non-subject countries, including Brazil, India, and Korea, are present in the U.S. market in growing quantities and would be expected to increase their U.S. market

---

<sup>1</sup> I note that even after the large mark-ups subject imports undersold domestically-produced DIWF in every pricing product comparison, by margins exceeding 20 percent in many instances.

<sup>2</sup> CR/PR at Table I-5. The two importers are \*\*\*.

presence in response to upswings in U.S. demand for DIWF. Domestic and non-subject DIWF are generally substitutable with the Chinese product.

In selecting a quota level, I sought to return the presence of imports of DIWF from China in the U.S. market to 2000 levels. The year 2000 preceded the significant surge in imports from China that occurred in 2001 and the continued increases that followed. The year 2000 also preceded the most substantial deterioration in the financial condition of the domestic industry.

I also took into account the significant inventories of DIWF from China that currently exist in the U.S. market and that are likely to exist at the start of any relief. Inventories of Chinese DIWF reported by U.S. importers significantly increased over the period examined to reach \*\*\* in June 2003.<sup>3</sup> The inventories held by U.S. importers at the time of any relief are likely to be significantly above this already high level. Importers reported that they had arranged for delivery of \*\*\* additional short tons for the period July-December 2003, an increase of \*\*\* percent over the same period in 2002.<sup>4</sup> Official statistics for the months of July through October show monthly imports of DIWF from China that exceed levels for any month in the first half of 2003.<sup>5</sup> The largest importer of DIWF from China candidly acknowledged that it would have enough inventories on hand for the first six months of 2004.<sup>6</sup>

The substantial likely inventories have led me to set the quota level at a somewhat lower level than I would have otherwise done. I have set the quota at 14,324 short tons, which is the quantity of *shipments of imports of DIWF from China in 2000*. Apparent U.S. consumption of DIWF has grown steadily since 2000. Consumption of DIWF in the most recent 12-month period for which we have data (July 2002 - June 2003) was 6.8 percent higher than in 2000. Given past trends, I assume that consumption will continue to grow modestly in 2004. Because of the likely inventories of DIWF from China, I have chosen not to increase the quota in the first year of relief to reflect the recent and likely further expansion of the market. To do so would permit the inventories to undercut the effectiveness of the relief in the first year.

I propose that the quota include appropriate spacing provisions, such as quarterly limits on the use of the quota. Spacing provisions would ensure that the effectiveness of the remedy would not be undermined by a rush to fill the annual quota amount early in the quota year.

As in prior investigations under section 421, I believe that the relief should take into account the fact that the remedy is temporary in nature. I propose to reduce the degree of protection over the three-year period, to encourage the domestic industry to take the necessary steps to adjust to import competition once the relief terminates. Thus, I recommend that the quota level be increased by 7.5 percent in each of the second and third years of relief. This increase also reflects my expectation that apparent consumption of DIWF will continue to grow, on the order of approximately 2.5 percent annually.

I have considered respondents' arguments that no relief is appropriate because non-subject imports will simply fill the void left by any restrictions imposed on imports from China. Respondents claim that the relief will not provide any benefit to the domestic industry and will therefore not remedy the market disruption. I disagree on legal and factual grounds. The statute instructs the Commission to recommend action that will prevent or remedy the market disruption caused or threatened by imports from China. Our remedy recommendation need not, and cannot, seek to address any negative effects caused by imports from other sources. In any event, while it is true that imports from non-subject countries would likely increase in the event of a remedy, the increase would be far from a one-to-one

---

<sup>3</sup> CR/PR at Table IV-3.

<sup>4</sup> CR/PR at Table IV-4.

<sup>5</sup> CR/PR at Table II-2 (revised).

<sup>6</sup> Final Comments on Remedy of SIGMA Corporation at 2-3.



replacement. I would expect that the domestic industry would experience a significant benefit from a remedy imposed on imports of DIWF from China, as described below.

## Short- and Long-Term Effects

### Short- and Long-term Effects of the Recommended Action

The remedy I am proposing would eliminate the market disruption caused by imports of DIWF from China. In the first year, the quota would limit imports of DIWF from China to the level of shipments of those imports in 2000. This level is substantially below the annual level of Chinese DIWF imported since 2000. The main effect of this reduction would be to increase the shipments of domestically produced DIWF and DIWF produced in non-subject countries. As the domestic industry already supplies a majority of the market, and has significant available capacity, I would expect most of the reduced volume of Chinese DIWF to be replaced by increased domestic shipments.<sup>7</sup> The increased domestic shipments would lead to increases in domestic production, capacity utilization and employment.<sup>8</sup>

The quota is likely to increase prices of both domestic and imported DIWF. However, the substantial available supply from both domestic and non-subject sources is likely to limit the extent of the price increases.<sup>9</sup>

*The increases in the quantity and prices of domestic industry shipments would provide a significant boost to domestic revenues. Moreover, given the steady growth in consumption over the period examined, it is reasonable to assume that some additional demand growth will take place during the years in which relief is in place. The volume and price increases, together with the effects of modest demand growth, should increase domestic industry revenues by \*\*\* in the first year of relief compared to the levels of the second half of 2002 and first half of 2003.*<sup>10</sup>

The increased revenues will have a positive effect on the industry's profitability. The remedy I propose will substantially reduce the industry's operating losses compared to the losses the industry suffered in the most recent twelve-month period.<sup>11</sup> Although I would have preferred a remedy that returned the industry to at least modest profitability, in this case a remedy that eliminated the injury caused by imports of Chinese DIWF is not likely to produce this result.

---

<sup>7</sup> The COMPAS economic model used by the Commission estimates the extent of market changes likely to result from import relief. The results of the model are expressed in terms of percentage changes from the most recent base period, in this case the 12-month period consisting of the second half of 2002 and first half of 2003. The quota I propose would reduce shipments of Chinese DIWF by \*\*\* percent, increase domestic shipments by \*\*\* percent, and increase non-subject DIWF shipments by \*\*\* percent. Although non-subject imports would increase by a greater percentage than domestic shipments over recent levels, domestic shipments are several times as large as shipments of non-subject imports and thus would grow by a larger absolute amount. EC-AA-048 at Table 7 (column 1).

<sup>8</sup> The increase may enable McWane to restart its recently-shuttered automated molding line at Union's Anniston, Alabama facility.

<sup>9</sup> The COMPAS model estimates the following increases in DIWF prices: \*\*\* percent increase in Chinese DIWF prices, \*\*\* percent increase in domestic DIWF prices, and \*\*\* percent increase in non-subject DIWF prices.

<sup>10</sup> The COMPAS model estimates a growth in domestic revenue of \*\*\* percent. I have assumed 2.5 percent demand growth in each year of relief.

<sup>11</sup> Specifically, accounting analysis based on the estimated effects from the COMPAS model estimate an operating loss of \$\*\*\* to \$\*\*\*, compared to an operating loss of \$\*\*\* in second half 2002 and first half 2003. Memo to Commission from staff accountant, Dec. 16, 2003.

I would anticipate the effects on consumers of DIWF to be modest. The ability of domestic and non-subject producers to increase their shipments means that there should be adequate supplies of DIWF in the U.S. market. Prices are likely to rise only modestly – well under 5 percent. DIWF are only a small share of the overall cost of the projects in which they are used, such as waste treatment facilities or residential subdivisions.

The estimated effects of my proposed remedy in the second and third years of relief would be similar to the estimated effects in the first year of relief; namely, domestic shipments would grow significantly while domestic prices would increase modestly.<sup>12</sup> The 7.5 percent annual increases in the quota level would mean that imports of Chinese DIWF would be restricted somewhat less in each succeeding year. I assume that demand for DIWF would continue to grow at a moderate 2.5 percent annual pace. The overall effect would be that domestic revenues would increase by a slightly greater amount than the increase expected in the first year of relief.<sup>13</sup>

Domestic producers have identified various capital expenditures that they intended to make to improve efficiency in the event that relief was provided.<sup>14</sup> These include \*\*\* by two producers. By improving the operating environment for the domestic industry, the quota I recommend should assist the domestic industry in following through with these plans, including obtaining any necessary financing.

### **Short- and Long-term Effects of Not Taking the Recommended Action**

Should my proposed remedy, or the proposed remedy of one of my colleagues, not be implemented, I would anticipate a rapid deterioration in the condition of the domestic industry producing DIWF. In the absence of relief, I would expect continued market share gains by imports of DIWF from China and further losses in market share by domestic producers. The lower market share will lead to reduced domestic production, shipments, and capacity utilization. Domestic producers will likely lay off workers and close production lines or even whole facilities.

The increased low-priced imports from China will put further downward pressure on domestic prices. The reduced domestic volume and prices will make the industry's already bleak financial performance even worse. The level of operating losses experienced recently by the domestic industry is not sustainable for an indefinite period. A continuation or exacerbation of these losses will likely result in one or more domestic producers exiting the DIWF business. Such an event would have a substantial negative impact on workers and the communities in which the closed facilities are located.

---

<sup>12</sup> The Commission's COMPAS model is not dynamic in that the estimates represent estimated effects for the first year of relief relative to the initial baseline period (in this case second half of 2002 through the first half of 2003). The estimated effects for quota years 2 and 3 are also relative to the initial base period and assume that certain market characteristics, e.g., market share, are the same as in that base period.

<sup>13</sup> In year 2, the COMPAS model estimates that domestic shipment quantity would increase by \*\*\* percent and domestic prices would increase by \*\*\* percent, compared to the levels that existed in the base period (second half 2002 through first half 2003). Domestic revenues would grow by \*\*\* percent. Operating losses would be between \$\*\*\* and \$\*\*\*. In year 3, the model estimates that domestic shipment quantity would increase by \*\*\* percent and domestic prices would increase by \*\*\* percent, compared to the base period levels. Domestic revenues would grow by \*\*\* percent, and operating losses would be between \$\*\*\* million and \$\*\*\* million. EC-AA-048 at Tables 1A and 2A; memo to Commission from staff accountant, Dec. 16, 2003.

<sup>14</sup> CR/PR at Table VI-2.

## VIEWS OF COMMISSIONER MARCIA E. MILLER ON REMEDY

While I join in the majority's views on remedy with respect to the statutory framework and the *conditions of competition*, I propose a different remedy and therefore write separately to express my views on the remedy I have chosen.

### Remedy Proposal

For the reasons set forth below, I propose the following action to remedy the market disruption found to exist –

I propose that the President impose a duty, in addition to the current rate of duty, for a three-year period, on imports of the subject ductile iron waterworks fittings (DIWF) from China as follows: 50 percent *ad valorem* in the first year, 40 percent *ad valorem* in the second year, and 30 percent *ad valorem* in the third year.

The statute authorizes the Commission to “propose the amount of increase in, or imposition of, any duty or other import restrictions necessary to prevent or remedy the market disruption.” I find that imposition of an additional tariff on imports of the subject DIWF from China, in the amount and for the duration proposed, is necessary to remedy the market disruption I have found to exist.

I also propose that the President direct the U.S. Department of Commerce and U.S. Department of Labor to provide expedited consideration of any petitions for trade adjustment assistance filed by domestic firms or workers producing DIWF.

### Proposed Relief

In determining what remedy to propose, I took into account the submissions of the parties. Petitioner initially requested, in its petition, that the Commission propose a tariff increase of 95 percent *ad valorem* as immediate relief, in the event it found critical circumstances, and a quota over the long-term, in the event the Commission then made an affirmative market disruption determination.<sup>15</sup> However, after the Commission made a negative critical circumstances determination, petitioner stated its belief that imposition of a quota or tariff-rate quota would be “highly problematic” and advocated instead a five-year tariff increase of 95 percent *ad valorem* in the first year, to be phased down, if at all, only moderately, to 80 percent in the second year, to 60 percent in the third year, to 50 percent in the fourth year, and to 30 percent in the fifth year. The petitioner argued against a quota or tariff-rate quota based on the lack of any reliable public data by which to assess the volume of imports of DIWF from China during the period investigated, given that, before 2002 certain DIWF were part of a basket HTS category and that in 2002 there was “rampant” misclassification of DIWF entries. In addition, the petitioner noted that there are already large volumes of Chinese DIWF in importer and distributor inventories in the United States and that the effectiveness of a quota would be undermined by the build-up of additional inventories of Chinese product in the United States before the quotas could be implemented. In contrast, petitioner argued, market awareness that a substantial tariff would be imposed on further entries of DIWF would tend to force importers and distributors to begin selling at higher, more realistic prices within the U.S. market almost immediately. Petitioner proposed a tariff level of 95 percent based primarily on the large mark-up in the price of imports from the importer to the purchaser

---

<sup>15</sup> Petition at 32-35.

and the alleged ability of the Chinese producers and importers to absorb any duty imposed. The petitioner also noted that, while this is not a dumping case, dumping margins against imports from China are historically high, often above 95 percent.<sup>16</sup>

Respondents oppose a remedy and assert that none is needed or would be ineffective, primarily because in their view nonsubject imports would simply replace any lost volumes of subject imports and the domestic industry would not regain any market share.<sup>17</sup>

The Commission is authorized to propose any of a number of possible remedies, including a simple tariff increase, a tariff-rate quota, and a quantitative restriction. In general, a simple *ad valorem* tariff is preferred over other remedy options because it tends to be less trade-distorting and is easier to apply. I find that a simple tariff increase will provide an appropriate remedy in this investigation. In choosing this form of relief, I have taken into account the petitioner's preference for a simple tariff over a quota or tariff-rate quota as the import restriction likely to be most effective in remedying the market disruption caused by imports from China.

I considered the specific tariff level of 95 percent proposed by petitioner, but do not find a tariff increase of this magnitude to be necessary to rectify the adverse effects of the imports from China. While I note, as respondents argue, that nonsubject imports have a substantial presence in the U.S. market and have increased over the period examined, I have already found that, whatever the effects of the nonsubject product, imports from China, which by themselves were larger in volume and market share than all other imports combined, are a significant cause of the market disruption experienced by the domestic industry. The purpose of a remedy under section 421 is to address imports from China, not other possible causes of harm to the domestic industry. It would be inappropriate under section 421 to either forego proposing a remedy or to propose a remedy that is more than necessary to rectify the effects of imports from China because of the presence of nonsubject imports in the market.

I propose tariff increases of 50, 40, and 30 percent *ad valorem* over a three-year period to address the market disruption caused by rapidly increasing imports from China. I have taken into account the strong demand for DIWF during the period examined, as evidenced by the steady growth in apparent U.S. consumption over the period. The tariff levels I propose are based on a projected modest increase in apparent U.S. consumption of approximately 2.5 percent over the next three years. The proposed tariff is estimated in the first year to decrease, but not completely bar, imports from China by \*\*\* to \*\*\* percent.<sup>18</sup> This remedy is therefore estimated to bring the level of imports from China down to their levels in 1999 and 2000, before the surge in imports in 2001.<sup>19</sup> It is also estimated to improve the industry's shipment quantities and values and therefore increase its revenues and profitability.<sup>20</sup> While the tariff increase I propose may not return the industry to its highest level of performance during the period, it should result in significant improvement and address the harm attributable to the imports from China. At the same time, the remedy should have no more than a minimal impact on downstream users of DIWF, as this product makes up only a small percentage of the overall cost of municipal and residential water projects.

Although there is some variation in product mix among individual domestic producers, the tariff increases I propose should provide assistance to the entire domestic industry by reducing the quantity of

---

<sup>16</sup> Petitioner's Prehearing Brief at 35-40.

<sup>17</sup> See generally Respondents' Final Comments on Remedy.

<sup>18</sup> Memorandum EC-AA-048 at Table 5.

<sup>19</sup> CR/PR at Table C-1.

<sup>20</sup> Memorandum EC-AA-048 at Table 5.

imports from China and generally strengthening prices and increasing domestic shipments.<sup>21</sup> Despite the presence of nonsubject imports in the U.S. market, I expect there will be some shift back to domestic product from subject imports, given that China has been the predominant source of imports and the tariff increases are projected to strengthen all prices in the U.S. market.

In addition, I propose relief that takes into account the fact that the remedy is temporary in nature. Although not required by section 421, I propose to reduce the degree of protection over the three-year period, to encourage the domestic industry to take the necessary steps to adjust to import competition once the relief terminates. Thus, I recommend that the tariff be reduced by 10 percent *ad valorem* in the second and third years of relief, to 40 percent and 30 percent, respectively.

I propose that the additional tariff remain in effect for a three-year period, which should provide sufficient time to remedy the market disruption and allow producers to implement the adjustment measures they have identified.<sup>22</sup> I note that during the period examined certain domestic producers have already undertaken efforts to compete more effectively and improve their safety and environmental compliance.<sup>23</sup>

## Short and Long-Term Effects

### *Short- and Long-Term Effects of the Recommended Remedy*

I find that the additional tariff I propose will address the market disruption found to exist in the domestic DIWF industry due to rapidly increasing imports from China and does not exceed the amount necessary to remedy the injury to domestic producers. The remedy is likely to restore domestic shipments and revenues to reasonable levels from the losses experienced following the surge in imports from China.

Based on available data, it is likely that imports from China will be reduced between \*\*\* percent and \*\*\* percent from their level in the most recent 12-month period examined, July 2002 through June 2003.<sup>24</sup> While there will be some negative effects for U.S. purchasers, DIWF are a small part of the ultimate end users' costs, and distributors of DIWF should experience increased prices on their sales in the United States of both U.S. product and subject and nonsubject imports.

It is not possible to predict market effects with precision following the initial year of relief. In general, it is expected that as the volume of imports from China is restrained to some extent and prices increase somewhat, the domestic industry will be able to respond by increasing production as necessary and ultimately improving its capacity utilization. In addition, I would expect the domestic industry to be able to increase its ability to compete with imported DIWF as it carries out plans to improve the productivity and efficiency of its facilities, while at the same time bringing them into full compliance with environmental and safety requirements. Under this tariff-based remedy, imports would continue to supply a share of the U.S. market and would continue to be an important competitive force in the U.S. market. In addition, if demand remains strong and continues to grow, U.S. producers may be able to approach or return to their previous levels of profitability.

---

<sup>21</sup> Memorandum EC-AA-048 at Table 5.

<sup>22</sup> CR/PR at Table VI-2.

<sup>23</sup> CR/PR at Table VI-1.

<sup>24</sup> Memorandum EC-AA-048 at Table 5.

## Short and Long-Term Effects of Not Taking the Recommended Action

In the absence of appropriate relief, the recent \*\*\* operating losses experienced by the domestic industry can be expected to continue and likely worsen. Chinese DIWF have significantly increased their share of the domestic market even as demand has been strong and apparent U.S. consumption has been growing. U.S. producers' loss of market share tempered somewhat toward the end of the period examined, but only as a result of their lowering prices to retain U.S. sales. The U.S. and Chinese product are highly substitutable,<sup>25</sup> and imports from China enter the United States at a price significantly lower than the price at which the importers sell to distributors. Moreover, despite the significant mark-up by importers of the Chinese product, their selling price undersold the domestic price consistently and by substantial margins during the period examined, as evidenced by the Commission's pricing data.<sup>26</sup> Inventories of Chinese DIWF in the U.S. market more than doubled over the period examined<sup>27</sup> and importers reported they plan to take delivery of an estimated 12,705 short tons of DIWF from July through December 2003.<sup>28</sup> There is currently no Chinese home market for certain DIWF, and the vast majority of their production is directed to the U.S. market. Although their capacity is not projected to increase, their capacity increased each year from 1998 through 2002 and their capacity utilization, which never rose above 78 percent during the period investigated, is projected to decrease in 2004.<sup>29</sup> Thus, *there is every reason to believe that imports of Chinese DIWF will increase further, absent the restraining effects of the tariff.* Absent relief, the domestic industry likely would not be able to lower its prices to the point where it could recapture market share lost to the imports from China, or even retain its current level of market share, could not increase its production or improve productivity, nor implement proposed investments and improvements. This would mean mounting losses and additional plant closures for the domestic industry, which during the period examined has already been weakened by the loss of one domestic producer, Griffin, the closure of a plant by U.S. Pipe, and reductions in operations at two other U.S. plants. The industry as a whole experienced negative operating margins throughout the period examined, and its financial performance would only continue to deteriorate absent relief.

In particular, rising volumes of Chinese DIWF will continue to take market share from domestic producers, depress and suppress U.S. prices, and contribute to the domestic industry's losses. Thus, without appropriate relief, the DIWF industry remains vulnerable to continued import surges and revenue losses. If operating losses continue, the domestic industry likely will be forced to curtail further its operations and will not be able to implement or continue efforts to improve productivity, thereby leaving it less viable and less able to compete with imports. Over the longer term, a significant portion of the industry likely would be forced to shut down or curtail production significantly. Such closings and partial closings will lead to increased layoffs of workers in the industry, *resulting in a negative impact on the local communities in which the production facilities are located.*

---

<sup>25</sup> CR at V-10, PR at V-5.

<sup>26</sup> CR/PR at Tables V-6-10.

<sup>27</sup> CR/PR at Table C-1.

<sup>28</sup> CR/PR at IV-1.

<sup>29</sup> CR/PR at Table IV-2.

