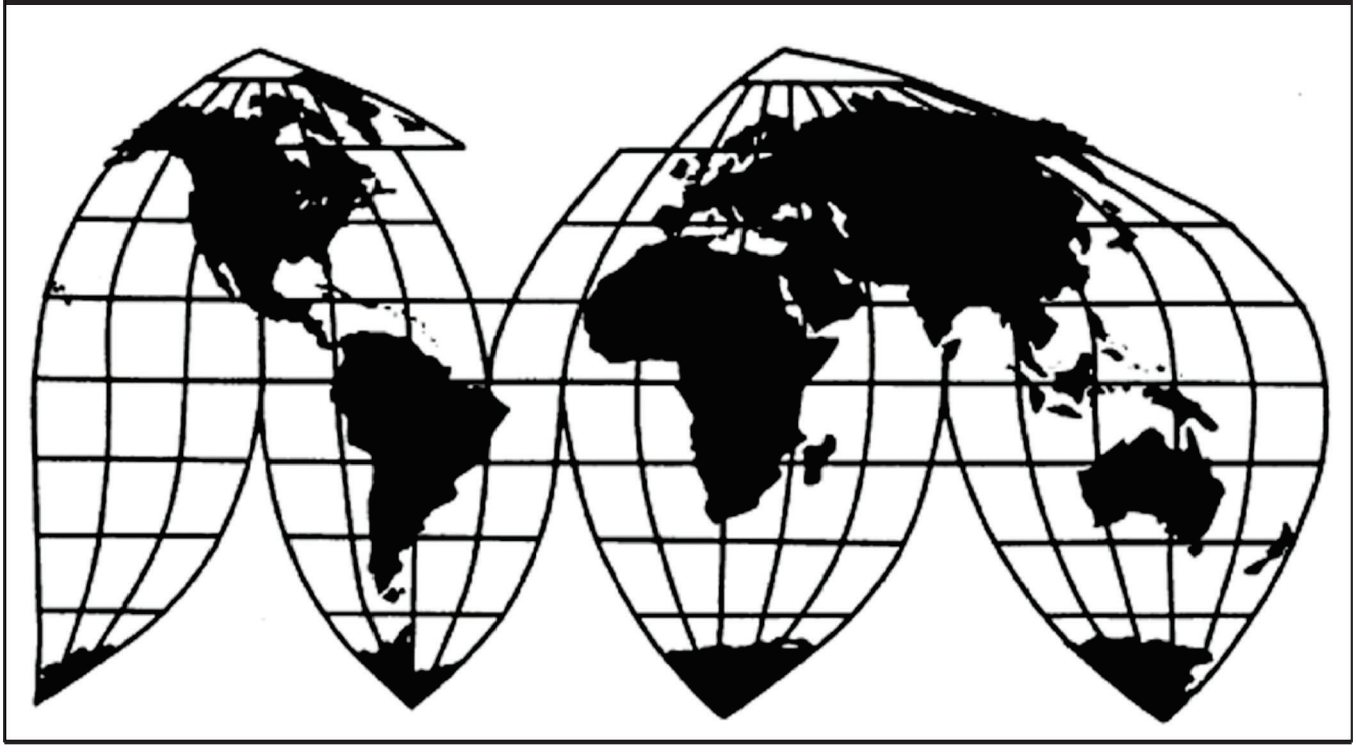
Strontium Chromate from Austria and France

Investigation Nos. 731-TA-1422-1423 (Preliminary)

Publication 4836 **October 2018**

U.S. International Trade Commission



Washington, DC 20436

U.S. International Trade Commission

COMMISSIONERS

David S. Johanson, Chairman
Irving A. Williamson
Meredith M. Broadbent
Rhonda K. Schmidtlein
Jason E. Kearns

Catherine DeFilippo
Director of Operations

Staff assigned

Kristina Lara, Investigator
Samantha DeCarlo, Industry Analyst
Tana von Kessler Economist
Jennifer Brinckhaus, Accountant
KaDeadra McNealy, Statistician
David Goldfine, Attorney
Douglas Corkran, 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

Strontium Chromate from Austria and France

Investigation Nos. 731-TA-1422-1423 (Preliminary)

Publication 4836

October 2018

CONTENTS

Page

CONTENTS

Page

CONTENTS

Page

CONTENTS

Page

Note.—Information that would reveal confidential operations of individual concerns may not be published.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

UNITED STATES INTERNATIONAL TRADE COMMISSION

Investigation Nos. 731-TA-1422-1423 (Preliminary)

Strontium Chromate from Austria and France

DETERMINATIONS

On the basis of the record[1] developed in the subject investigations, the United States International Trade Commission ("Commission") determines, pursuant to the Tariff Act of 1930 ("the Act"), that there is a reasonable indication that an industry in the United States is materially injured by reason of imports of strontium chromate from Austria and France provided for in subheadings 2841.50.91 and 3212.90.00 of the Harmonized Tariff Schedule of the United States, that are alleged to be sold in the United States at less than fair value ("LTFV").[2]