## PART I: INTRODUCTION

### BACKGROUND

On September 5, 2003, a petition was filed on behalf of McWane, Inc.,<sup>1</sup> Birmingham, AL, requesting that the Commission institute an investigation under section 421(b) of the Trade Act of 1974 (19 U.S.C. § 2451(b)) (the Act), to determine whether certain ductile iron waterworks fittings (DIWF)<sup>2</sup> from China are being imported into the United States in such increased quantities or under such conditions as to cause or threaten to cause market disruption to the domestic producers of like or directly competitive products. The petition also alleged under section 421(i) of the Act that critical circumstances exist with respect to the subject product and requests that provisional relief be provided. Effective September 5, 2003, the Commission instituted investigation No. TA-421-4. On October 20, 2003, the Commission made a negative critical circumstances determination, and specifically that delay in taking action would not cause damage to the relevant domestic industry which would be difficult to repair. Information relating to the timetable for the investigation is provided below.<sup>3</sup>

Effective date	Action
September 5, 2003	Petition filed with the Commission; institution of inv. No. TA-421-4 (68 FR 54010, September 15, 2003)
September 26, 2003	Staff conference
October 16, 2003	Commission's vote on critical circumstances
October 20, 2003	Critical circumstances determination transmitted to the President (68 FR 6103, October 24, 2003) <sup>1</sup>
November 6, 2003	Commission's hearing
December 4, 2003	Scheduled date for the Commission's vote on market disruption
December 4, 2003	Commission's determination on market disruption transmitted to the President (68 FR 69421, December 12, 2003)
December 15, 2003	Commission's vote on remedy
December 24, 2003	Commission's report transmitted to the President
<sup>1</sup> <i>Certain Ductile Iron Waterworks Fittings From China</i> (Inv. TA-421-4 Critical Circumstances Phase, USITC Pub. 3642, October 2003).	

---

<sup>1</sup> McWane operates three subsidiaries that produce the subject product including: Clow Water Systems Co., Coshocton, OH; Tyler Pipe Co., Tyler, TX; and Union Foundry Co., Anniston, AL.

<sup>2</sup> For a complete description of the product subject to this investigation, see the section of this part of the report entitled *The Subject Articles*.

<sup>3</sup> The *Federal Register* notice cited in the tabulation is presented in appendix A, and a list of witnesses appearing at the staff conference is presented in appendix B.

## PREVIOUS INVESTIGATIONS

The U.S. Waterworks Fittings Producers Council and its individual members, Clow Water Systems, Tyler Pipe Industries, Inc., and Union Foundry Co., previously filed a petition on July 8, 1992, alleging that an industry in the United States was materially injured or threatened with material injury by reason of less than fair value (LTFV) imports of compact ductile iron waterworks fittings and accessories thereof<sup>4</sup> from China. Following the Department of Commerce's (Commerce) affirmative determination of LTFV imports, and the Commission's determination of material injury or threat of material injury,<sup>5</sup> an antidumping duty order was placed on imports of compact ductile iron waterworks fittings (CDIWF) and glands from China on September 7, 1993.<sup>6</sup> The antidumping duty order was revoked on January 24, 2000.<sup>7</sup>

## STATUTORY CRITERIA AND ORGANIZATION OF THE REPORT

Section 421(c) of the Act (19 U.S.C. § 2451(c)) states that:

*market disruption exists whenever imports of an article like or directly competitive with an article produced by a domestic industry are increasing rapidly, either absolutely or relatively, so as to be a significant cause of material injury, or threat of material injury, to the domestic industry.*

Further, as defined in section 421(d) (19 U.S.C. § 2451(d)), the Commission is instructed to consider the following objective factors in determining whether market disruption exists:

*(1) the volume of imports of the product which is the subject of the investigation;*

---

<sup>4</sup> The Commission found three separate like products in the antidumping duty investigation: (1) all iron waterworks fittings (including both full-bodied and compact ductile iron waterworks fittings and gray iron fittings as well as fittings over 16 inches in nominal diameter), (2) all iron glands, and (3) accessory packs. See, *Certain Compact Ductile Iron Waterworks Fittings and Accessories Thereof From The People's Republic of China* (Inv. No. 731-TA-621 (Final)), USITC Publication No. 2671 (August 1993) (hereinafter *1993 CDIWF Final*), pp. 5-20.

<sup>5</sup> The Commission found that an industry in the United States was threatened with material injury by reason of LTFV imports of certain compact ductile iron waterworks fittings from China. The Commission further determined that an industry in the United States was materially injured by LTFV imports from China of cast iron glands for such fittings but that an industry in the United States was not materially injured or threatened with material injury, and the establishment of an industry in the United States was not materially retarded, by reason of imports from China of accessory packs. *1993 CDIWF Final*, p. 1-2.

<sup>6</sup> The order imposed a PRC-wide margin of 127.38 percent *ad valorem* (58 FR 47117, September 7, 1993).

<sup>7</sup> Commerce's final determination subsequently was challenged in the U.S. Court of International Trade by China National Metal Products Import and Export Corporation (CMP), a Chinese exporter of the subject fittings, and SIGMA Corporation, a U.S. importer. On remand, Commerce determined CMP to be entitled to a separate rate that it further found to be *de minimis*. Accordingly, CMP was excluded from the order. The antidumping duty order continued in effect through January 2000 when it was revoked by Commerce during a five-year sunset review because no domestic party responded to Commerce's sunset review notice of initiation (65 FR 3661, January 24, 2000). Petitioners reported that the domestic industry decided not to participate in the sunset review because the effectiveness of the dumping order had been significantly reduced by Commerce's decision relating to CMP (petition, p. 11).



*(2) the effect of imports of such product on prices in the United States for like or directly competitive articles; and*

*(3) the effect of imports of such product on the domestic industry producing like or directly competitive articles.*

As the petition in the subject investigation has alleged critical circumstances, the Commission is directed under section 421(i) (19 U.S.C. § 2451(i)) to:

*(A) determine whether delay in taking action . . . would cause damage to the relevant domestic industry which would be difficult to repair; and*

*(B) if the determination under subparagraph (A) is affirmative, make a preliminary determination of whether imports of the product which is the subject of the investigation have caused or threatened to cause market disruption.*

Information on the subject articles, the like or directly competitive domestic articles, and the U.S. market for such articles is presented in *Part I*. Data pertaining to the volume of U.S. imports and the question of rapidly increasing imports is presented in *Part II*. Information relating to the questions of material injury, including U.S. industry data on capacity, production, shipments, inventories, employment, and financial condition, is presented in *Part III*. Available information relating to the question of the threat of material injury, including data on capacity, production, shipments, and inventories of manufacturers in China, is presented in *Part IV*. The question of the causal relationship between the alleged injury and imports, with information on U.S. market penetration of imports, imports relative to production, and pricing, is presented in *Part V*. Additional information regarding efforts by U.S. producers to compete and critical circumstances is presented in *Part VI*.

## SUMMARY DATA

A summary of data collected in the investigation for DIWF is presented in appendix C, tables C-1 and C-2. U.S. industry data are based on the questionnaire responses of six firms that accounted for all known U.S. production of DIWF during the period examined (i.e., 1998-2002, January-June 2002, and January-June 2003). U.S. imports are compiled from responses to the Commission's questionnaires.

## THE SUBJECT PRODUCT

As described in the Commission's notice of institution,<sup>8</sup> the product subject to this investigation is cast pipe or tube fittings of ductile iron (containing 2.5 percent carbon and over 0.02 percent magnesium or magnesium and cerium, by weight) with mechanical, push-on (rubber compression) or flanged joints attached. Ductile iron waterworks fittings are used to join pipes, valves, and hydrants in straight lines or to change, divert, divide, or direct the flow of water or sewage in municipal utility and industrial piping systems. Included within this definition are fittings of all nominal diameters and of both full-bodied and compact designs. The subject product is imported under statistical reporting number 7307.19.3070 of the Harmonized Tariff Schedule of the United States (HTS). Products of China are dutiable at a general rate of 5.6 percent ad valorem in 2003.

---

<sup>8</sup> *Certain Ductile Iron Waterworks Fittings from China: Institution and scheduling of an investigation*, 68 FR 54010, September 15, 2003; and petition, pp. 3-4.

Excluded from the scope of the petition are (1) gray iron fittings; (2) grooved-end fittings or grooved couplings (HTS statistical reporting number 7307.19.3040); (3) threaded ductile iron fittings (HTS 7307.19.3060); (4) "other" ductile iron fittings (HTS 7307.19.3085); (5) iron glands; and (6) accessory packs for DIWF.

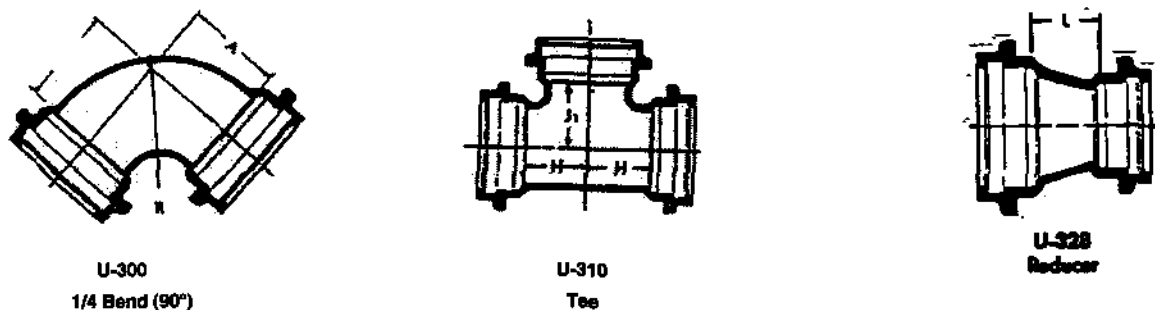
### THE LIKE OR DIRECTLY COMPETITIVE DOMESTIC ARTICLE

In making determinations of what constitutes the domestic product like or directly competitive with the imports subject to investigation, the Commission considers such factors as (1) the physical properties of the article, (2) its customs treatment, (3) its manufacturing process (i.e., where and how it is made), (4) its uses, and (5) the marketing channels through which the product is sold.<sup>9</sup> Information regarding these factors is presented below.

#### Physical Properties and Uses

Waterworks fittings are used to join pipes, valves, and hydrants in straight lines and to change, divert, divide, or direct the flow of raw or treated water (primarily in municipal water distribution systems). Waterworks fittings are produced in a variety of shapes (e.g., bends, tees, crosses, elbows, wyes, reducers, and adapters) and range in size from 2 inches to 64 inches in nominal diameter (figure 1).<sup>10</sup>

**Figure 1**  
**Typical ductile iron waterworks fittings**



Source: McWane, Incorporated. Pipe Economy 91.

The standard material for conveying water and sewage in municipal utility and industrial piping systems traditionally has been cast iron, which is available in essentially two forms--gray iron and ductile iron.<sup>11</sup> Because ductile iron has proven to be a far superior material in terms of strength, ductility, and corrosion resistance, it has, to a large degree, replaced gray iron as the material of choice for a significant number of end users. Further, gray iron waterworks fittings (GIWF) are generally rated at not higher than 250 pounds per square inch (PSI), compared with 350 PSI for ductile iron waterworks fittings.<sup>12</sup>

<sup>9</sup> *Certain Brake Drums and Rotors from China*, Inv. No. TA-421-3, USITC Pub. 3622 (September 2003) at 8.

<sup>10</sup> *1993 CDIWF Final*, p. I-5. Staff field trip notes, Union Foundry, Sept. 24, 2003.

<sup>11</sup> Staff field trip notes, Union Foundry, Sept. 24, 2003.

<sup>12</sup> *1993 CDIWF Final*, p. I-5.

Waterworks fittings come in either full-bodied or compact designs, that differ primarily in size and weight. Full-bodied fittings are bulkier, thicker-walled, heavier, and have a longer body design, or lay length. Compact fittings have a shorter lay length and thinner walls; as a result, they weigh only about half as much as comparably sized full-bodied fittings.<sup>13</sup> Although full-bodied ductile iron waterworks fittings (FBDIWF) typically have the same use as CDIWF, conditions in which FBDIWF must be used include "extra heavy duty applications," such as water systems in earthquake zones, or municipalities that have not updated their specifications to include CDIWF. Some municipalities that have highly corrosive soils prefer full-bodied fittings because of their thicker walls.<sup>14</sup>

Each end of a waterworks fitting is designed so that it can be attached to a pipe, hydrant, valve, or to another fitting with a mechanical joint, push-on joint, or flanged joint. Certain accessories are required to complete the attachment. A mechanical joint requires the use of an iron gland, a styrene butadiene rubber (SBR) gasket, and the requisite number of steel or iron T-head bolts and nuts to secure the fitting to the pipe. Push-on joint waterworks fittings perform the same function as mechanical joint, except that push-on fittings require only an SBR gasket to secure the fitting to the pipe. Flanged joints require the use of a rubber gasket and the requisite number of bolts to secure one flanged joint to a second flange or to a fitting or hydrant. Flanged joints are used to facilitate disassembly and reassembly.

In the early 1990s, the market for ductile waterworks fittings shifted from full-bodied ductile iron fittings to compact ductile iron fittings because compact are less expensive to manufacture, easier to install, and lighter in weight.<sup>15</sup> The most common sizes of ductile iron waterworks fittings (DIWF) sold in the U.S. market are 4 inches, 6 inches, and 8 inches in nominal diameter.<sup>16</sup> Fittings of 24 inches and below account for more than 90 percent of the domestic market.<sup>17</sup> Ductile iron waterworks fittings above 42 inches in nominal diameter are produced primarily for wastewater treatment plants and those over 36 inches in nominal diameter are a small segment of the U.S. market.<sup>18</sup>

All waterworks fittings and accessories must conform to standards set by the American Waterworks Association (AWWA) and the American National Standards Institute (ANSI). Standards established for CDIWF of ductile iron from 3 inches through 36 inches are provided for under AWWA/ANSI standard C153/A21.53, and those for full-bodied waterworks fittings from 3 inches through 48 inches made of either ductile or gray iron are provided for under AWWA/ANSI standard C110/A21.<sup>19</sup> AWWA/ANSI standards provide that both full-bodied and compact fittings can be used with the same accessories, thus making them interchangeable with each other with respect to the configuration of the joint.

Because all the subject waterworks fittings sold in the United States conform to AWWA/ANSI specifications, domestic and imported products are generally recognized as interchangeable.<sup>20</sup> End users generally know the origin of the product being used because the specifications require the name of the manufacturer to be cast on the product.

---

<sup>13</sup> *Id.*

<sup>14</sup> Petition, pp. 4-5.

<sup>15</sup> Staff field trip notes, Union Foundry, Sept. 24, 2003.

<sup>16</sup> Conference transcript, p. 111 (Green).

<sup>17</sup> Staff field trip notes, Union Foundry, Sept. 24, 2003.

<sup>18</sup> *Id.*

<sup>19</sup> A third type of waterworks fitting, ductile iron flanged fittings, is also covered in the AWWA/ANSI standard C110/A21. The most significant differences in the standards are the working pressure requirements and joint-type requirements. The C110 standard for full-bodied fittings permits fittings to be rated at 250 PSI or 350 PSI, depending on whether the fitting is a mechanical joint, push-on joint, or flanged joint. The C153 standard requires all compact fittings to be rated for 350 PSI working pressure.

<sup>20</sup> Staff field trip notes, Union Foundry, Sept. 24, 2003.

## Manufacturing Process

DIWF are manufactured by melting scrap iron, into which silicon and calcium carbide are added to improve the iron base and reduce the sulfur content of the iron to 0.15 percent or less. In addition, magnesium is added to the molten iron to give the iron “ductile” properties.<sup>21</sup> The addition of magnesium to the molten iron changes the chemical structure of graphite found in the iron from flake form (as found in gray iron) to a spheroidal form. The changes resulting from the addition of magnesium give the ductile iron twice the strength of gray iron.

The first stage of the manufacturing process consists of placing the raw materials in a cupola and heating to a molten or liquid state.<sup>22</sup> For both gray iron and ductile iron fittings, a pattern is placed in a flask and covered with green molding sand.<sup>23</sup> Each flask holds multiple compact fittings, but only one or two full-bodied patterns. Sand is compacted around the pattern, which is then removed, leaving an impression of the outside of the fitting.<sup>24</sup> The core is inserted into the molding cavity and a separate flask containing an impression of the other half of the fitting is placed on top. The completed mold then advances to the casting stage where molten iron in the cupola is poured into the assembled mold. Once the castings have cooled, they are removed from the flasks and excess molding sand is removed. For CDIWF, excess sand is removed on a continuous automated shakeout line.<sup>25</sup> The castings are then further cooled, after which they undergo finishing, machining, and coating operations. Such finishing operations may include shot-blasting the fittings to remove excess materials or irregularities, lining the inside surface of the fitting with cement, and coating the fittings with bitumen, a tar-like substance that prevents corrosion.

## Marketing Channels

Information provided in response to the Commission’s questionnaires regarding producer and importer sales by marketing channels is presented in table I-1. The vast majority of DIWF sold in the United States, whether domestically produced or imported from China, are sold through waterworks distributors or so-called “waterworks houses.” Waterworks houses account for more than 90 percent of all DIWF sold in the United States. Only a limited quantity of DIWF are sold directly to contractors or municipal or regional water authorities.

**Table I-1**  
**DIWF: U.S. producers’ and U.S. importers’ commercial U.S. shipments, by channels of distribution, 1998-2002, January-June 2002, and January-June 2003**

\* \* \* \* \*

The prominence of waterworks distributors in the distribution chain has evolved only since the 1980s. Previously, sales of waterworks fittings were generally made directly from the manufacturer to the end user as part of the sale of water pipe.<sup>26</sup> Currently, U.S. waterworks distributors number over 100 and generally handle the full spectrum of waterworks products, including iron glands, gland or accessory packs, pipes, valves, fire hydrants, and other products. Most waterworks distributors are independent firms, not owned by or affiliated with U.S. producers or importers of DIWF.

---

<sup>21</sup> Petition, p. 5.

<sup>22</sup> Electric induction furnaces are also used by the industry to melt iron.

<sup>23</sup> Green sand is composed of clay, sand, sea coal, and water. Green sand is used in the production of fittings ranging from 2 inches to 36 inches in diameter. Fittings 36 inches in diameter and greater are produced using a resin coated no-bake system.

<sup>24</sup> A sand core is produced from a separate pattern to form the internal passages of the fitting.

<sup>25</sup> 1993 CDIWF Final, p. I-5.

<sup>26</sup> 1993 CDIWF Final, p. I-5.

## Customs Treatment

Table I-2 presents current tariff rates for DIWF, which is provided for in HTS subheading 7307.19.30. During 1998-2001, DIWF was imported under statistical reporting number 7307.19.3080, a provision that included nonsubject ductile iron fittings. The product-specific category applicable to DIWF (statistical reporting number 7307.19.3070) was added to the HTS in 2002.<sup>27</sup>

**Table I-2**  
**DIWF: Tariff rates, 2003**

HTS provision	Article description <sup>1</sup>	General <sup>2</sup>	Special <sup>3</sup>	Column 2 <sup>4</sup>
		Rates (percent <i>ad valorem</i> )		
7307.19.3070	Tube or pipe fittings (for example, couplings, elbows, sleeves) of iron or steel: Other cast fittings: Ductile fittings: Other, with mechanical, push-on (rubber compression) or flanged joints attached	5.6	Free 1.4% (JO)	45.0

<sup>1</sup> An abridged description is provided for convenience; however, an unabridged description may be obtained from the respective headings, subheadings, and legal notes of the HTS.

<sup>2</sup> Normal trade relations, formerly known as the most-favored-nation duty rate, applicable to imports from China.

<sup>3</sup> Free rate applies to eligible goods under the Generalized System of Preferences (least-developed beneficiaries only), African Growth and Opportunity Act, Caribbean Basin Economic Recovery Act, Andean Trade Preference Act, Automotive Products Trade Act, Israel Free Trade Agreement, and NAFTA-originating goods of Canada and Mexico. The reduced "JO" rate is a concession staged rate under the U.S.-Jordan Free Trade Agreement.

<sup>4</sup> Applies to imports from a small number of countries that do not enjoy normal trade relations duty status.

Source: Harmonized Tariff Schedule of the United States (2003).

## DOMESTIC LIKE OR DIRECTLY COMPETITIVE PRODUCT CONSIDERATIONS

As previously noted, products excluded from the scope of this investigation are (1) gray iron fittings;<sup>28</sup> (2) grooved-end fittings or grooved couplings;<sup>29</sup> (3) threaded ductile iron fittings;<sup>30</sup> (4) "other"

<sup>27</sup> Petition, p. 16, fn. 14.

<sup>28</sup> During the 1993 antidumping investigation of CDIWF, the Commission determined that compact gray iron waterworks fittings were included in the domestic like product. In response to the Commission's producers' questionnaire in this investigation, no U.S. producer reported production of GIWF. Petitioner also has noted that gray iron fittings are not manufactured in any significant quantities in China and are not exported to the United States from China. Petition, p. 3, fn. 2. U.S. importers reported limited amounts (2,000-4,000 short tons) of GWIF from all sources during the period of investigation.

<sup>29</sup> The majority of grooved-end fittings or grooved couplings are used in plumbing or fire protection applications involving pipes with relatively small diameters. As such, petitioner argued that grooved fittings and DIWF have distinct physical characteristics and end uses and do not compete with each other. Petition, p. 3, fn. 2.

<sup>30</sup> Threaded ductile iron fittings are used in applications that are distinct from the applications in which DIWF are used. These products are used in gas line applications involving smaller diameter pipe as compared to waterworks applications. *Id.*

ductile iron fittings;<sup>31</sup> (5) iron glands; and (6) accessory packs for DIWF.<sup>32</sup> No party has argued that these products be included in the domestic product that is like the imported product.

During the critical circumstances phase of this investigation, counsel for U.S. importer, Pipeline Components, Inc. (PCI) argued that small (30 inches nominal diameter (ND) or less) and large (36 inches ND or greater) DIWF are separate like products.<sup>33</sup> Counsel argued that (a) size differences preclude the substitution of one size range for the other in project applications; (b) different production processes are used for the products (small DIWF using “green sand” and large DIWF using “resin-coated no bake system”); (c) there are different end uses (small predominately in water and sewer lines in subdivision developments and large in water and sewage treatment plants); and (d) different channels of distribution (small to waterworks house distributors and large to specialty contractors).<sup>34</sup>

Petitioner argued that (a) all DIWF comply with the same AWWA/ANSI standards; (b) all are produced in similar manufacturing facilities with a significant degree of overlap among the types of machinery used; (c) all DIWF are used as connections to change water direction or accommodate increase/decrease system diameters; and (d) all are sold principally through distributors.<sup>35</sup>

For purposes of its critical circumstances determination, the Commission found that domestically produced DIWF are like the imported Chinese DIWF.<sup>36</sup> Respondents did not contest this finding during the market disruption phase of this investigation.

Also during the critical circumstances phase of this investigation, counsel for PCI argued that the U.S. market for DIWF is segmented into small and large markets, with no significant presence by the petitioning companies in the large size segment.<sup>37</sup> Information regarding U.S. shipments by producers and importers, by sizes and types of DIWF, are presented in table I-3, figure I-1, and appendix D, table D-1. These data indicate that small diameter (30 inches ND and less) DIWF accounted for approximately 89 percent of U.S. commercial shipments during the period examined, and that U.S.-produced products accounted for the principal shares of the markets by size: \*\*\* percent of small diameter and \*\*\* percent of the large diameter (greater than 30 inches ND) DIWF markets.<sup>38</sup> Imports from China accounted for \*\*\* percent and imports from all other sources accounted for \*\*\* percent of the large diameter market. With respect to DIWF types, sales of compact fittings increased during the period examined, averaging two-thirds of total shipments of DIWF (based on quantity of short tons). See figure I-2.

**Table I-3**

**DIWF: U.S. commercial shipments of domestically produced and imported products, by sizes and types, shares based on quantity, 1998-2002, January-June 2002, and January-June 2003**

\* \* \* \* \*

---

<sup>31</sup> Petitioner noted that it is uncertain of the precise nature of the HTS category of this product, but believes that such product could include either flanges or iron glands. Neither of these products (or any other product that could be possibly classified under that subheading) is used in the waterworks applications in which DIWF are used. *Id.*

<sup>32</sup> Unlike the 1993 antidumping investigation, petitioner did not include these products in the scope of the petition for this investigation. Petitioner noted that “(s)ince the time of the Commission’s prior Title VII investigation in 1993, the marketing of those products has changed such that iron glands and accessory packs are now sold separately from DIWF and are now regarded as a distinct product from DIWF and, as such, should not be considered a product that is like DIWF.” *Id.*

<sup>33</sup> Postconference brief of Neville Peterson, pp. 16-17.

<sup>34</sup> *Id.*

<sup>35</sup> Petitioner’s postconference, pp. 5-7.

<sup>36</sup> *Certain Ductile Iron Waterworks Fittings From China (Inv. No. TA-421-4 (Critical Circumstances Phase))*, USITC Publication No. 3642 (October 2003), p. 5.

<sup>37</sup> Postconference brief of Neville Peterson, pp. 13-15.

<sup>38</sup> U.S. producers \*\*\* reported shipments of large diameter DIWF.

Figure I-1

DIWF: U.S. commercial shipments by sizes, shares of total based on quantity, 1998-2002, January-June 2002, and January-June 2003

\* \* \* \* \*

Figure I-2

DIWF: U.S. commercial shipments by types, shares of total based on quantity, 1998-2002, January-June 2002, and January-June 2003

\* \* \* \* \*

**THE U.S. MARKET**

**U.S. Producers**

Questionnaires were sent to the five firms listed in the petition and to two additional firms that the Commission had reason to believe produced DIWF during the period of investigation. Table I-4 presents U.S. producers' plant locations, positions on the petition, and shares of total reported U.S. production in 2002.

**Petitioners**

McWane International was established in 1992 to promote the sale of ductile iron pipe, valves, and fittings on a worldwide basis. McWane is a leading producer of these products in the United States and Canada.<sup>39</sup>

Clow Water Systems Co. (Clow) is a wholly owned subsidiary of McWane, Inc., with manufacturing interests in pipes, fittings, waterworks valves, and fire hydrants.<sup>40</sup> Clow has its corporate offices in Oak Brook, IL, and produces pressure pipe and waterworks fittings at its production facility located in Coshocton, OH. Clow produces DIWF ranging from 2-36 inches ND and in bend and tee shapes. DIWF accounted for \*\*\* percent of its total sales in the facilities where DIWF is produced during 2002.

---

<sup>39</sup> Companies operated and products produced by McWane International (<http://www.mcwaneinternational.com/>) are as follows: Amerex Corporation - fire extinguishers; Atlantic States Cast Iron Pipe Co. - AWWA Ductile Iron Pipe; Bibby-Ste-Croix - AWWA Ductile Iron Pipe & ASTM Soil Pipe & Fittings; Canada Pipe Company - AWWA ISO 2531/BSEN545 Ductile Iron Pipe; Clow Canada - AWWA Valves and Fire Hydrants; Clow Water Systems - AWWA Ductile Iron Pipe & Fittings; Clow Valve Corporation - AWWA-UL/FM Valves & Fire Hydrants; Kennedy Valve - AWWA-UL/FM Valves & Fire Hydrants, BS 5163 Valves and DIN 3352 Valves; Manchester Tank - Pressure Vessels; McWane Cast Iron Pipe Co. - AWWA ISO 2531/BSEN545 Ductile Iron Pipe; M&H valve Company - AWWA Valves & Fire Hydrants; Pacific States Cast Iron Pipe Co. - AWWA Ductile Iron Pipe; Tyler Pipe - AWWA Ductile Iron Fittings & Accessories & ASTM Soil Pipe & Fittings; Union Foundry Company - AWWA Pipe, Fittings & Accessories; Wade Drains, Division of Tyler Pipe - Floor and Roof Drains & Accessories.

<sup>40</sup> "Clow Water Systems Company, a division of McWane, Inc., manufactures ductile iron pipe and fittings from a modern foundry located in Coshocton, Ohio. Clow produces ductile iron pipe in sizes 6"-30" according to AWWA standard C-151. Also, we produce flange, compact and MJ fittings according to AWWA standards C-110 and C-153 nationwide to plant contractors who construct water and wastewater treatment plants and pumping stations." Retrieved from Clow's website <http://www.clowwatersystems.com/about.htm> on September 16, 2003.

**Table I-4**

**DIWF: U.S. producers, their positions on the petition, plant locations, ownership, and shares of production, 2002**

<b>Firm</b>	<b>Position on petition</b>	<b>Plant location(s)</b>	<b>Related companies</b>	<b>Share of total reported U.S. production</b>
American Cast Iron Pipe Co.	***	Birmingham, AL	Intercast/Brazil	***
Griffin Pipe Products Co. <sup>1</sup>	***	Downers Grove, IL	Amsted Industries/ 100%	***
McWane, Industries	Support/ Petitioner	Coshocton, OH; Tyler, TX; Anniston, AL	Clow Water Systems Tyler Pipe Union Foundry	*** *** ***
U.S. Pipe and Foundry Co.	***	Chattanooga, TN	Walter Industries, Inc./Parent Company	***

<sup>1</sup> Griffin ceased its U.S. production of DIWF during 1999.

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

Tyler Pipe Industries (Tyler) is the largest U.S. producer of DIWF, accounting for \*\*\* percent of U.S. production of such products in 2002.<sup>41</sup> It is also owned by McWane through Ransom Industries, LP, a holding company. During the period for which information was requested, Tyler or its related or affiliated companies produced ductile and gray iron waterworks fittings, iron glands, SBR gaskets, watermain pipe, fabricated pipe, tapping sleeves, municipal castings, retainer glands, valve and service boxes, and grooved and swivel hydrant fittings. Tyler produces DIWF ranging from 3-24 inches ND and in all standard shapes (bends, tees, reducers, sleeves, etc.). DIWF accounted for \*\*\* percent of its total sales in the facilities where DIWF is produced (south plant) during 2002.

Union Foundry Co. (Union) is also owned by McWane through Ransom Industries, and produces DIWF at its manufacturing facility located in Anniston, AL. Union produces DIWF ranging from 3-24 inches ND and in all shapes (bends, tees, reducers, sleeves, etc.). About \*\*\* percent of the value of Union's total sales in the facilities where DIWF is produced during 2002 were accounted for by the subject product.

---

<sup>41</sup> Currently Tyler Pipe has foundries in Texas and Pennsylvania, and coupling/gasket production facilities in Missouri and California. Retrieved from Tyler's website <http://www.tylerpipe.com/> on September 16, 2003.



## Non-Petitioning Firms<sup>42</sup>

American Cast Iron Pipe Co. (ACIPCO) produces DIWF at its plant in Birmingham, AL.<sup>43</sup> ACIPCO produces a complete line of 14" through 64" ductile iron pipe and fittings. It recently purchased the foundry owned by Mid-American Casting Corporation in Pryor Creek, OK.<sup>44</sup> ACIPCO produces DIWF ranging from 14-64 inches ND and in all shapes (bends, tees, reducers, sleeves, etc.). DIWF accounted for \*\*\* percent of its total sales in the facilities where DIWF is produced during 2002.

Griffin Pipe Products (Griffin) is a wholly owned subsidiary of Amsted, Industries, Inc.<sup>45</sup> The firm produced compact and full-bodied DIWF through 1999. In 2000, \*\*\*.<sup>46</sup>

U.S. Pipe and Foundry Co. (U.S. Pipe), a subsidiary of Walter Industries, Inc., produces DIWF at its production facility located in Chattanooga, TN.<sup>47</sup> U.S. Pipe typically sells waterworks fittings in conjunction with the sale of waterpipe. U.S. Pipe produces DIWF ranging from 3-64 inches ND and in all standard shapes (bends, tees, reducers, sleeves, etc.). DIWF accounted for \*\*\* percent of its total sales in the facilities where DIWF is produced during 2002. U.S. Pipe also reported that it \*\*\*.<sup>48</sup>

## U.S. Importers

Eleven U.S. importers accounted for all known imports of DIWF from China and nonsubject sources during the period examined. A list of importers providing useable information to the Commission, their U.S. imports, and shares of total imports during 2002, is presented in table I-5. Two companies, SIGMA and Star, accounted for the vast majority of total imports from China (\*\*\* percent).

**Table I-5**

**DIWF: U.S. importers, U.S. imports, and shares of total U.S. imports, by sources and firms, 2002**

\* \* \* \* \*

---

<sup>42</sup> Russell Pipe & Foundry (Russell) produced DIWF during the Commission's 1993 investigation, but the firm ceased DIWF production during 1992.

<sup>43</sup> "Founded in 1905, ACIPCO is one of Birmingham's oldest companies and is the largest manufacturing employer in the city. It employs 3,000 workers in 16 facilities in the United States. ACIPCO manufactures a diversified product line for the waterworks, capital goods, and energy industries. Products manufactured in the company include ductile iron pipe and fittings, fire hydrants, valves, fire truck pumps, centrifugally cast steel tubes, static castings and fabricated assemblies, ERW steel pipe, and spiral-welded steel pipe. The ACIPCO plant facility covers more than 2,000 acres. Total employment is approximately 3,000 employees. ACIPCO is a privately held Company and operates as a beneficial trust with both employees and customers as beneficiaries." Retrieved from ACIPCO's website <http://www.acipco.com/fortune100.cfm> on September 16, 2003.

<sup>44</sup> ACIPCO recently purchased the assets of a foundry in Pryor Creek, OK. The former company predominantly made OEM parts for commercial and agricultural equipment components. \*\*\*. In an e-mail message to the Commission, \*\*\* states, "\*\*\*\*." E-mails dated October 1, 2003, and October 9, 2003.

<sup>45</sup> AMSTED Industries is a diversified manufacturer of industrial components serving primarily the railroad, vehicular, and construction and building markets. Retrieved from Amsted's website <http://www.amsted.com/companyinfo.asp> on September 16, 2003.

<sup>46</sup> U.S. producer questionnaire response.

<sup>47</sup> U.S. Pipe manufactures a complete range of Ductile Iron Pipe, Fittings, Valves, and Hydrants for the transmission and distribution of water and the collection and pumping of wastewater. Pipe and fittings are produced in sizes from 4" to 64" diameter and valves from 3" through 60" sizes. Retrieved from U.S. Pipe's website <http://www.uspipe.com/custom/history.htm> on September 16, 2003.

<sup>48</sup> U.S. producers questionnaire response, section II-2.

## Apparent U.S. Consumption

Table I-6 presents apparent U.S. consumption of DIWF for the period examined. See Part V for an analysis of demand trends.

**Table I-6**

**DIWF: Apparent U.S. consumption, 1998-2002, January-June 2002, and January-June 2003**

Item	Calendar year					January-June	
	1998	1999	2000	2001	2002	2002	2003
<b>Quantity (short tons)</b>							
U.S. producers' shipments	***	***	***	***	***	***	***
U.S. shipments of imports from--							
China	***	***	14,324	20,416	23,010	11,174	12,233
All other sources	***	***	***	***	***	***	***
Total U.S. shipments of imports	***	***	***	***	***	***	***
Apparent consumption	116,237	123,039	125,756	127,712	131,110	65,048	68,244
<b>Value (\$1,000)</b>							
U.S. producers' shipments	***	***	***	***	***	***	***
U.S. shipments of imports from--							
China	***	***	29,136	37,897	40,919	20,989	21,714
All other sources	***	***	***	***	***	***	***
Total U.S. shipments of imports	***	***	***	***	***	***	***
Apparent consumption	220,712	230,622	236,778	247,058	241,924	122,585	119,818
Source: Compiled from data submitted in response to Commission questionnaires.							

## PART II: THE QUESTION OF RAPIDLY INCREASING U.S. IMPORTS

### U.S. IMPORTS

Because the subject products were imported under a "basket category" during most of the period of investigation, import data are based on the questionnaire responses of 11 U.S. importers of DIWF from China and other nonsubject sources. Data regarding U.S. imports of DIWF are presented in table II-1 and imports from China are graphically depicted in figure II-1.

**Table II-1**  
**DIWF: U.S. imports, by sources, 1998-2002, January-June 2002, and January-June 2003**

Source	Calendar year					January-June		Period changes <sup>1</sup>					
	1998	1999	2000	2001	2002	2002	2003	1998-2002	1998-1999	1999-2000	2000-2001	2001-2002	Interim 2002-2003
<b>Quantity (short tons)</b>								<b>(Percent, except where noted)</b>					
China	***	***	14,768	24,404	25,070	13,772	14,022	***	***	***	65.2	2.7	1.8
Other sources	***	***	***	***	***	***	***	***	***	***	***	***	***
Total	***	***	***	***	***	***	***	***	***	***	***	***	***
<b>Value (1,000 dollars)<sup>2</sup></b>													
China	***	***	14,124	22,211	22,656	12,387	11,758	***	***	***	57.3	2.0	-5.1
Other sources	***	***	***	***	***	***	***	***	***	***	***	***	***
Total	***	***	***	***	***	***	***	***	***	***	***	***	***
<b>Unit value (per short ton)<sup>2</sup></b>													
China	***	***	956	910	904	899	839	***	***	***	-4.8	-0.7	-6.8
Other sources	***	***	***	***	***	***	***	***	***	***	***	***	***
Average	***	***	***	***	***	***	***	***	***	***	***	***	***
<b>Share of quantity (percent)</b>													
China <sup>2</sup>	***	***	***	***	***	***	***	***	***	***	***	***	***
Other sources <sup>2</sup>	***	***	***	***	***	***	***	***	***	***	***	***	***
Total	***	***	***	***	***	***	***	***	***	***	***	***	***
<b>Share of value (percent)</b>													
China <sup>2</sup>	***	***	***	***	***	***	***	***	***	***	***	***	***
Other sources <sup>2</sup>	***	***	***	***	***	***	***	***	***	***	***	***	***
Total	***	***	***	***	***	***	***	***	***	***	***	***	***

<sup>1</sup> Period changes are in percentage points.  
<sup>2</sup> Landed, duty-paid.  
<sup>3</sup> Not applicable.

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

**Figure II-1**

**DIWF: U.S. imports from China, 1998-2002, January-June 2002, and January-June 2003**

\* \* \* \* \*

Monthly import statistics for January-October 2003 (the period of time that imports would have been properly classified and reported in the discrete DIWF HTS category) are presented in table II-2 and figure II-2. However, official imports statistics continue to be understated, with discrepancies between official statistics and questionnaire responses for the period January-June 2003, as follows:

\* \* \* \* \*

**Table II-2**

**DIWF: Monthly U.S. imports, by sources, January-October 2003, and the six-month period January-June 2003**

Source	Calendar year 2003										Jan.-Jun.
	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sept.	Oct.	2003
<b>Quantity (short tons)</b>											
China	1,875	1,437	1,649	2,185	2,678	2,225	2,787	2,873	2,753	2,859	12,049
India	286	427	403	535	677	738	704	691	560	463	3,066
Mexico	205	231	343	706	718	184	397	207	311	0	2,387
Brazil	0	0	15	58	105	30	132	189	20	356	209
Korea	65	90	161	303	131	169	90	133	70	213	919
All other	1	51	41	0	16	3	1	13	0	127	113
Subtotal nonsubject	557	799	964	1,602	1,648	1,124	1,323	1,232	961	1,159	6,693
Total	2,431	2,235	2,613	3,787	4,327	3,349	4,111	4,105	3,713	4,018	18,742
<b>Landed, duty-paid value (1,000 dollars)</b>											
China	1,810	1,286	1,507	1,831	3,745	2,421	2,495	2,542	2,491	2,349	12,601
India	252	369	335	462	553	603	608	568	479	398	2,575
Mexico	365	407	578	1,036	1,139	448	717	341	553	0	3,973
Brazil	0	0	15	47	83	24	109	151	16	278	169
Korea	104	137	257	412	210	267	139	204	108	407	1,385
All other	14	66	35	0	15	24	9	27	8	271	154
Subtotal nonsubject	736	979	1,219	1,957	2,000	1,364	1,582	1,292	1,163	1,354	8,256
Total	2,546	2,266	2,726	3,788	5,746	3,785	4,077	3,833	3,654	3,703	20,856

Table continued on next page.

Table II-2

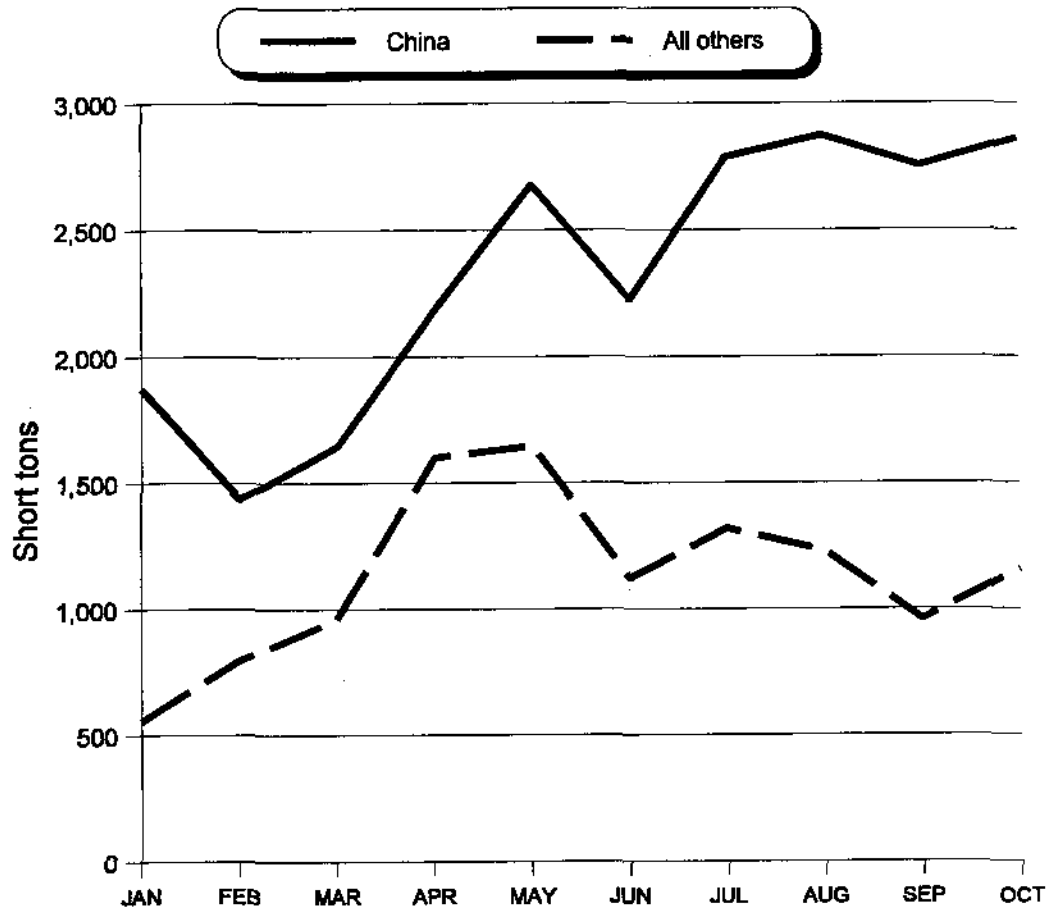
DIWF: Monthly U.S. imports, by sources, January-October 2003, and the six-month period January-June 2003

Source	Calendar year 2003										Jan.- Jun.
	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sept.	Oct.	2003
<b>Unit value (per short ton)</b>											
China	\$965	\$895	\$914	\$838	\$1,398	\$1,088	\$895	\$885	\$905	\$822	\$1,046
India	883	865	830	865	817	816	864	822	855	860	840
Mexico	1,783	1,761	1,684	1,467	1,586	2,438	1,805	1,648	1,779	( <sup>1</sup> )	1,664
Brazil	( <sup>1</sup> )	( <sup>1</sup> )	974	814	793	778	832	801	786	780	810
Korea	1,599	1,523	1,593	1,359	1,596	1,579	1,548	1,542	1,545	1,910	1,507
All other	13,091	1,293	836	( <sup>1</sup> )	920	8,069	12,276	2,027	33,198	2,134	1,362
Subtotal nonsubject	1,322	1,226	1,264	1,222	1,214	1,214	1,196	1,048	1,210	1,168	1,233
Average	1,047	1,013	1,043	1,000	1,328	1,130	992	934	984	922	1,113
<b>Share of quantity (percent)</b>											
China	77.1	64.3	63.1	57.7	61.9	66.4	67.8	70.0	74.1	71.1	64.3
India	11.7	19.1	15.4	14.1	15.7	22.0	17.1	16.8	15.1	11.5	16.4
Mexico	8.4	10.3	13.1	18.7	16.6	5.5	9.7	5.0	8.4	0.0	12.7
Brazil	0.0	0.0	0.6	1.5	2.4	0.9	3.2	4.6	0.5	8.9	1.1
Korea	2.7	4.0	6.2	8.0	3.0	5.0	2.2	3.2	1.9	5.3	4.9
All other	0.0	2.3	1.6	0.0	0.4	0.1	0.0	0.3	0.0	3.2	0.6
Subtotal nonsubject	22.9	35.7	36.9	42.3	38.1	33.6	32.2	30.0	25.9	28.9	35.7
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
<b>Share of value (percent)</b>											
China	71.1	56.8	55.3	48.3	65.2	64.0	61.2	66.3	68.2	63.4	60.4
India	9.9	16.3	12.3	12.2	9.6	15.9	14.9	14.8	13.1	10.7	12.3
Mexico	14.4	18.0	21.2	27.3	19.8	11.8	17.6	8.9	15.1	0.0	19.0
Brazil	0.0	0.0	0.6	1.2	1.4	0.6	2.7	3.9	0.4	7.5	0.8
Korea	4.1	6.0	9.4	10.9	3.7	7.0	3.4	5.3	2.9	11.0	6.6
All other	0.6	2.9	1.3	0.0	0.3	0.6	0.2	0.7	0.2	7.3	0.7
Subtotal nonsubject	28.9	43.2	44.7	51.7	34.8	36.0	38.8	33.7	31.8	36.6	39.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

<sup>1</sup> Not applicable.

Source: Compiled from official Commerce statistics for HTS item 7307.19.3070.

Figure II-2  
DIWF: Monthly imports, by sources, January-October 2003



Source: Table II-2.

### PART III: THE QUESTION OF MATERIAL INJURY

The information in this section of the report was compiled from responses to questionnaires of the U.S. International Trade Commission. Four firms, which are believed to account for virtually all U.S. production of DIWF during the period examined, supplied information on such operations. These four firms include the petitioner, McWane, as well as, ACIPCO, Griffin, and U.S. Pipe. The majority of data presentations in this part of the report provide information on the U.S. industry as a whole. Company-by-company data are presented in appendix E.<sup>1</sup>

#### U.S. PRODUCTION, CAPACITY, AND CAPACITY UTILIZATION

Table III-1 presents data (graphically presented in figure III-1) concerning capacity, production, and capacity utilization for domestic manufacturers of DIWF.

**Table III-1**

**DIWF: U.S. production capacity, production, and capacity utilization, 1998-2002, January-June 2002, and January-June 2003**

\* \* \* \* \*

**Figure III-1**

**DIWF: U.S. production capacity, production, and capacity utilization, 1998-2002, January-June 2002, and January-June 2003**

\* \* \* \* \*

#### U.S. PRODUCERS' U.S. SHIPMENTS, EXPORT SHIPMENTS, AND INVENTORIES

U.S. producers' shipments of DIWF are presented in table III-2 and inventories are shown in table III-3. Industry witnesses have testified that high levels of inventory (about a four-month supply) are typically maintained because "our service levels are such that 95 percent of the time we will deliver to a customer his order complete, every item, every line item, within five days of when he places that order."<sup>2</sup>

**Table III-2**

**DIWF: U.S. producers' shipments, by types, 1998-2002, January-June 2002, and January-June 2003**

\* \* \* \* \*

**Table III-3**

**DIWF: U.S. producers' end-of-period inventories, 1998-2002, January-June 2002, and January-June 2003**

\* \* \* \* \*

---

<sup>1</sup> As reported in Part I, Griffin did not produce subject product after 1999.

<sup>2</sup> Conference transcript, p. 112 (Green).

## IMPORTS AND OTHER PURCHASES BY U.S. PRODUCERS

Table III-4 presents data, as reported by U.S. producers, on their imports, purchases of U.S. imports, and other purchases of DIWF. Generally, firms reported that they import or purchase DIWF in order to supplement their product line or inventory.<sup>3</sup>

**Table III-4**

**DIWF: U.S. producers' direct imports, purchases of U.S. imports, other purchases, and ratios to production, by sources, 1998-2002, January-June 2002, and January-June 2003<sup>1</sup>**

\* \* \* \* \*

## U.S. EMPLOYMENT, WAGES, AND PRODUCTIVITY

All four firms that produced DIWF were able to supply employment information related to their U.S. establishments in which the subject product is produced. The data are shown in table III-5.

**Table III-5**

**DIWF: U.S. producers' employment-related indicators, 1998-2002, January-June 2002, and January-June 2003**

Item	Calendar year					January-June	
	1998	1999	2000	2001	2002	2002	2003
Production and related workers (PRWs)	1,118	1,234	1,118	1,151	1,078	1,158	1,017
Hours worked by PRWs (1,000 hours)	***	***	***	***	***	***	***
Wages paid to PRWs (1,000 dollars)	***	***	***	***	***	***	***
Hourly wages	\$16.43	\$17.44	\$18.18	\$18.45	\$18.62	\$18.65	\$18.48
Productivity (tons produced per 1,000 hours)	35.8	36.8	40.1	34.9	40.2	39.6	40.4
Unit labor costs (per ton)	\$458.40	\$473.39	\$453.70	\$527.91	\$463.01	\$470.53	\$457.67

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

## FINANCIAL EXPERIENCE OF U.S. PRODUCERS

### Background

The financial data of the DIWF operations of four U.S. producers are reflected in this section of the report: ACIPCO, Griffin, McWane, and U.S. Pipe. The majority of producers reported their financial results on a calendar-year basis using U.S. generally accepted accounting principles (GAAP). Griffin reported on a fiscal-year basis ending September 30. U.S. Pipe revised its data to reflect calendar years for all annual periods. Griffin, \*\*\*, stopped DIWF operations in 1999 and is therefore not reflected in subsequent periods.

<sup>3</sup> Producer questionnaire responses, section II-13; and Nov. 5, 2003, telephone interview with \*\*\*.



McWane's financial results represent the combined operations of Clow, Tyler, and Union with eliminations for transfers.<sup>4</sup> U.S. Pipe's operations represent \*\*\*.<sup>5</sup> ACIPCO and Griffin each have operations at a single foundry. The separate operations of each company/plant are presented in appendix E. The financial results of Tyler, Union, and U.S. Pipe were verified by Commission staff. Changes in reported data resulting from these verifications are reflected in this and other relevant sections of the sta report.

### Operations on DIWF

Income-and-loss data for U.S. producers are presented in table III-6 and on a unit basis in table III-7. Table III-8 and table III-8A present selected company-specific data as referenced in this section of the report. Table III-9 presents a variance analysis of the financial results.

**Table III-6**  
**DIWF results of U.S. producers' operations, fiscal years 1998-2002, January-June 2002, and January-June 2003**

\* \* \* \* \*

**Table III-7**  
**DIWF results of U.S. producers' operations (per short ton), fiscal years 1998-2002, January-June 2002, and January-June 2003**

\* \* \* \* \*

**Table III-8**  
**DIWF: Selected financial information of U.S. producers' operations, fiscal years 1998-2002, January-June 2002, and January-June 2003**

\* \* \* \* \*

**Table III-8A**  
**DIWF: Detailed information for COGS of U.S. producers' operations (per short ton), fiscal years 1998-2002, January-June 2002, and January-June 2003**

\* \* \* \* \*

**Table III-9**  
**DIWF: Variance analysis of financial results, fiscal years 1998-2002, January-June 2002, and January-June 2003**

\* \* \* \* \*

---

<sup>4</sup> \*\*\*.

<sup>5</sup> \*\*\*.

Throughout the period McWane represented the largest share of sales (reported by U.S. producers) in terms of both volume and value. The facilities where DIWF are produced include the production of other products which represent varying degrees of importance in terms of each plant's total sales.<sup>6</sup> With respect to the DIWF sold by individual producers, differences in product mix are evident in the reported information.<sup>7</sup> As shown in table III-8 and III-8A, \*\*\* consistently had the \*\*\* unit revenue and average unit cost of goods sold (COGS), while McWane had the \*\*\*. This appears to be due in part to the DIWF sizes sold: ACIPCO and U.S. Pipe reportedly produce and sell larger diameter fittings, while McWane concentrates on smaller diameter fittings.<sup>8 9</sup>

As shown in table III-8 and III-8A, the financial results of the U.S. DIWF producers reflect different patterns in terms of the level and magnitude of operating income and/or operating losses. In addition to company-specific cost structures and product mix, the reported financial results also appear to reflect basic differences in operating structures.

ACIPCO generated \*\*\* to cover its allocated selling, general, and administrative (SG&A) expenses. ACIPCO's ratio of SG&A expenses to DIWF sales is \*\*\* which appears to be in part due to the fact that it is an employee-owned company. Pursuant to clarification regarding what items should not be included in SG&A, the company \*\*\*.<sup>10</sup> An ACIPCO company official also stated that the company views DIWF \*\*\*.<sup>11</sup>

McWane's overall allocated SG&A expenses were \*\*\*. As noted in a previous section of this report, McWane acquired Tyler in 1995.<sup>12</sup> In 2001, \*\*\*. \*\*\*.<sup>13</sup> \*\*\*.

While overall costs for McWane were characterized by company officials as generally stable, the company did experience \*\*\*. Raw material costs also fluctuated somewhat.<sup>14</sup> \*\*\*. As shown in tables III-10 and III-11, McWane recognized consistent capital expenditures throughout the period which were \*\*\*.<sup>15</sup>

U.S. Pipe generated DIWF \*\*\* which appear to be due to several related causes. \*\*\*. \*\*\*.<sup>16</sup> \*\*\*.

---

<sup>6</sup> \*\*\*. October 29, 2003 fax from \*\*\*, ACIPCO.

<sup>7</sup> For example, \*\*\*. At the conference, McWane officials indicated that in general both the range of production and products sold were about the same from year to year. Conference transcript, p. 99 (Waugaman). Given the relatively wide range covered by the scope of this investigation, a variance analysis is less meaningful than if the products were homogenous. Despite this limitation, a variance analysis is presented in table III-9.

<sup>8</sup> Conference transcript, pp. 178-179 (Saha).

<sup>9</sup> \*\*\*.

<sup>10</sup> \*\*\*. October 1, 2003 telephone interview with \*\*\*, ACIPCO. \*\*\*.

<sup>11</sup> October 1, 2003 telephone interview and October 29, 2003 fax from \*\*\*, ACIPCO.

<sup>12</sup> \*\*\*.

<sup>13</sup> \*\*\*.

<sup>14</sup> A McWane company official stated that "... {t}wo years ago, electric prices were very high, but scrap steel was at a historical level. Electrical prices on a unit basis have come down. Scrap steel prices have gone up. Natural gas is cyclical. Some years it will be very high. Some years it will be very low ... {i}n the last year we've seen a pretty good increase on the scrap steel prices, but overall our costs are relatively stable for the period of time in this investigation." Conference transcript, pp. 132 and 133 (Green).

<sup>15</sup> \*\*\*.

<sup>16</sup> \*\*\* part of U.S. Pipe's overall operations which is itself part of the Industrial Products segment of Walter Industries. U.S. Pipe's primary product is ductile iron pipe which is produced at four plants. Fittings are currently produced at a plant in Chattanooga, TN where valves and hydrants are also produced. As noted previously, until the first quarter of 2003, fittings were also produced by U.S. Pipe at a plant in Anniston, AL.

\*\*\*, <sup>17</sup> \*\*\*, <sup>18</sup> <sup>19</sup> \*\*\*.

### Capital Expenditures, Research and Development Expenses, and Investment in Productive Assets

The responding producers' data on DIWF capital expenditures, research and development (R&D) expenses, and the original cost and book value of property, plant, and equipment are shown in table III-10. Table III-11 presents safety and environmental-related capital expenditures.

McWane reported \*\*\*. McWane's relatively large capital expenditures have been characterized as part of a modernization program after a period in which the company's previous ownership reportedly did not reinvest in the DIWF operations.<sup>20</sup> \*\*\*.<sup>21</sup> The capital expenditures reported by ACIPCO fluctuated, but were generally only somewhat higher than reported depreciation.

**Table III-10**

**DIWF operations: Capital expenditures, research and development (R&D) expenses, and overall value of property, plant, and equipment for fiscal years 1998-2002, January-June 2002, and January-June 2003**

\* \* \* \* \*

**Table III-11**

**DIWF operations: Safety and environmental-related capital expenditures for fiscal years 1998-2002, January-June 2002, and January-June 2003**

\* \* \* \* \*

In several periods, environmental and safety-related capital expenditures represented the majority of total expenditures. \*\*\*. ACIPCO was the \*\*\*. McWane indicated that \*\*\* R&D expenses because the product is mature and is produced to standard product specifications.

### Capital and Investment

The Commission requested U.S. producers to describe any actual or anticipated negative effects due to imports of DIWF from China on their growth, investment, and ability to raise capital or development and production efforts (including efforts to develop a derivative or more advanced version of the product), or the scale of capital investments. Their responses are presented in appendix F.

---

<sup>17</sup> \*\*\*.

<sup>18</sup> \*\*\*.

<sup>19</sup> \*\*\*. October 7, 2003 e-mail from \*\*\*, U.S. Pipe. U.S. Pipe's \*\*\*. October 13, 2003 e-mail from \*\*\*, U.S. Pipe.

<sup>20</sup> A McWane company official stated "{w}e see that pretty regularly prior to acquisition, that the previous owners that would be losing money would not have the access to capital to make the necessary investments to stay in that business, so when we purchased these facilities we put the necessary capital amount that we believe was required in to grow and strengthen the business, versus just harvest it and watch it die." Conference transcript, pp. 98-96 (Green). The acquisition being referenced was McWane's purchase of Tyler in 1995. \*\*\*.

<sup>21</sup> October 1, 2003 telephone interview with \*\*\*.



## **PART IV: THE QUESTION OF THREAT OF MATERIAL INJURY**

### **THE CHINESE INDUSTRY AND MARKET**

The Commission sent foreign producer questionnaires to 48 firms identified in the petition and internet searches. Fourteen producers completed the Commission's questionnaire for their production operations in China, 7 additional exporting firms provided information, 14 firms stated they did not produce or export the subject products, and 13 firms did not respond to the Commission's questionnaires. The Chinese manufacturers and exporters, and their production and exports to the United States during 2002, are presented in table IV-1.

**Table IV-1**

**DIWF: Chinese manufacturers and exporters, U.S. importing firms, production in China, and exports to the United States, by firms, 2002**

\* \* \* \* \*

Information with respect to the DIWF operations of manufacturers/exporters in China were provided by counsel for the Chinese respondents. The data were reported for only DIWF produced to AWWA/ANSI standards, as no ISO-standard products manufactured by the Chinese producers are sold in the U.S. market.<sup>1</sup> In addition, AWWA-standard DIWF are not sold for use in the home market in China.<sup>2</sup> Data on the Chinese industry for DIWF provided by manufacturers in China are presented in table IV-2. Chinese capacity, production, and capacity utilization are graphically presented in figure IV-1.

### **U.S. IMPORTERS' INVENTORIES**

Data on U.S. importers' inventories of DIWF are presented in table IV-3.

### **U.S. IMPORTERS' CURRENT ORDERS**

Through the Commission's questionnaire, U.S. importers were asked whether they had arranged for the importation of the subject DIWF fittings from China for delivery after June 30, 2003. All importers (eight firms) of subject product from China responded in the affirmative, with firms reporting that they plan to take delivery of an estimated 12,705 short tons of DIWF during the remainder of 2003. Table IV-4 provides available semi-annual information (January-June 2002-2003, July-December 2002, and arranged July-December 2003) on subject imports from China for the eight importers.

---

<sup>1</sup> Counsel for SIGMA has reported that DIWF produced to ISO standards cannot be sold in the United States because of safety, compatibility, and interchangeability issues. SIGMA postconference brief, p. 16.

<sup>2</sup> Chinese respondents' postconference brief, attachment A, answer E.1.

Table IV-2

DIWF: Chinese production capacity, production, shipments, and inventories, 1998-2002, January-June 2002, January-June 2003, and projected 2003-04

Item	Actual experience							Projections	
	1998	1999	2000	2001	2002	January-June		2003	2004
						2002	2003		
<b>Quantity (short tons)</b>									
Capacity	***	***	***	34,612	36,568	19,759	18,546	34,043	34,043
Production	***	***	***	25,410	26,637	15,264	12,291	21,908	21,559
End of period inventories	***	***	***	2,192	2,923	1,925	1,363	2,130	2,671
Shipments:									
Internal consumption	***	***	***	0	0	0	0	0	0
Home market	***	***	***	0	0	0	0	0	0
Exports to--									
The United States	***	***	***	23,668	24,658	14,870	13,022	21,289	19,663
All other markets	***	***	***	***	***	***	***	***	***
Total exports	***	***	***	***	***	***	***	***	***
Total shipments	***	***	***	***	***	***	***	***	***
<b>Value (\$1,000)</b>									
Exports to the United States	***	***	***	15,786	16,602	9,758	8,403	14,062	13,144
<b>Unit value (per short ton)</b>									
Exports to the United States	***	***	***	\$667	\$673	\$656	\$645	\$661	\$668
<b>Ratios and shares (percent)</b>									
Capacity utilization	***	***	***	73.4	72.8	77.3	66.3	64.4	63.3
Inventories to production	***	***	***	8.6	11.0	6.3	5.5	9.7	12.4
Inventories to total shipments	***	***	***	***	***	***	***	***	***
Share of total quantity of shipments:									
Internal consumption	***	***	***	0.0	0.0	0.0	0.0	0.0	0.0
Home market	***	***	***	0.0	0.0	0.0	0.0	0.0	0.0
Exports to--									
The United States	***	***	***	***	***	***	***	***	***
All other markets	***	***	***	***	***	***	***	***	***
All export markets	***	***	***	100.0	100.0	100.0	100.0	100.0	100.0

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

Figure IV-1

DIWF: Chinese production capacity, production, and capacity utilization, 1998-2002, and projected 2003-04

\* \* \* \* \*

Table IV-3

DIWF: U.S. importers' end-of-period inventories of imports, 1998-2002, January-June 2002, and January-June 2003

Item	Calendar year					January-June	
	1998	1999	2000	2001	2002	2002	2003
Imports from China:							
Inventories ( <i>short tons</i> )	***	***	6,809	9,848	10,686	11,961	11,998
Ratio to imports ( <i>percent</i> )	***	***	46.1	40.4	42.6	43.4	42.8
Ratio to U.S. shipments of imports ( <i>percent</i> )	***	***	47.5	48.2	46.4	53.5	49.0
Imports from all other sources:							
Inventories ( <i>short tons</i> )	***	***	***	***	***	***	***
Ratio to imports ( <i>percent</i> )	***	***	***	***	***	***	***
Ratio to U.S. shipments of imports ( <i>percent</i> )	***	***	***	***	***	***	***
Imports from all sources:							
Inventories ( <i>short tons</i> )	***	***	***	***	***	***	***
Ratio to imports ( <i>percent</i> )	***	***	***	***	***	***	***
Ratio to U.S. shipments of imports ( <i>percent</i> )	***	***	***	***	***	***	***

Note.—Ratios for January-June periods are based on annualized imports and shipments.

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

Table IV-4

DIWF: U.S. importers' semi-annual imports from China, January-June 2002-2003, July-December 2002, and arranged July-December 2003

\* \* \* \* \*

Respondents have argued that a surge in imports of DIWF from China is highly unlikely because “the bulk of 2003 subject imports already have entered the United States,”<sup>3</sup> and that “imports of DIWF from China are seasonal, and by November the volumes needed to service the lowered demand during the winter months have already entered.”<sup>4</sup> Seasonal trends may be gleaned from a summary of available data regarding imports and the U.S. industry on a semi-annual basis (January 2002-June 2003). Such data are presented in appendix C, table C-2.

<sup>3</sup> Postconference brief of White & Case (SIGMA), p. 5.

<sup>4</sup> Postconference brief of Paul Hastings (Chinese manufacturers), p. 20.





**PART V: THE QUESTION OF THE CAUSAL RELATIONSHIP BETWEEN  
THE ALLEGED INJURY AND IMPORTS**

**U.S. MARKET PENETRATION OF IMPORTS**

Apparent U.S. consumption and U.S. market shares are presented in table V-1 and figure V-1.

**Table V-1**

**DIWF: Market shares of U.S. apparent consumption, 1998-2002, January-June 2002, and January-June 2003**

Item	Calendar year					January-June	
	1998	1999	2000	2001	2002	2002	2003
<b>Quantity (short tons)</b>							
Apparent consumption	116,237	123,039	125,756	127,712	131,110	65,048	68,244
<b>Value (\$1,000)</b>							
Apparent consumption	220,712	230,622	236,778	247,058	241,924	122,585	119,818
<b>Share of quantity (percent)</b>							
U.S. producers' shipments	***	***	***	***	***	***	***
U.S. shipments of imports from--							
China	***	***	11.4	16.0	17.5	17.2	17.9
All other sources	***	***	***	***	***	***	***
Total shipments of imports	***	***	***	***	***	***	***
<b>Share of value (percent)</b>							
U.S. producers' shipments	***	***	***	***	***	***	***
U.S. shipments of imports from--							
China	***	***	12.3	15.3	16.9	17.1	18.1
All other sources	***	***	***	***	***	***	***
Total shipments of imports	***	***	***	***	***	***	***
Source: Compiled from data submitted in response to Commission questionnaires.							

**Figure V-1**

**DIWF: Market shares of U.S. apparent consumption, 1998-2002, January-June 2002, and January-June 2003**

\* \* \* \* \*

## U.S. IMPORTS RELATIVE TO PRODUCTION

Table V-2 and figure V-2 present information regarding the relationship of U.S. imports of DIWF to U.S. production.

**Table V-2**

**DIWF: U.S. production, U.S. imports, and the ratio of U.S. imports to U.S. production, 1998-2002, January-June 2002, and January-June 2003**

Item	Calendar year					January-June	
	1998	1999	2000	2001	2002	2002	2003
U.S. production ( <i>short tons</i> )	***	***	***	***	***	***	***
U.S. imports from--( <i>short tons</i> )							
China	***	***	14,768	24,404	25,070	13,772	14,022
All other sources	***	***	***	***	***	***	***
Total imports	***	***	***	***	***	***	***
Ratio of imports to production- ( <i>percent</i> )							
China	***	***	***	***	***	***	***
All other sources	***	***	***	***	***	***	***
Total imports	***	***	***	***	***	***	***

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

**Figure V-2**

**DIWF: Market shares of shipments and ratios of imports to production for imports from China, 1998-2002, January-June 2002, and January-June 2003**

\* \* \* \* \*

## PRICES AND RELATED INFORMATION

### Market Segments and Channels of Distribution

DIWF are used in water treatment facilities and water pipe lines for homes and businesses. DIWF are usually sold to distributors who in turn sell the DIWF to contractors who use the DIWF in pipeline construction according to local municipal codes. The ultimate end user is the local municipality, and the DIWF ends up as part of that municipality's infrastructure.<sup>1</sup> There are a wide range of diameters and shapes, as well as a division between the more traditional full-bodied DIWF and more recent compact DIWF, with these and other distinctions resulting in over 1,500 possible "configurations" for DIWF.<sup>2</sup> Importers of Chinese DIWF stated that petitioners are strong in the smaller diameters and have some presence in the larger diameters but virtually none in the largest diameters, although the other two

<sup>1</sup> Hearing transcript, pp. 88-89 (Teske).

<sup>2</sup> Conference transcript, p. 72 (Waugaman). Compact DIWF are a majority of the market. See appendix D, table D-1. According to petitioners, the DIWF market moved from compact to full-bodied fittings in the late 1980s due to full-bodied fittings' lighter weight and superior usability. Hearing transcript, pp. 73-75 (Waugaman, Blair, and Rosenthal).

U.S. producers (ACIPCO and U.S. Pipe) do produce these sizes.<sup>3</sup> The data (table D-1) show that U.S. producers are present in all market segments, and always in greater volume than Chinese imports. The McWane companies (petitioners) control approximately 75 percent of the market, with respondents describing producers ACIPCO and U.S. Pipe as a small part of the U.S. industry.<sup>4</sup>

DIWF are sold almost entirely<sup>5</sup> through distribution to “waterworks houses” that specialize in distributing pipe products for water projects.<sup>6</sup> There are over 100 such distributors, some local and others national chains with local branches. (The national chains account for about 50 percent of the national distribution network).<sup>7</sup> \*\*\* stated that the national chains of distributors prefer to buy from McWane because the volume and range produced by McWane assures supply and the availability of nonsubject products. All the waterworks houses and other distributors sell either directly to municipalities or to contractors who sell project services to the municipalities (although a small proportion of DIWF sales go to plumbing contractors).<sup>8</sup>

Domestic producers and importers arrange transportation to distributors. The six producers had few sales within 100 miles of their facilities, but, except for \*\*\*, most producers’ sales were within 1,000 miles of their facilities.<sup>9</sup> Importers also reported that most of their sales were between 100 and 1,000 miles of their facilities, and most reported sales in at least the entire continental United States.<sup>10</sup>

## Supply Considerations

### Domestic Producers

U.S. DIWF producers also produce other products (including ductile iron mechanical joint glands, valve and hydraulic castings, and flanges) on the same equipment that they use for producing DIWF. Respondents allege that producers often bundle these products with DIWF in selling to purchasers.<sup>11</sup> However, the majority of U.S. producers’ foundries are devoted to DIWF.

---

<sup>3</sup> Conference transcript, pp. 170-172 (Saha) and pp. 201-203 (Bhattacharji and Rybacki).

<sup>4</sup> Conference transcript, p. 161 (Rybacki).

<sup>5</sup> SIGMA estimated that 10 percent was sold directly from producers to end users and the rest of the market is through distributors. Conference transcript, p. 196 (Rybacki). Purchaser (distributor) C.I. Thornburg stated that it had lost business when Clow sold DIWF directly to producers. Hearing transcript, p. 187 (Morrison).

<sup>6</sup> Conference transcript, p. 25 (Waugaman).

<sup>7</sup> Conference transcript, pp. 80-83 (Waugaman) and 196 (Rybacki). At the hearing, SIGMA said that three purchasers, Hughes Supply, Ferguson, and National Waterworks, account for 50 percent of the market, and that importers can not sell to these three chains because McWane’s loyalty clauses and municipalities’ “Buy America” provisions prevent those purchasers from serving some markets with imports if McWane retaliates in “Buy America” markets. Hearing transcript, pp. 173-176 (Rybacki).

<sup>8</sup> Conference transcript, p. 105 (Waugaman).

<sup>9</sup> \*\*\* reported that it mainly served the Midwest, but does ship throughout the United States. \*\*\* reported national sales, while \*\*\* said its sales were mainly east of the Mississippi River.

<sup>10</sup> The exceptions were \*\*\*. At the conference, PCI described importers as mostly serving coastal customers due to high transportation costs inland. Conference transcript, p. 198 (Saha). \*\*\* submitted both a producers’ and importers’ questionnaire; \*\*\* answers have been counted with the producers for purposes of this chapter, and \*\*\* did not answer the anecdotal questions.

<sup>11</sup> Conference transcript, p. 162 (Rybacki). Petitioners stated that Tyler and Union never sell their DIWF bundled with their other ductile pipe products, in part because their DIWF are installed more often to plastic pipe than to metal pipe, and the petitioners do not produce plastic pipe. Hearing transcript, pp. 34 (Green) and 67 (Waugaman).

(continued...)

Domestic producers showed significant unused capacity from 1998 through June 2003. Domestic producers reported that they export a small percentage of their total production. Petitioners (as well as respondents) stated that they like to maintain high inventories as a means of ensuring deliveries. Sales are generally out of inventories, not made to order.<sup>12</sup> Thus, a lack of export markets constrains U.S. producers' supply response; however, U.S. producers have moderate ability to respond to changes in price with increased production because of the availability of some unused capacity and some production substitution potential. In addition, the existence of substantial inventories might allow some short-run increase in shipments; however, high inventories are a condition of competition in the DIWF market, and perhaps not too much should be assumed from high levels of inventories.

Purchasers were asked to report inventories from 1998 through 2002. Of purchasers who responded to the question, fifteen reported increasing inventories from 1998 through 2002, while three reported decreasing inventories over the same period. From 2000 through 2002, fourteen purchasers reported increasing inventories while four reported decreasing inventories.<sup>13</sup>

### **Subject Imports**

Chinese imports of DIWF grew during January 1998-June 2003, but the acceleration slowed over 2001-June 2003. Chinese imports remain a smaller part of the U.S. market than domestic producer shipments, accounting for \*\*\* of all U.S. consumption during the period examined.

Importers' inventories of Chinese DIWF grew from 1998 through 2002. Like producers, importers make sales out of inventories. SIGMA stated that it imports 55 percent of its shipments in the first half of the year in order to have adequate inventories for seasonal demand in mid-year.<sup>14</sup>

While no U.S. producers reported any changes in the product range or marketing of DIWF (other than price declines to meet Chinese import competition), importers described a gradual market shift from full body to compact fittings, especially in sizes above 30 inches. The AWWA has added standards for these fittings in the 30 to 48 inch diameter range (previously the maximum diameter covered by the AWWA for DIWF was 24 inches). \*\*\* described Chinese importers as developing these markets before petitioners, who (according to importers) also need to import to meet new market demands for such larger diameter and compact DIWF.

In addition, importers described their market niche as one that values superior service<sup>15</sup> (including \*\*\*) and just-in-time delivery.<sup>16</sup>

---

<sup>11</sup> (...continued)

However, other U.S. producers, including at least Clow and U.S. Pipe, do sell DIWF as part of a package with other pipe products, although not always. DIWF sold to distributors is generally sold independently of other products, while DIWF sold to contractors is more likely to be sold as part of a package. Hearing transcript, p. 69 (Teske) and pp. 68-69 (Murray and Waugaman).

<sup>12</sup> Conference transcript, p. 33 (Teske) and p. 100 (Green).

<sup>13</sup> ACIPCO, Clow, Tyler, Star, U.S. Pipe, and Union all submitted purchaser questionnaires. For purposes of this analysis, their reported inventories were not included.

<sup>14</sup> Conference transcript, p. 165 (Rybacki).

<sup>15</sup> Conference transcript, p. 172 (Saha).

<sup>16</sup> However, from the purchaser responses and pricing data presented later in this chapter, it does not appear that importers charge more for these alleged advantages.

## Nonsubject Imports

The major source of imported DIWF is China, but other import sources include Brazil, Korea, India, and Mexico. Petitioners described nonsubject imports as a problem, but less of a problem than Chinese DIWF.<sup>17</sup>

Importers Star and SIGMA stated that they currently import from India (as well as Mexico and Korea for SIGMA).<sup>18</sup> They stated that if large tariffs were imposed on Chinese imports of DIWF, it would take up to a year for nonsubject foundries to be able to fill their orders.<sup>19</sup> They added that the fact that most of their orders of Chinese DIWF are usually filled by this time of year (fall), there would be even less effect from any 421 tariff.<sup>20</sup>

## Demand Considerations

Demand for DIWF is heavily associated with housing starts and other construction starts, since these new construction activities will require water and water pipes. There is some seasonality in demand due to the relative ease of construction in the summer versus the winter in the North.<sup>21</sup> DIWF are mostly used in underground pipe connections for water and sewer lines, but sewer treatment plants are also significant end users.<sup>22</sup> DIWF represents a small (2 to 10 percent) portion of the overall cost of such water projects.

## Demand Trends

Producers and importers agreed that demand for DIWF had been strong since 1998, reflecting a strong construction market for new homes. Some firms, however, reported a recent slowing of DIWF demand connected to slowing construction nationally.<sup>23</sup>

Among producers, \*\*\* described demand shifting from the higher-priced full-bodied to lower-priced compact DIWF. \*\*\* cited new housing construction, new commercial construction, and increased water treatment plants as factors that had increased demand. \*\*\* described the market for DIWF as increasing from 1998-2000 (reaching a five year high) and then decreasing at 4 percent a year until the present, chiefly due to demand for water construction projects. \*\*\* described demand as stable over 1998 through June 2003, and estimated the level at 180,000 to 200,000 tons per year. \*\*\* described demand changes since 1998 as slight and based on economic conditions, especially housing starts and interest rates.

Among importers, \*\*\* described the market growing from 1998 through 2000 or 2001, and flattening since then. \*\*\* also described a rise in demand from 1998 to 2001, and attributed the growth to *low interest rates and increasing homebuilding and private developments*, as well as the "Clean Water Act" of the late 1990s prompting more construction or renovation of water treatment plants. It described the private development demand sector falling since 2001, while stating that demand from the

---

<sup>17</sup> Conference transcript, pp. 53-54 (Rosenthal).

<sup>18</sup> Conference transcript, pp. 193-195 (Bhattacharji and Saha).

<sup>19</sup> Hearing transcript, p. 249 (McCutcheon).

<sup>20</sup> Conference transcript, p. 165 (Rybacki).

<sup>21</sup> Conference transcript, p. 100 (Waugaman), p. 105 (Kerwin), and p. 173 (Saha).

<sup>22</sup> Conference transcript, pp. 83-84 (Waugaman).

<sup>23</sup> SIGMA, for example, described the construction market as flat since 2000. Conference transcript, p. 163 (Rybacki).

government treatment plant market has remained strong. \*\*\* described similar conditions with some sectors slowing since 2000. It added that compliance with the Clean Water Act has meant more demand for DIWF with diameters of more than 36 inches.

### **Substitute Products**

Neither producers nor importers described substitute products as having a large effect on their sales of DIWF. Producers and importers named PVC (especially in diameters under 4 inches), gray iron full bodied waterworks fittings, steel fabricated fittings (especially in diameters 24 inches and up), and welded outlet pipe as sometime substitutes. \*\*\* explained that PVC fittings can be used with PVC pipe, but that even for use with PVC pipe, many municipalities specify DIWF because of its greater durability over PVC fittings. According to \*\*\*, greater durability is also the reason DIWF has become preferred to gray iron fittings.

### **Lead Times**

Among domestic producers and importers, \*\*\* reported that stock items were shipped in a matter of days, although \*\*\* stated that DIWF \*\*\* would take from one week to 16 weeks. \*\*\* reported lead times of three weeks, and \*\*\* added that made-to-order items would take 4 to 6 weeks.<sup>24</sup> \*\*\* reported lead times of 60 days.

### **Substitutability Issues**

Chinese and U.S. DIWF are basically interchangeable, since all are made to the same AWWA specifications.<sup>25</sup> Six producers and seven importers reported that U.S., Chinese, and nonsubject DIWF are used interchangeably. With regard to nonsubject DIWF, six producers and seven importers stated that U.S. and nonsubject, as well as Chinese and nonsubject, DIWF are used interchangeably.

When asked about significant differences between U.S. and Chinese DIWF, two producers stated that even though U.S. DIWF have more consistent quality and higher availability of test information, those advantages were not enough to prevent customers from buying imported DIWF that met AWWA specifications. All the producers believed there were no differences between U.S., Chinese, and nonsubject imports that were a significant factor in sales. Five importers, on the other hand, did cite "Buy American" provisions, U.S. producers' advantages with large distributor networks, and their own self-described advantages in quality and technical support as significant factors in sales. However, seven importers stated that there were no differences between Chinese and nonsubject imports that were a significant factor in sales.

Since the ultimate end user of DIWF is usually a municipality, some DIWF are bought under "Buy American" provisions. Petitioners stated that some localities have been moving away from such

---

<sup>24</sup> In addition, petitioners alleged that respondents send out a "route truck" for immediate orders, charge low prices for these sales, and do not charge freight on even small orders. SIGMA agreed with the basics of the allegation, but disputed the lack of freight on the smallest orders and described the sales as limited to the southeastern United States. Conference transcript, p. 32 (Blair) and pp. 197-198 (Rybacki).

<sup>25</sup> DIWF are made according to AWWA standards in the United States, and ISO standards in Europe and South America. Respondents described AWWA standards as stricter than ISO standards, but both AWWA and ISO specifications are based on the pattern used for the DIWF. Hearing transcript, p. 248 (Rybacki), and SIGMA postconference brief, pp. 16-18. Thus, while ISO and AWWA DIWF may not always be substitutable at the consumer level, at the production level it is a matter of changing the pattern in order to produce ISO or AWWA specifications.

provisions lately due to lower priced imports.<sup>26</sup> They also stated that “Buy American” provisions are often in effect only if the price difference between U.S. and imported DIWF is within a certain range, and that since Chinese DIWF are often much lower priced, such provisions do not always hold.<sup>27</sup> Respondents stated that petitioners’ use of “loyalty programs” means that distributors that wish to supply “Buy American” municipalities as even a minority of their customers must purchase all their DIWF from McWane in order to serve those areas.<sup>28</sup> Petitioners estimate that \*\*\* only domestically produced DIWF.<sup>29</sup> They also estimated that about 10 percent of the national DIWF market is restricted by domestic preference specifications at the state and local level (in addition to any Federal construction under the Buy America Act).<sup>30</sup> \*\*\* estimates that 10 to 20 percent of the national DIWF market is restricted by these domestic preference specifications.<sup>31</sup> However, East Jordan Ironworks, while acknowledging that some purchases have a preference for U.S.-produced DIWF, stated that these preferences are usually not legal requirements, but rather issues of U.S. producers being the traditional suppliers or the market standard. It added that such preferences are under pressure right now because municipalities are under tighter budgets and looking for ways to cut costs.<sup>32</sup>

## U.S. Purchasers

The Commission received responses from 29 purchasers. Eighteen purchasers described themselves as at least sometimes a “waterworks house.” The other purchasers also described themselves as DIWF distributors, though possibly as a supplement to flange production or their own DIWF production.<sup>33</sup> Most purchasers expressed enough familiarity with both U.S. and Chinese DIWF to compare them, although not all of them had actually purchased both recently. Nineteen purchasers stated that they were always aware of whether the DIWF they purchased was U.S.-produced or imported, and seven said that they were usually aware. They were slightly less likely to know the manufacturer of the DIWF they purchased, with eleven reporting that they were always aware of who the manufacturer was, five reporting they were usually aware, six reporting they were sometimes aware, and three reporting they were never aware. One additional purchaser said he was usually aware of who the producer was for domestic purchases, but never for purchases of imports. Purchasers felt their customers were less likely to be aware and/or interested in the country of origin of the DIWF they purchased. Five stated their

---

<sup>26</sup> Conference transcript, pp. 85-86 (Waugaman).

<sup>27</sup> See also “lost sales” section, lost sale allegation involving \*\*\*.

<sup>28</sup> As examples, \*\*\* cited the states of Pennsylvania and New Jersey and utilities like Washington Suburban Sewer and Sanitary Commission (WSSC). Also see conference transcript, pp. 180-181 (McCutcheon).

<sup>29</sup> Petitioners’ postconference brief, response to questions, p. 9.

<sup>30</sup> In addition, petitioners stated that “firm” “Buy America” provisions exist only in Pennsylvania. Petitioners’ prehearing brief, pp. 33-34.

<sup>31</sup> See \*\*\*. In addition, PCI cited states that it said had “Buy America” provisions on page 9 of its postconference brief.

<sup>32</sup> Hearing transcript, pp. 54 and 63-65 (Teske).

<sup>33</sup> In some of the discussions that follow, the number of purchasers responding to a question may add up to less than 29. Not all purchasers gave usable answers to every question. Among the 29 purchasers, \*\*\*, but did not answer the anecdotal questions. One, \*\*\*, is also a respondent importer, and \*\*\*, are \*\*\*. Producers and importers purchase DIWF to supplement their product lines.

customers were always aware, eight said they were usually aware, 12 said they were sometimes aware, and one said they were never aware.<sup>34</sup>

When asked if they were aware of any new suppliers in the U.S. DIWF market, eight purchasers cited PCI, two cited ACIPCO, and one cited Mexican producer Metalfit. Twelve purchasers said that they were not aware of any new suppliers.

Twenty-three purchasers stated that U.S. and Chinese DIWF are generally used in the same applications, with the others not answering or \*\*\*. When asked if DIWF are only available from a single source, 17 purchasers said no (although \*\*\*). However, six purchasers said that larger diameters (greater than 36 inches) were only available from non-petitioners, with three purchasers citing other U.S. producers and three citing Chinese imports.<sup>35</sup>

Eleven purchasers reported increasing relative purchases of Chinese DIWF and/or decreasing relative purchases of U.S. DIWF, citing extended size ranges, pricing, availability, improved quality, higher demand, and U.S. producers not selling to them for competitive reasons.<sup>36</sup> \*\*\*.<sup>37</sup> Three purchasers who had purchased only from U.S. suppliers cited long term support from domestic producers, convenience, traditional source, and end user acceptance. \*\*\* stated that they purchase only imports as U.S. producers will not supply them because \*\*\*.

When asked if they had changed suppliers, eleven purchasers reported at least one change. Among those changes, \*\*\* dropped Griffin when it closed its Mexico plant. \*\*\* added SIGMA, Linx, Tyler, and Union due to market price pressures, especially in smaller diameter fittings. \*\*\* reported adding Star and decreasing purchases from Tyler when Tyler found out that \*\*\* had purchased imported fittings and thus instituted higher pricing. (\*\*\*) \*\*\* also described Tyler's DIWF as inferior quality and Tyler as an unreliable source of supply, while describing Star as having a better quality product, better product availability, better service, and lower prices. \*\*\* said that it added SIGMA and PCI and dropped Union and Tyler due to quality and availability issues. \*\*\* stated that it added \*\*\* while dropping \*\*\*. \*\*\* also reported adding \*\*\*. \*\*\*.

Purchasers were also asked to report purchases of DIWF from 1998 through June 2003. For the period 1998 through 2002, four purchasers who reported purchases of both U.S. and Chinese DIWF showed an increase in their purchases of Chinese DIWF (by value) with a simultaneous decrease in their purchases of U.S. DIWF, while two showed an increase in their purchases of U.S. DIWF and a simultaneous decrease in their purchases of Chinese DIWF.<sup>38</sup> Ten purchasers who reported purchases of both U.S. and Chinese DIWF showed a larger percentage increase (or lower decrease) in purchases of Chinese DIWF than in purchases of U.S. DIWF, and two showed the opposite.<sup>39</sup>

---

<sup>34</sup> Of the four who said their customers were always aware of the country of origin of the DIWF they purchased, three were \*\*\*, and hence not typical waterworks houses.

<sup>35</sup> In addition, purchaser \*\*\* stated that importers Star and SIGMA were superior to U.S. producer Tyler in the availability of large diameter DIWF.

<sup>36</sup> See "lost sales" section, lost sale allegation involving \*\*\*. Purchaser \*\*\* also reported a domestic firm offering discounts only if they purchased all their DIWF from that firm.

<sup>37</sup> \*\*\*.

<sup>38</sup> This analysis was performed only on purchasers not affiliated with U.S. producers or importers.

<sup>39</sup> For the period 2000 through 2002, the results are slightly different. Five purchasers showed an increase in their purchases of Chinese DIWF with a simultaneous decrease in their purchases of U.S. DIWF, while none showed an increase in its purchases of U.S. DIWF and a simultaneous decrease in its purchases of Chinese DIWF. Twelve purchasers who reported purchases of both U.S. and Chinese DIWF showed a larger percentage increase (or lower decrease) in purchases of Chinese DIWF than in purchases of U.S. DIWF, while two showed the opposite.



DIWF purchasers do qualify suppliers. Qualification of new suppliers was based on many factors, including quality of product, availability, product range, price, reputation, and acceptance by end user. Qualification can take weeks to even multiple years depending on the purchaser.

### Factors Affecting Purchasing Decisions

Available data indicate that availability and quality are the most important factors that influence purchasing decisions for DIWF.<sup>40</sup> Purchasers were asked to list the top three factors that they consider when choosing a supplier of DIWF. Table V-3 summarizes responses to this question. Purchasers were also asked to describe the importance of various purchasing factors, as summarized in table V-4. Most purchasers did not report that price was as critical a purchasing factor as others. However, while quality (meeting specification) was reported as "very important" by most purchasers, quality (exceeding specifications) was not considered as important.<sup>41</sup>

**Table V-3**  
**DIWF: Ranking of purchasing factors by purchasers**

Factor	Number of firms reporting		
	Number 1 factor	Number 2 factor	Number 3 factor
Quality	8	5	4
Availability	5	9	2
Price	2	2	12
Traditional supplier	3	2	0
Existing contract	3	0	1
End user acceptance/ domestic requirement	3	2	1
Range	0	2	3
Delivery	0	2	1

Note.--Other factors mentioned include fill rate, service (three times), relationship, information, and responsiveness. These answers were not included above.

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

<sup>40</sup> When asked what defines the quality of DIWF, purchasers cited the product appearance, meeting AWWA standards, service, reputation, product history, and customer perception.

<sup>41</sup> When asked how often they purchased the lowest priced DIWF available, 19 purchasers said sometimes, six said usually, and one said never.

**Table V-4**  
**DIWF: Importance of purchasing factors**

Factor	Average importance score <sup>1</sup>	Factor	Average importance score <sup>1</sup>
Availability	2.9	Product quality- meeting specs	3.0
Delivery terms	2.6	Product quality- exceeding specs	2.1
Delivery time	2.9	Product range	2.6
Discounts offered	2.5	Reliability of supply	3.0
Lowest price	2.4	Technical support	2.3
Minimum quantity requirements	2.0	Transportation network	2.0
Packaging	1.8	U.S. transportation costs	2.0
Product consistency	2.9		

<sup>1</sup> 3 = very important, 2 = somewhat important, 1 = not important.

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

Summaries of purchaser comparisons of domestic, subject, and nonsubject DIWF are presented in table V-5. Based on responses, purchasers consider U.S., Chinese, and nonsubject DIWF as comparable in most factors although Chinese DIWF are regarded as less expensive. Thus, although price was not given a high relative importance in table V-3, it is clearly the factor of greatest perceived contrast between U.S. and Chinese DIWF.

**Table V-5**

**DIWF: Number of purchasers' comparisons of U.S. product and imports**

Factor	U.S. vs. China <sup>1</sup>			U.S. vs. nonsubject <sup>1</sup>			China vs. nonsubject <sup>1</sup>		
	S	C	I	S	C	I	S	C	I
Availability	4	12	7	2	12	7	0	4	0
Delivery terms	2	15	6	2	16	3	0	4	0
Delivery time	4	12	7	6	10	5	0	4	0
Discounts offered	0	15	8	1	15	5	1	3	0
Lowest price <sup>2</sup>	0	7	16	0	7	14	2	2	0
Minimum quantity requirements	1	15	7	0	16	5	0	4	0
Packaging	0	22	1	1	20	0	0	4	0
Product consistency	1	16	6	0	13	8	0	4	0
Product quality- meeting specs	1	16	6	1	16	4	0	4	0
Product quality- exceeding specs	3	15	5	1	18	2	0	4	0
Product range	2	16	5	2	15	4	0	2	2
Reliability of supply	5	12	6	3	13	5	1	2	1
Technical support	8	12	3	5	13	3	0	2	2
Transportation network	3	15	4	1	19	1	0	4	0
U.S. transportation costs	1	20	0	0	19	0	0	4	0

<sup>1</sup> S = first named source superior, C = products comparable, I = first named source inferior.

<sup>2</sup> A rating of superior means that the price is generally lower. For example, if a firm reports "U.S. superior," it means that the price of the U.S. product is generally lower than the price of the imported product.

Note- "Nonsubject" are Brazil, India, Korea, Mexico, and Venezuela. \*\*\* also mentioned "willing to sell" as an area in which U.S.-produced DIWF are inferior to Chinese imports. \*\*\*. \*\*\* compared Tyler to Star and SIGMA separately. It listed SIGMA first in its supplier list, and so the SIGMA comparisons were used in the tabulation above. Several purchasers (as well as \*\*\*) noted that some importers sell all their imported DIWF out of the same inventory, and do not distinguish between DIWF from China or nonsubject countries. When this lack of distinction was recorded, staff tabulated the results in both the China and nonsubject comparisons above. However, it should be noted that this lack of distinction may have occurred in other cases where purchasers did not note it or only marked "China."

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

**Elasticity Estimates**

Elasticity estimates are discussed below and may be used in the preparation of remedy recommendations.

**U.S. Supply Elasticity**

The domestic supply elasticity for DIWF depends on factors such as the level of excess capacity, the ability to shift production to alternate products, and the availability of alternate markets. Producers have rising inventories and low capacity utilization, but limited alternative production possibilities and no major exports. Analysis of these factors indicates that the domestic producers of DIWF have some ability to alter domestic shipments in response to a change in the relative price of DIWF. An estimate in the range of 4 to 8 is suggested.

## **U.S. Demand Elasticity**

The U.S. demand elasticity for DIWF depends on the availability of substitute products as well as the share of DIWF in the production cost of downstream products. There are few substitutes for DIWF, and DIWF are a small part of a water project's cost. Based on the available information, the aggregate demand for DIWF is likely to be relatively inelastic. An estimate in the range of 0.2 to 0.4 is suggested.

## **Substitution Elasticity**

The elasticity of substitution depends on the extent of product differentiation between the domestic and imported products. Product differentiation depends on factors such as the range of products produced, quality, availability, and the reliability of supply. Based on available information, Chinese DIWF are substitutable for domestic DIWF for both the AWWA-certified small diameter DIWF that comprise the bulk of the U.S. DIWF market and the larger diameter DIWF. Based on these factors, staff estimates the substitution elasticity between domestic DIWF and those imported from China to be in the range of 10 to 15.<sup>42</sup>

## **Factors Affecting Pricing**

### **Exchange Rates**

The nominal value of the Chinese yuan relative to the U.S. dollar has remained virtually unchanged since the first quarter of 1998, at 8.28 yuan per dollar.

### **Tariff Rates and Transportation Costs to the U.S. Market**

The U.S. normal trade relations *ad valorem* import duty rate was 5.6 percent for imports of all cast ductile iron or steel fittings for tubes or pipes under HTS subheading 7307.19.30 during January 1999-June 2003.<sup>43</sup> Such goods that are the product of China, which include DIWF, have been subject to these rates during these periods.<sup>44</sup> Transportation charges for imports of DIWF (a subset of the products under the above HTS rate line) from China to the U.S. ports of entry, as a share of declared import values, averaged 15.3 percent during July 2002-June 2003, the most recent 12-month period for which

---

<sup>42</sup> Star described such a range as "unusually high." Prehearing brief of Star, p. 12. However, staff notes that a range of 10-15 represents products that are highly substitutable. Information gathered in this investigation, such as the fact that DIWF must conform to AWWA specifications, support such an estimate. Star's objections center on the use of the pricing data to test staff's estimates. However, staff notes that Star's analysis does not take into account demand growth that may have been occurring in 2002 (and has since diminished).

<sup>43</sup> The import duty rate was 5.7 percent during 1998. The 5.6 rate, effective as of Jan. 1, 1999, is the final scheduled staged reduction of the NTR rate as a result of Uruguay Round concessions.

<sup>44</sup> Under the NAFTA Canada/Mexico Preference, cast ductile iron or steel fittings for tubes or pipes imported from Canada and Mexico under the above HTS subheading qualifying for North American treatment were accorded a free duty rate during January 1998-June 2003. In addition, under the Jordan FTA preference, the import duty rate for imports of these products was 4.2 *ad valorem* percent beginning in 2001, 2.8 percent in 2002, and 1.4 percent in 2003; a free import duty rate will apply starting in January 2004.

data were available. A U.S. antidumping duty order was in place on DIWF from China during January 1998-January 2000,<sup>45</sup> and Commerce revoked the order on January 24, 2000.

### Pricing Practices

Domestic producers and importers reported that pricing is usually based on transaction-by-transaction negotiation off of a price list, usually based on the published McWane price list. This price list is used in conjunction with discounts through a “multiplier” that varies from one local region to another. Price competition actually occurs in terms of quoting multipliers off of the widely available price lists. (This multiplier is often less than 0.5, meaning that real price levels bear little relation to the quoted prices on price lists.)<sup>46</sup> Petitioners stated that while there have been list price increases in recent years, multiplier decreases have often overwhelmed these increases.<sup>47</sup> Importers and \*\*\* stated that they also determine prices by taking a market discount off the McWane price list. Several importers (including \*\*\*) issue their own price lists, but admit that such lists are not very different from the McWane price list. Some importers reported limited use of volume discounts.

Petitioners also offer “loyalty rebates” to customers who purchase only from McWane, and especially to those who do not purchase imports. Respondents stated that these loyalty rebates sometimes reach 17 percent and result in less expensive U.S. product than imported product. Respondents added that such loyalty rebates are sometimes selectively enforced, with larger purchasers allowed to purchase imported DIWF without penalty.<sup>48</sup> Petitioner stated that such rebates are currently in the range of \*\*\* percent.<sup>49</sup>

While DIWF prices to waterworks houses may vary by supplier and/or country of origin, the contractors and municipalities that purchase DIWF from distributors do not pay different prices for DIWF from different countries or manufacturers.<sup>50</sup>

All U.S. producers reported that over \*\*\* percent of their sales were spot sales. For the producers’ \*\*\* contracts, the duration was typically one year, the contract fixed price only, and there were no standard minimum quantity requirements. Six of seven importers reported 100 percent of their sales were spot, with \*\*\* reporting 100 percent contract sales. \*\*\* all reported that their sales are on a delivered basis.

Producers and importers stated that DIWF are usually priced to distributors on a delivered basis from producers, with shipment usually arranged by the producer or importer. U.S. inland transportation accounts for a small share of the cost of DIWF, with producers and importers reporting transportation

---

<sup>45</sup> The largest Chinese producer was excluded from the antidumping duty during this period because the Commerce Department determined that the firm’s separate rate was *de minimis*.

<sup>46</sup> Conference transcript, pp. 25-27 (Waugaman) and pp. 30-31 (Blair). See also lost sales allegations of \*\*\*. As an example, if the multiplier is 0.3 and the list price is \$100, then the transaction price is \$30.

<sup>47</sup> Conference transcript, pp. 123-124 (Waugaman). Respondents alleged that McWane raised prices four to five percent in November 2002 and raised prices multiple times in 2003. These alleged increases would be price list increases, though, and not de facto increases. Conference transcript, p. 163 (Rybacki) and p. 174 (Saha). They also provided information about list price increases from their own firms in the SIGMA postconference brief, pp. 7-8. More information about the timing of U.S. producer multiplier decreases is available in petitioners’ postconference brief, exhibit 6. Discounts off of the list price for DIWF can also vary by region. McWane estimates that its discounts range from 52 to 71 percent off of the list price, by region. Hearing transcript, pp. 66-67 (Waugaman).

<sup>48</sup> Hearing transcript, p. 187 (Morrison).

<sup>49</sup> \*\*\*.

<sup>50</sup> Hearing transcript, p. 134 (Waugaman) and p. 135 (Green).

costs generally between two and eight percent. Purchasers also generally reported transportation costs in this range when they were aware of them.

Thirteen purchasers reported weekly purchases, nine reported daily purchases, and three reported monthly purchases.<sup>51</sup> Six purchasers reported contacting only one supplier for a typical order and thirteen reported contacting one to four suppliers. Two additional purchasers stated that they usually purchased from the same suppliers. Only two purchasers (\*\*\*) said that price is always a component of purchase volume. Other purchasers were more likely to say they rarely, infrequently, or never vary purchase volumes based on price. When asked how frequently price changes, purchasers responded with a wide variety of answers, from once a year to five times a year.<sup>52</sup>

Producers, importers, and some purchasers disagreed about who had led DIWF prices down over the last five years. Petitioners stated that importers had never raised prices independently of a McWane price increase until right before the Commission staff conference in October 2003.<sup>53</sup> On the other hand, purchaser Groeniger stated that McWane had led prices down in California, and importers stated that McWane led prices lower in areas of the country where imports were present (especially the Southeast and Texas) while maintaining high prices in areas where imports were not present (the upper Northwest).<sup>54</sup>

Regarding the prices of nonsubject imports, respondents described Indian DIWF as close to or lower priced than Chinese DIWF, with Mexican and Korean DIWF slightly higher priced than Chinese DIWF.<sup>55</sup>

### Price Data

The Commission requested quarterly data for the total quantity and value of commercial shipments of five DIWF products. Data were requested for the period January 1998 through June 2003. The products for which pricing data were requested are as follows:

**Product 1.**— Compact ductile iron (ASTM A536) mechanical joint 45 degree bend, 6 inch nominal diameter, without accessories, conforming to AWWA/ANSI specification C153/A21.53, cement-lined, tar-coated, rated for waterworking pressure of 350 PSI.

**Product 2.**— Compact ductile iron (ASTM A536) mechanical joint 90 degree bend, 6 inch nominal diameter, without accessories, conforming to AWWA/ANSI specification C153/A21.53, cement-lined, tar-coated, rated for waterworking pressure of 350 PSI.

**Product 3.**— Compact ductile iron (ASTM A536) mechanical joint tee, 6 inch nominal diameter (6 inch by 6 inch tee), without accessories, conforming to AWWA/ANSI specification C153/A21.53, cement-lined, tar-coated, rated for waterworking pressure of 350 PSI.

**Product 4.**— Compact ductile iron (ASTM A536) mechanical joint 45 degree bend, 8 inch nominal diameter, without accessories, conforming to AWWA/ANSI specification C153/A21.53, cement-lined, tar-coated, rated for waterworking pressure of 350 PSI.

---

<sup>51</sup> None of the purchasers who reported monthly purchases were waterworks houses.

<sup>52</sup> \*\*\*.

<sup>53</sup> Hearing transcript, p. 153 (Waugaman).

<sup>54</sup> Hearing transcript, pp. 188-190 (Groeniger), pp. 197 and 244 (Saha), and p. 245 (McCutcheon).

<sup>55</sup> Hearing transcript, pp. 268-269 (Rybacki and Saha).

**Product 5.**—Full-bodied ductile iron (ASTM A536) mechanical joint 90 degree bend, 8 inch nominal diameter, without accessories, conforming to AWWA/ANSI specification C110/21.10, cement-lined, tar-coated, rated for waterworking pressure of 350 PSI.

Four U.S. producers<sup>56</sup> and three importers<sup>57</sup> provided usable pricing data for sales of the requested products in the U.S. market, although not all firms reported pricing data for all products for all quarters. In general, most producers' reported prices were close to their fellow producers' reported prices, and importers' reported prices were close to other importers' reported prices. The reported price data accounted for 4.6 percent of the 2002 value of domestically produced commercial shipments of DIWF, as well as 5.0 percent of the 2002 value of shipments of imports of DIWF from China. Data on reported weighted-average selling prices and quantities for products 1 through 5 are presented in tables V-6 through V-10, and figures V-3 through V-12. Table V-11 shows the extent of U.S. and Chinese DIWF price declines over different periods. Due to some potential seasonality in the data, the comparisons in table V-11 are made using second quarter data from each year.

Products 1 through 4 are typical compact DIWF suggested by petitioners. Product 5 is a full-bodied DIWF suggested by petitioners and was also used in the previous Commission investigation. As shown in tables V-6 through V-10 and figures V-3 through V-12, as well as table V-11, U.S. and Chinese prices for DIWF show a similar pattern over multiple periods investigated: a consistently higher U.S. price and an increase in the volume of Chinese shipments. As shown in table V-11, U.S. and Chinese prices have generally declined since 1998, 2000, and 2002, but not for all products in all periods examined.

Chinese DIWF always undersold U.S. DIWF in all quarters for all products. In product 1, margins of underselling ranged from 14.4 to 21.4 percent. For product 2, margins of underselling ranged from 16.6 to 23.1 percent. For product 3, margins of underselling ranged from 17.1 to 32.8 percent. For product 4, margins of underselling ranged from 11.1 to 22.9 percent. For product 5, margins of underselling ranged from 6.3 to 23.4 percent.

**Table V-6**

**DIWF: Weighted-average selling prices and quantities as reported by U.S. producers and importers of product 1 from China, with margins of underselling, by quarters, January 1998-June 2003**

\* \* \* \* \*

**Figure V-3**

**DIWF: Weighted-average selling prices as reported by U.S. producers and importers of product 1 from China, by quarters, January 1998-June 2003**

\* \* \* \* \*

**Figure V-4**

**DIWF: Quantities as reported by U.S. producers and importers of product 1 from China, by quarters, January 1998-June 2003**

\* \* \* \* \*

---

<sup>56</sup> \*\*\*. The four U.S. producers whose data were used are the \*\*\*.

<sup>57</sup> \*\*\*.

**Table V-7**

**DIWF: Weighted-average selling prices and quantities as reported by U.S. producers and importers of product 2 from China, with margins of underselling, by quarters, January 1998-June 2003**

\* \* \* \* \*

**Figure V-5**

**DIWF: Weighted-average selling prices as reported by U.S. producers and importers of product 2 from China, by quarters, January 1998-June 2003**

\* \* \* \* \*

**Figure V-6**

**DIWF: Quantities as reported by U.S. producers and importers of product 2 from China, by quarters, January 1998-June 2003**

\* \* \* \* \*

**Table V-8**

**DIWF: Weighted-average selling prices and quantities as reported by U.S. producers and importers of product 3 from China, with margins of underselling, by quarters, January 1998-June 2003**

\* \* \* \* \*

**Figure V-7**

**DIWF: Weighted-average selling prices as reported by U.S. producers and importers of product 3 from China, by quarters, January 1998-June 2003**

\* \* \* \* \*

**Figure V-8**

**DIWF: Quantities as reported by U.S. producers and importers of product 3 from China, by quarters, January 1998-June 2003**

\* \* \* \* \*

**Table V-9**

**DIWF: Weighted-average selling prices and quantities as reported by U.S. producers and importers of product 4 from China, with margins of underselling, by quarters, January 1998-June 2003**

\* \* \* \* \*

**Figure V-9**

**DIWF: Weighted-average selling prices as reported by U.S. producers and importers of product 4 from China, by quarters, January 1998-June 2003**

\* \* \* \* \*



**Figure V-10**

**DIWF: Quantities as reported by U.S. producers and importers of product 4 from China, by quarters, January 1998-June 2003**

\* \* \* \* \*

**Table V-10**

**DIWF: Weighted-average selling prices and quantities as reported by U.S. producers and importers of product 5 from China, with margins of underselling, by quarters, January 1998-June 2003**

\* \* \* \* \*

**Figure V-11**

**DIWF: Weighted-average selling prices as reported by U.S. producers and importers of product 5 from China, by quarters, January 1998-June 2003**

\* \* \* \* \*

**Figure V-12**

**DIWF: Quantities as reported by U.S. producers and importers of product 5 from China, by quarters, January 1998-June 2003**

\* \* \* \* \*

**Table V-11**

**DIWF: Analysis of changes in price levels by product, source, and time period**

Product	Change in price of U.S. DIWF, 2 <sup>nd</sup> quarter 1998 to 2 <sup>nd</sup> quarter 2003	Change in price of Chinese DIWF, 2 <sup>nd</sup> quarter 1998 to 2 <sup>nd</sup> quarter 2003
	<i>Percent increase</i>	<i>Percent increase</i>
1	-7.0	-4.4
2	-6.4	-7.4
3	-7.8	-5.9
4	-4.5	-6.3
5	4.4	-0.7
Product	Change in price of U.S. DIWF, 2 <sup>nd</sup> quarter 2001 to 2 <sup>nd</sup> quarter 2003	Change in price of Chinese DIWF, 2 <sup>nd</sup> quarter 2001 to 2 <sup>nd</sup> quarter 2003
	<i>Percent increase</i>	<i>Percent increase</i>
1	-6.2	-4.6
2	-6.5	-6.1
3	-6.3	-5.3
4	-8.9	-5.6
5	1.1	-6.9
Product	Change in price of U.S. DIWF, 2 <sup>nd</sup> quarter 2002 to 2 <sup>nd</sup> quarter 2003	Change in price of Chinese DIWF, 2 <sup>nd</sup> quarter 2002 to 2 <sup>nd</sup> quarter 2003
	<i>Percent increase</i>	<i>Percent increase</i>
1	-1.6	-1.3
2	0.4	-2.9
3	-0.3	-4.4
4	-2.4	-1.5
5	-4.0	5.7

Source: Tables V-6 through V-10.

**Lost Sales and Lost Revenues**

The Commission requested U.S. producers of DIWF to report any instances of lost sales or revenues they experienced due to competition from imports of DIWF from China during 1998-2003. Petitioners did not submit any lost sales or revenues allegations with the petition, but did submit some information on lost sales allegations in their questionnaires. They submitted these lost sales in two forms: a list of three distributors where they had lost sales, and a list of municipalities where petitioners' distributors had lost sales. In addition, non-petitioning producer \*\*\* was able to submit lost sales in the form requested by the Commission.

## Petitioners' Lost Sales Allegations at the Distributor Level

Petitioners submitted a list of three distributors (\*\*\*) who had reduced purchases from petitioners. The allegations are summarized in table V-12.

**Table V-12**  
**Alleged reductions in volumes of DIWF sales to lost distributor accounts**

\* \* \* \* \*

Purchasers questionnaires were sent to all three, and the standard questionnaire answers can illuminate the data petitioners provided. \*\*\*,<sup>58</sup> \*\*\* purchase data were provided only in dollars, but does show a steep reduction in U.S. purchases in 2002 and year-to-date 2003.<sup>59</sup> In its questionnaire response, \*\*\*.

\*\*\*. \*\*\* purchase data do show a decrease in purchases from U.S. producers, with 2001 purchases of \$\*\*\* falling to \$\*\*\* in 2002 while Chinese purchases rose from \$\*\*\* in 2001 to \$\*\*\* in 2002. \*\*\* attributed the switch in relative shares to price and quality issues.<sup>60</sup>

\*\*\*.<sup>61</sup> \*\*\* purchase data do not show such a decrease in U.S. purchases, with 2001 purchases of \$\*\*\* remaining relatively constant at \$\*\*\* in 2003. However, its purchases of Chinese DIWF did rise from \$\*\*\* in 2001 to \$\*\*\* in 2002. In addition, \*\*\* reported \*\*\*. \*\*\*.<sup>62</sup>

## Petitioners' Lost Sales Allegations at the Municipality Level

Petitioners also submitted a list of seven municipalities which had allegedly purchased Chinese DIWF instead of U.S.-produced DIWF for projects during 2001 through 2003. Commission staff has contacted some of the purchasers named in the allegations, and descriptions of these contacts follow.

Petitioners alleged that its distributors lost a bid for \*\*\*.<sup>63</sup>

Petitioners also alleged that its distributors lost \*\*\*.<sup>64</sup>

Petitioners further alleged that its distributors lost \*\*\*.<sup>65</sup>

Petitioners alleged that its distributors lost \*\*\*.<sup>66</sup>

Petitioners alleged that its distributors lost the \*\*\*.<sup>67</sup>

---

<sup>58</sup> See \*\*\*.

<sup>59</sup> The percentage reductions are not the same as in the allegation. In table V-12 above, \*\*\* allegedly reduced purchases to \*\*\* percent of 2001 purchases in 2002 and to \*\*\* percent of half-year 2001 purchases in YTD 2003. In \*\*\* questionnaire response, they reduced purchases to \*\*\* percent of 2001 purchases in 2002 and to \*\*\* percent of half-year 2001 purchases in YTD 2003.

<sup>60</sup> \*\*\*.

<sup>61</sup> \*\*\*.

<sup>62</sup> See questionnaire response of \*\*\* and hearing transcript, pp. 188-189. \*\*\*.

<sup>63</sup> Staff interview with \*\*\*.

<sup>64</sup> Fax from \*\*\*.

<sup>65</sup> Staff interview with \*\*\*.

<sup>66</sup> Fax from \*\*\*.

<sup>67</sup> Fax from \*\*\*.

**Other Lost Sales Allegations**

Lost sales allegations from \*\*\* are summarized in table V-13.  
\*\*\*<sup>68</sup>

**Table V-13**  
**DIWF: \*\*\*'s lost sales allegations**

\* \* \* \* \*

---

<sup>68</sup> Staff interview with \*\*\*.

## PART VI: U.S. PRODUCERS' EFFORTS TO COMPETE AND REQUESTED RELIEF

### EFFORTS BY U.S. PRODUCERS TO COMPETE

U.S. firms were requested in the Commission's producer questionnaire to provide information on their competitive efforts since January 1998, and the adjustments they would make in their DIWF operations if import relief were granted. Their responses are presented in tables VI-1 and VI-2, respectively. For the majority of the firms, capital expenditures for the purchase of replacement equipment and environmental items were the leading expenditures.

**Table VI-1**

**DIWF: Responses regarding efforts undertaken to compete since January 1, 1998, by firm**

\* \* \* \* \*

**Table VI-2**

**DIWF: Responses regarding adjustments to operations if import relief were provided, by firm**

\* \* \* \* \*

### REQUESTED IMPORT RELIEF

Petitioner requested that the Commission recommend a tariff of 95 percent on imports of DIWF from China as an import remedy based upon the difference between the average unit value of imports of DIWF from China in interim 2003 and the domestic industry's \*\*\* DIWF in interim 2003.<sup>1</sup> Petitioner argued that the imposition of a 95 percent tariff should facilitate price increases in the U.S. market that will allow the domestic industry to sell DIWF at prices that will enable it to regain its financial health, and that the remedy requested is "practical, realistic, and necessary to prevent or remedy the market disruption that has occurred in the U.S. DIWF market."<sup>2</sup>

Because respondents argued that market disruption does not exist, they urged the Commission to deny petitioners' request for a 95 percent *ad valorem* tariff on imports of DIWF from China. Respondents further argued that petitioner's proposed remedy "would destroy" the U.S. market position of Chinese imports and shift volumes to nonsubject sources, and that there is "no remedy that can ameliorate the condition of the domestic industry here, and thus imposition of any remedy would be improper."<sup>3</sup>

Information relating to the differential (mark up) between the import and shipment values by U.S. importers is presented in table VI-3 and appendix H. The magnitude of mark ups varied and was dependent on the U.S. importer and the source of imports.

---

<sup>1</sup> The tariff rate was calculated using the AUV of Chinese imports of DIWF in interim 2003 of \$\*\*\* per ton, compared to \*\*\* for the same period of \$\*\*\* per ton. Petitioner's prehearing brief, p. 39, fn. 37.

<sup>2</sup> Petitioner's posthearing brief, p. 8.

<sup>3</sup> Chinese respondents' posthearing brief, p. 48.

**Table VI-3**  
**DIWF: U.S. importers' mark ups for U.S. shipments of imports, by firms, 1998-2002, January-June 2002, and January-June 2003**

\* \* \* \* \*

**APPENDIX A**  
***FEDERAL REGISTER* NOTICES**





---

**INTERNATIONAL TRADE  
COMMISSION**

[Investigation No. TA-421-4]

**Certain Ductile Iron Waterworks  
Fittings From China****AGENCY:** United States International  
Trade Commission.**ACTION:** Institution and scheduling of an  
investigation under section 421(b) of the  
Trade Act of 1974 (19 U.S.C. 2451(b))  
(the Act).

---

**SUMMARY:** Following receipt of a  
petition, on September 5, 2003, on  
behalf of McWane, Inc.,<sup>1</sup> Birmingham,  
AL, the Commission instituted  
investigation No. TA-421-4, Certain  
Ductile Iron Waterworks Fittings from  
China, under section 421(b) of the Act  
to determine whether certain ductile  
iron waterworks fittings<sup>2</sup> from China  
are being imported into the United  
States in such increased quantities or  
under such conditions as to cause or  
threaten to cause market disruption to  
the domestic producers of like or  
directly competitive products. The  
petition also alleges under section 421(i)  
of the Act that critical circumstances  
exist with respect to the subject  
*products and requests that provisional*  
relief be provided. Accordingly, the  
Commission will determine whether  
delay in taking action would cause  
damage to the relevant domestic  
industry which would be difficult to  
repair, and if that determination is  
affirmative, make a preliminary  
determination of whether imports of  
certain ductile iron waterworks fittings

---

<sup>1</sup> McWane operates three subsidiaries that produce the subject products including: Clow Water Systems Co., Coshocton, OH; Tyler Pipe Co., Tyler, TX; and Union Foundry Co., Anniston, AL.

<sup>2</sup> The products subject to this investigation are cast pipe or tube fittings of ductile iron (containing 2.5 percent carbon and over 0.02 percent magnesium or magnesium and cerium, by weight) with mechanical, push-on (rubber compression) or flanged joints attached. Ductile iron waterworks fittings are used to join pipes, valves, and hydrants in straight lines or to change, divert, divide, or direct the flow of water or sewage in municipal utility and industrial piping systems. Included within this definition are fittings of all nominal diameters and of both full-bodied and compact designs.

The imported products are provided for in statistical reporting number 7307.19.3070 of the Harmonized Tariff Schedule of the United States (HTS). Although the HTS category is provided for convenience and Customs purposes, the written description of the merchandise under investigation is dispositive.

from China have caused or threaten to cause market disruption.

For further information concerning the conduct of this investigation, hearing procedures, and rules of general application, consult the Commission's rules of practice and procedure, part 201, subparts A through E (19 CFR part 201), and part 206, subparts A and E (19 CFR part 206).

**EFFECTIVE DATE:** September 5, 2003.

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

**SUPPLEMENTARY INFORMATION:**

**Participation in the investigation and service list.**—Persons wishing to participate in the investigation as parties must file an entry of appearance with the Secretary to the Commission, as provided in section 201.11 of the Commission's rules, not later than seven days after publication of this notice in the *Federal Register*. The Secretary will prepare a service list containing the names and addresses of all persons, or their representatives, who are parties to this investigation upon the expiration of the period for filing entries of appearance.

**Limited disclosure of confidential business information (CBI) under an administrative protective order (APO) and CBI service list.**—Pursuant to section 206.47 of the Commission's rules, the Secretary will make CBI gathered in this investigation available to authorized applicants under the APO issued in the investigation, provided that the application is made not later than seven days after the publication of this notice in the *Federal Register*. A separate service list will be maintained by the Secretary for those parties authorized to receive CBI under the APO.

**Service of the petition.**—The Secretary shall promptly notify a petitioner when, before the establishment of a service list under section 206.17(a)(4) of the

Commission's rules, he or she approves an application under section 206.17(a)(2) pursuant to section 206.47. When practicable, this notification shall be made by facsimile transmission. The petitioner shall then serve a copy of the petition, including all confidential business information, on the approved lead authorized applicants in accordance with section 206.17(f) within two (2) calendar days of the time notification is made by the Secretary.

Upon establishment of the service list, the petitioner shall serve the lead authorized applicants enumerated on the list established by the Secretary pursuant to section 206.17(a)(4) that have not been served pursuant to the preceding paragraph within two (2) calendar days of the establishment of the Secretary's list.

**Conference.**—The Commission has scheduled a conference in connection with this investigation beginning at 9:30 a.m. on September 26, 2003, at the U.S. International Trade Commission Building. Subjects related to critical circumstances and provisional remedy proposals may be addressed at the conference. Parties wishing to participate in the conference should contact Fred Ruggles (202-205-3187; e-mail: [fruggles@usitc.com](mailto:fruggles@usitc.com)) not later than September 23, 2003, to arrange for their appearance. Parties in support of the imposition of provisional import relief in this investigation and parties in opposition to the imposition of such relief will each be collectively allocated one hour within which to make an oral presentation at the conference. Oral testimony and written materials to be submitted at the conference are governed by sections 201.6(b)(2) and 201.13(f) of the Commission's rules.

**Hearing.**—The Commission has also scheduled a hearing in connection with this investigation beginning at 9:30 a.m. on November 6, 2003, at the U.S. International Trade Commission Building. Subjects related to both market disruption or threat thereof and remedy may be addressed at the hearing. Requests to appear at the hearing should be filed in writing with the Secretary to the Commission on or before October 28, 2003. All persons desiring to appear at the hearing and make oral presentations should attend a prehearing conference to be held at 9:30 a.m. on October 30, 2003, at the U.S. International Trade Commission Building. Oral testimony and written materials to be submitted at the hearing are governed by sections 201.6(b)(2) and 201.13(f) of the Commission's rules. Parties must submit any request to present a portion of their hearing

testimony *in camera* no later than 7 days prior to the date of the hearing.

**Written submissions.**—Each party is encouraged to submit briefs to the Commission. The deadline for filing postconference briefs relating to critical circumstances market disruption and/or provisional remedy proposals is October 1, 2003. The deadline for filing prehearing briefs is October 28, 2003, and the deadline for posthearing briefs is November 12, 2003. In addition, any person who has not entered an appearance as a party to the investigation may submit a written statement of information pertinent to the consideration of critical circumstances market disruption and/or provisional import relief on or before October 1, 2003; and a written statement related to the consideration of market disruption or threat thereof and/or remedy on or before November 12, 2003. Parties may submit final comments on market disruption on or before November 26, 2003, and on remedy on or before December 8, 2003. Final comments shall contain no more than ten (10) double spaced and single sided pages of textual material, and shall only concern information disclosed after the filing of posthearing briefs. Comments containing new factual information shall be disregarded. All written submissions must conform with the provisions of section 201.8 of the Commission's rules; any submissions that contain CBI must also conform with the requirements of section 201.6 of the Commission's rules. The Commission's rules do not authorize filing of submissions with the Secretary by facsimile or electronic means, except to the extent permitted by section 201.8 of the Commission's rules, as amended, 67 FR 68036 (November 8, 2002).

In accordance with section 201.16(c) of the Commission's rules, each document filed by a party to the investigation must be served on all other parties to the investigation (as identified by the service list), and a certificate of service must be timely filed. The Secretary will not accept a document for filing without a certificate of service.

**Remedy.**—Parties are reminded that no separate conference or hearing on the issues of provisional remedy or final remedy will be held. Those parties wishing to present arguments on the issues of remedy may do so orally at the conference or hearing; or in their postconference briefs, prehearing briefs, posthearing briefs, or final comments on remedy.

**Authority:** This investigation is being conducted under the authority of section 421 of the Trade Act of 1974; this notice is

published pursuant to section 206.3 of the Commission's rules.

Issued: September 9, 2003.

By order of the Commission.

**Marilyn R. Abbott,**

*Secretary.*

[FR Doc. 03-23420 Filed 9-12-03; 8:45 am]



determines, pursuant to section 421(i) of the Trade Act of 1974,<sup>1</sup> that critical circumstances do not exist with respect to imports of certain ductile iron waterworks fittings from China. Specifically, the Commission makes a negative determination under section 421(i)(1)(A) with respect to whether delay in taking action under this section would cause damage to the relevant domestic industry which would be difficult to repair.<sup>2</sup>

#### Background

Following receipt of a petition filed on September 5, 2003, on behalf of McWane, Inc.,<sup>3</sup> Birmingham, AL, the Commission instituted investigation No. TA-421-4, *Certain Ductile Iron Waterworks Fittings from China*, under section 421(b) of the Act to determine whether certain ductile iron waterworks fittings<sup>4</sup> from China are being imported into the United States in such increased quantities or under such conditions as to cause or threaten to cause market disruption to the domestic producers of like or directly competitive products. The petition also alleged under section 421(i) of the Act that critical circumstances exist with respect to the subject products and requested that provisional relief be provided.

Notice of the institution of the Commission's investigation and of the scheduling of a staff conference during the critical circumstances phase and a subsequent public hearing to be held in the investigation was given by posting copies of the notice in the Office of the Secretary, U.S. International Trade Commission, Washington, DC, and by publishing the notice in the *Federal Register* of September 15, 2003 (68 F.R. 54010). The staff conference in connection with the critical circumstances phase of the investigation was held on September 26, 2003 in Washington, DC; all persons who requested the opportunity were

permitted to appear in person or by counsel.

The Commission transmitted its determination in the critical circumstances phase of this investigation to the President on October 20, 2003. The views of the Commission are contained in USITC Publication 3642 (October 2003), entitled *Certain Ductile Iron Waterworks Fittings from China: Investigation No. TA-421-4* (Critical Circumstances Phase).

Issued: October 20, 2003.

By order of the Commission.

**Martlyn R. Abbott,**

*Secretary to the Commission.*

[FR Doc. 03-26813 Filed 10-23-03; 8:45 am]

BILLING CODE 7020-02-P

## INTERNATIONAL TRADE COMMISSION

[Investigation No. TA-421-4]

### Certain Ductile Iron Waterworks Fittings From China

#### Determination

On the basis of information developed in the critical circumstances phase of the subject investigation, the United States International Trade Commission

<sup>1</sup> 19 U.S.C. 2451(i).

<sup>2</sup> Commissioner Lane makes an affirmative determination under section 421(i)(1)(A), and therefore dissents. Commissioner Pearson did not participate in this determination.

<sup>3</sup> McWane operates three subsidiaries that produce the subject products including: Clow Water Systems Co., Coshocton, OH; Tyler Pipe Co., Tyler, TX; and Union Foundry Co., Anniston, AL.

<sup>4</sup> The products subject to this investigation are cast pipe or tube fittings of ductile iron (containing 2.5 percent carbon and over 0.02 percent magnesium or magnesium and cerium, by weight) with mechanical, push-on (rubber compression) or flanged joints attached. Included within this definition are fittings of all nominal diameters and of both full-bodied and compact designs. The imported products are provided for in statistical reporting number 7307.19.3070 of the Harmonized Tariff Schedule of the United States (HTS).



**FOR FURTHER INFORMATION CONTACT:**

William Gearhart, Office of General Counsel, U.S. International Trade Commission, 500 E Street, SW., Washington, DC 20436, telephone 202-205-3091, e-mail [wgearhart@usitc.gov](mailto:wgearhart@usitc.gov). Hearing-impaired individuals are advised that information on this matter may be obtained by contacting the Commission's TDD terminal on 202-205-1810.

**SUPPLEMENTARY INFORMATION:** The Commission believes that counsel has justified the need for a closed session. Counsel seeks a closed session to provide a full discussion of information relating to pricing data, its analysis of domestic industry and Petitioner financial performance, indicators of the extent of competition between domestic product and subject imports, and domestic shipments and domestic producer market share trends. Because such discussions will necessitate disclosure of confidential business information (CBI), they can only occur if a portion of the hearing is held in camera. In making this decision, the Commission nevertheless reaffirms its belief that whenever possible its business should be conducted in public.

The hearing will include the usual public presentations by parties, with questions from the Commission. In addition, the hearing will include in camera sessions for confidential presentations by Chinese Respondents and for questions from the Commission relating to the CBI. For any in camera session the room will be cleared of all persons except for those company officials and their counsel who are authorized to have access to the CBI at issue. See 19 CFR 201.35(b)(1), (2). The time for the party's presentations in the in camera session will be taken from its overall allotment for the hearing. All persons planning to attend the in camera portions of the hearing should be prepared to present proper identification.

**Authority:** The General Counsel has certified, pursuant to Commission Rule 201.39 (19 CFR 201.39) that, in her opinion, a portion of the Commission's hearing in Inv. No. TA-421-4, Ductile Iron Waterworks Fittings from China, may be closed to the public to prevent the disclosure of CBI.

By order of the Commission.

Issued: November 5, 2003.

**Marilyn R. Abbott,**

*Secretary to the Commission.*

[FR Doc. 03-28510 Filed 11-13-03; 8:45 am]

**BILLING CODE 7020-02-P**

---

**INTERNATIONAL TRADE  
COMMISSION**

[Investigation No. TA-421-4]

**Ductile Iron Waterworks Fittings From  
China; Notice of Commission  
Determination To Conduct a Portion of  
the Hearing in Camera**

**AGENCY:** International Trade  
Commission.

**ACTION:** Closure of a portion of a  
Commission hearing to the public.

**SUMMARY:** Upon request of counsel for Chinese Respondents, the Commission has determined to conduct a portion of its hearing in the above-captioned investigation scheduled for November 6, 2003, in camera. See Commission rules 201.13(m) and 201.35(b)(3) (19 CFR 201.13(m) and 201.35(b)(3)). The remainder of the hearing will be open to the public. The Commission has determined that the seven-day advance notice of the change to a meeting was not possible. See Commission rule 201.35(a), (c)(1) (19 CFR 201.35(a), (c)(1)).





---

---

**INTERNATIONAL TRADE  
COMMISSION**

[Investigation No. TA-421-4]

**Certain Ductile Iron Waterworks  
Fittings From China****Determination**

On the basis of information developed in the subject investigation, the United States International Trade Commission determines, pursuant to section 421(b)(1) of the Trade Act of 1974,<sup>1</sup> that certain ductile iron waterworks fittings<sup>2</sup> from the People's Republic of China are being imported into the United States in such increased quantities or under such conditions as to cause market disruption to the domestic producers of like or directly competitive products.<sup>3</sup>

**Background**

Following receipt of a petition, on September 5, 2003, on behalf of McWane, Inc.,<sup>4</sup> Birmingham, AL, the Commission instituted investigation No. TA-421-4, *Certain Ductile Iron Waterworks Fittings from China*, under section 421(b) of the Act to determine

---

<sup>1</sup> 19 U.S.C. 2451(b)(1).

<sup>2</sup> The products subject to this investigation are cast pipe or tube fittings of ductile iron (containing 2.5 percent carbon and over 0.02 percent magnesium or magnesium and cerium, by weight) with mechanical, push-on (rubber compression) or flanged joints attached. Included within this definition are fittings of all nominal diameters and of both full-bodied and compact designs. The imported products are provided for in statistical reporting number 7307.19.3070 of the Harmonized Tariff Schedule of the United States (HTS).

<sup>3</sup> Commissioners Koplan and Lane determine that certain ductile iron waterworks fittings from China are being imported into the United States in such increased quantities as to cause market disruption to the domestic producers of like products.

<sup>4</sup> McWane operates three subsidiaries that produce the subject products including: Clow Water Systems Co., Coshocton, OH; Tyler Pipe Co., Tyler, TX; and Union Foundry Co., Anniston, AL.

whether certain ductile iron waterworks fittings from China are being imported into the United States in such increased quantities or under such conditions as to cause market disruption to the domestic producers of like or directly competitive products. The petition also alleged under section 421(i)(1)(A) of the Act, that critical circumstances exist with respect to imports of the subject product from China, and on October 20, 2003, the Commission made a negative determination<sup>5 6</sup> with respect to whether delay in taking action under this section would cause damage to the relevant domestic industry which would be difficult to repair (68 FR 61013, October 24, 2003).

Notice of the institution of the Commission's investigation and of the scheduling of a public hearing to be held in connection therewith was given by posting a copy of the notice on the Commission's Web site (<http://www.usitc.gov>) and by publishing the notice in the **Federal Register** of September 15, 2003 (68 FR 54010). The hearing was held on November 6, 2003, in Washington, DC; all persons who requested the opportunity were permitted to appear in person or by counsel.

By order of the Commission.

Issued: December 8, 2003.

**Marilyn R. Abbott,**

*Secretary.*

[FR Doc. 03-30731 Filed 12-11-03; 8:45 am]

BILLING CODE 7020-02-P

---

<sup>5</sup> Commissioner Lane made an affirmative critical circumstances determination.

<sup>6</sup> Commissioner Pearson did not participate in the critical circumstances determination.

**APPENDIX B**  
**CONFERENCE AND HEARING WITNESSES**



## CALENDAR OF THE PUBLIC CONFERENCE

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

**Subject:** Certain Ductile Iron Waterworks Fittings from China  
**Inv. No.:** TA-421-4 (Critical Circumstances Phase)  
**Date and Time:** September 26, 2003 - 9:30 am

The conference was held in Room 101 (Main Hearing Room) of the United States International Trade Commission Building, 500 E Street, SW, Washington, DC.

### IN SUPPORT OF IMPORT RELIEF:

Collier Shannon Scott  
Washington, DC  
on behalf of

**Ransom Industries, LP**  
David Green, President

**Tyler Pipe Co.**  
Don Waugaman, Vice President for Sales & Administration  
Joel Blair, National Sales Manager for Utility Products

**East Jordan Iron Works, Inc.**  
Thomas Teske, General Manager, Vice President of Sales & Marketing

**United Steelworkers Union of America**  
William Klinefelter, Assistant to the International President, Legislative and Political Director

**Georgetown Economic Services, LLC**  
Michael Kerwin  
Brad Hudgens

Paul Rosenthal  
Robin Gilbert )--OF COUNSEL

**IN OPPOSITION TO IMPORT RELIEF:**

**Paul, Hastings, Janofsky & Walker LLP**

Washington, DC

on behalf of

**Beijing Tongzhou Songzhuang Foundry, Beijing Cheng Hong Foundry and the  
China Chamber of Commerce of Metals, Minerals & Chemical Importers and  
Exporters**

John Reilly, Nathan Associates, Inc

Hamilton Loeb

Scott Flicker

Alexander W. Koff

)-OF COUNSEL

**White & Case**

Washington, DC

on behalf of

**SIGMA**

Victor Pais, President

Siddharth Bhattacharji, Vice President

Larry Rybacki, Vice President, Marketing

Keir Whitson, Consultant

Robert Gosselink

)-OF COUNSEL

**Neville Peterson, LLP**

Washington, DC

on behalf of

**Pipeline Components, Inc.**

Steve Saha, Executive Vice-President

Lawrence J. Bogard

)-OF COUNSEL

**IN OPPOSITION TO IMPORT RELIEF:--Continued**

**Lafave & Sailer LLP**

Washington, DC

on behalf of

**Star Pipe Products, Inc.**

Dan McCutcheon, Vice President

Francis J. Sailer )--OF COUNSEL

**CALENDAR OF PUBLIC HEARING**

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

**Subject:** Certain Ductile Iron Waterworks Fittings from China  
**Inv. No:** TA-421-4  
**Date and Time:** November 6, 2003 - 9:30 a.m.

The hearing was held in Room 101 (Main Hearing Room) of the United States International Trade Commission Building, 500 E Street, SW, Washington, D.C.

**IN SUPPORT OF RELIEF:**

Collier Shannon Scott PLLC  
Washington, D.C.  
on behalf of

**McWane, Inc.**

David Green, President, Ransom Industries, LP  
Don Waugaman, Vice President, Sales & Administration, Tyler Pipe Industries  
Joel Blair, National Sales Manager, Utility Products, Tyler Pipe Industries

**U.S. Pipe and Foundry**

James R. Murray, Vice President, Business Development  
John E. Freeman, Vice President and Corporate Counsel

**East Jordan Iron Works, Inc.**

Thomas Teske, General Manager and Vice President of Sales & Marketing

**United Steel Workers of America**

Leo W. Gerard, International President

**Georgetown Economic Services, LLC**

Michael T. Kerwin, Economic Consultant  
Brad Hudgens, Economic Consultant

**Paul C. Rosenthal** )  
**Robin H. Gilbert** ) – OF COUNSEL  
**John M. Herrmann** )



**IN OPPOSITION TO IMPORT RELIEF:**

Paul, Hastings, Janofsky & Walker LLP  
Washington, D.C.  
on behalf of

**Beijing Tongzhou Songzhuang Foundry, Beijing Cheng Hong Foundry and the  
China Chamber of Commerce of Metals, Minerals & Chemical Importers and  
Exporters**

John Reilly, Nathan Associates, Inc

Hamilton Loeb  
Scott Flicker )-OF COUNSEL  
Alexander W. Koff

**White & Case**  
Washington, DC  
on behalf of

**SIGMA**  
Victor Pais, President  
Siddharth Bhattacharji, Vice President  
Larry Rybacki, Vice President, Marketing

**Groeniger, Groeniger & Company**  
Mike Groeniger, President

**CI Thornburg**  
Eddie Morrison, President

Robert Gosselink  
Keir Whitson )-OF COUNSEL  
Elliot Lindquist

**Neville Peterson, LLP**  
Washington, DC  
on behalf of

**Pipeline Components, Inc.**  
Steve Saha, Executive Vice-President

Lawrence J. Bogard )-OF COUNSEL

**IN OPPOSITION TO IMPORT RELIEF:--Continued**

**Lafave & Sailer LLP**  
Washington, DC  
on behalf of

**Star Pipe Products, Inc.**  
Dan McCutcheon, Vice President  
Peter Lisowski, Accounts Manager

Francis J. Sailer  
Daniel W. Klett      } -OF COUNSEL

**APPENDIX C**  
**SUMMARY DATA**



**Table C-1**  
**DIWF: Summary data concerning the U.S. market, 1998-2002, January-June 2002, and January-June 2003**

(Quantity=short tons; value=1,000 dollars; unit values, unit labor costs, and unit expenses are per short ton; and period changes=percent, except where noted)

Item	Calendar year						January-June						Period changes						
	1998	1999	2000	2001	2002	2002	2002	2002	2002	2002	2002	2003	1998-2002	1998-1999	1999-2000	2000-2001	2001-2002	Jan.-June 2002- Jan.-June 2003	
U.S. consumption quantity:																			
Amount	116,237	123,039	125,756	127,712	131,110	65,048	68,244	12.8	5.9	2.2	1.6	2.7	4.9	***	***	***	***	***	
Producers' share <sup>1</sup>	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Importers' share: <sup>1</sup>																			
China	***	***	11.4	16.0	17.5	17.2	17.9	***	***	***	4.5	1.6	0.7	***	***	***	***	***	***
Other sources	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Total	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
U.S. consumption value:																			
Amount	220,712	230,622	236,778	247,058	241,924	122,585	119,818	9.6	4.5	2.7	4.3	-2.1	-2.3	***	***	***	***	***	***
Producers' share <sup>1</sup>	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Importers' share: <sup>1</sup>																			
China	***	***	12.3	15.3	16.9	17.1	18.1	***	***	***	3.0	1.6	1.0	***	***	***	***	***	***
Other sources	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Total	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
U.S. shipments of imports from--																			
China:																			
Quantity	***	***	14,324	20,416	23,010	11,174	12,233	***	***	***	42.5	12.7	9.5	***	***	***	***	***	***
Value	***	***	29,136	37,897	40,919	20,989	21,714	***	***	***	30.1	8.0	3.5	***	***	***	***	***	***
Unit value	***	***	\$2,034	\$1,856	\$1,778	\$1,878	\$1,775	***	***	***	-8.7	-4.2	-5.5	***	***	***	***	***	***
Ending inventory	***	***	6,809	9,848	10,686	11,961	11,998	***	***	***	44.6	8.5	0.3	***	***	***	***	***	***
Other sources:																			
Quantity	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Unit value	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Ending inventory	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***

Table continued on next page.

(Quantity=short tons; value=1,000 dollars; unit values, unit labor costs, and unit expenses are per short ton, and period changes=percent, except where noted)

Item	Calendar year						January-June					Period changes				
	1998	1999	2000	2001	2002	2002	2002	2002	2003	1998-2002	1998-1999	1999-2000	2000-2001	2001-2002	Jan.-June 2002- Jan.-June 2003	
All sources	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	
Quantity	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	
Value	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	
Unit value	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	
Ending inventory	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	
U.S. producers <sup>1</sup>	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	
Capacity quantity	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	
Production quantity	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	
Capacity utilization <sup>1</sup>	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	
U.S. shipments:	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	
Quantity	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	
Value	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	
Unit value	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	
Export shipments:	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	
Quantity	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	
Value	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	
Unit value	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	
Ending inventory quantity	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	
Inventories/total shipments <sup>1</sup>	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	
Production workers	1,118	1,234	1,118	1,151	1,078	1,158	1,017	1,017	1,017	-3.6	10.4	-9.4	3.0	-6.3	-12.2	
Hours worked (1,000 hours)	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	
Wages paid (1,000 dollars)	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	
Hourly wages	\$16.43	\$17.44	\$18.18	\$18.45	\$18.62	\$18.65	\$18.48	\$18.48	\$18.48	13.3	6.1	4.3	1.4	0.9	-0.9	
Productivity (tons/1,000 hrs)	35.8	36.8	40.1	34.9	40.2	39.6	40.4	40.4	40.4	12.2	2.8	8.8	-12.8	15.1	1.9	
Unit labor costs	\$458.40	\$473.39	\$453.70	\$527.91	\$463.01	\$470.53	\$457.67	\$457.67	\$457.67	1.0	3.3	-4.2	16.4	-12.3	-2.7	
Net sales:	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	
Quantity	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	
Value	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	
Unit value	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	

Table continued on next page.

(Quantity=short tons; value=1,000 dollars; unit values, unit labor costs, and unit expenses are per short ton; and period changes=percent, except where noted)

Item	Calendar year						Period changes																
	1998		1999		2000		2001		2002		2003		1998-2002		1999-2000		2000-2001		2001-2002		Jan.-June 2002- Jan.-June 2003		
COGS	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Gross profit or (loss)	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
SG&A expenses	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Operating income	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Capital expenditures	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Unit COGS	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Unit SG&A expenses	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Unit operating income	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
COGS/sales <sup>1</sup>	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Operating income or (loss)/sales <sup>1</sup>	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***

<sup>1</sup> Period changes are in percentage points.

<sup>2</sup> Not applicable.

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

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

Table C-2

DIWF: Summary data concerning the U.S. market, January-June 2002, July-December 2002, and January-June 2003

(Quantity=short tons; value=1,000 dollars; unit values, unit labor costs, and unit expenses are per short ton; and period changes=percent, except where noted)

Item	Reported data			Period changes		
	Jan.-June 2002	July-Dec. 2002	Jan.-June 2003	Jan.-June 2002-2003	Jan.-June 2002 - July-Dec. 2002	July-Dec. 2002 - Jan.-June 2003
U.S. consumption quantity:						
Amount	64,654	66,448	67,914	5.0	2.8	2.2
Producers' share <sup>1</sup>	***	***	***	***	***	***
Importers' share: <sup>1</sup>						
China	17.3	17.8	18.0	0.7	0.5	0.2
Other sources	***	***	***	***	***	***
Total	***	***	***	***	***	***
U.S. consumption value:						
Amount	121,901	120,008	119,283	-2.1	-1.6	-0.6
Producers' share <sup>1</sup>	***	***	***	***	***	***
Importers' share: <sup>1</sup>						
China	17.2	16.6	18.2	1.0	-0.6	1.6
Other sources	***	***	***	***	***	***
Total	***	***	***	***	***	***
U.S. shipments of imports from--						
China:						
Quantity	11,174	11,835	12,233	9.5	5.9	3.4
Value	20,989	19,929	21,714	3.5	-5.1	9.0
Unit value	\$1,878	\$1,684	\$1,775	-5.5	-10.4	5.4
Ending inventory	11,961	10,686	11,998	0.3	-10.7	12.3
Other sources:						
Quantity	***	***	***	***	***	***
Value	***	***	***	***	***	***
Unit value	***	***	***	***	***	***
Ending inventory	***	***	***	***	***	***
All sources						
Quantity	***	***	***	***	***	***
Value	***	***	***	***	***	***
Unit value	***	***	***	***	***	***
Ending inventory	***	***	***	***	***	***
U.S. imports from-- <sup>2</sup>						
China:						
Quantity	13,772	11,298	14,022	1.8	-18.0	24.1
Value	12,387	10,269	11,758	-5.1	-17.1	14.5
Unit value	\$899	\$909	\$839	-6.8	1.1	-7.7
All other sources:						
Quantity	***	***	***	***	***	***
Value	***	***	***	***	***	***
Unit value	***	***	***	***	***	***
All sources:						
Quantity	***	***	***	***	***	***
Value	***	***	***	***	***	***
Unit value	***	***	***	***	***	***

Table continued on next page.



(Quantity=short tons; value=1,000 dollars; unit values, unit labor costs, and unit expenses are per short ton; and period changes=percent, except where noted)

Item	Reported data			Period changes		
	Jan.-June 2002	July-Dec. 2002	Jan.-June 2003	Jan.-June 2002-2003	Jan.-June 2002 - July-Dec. 2002	July-Dec. 2002 - Jan.-June 2003
U.S. producers <sup>1</sup> --						
Capacity quantity	***	***	***	***	***	***
Production quantity	***	***	***	***	***	***
Capacity utilization <sup>1</sup>	***	***	***	***	***	***
U.S. shipments:						
Quantity	***	***	***	***	***	***
Value	***	***	***	***	***	***
Unit value	***	***	***	***	***	***
Export shipments:						
Quantity	***	***	***	***	***	***
Value	***	***	***	***	***	***
Unit value	***	***	***	***	***	***
Ending inventory quantity	***	***	***	***	***	***
Inventories/total shipments <sup>1</sup>	***	***	***	***	***	***
Production workers	1,158	998	1,017	-12.2	-13.8	1.9
Hours worked (1,000 hours)	***	***	***	***	***	***
Wages paid (1,000 dollars)	***	***	***	***	***	***
Hourly wages	\$18.65	\$18.58	\$18.48	-0.9	-0.4	-0.5
Productivity (tons/1,000 hrs)	39.6	40.9	40.4	1.9	3.2	-1.3
Unit labor costs	\$470.53	\$454.25	\$457.67	-2.7	-3.5	0.8
Net sales:						
Quantity	***	***	***	***	***	***
Value	***	***	***	***	***	***
Unit value	***	***	***	***	***	***
COGS	***	***	***	***	***	***
Gross profit or (loss)	***	***	***	***	***	***
SG&A expenses	***	***	***	***	***	***
Operating income	***	***	***	***	***	***
Capital expenditures	***	***	***	***	***	***
Unit COGS	***	***	***	***	***	***
Unit SG&A expenses	***	***	***	***	***	***
Unit operating income	***	***	***	***	***	***
COGS/sales <sup>1</sup>	***	***	***	***	***	***
Operating income or (loss)/sales <sup>1</sup>	***	***	***	***	***	***

<sup>1</sup> Period changes are in percentage points.

<sup>2</sup> Data for imports are not included in apparent consumption but are presented for informational purposes.

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

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



**APPENDIX D**

**U.S. SHIPMENTS BY SIZE AND TYPES**



**Table D-1**  
**DIWF: U.S. producers' U.S. shipments, U.S. shipments of imports, by product categories,**  
**1998-2002, January-June 2002, and January-June 2003**

\* \* \* \* \*



**APPENDIX E**

**U.S. PRODUCERS' COMPANY-BY-COMPANY COMPARISONS**





**Table E-1**

**DIWF: U.S. producers' trade and employment comparisons, by firms, 1998-2002, January-June 2002, and January-June 2003**

\* \* \* \* \*

**Table E-2**

**DIWF: U.S. producers' financial data, by firms, fiscal years 1998-2002, January-June 2002, and January-June 2003**

\* \* \* \* \*



**APPENDIX F**

**EFFECTS OF IMPORTS OF CERTAIN DUCTILE IRON WATERWORKS  
FITTINGS FROM CHINA ON U.S. FIRMS' EXISTING DEVELOPMENT AND  
PRODUCTION EFFORTS, GROWTH, INVESTMENT, AND ABILITY TO  
RAISE CAPITAL**



The Commission requested U.S. firms to describe any actual or anticipated negative effects, since January 1, 2000, of imports of certain ductile iron waterworks fittings from China on their growth, investment, and ability to raise capital or development and production efforts (including efforts to develop a derivative or more advanced version of the product).<sup>1</sup> Responses are shown below.

**Actual Negative Effects**

ACIPCO	***.
McWane <sup>2</sup>	***.
U.S. Pipe	***.

**Anticipated Negative Effects**

ACIPCO	***.
McWane <sup>2</sup>	***.
U.S. Pipe	***.

---

<sup>1</sup> \*\*\*.

<sup>2</sup> Actual negative effects were described by the individual subsidiaries. The anticipated negative effects were described in McWane's consolidated response.



**APPENDIX G**  
**PRICING DATA BY U.S. PRODUCER**





**Table G-1**

**DIWF: Weighted-average selling prices and quantities of product 1, as reported by U.S. producers McWane and U.S. Pipe, by quarters, January 1998-June 2003**

\* \* \* \* \*

**Table G-2**

**DIWF: Weighted-average selling prices and quantities of product 2, as reported by U.S. producers McWane and U.S. Pipe, by quarters, January 1998-June 2003**

\* \* \* \* \*

**Table G-3**

**DIWF: Weighted-average selling prices and quantities of product 3, as reported by U.S. producers McWane and U.S. Pipe, by quarters, January 1998-June 2003**

\* \* \* \* \*

**Table G-4**

**DIWF: Weighted-average selling prices and quantities of product 4, as reported by U.S. producers McWane and U.S. Pipe, by quarters, January 1998-June 2003**

\* \* \* \* \*

**Table G-5**

**DIWF: Weighted-average selling prices and quantities of product 5, as reported by U.S. producers McWane and U.S. Pipe, by quarters, January 1998-June 2003**

\* \* \* \* \*



**APPENDIX H**

**U.S. IMPORTERS' COMPANY-BY-COMPANY COMPARISONS  
OF IMPORTS AND SHIPMENTS OF IMPORTS**



**Table H-1**

**DIWF: U.S. importers' imports from China, by firms, 1998-2002, January-June 2002, and January-June 2003**

\* \* \* \* \*

**Table H-2**

**DIWF: U.S. importers' U.S. shipments of imports from China, 1998-2002, January-June 2002, and January-June 2003**

\* \* \* \* \*

**Table H-3**

**DIWF: U.S. importers' imports from all other sources, by firms, 1998-2002, January-June 2002, and January-June 2003**

\* \* \* \* \*

**Table H-4**

**DIWF: U.S. importers' U.S. shipments of imports from all other sources, by firms, 1998-2002, January-June 2002, and January-June 2003**

\* \* \* \* \*