COMMENCEMENT OF FINAL PHASE INVESTIGATIONS

Pursuant to section 207.18 of the Commission's rules, the Commission also gives notice of the commencement of the final phase of its investigations. The Commission will issue a final phase notice of scheduling, which will be published in the *Federal Register* as provided in section 207.21 of the Commission's rules, upon notice from the U.S. Department of Commerce ("Commerce") of affirmative preliminary determinations in the investigations under section 733(b) of the Act, or, if the preliminary determinations are negative, upon notice of affirmative final determinations in those investigations under section 735(a) of the Act. Parties that filed entries of appearance in the preliminary phase of the investigations need not enter a separate appearance for the final phase of the investigations. Industrial users, and, if the merchandise under investigation is sold at the retail level, representative consumer organizations have the right to appear as parties in Commission antidumping and countervailing duty investigations. The Secretary will prepare a public service list containing the names and addresses of all persons, or their representatives, who are parties to the investigations.

BACKGROUND

On September 5, 2018, WPC Technologies, Oak Creek, Wisconsin, filed a petition with the Commission and Commerce, alleging that an industry in the United States is materially injured by reason of LTFV imports of strontium chromate from Austria and France. Accordingly, effective September 5, 2018, the Commission, pursuant to section 733(a) of the Act (19 U.S.C. 1673b(a)), instituted antidumping duty investigation Nos. 731-TA-1422-1423 (Preliminary).

Notice of the institution of the Commission's investigations and of a public conference

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

[2] 83 FR 49543 (October 2, 2018).

to be held in connection therewith was given by posting copies of the notice in the Office of the Secretary, U.S. International Trade Commission, Washington, DC, and by publishing the notice in the *Federal Register* of September 12, 2018 (82 FR 46189). The conference was held in Washington, DC, on September 26, 2018, and all persons who requested the opportunity were permitted to appear in person or by counsel.

Views of the Commission

Based on the record in the preliminary phase of these investigations, we determine that there is a reasonable indication that an industry in the United States is materially injured by reason of imports of strontium chromate from Austria and France that are allegedly sold in the United States at less than fair value.

I. The Legal Standard for Preliminary Determinations

The legal standard for preliminary antidumping duty determinations requires the Commission to determine, based upon the information available at the time of the preliminary determinations, whether there is a reasonable indication that a domestic industry is materially injured or threatened with material injury, or that the establishment of an industry is materially retarded, by reason of the allegedly unfairly traded imports.[1] In applying this standard, the Commission weighs the evidence before it and determines whether "(1) the record as a whole contains clear and convincing evidence that there is no material injury or threat of such injury; and (2) no likelihood exists that contrary evidence will arise in a final investigation."[2]

II. Background

Petitioner Lumimove Inc., d.b.a. WPC Technologies ("Petitioner" or "WPC"), a domestic producer of strontium chromate, filed the petitions in these investigations on September 5, 2018. WPC appeared at the staff conference and submitted a postconference brief.

Two respondent entities participated in the preliminary phase of these investigations. Societe Nouvelle des Couleurs Zinciques ("SNCZ"), the sole French producer/exporter of strontium chromate, appeared at the conference and submitted postconference comments.[3] The European Commission, which did not enter an appearance in these investigations and did not appear at the conference, filed a written statement.[4]

---

[1] 19 U.S.C. §§ 1671b(a), 1673b(a) (2000); *see also American Lamb Co. v. United States*, 785 F.2d 994, 1001-04 (Fed. Cir. 1986); *Aristech Chem. Corp. v. United States, 2*0 CIT 353, 354-55 (1996). No party argues that the establishment of an industry in the United States is materially retarded by the allegedly unfairly traded imports.

[2] *American Lamb Co*., 785 F.2d at 1001; *see also Texas Crushed Stone Co. v. United States*, 35 F.3d 1535, 1543 (Fed. Cir. 1994).

[3] SNCZ's postconference comments are two pages and address the domestic industry's purported supply shortage during the period of investigation ("POI"). As an attachment to its postconference comments, SNCZ includes email correspondence from Petitioner and various customers seeking SNCZ as a supplier of strontium chromate for the U.S. market.

[4] The European Commission's three-page written statement is entirely procedural in nature. According to the European Commission, the USITC did not comply with its obligations under Article 6.5.1 of the WTO Antidumping Agreement because it failed to require that the public version of the petition in these preliminary investigations provide nonconfidential summaries of confidential information or a statement of the reasons why such nonconfidential summaries were not possible.

U.S. industry data are based on the questionnaire responses of WPC, the only known domestic producer of strontium chromate powder during the January 2015-June 2018 POI, and WPC's exclusive toller, ***, which converts the powder form of the product into strontium chromate in paste form for sale by WPC to its customers.[5] U.S. import data are based on questionnaire responses from eight U.S. importers, accounting for *** of total subject imports from Austria and France in 2017.[6] The Commission received responses to its questionnaires from two foreign producers of subject merchandise, Habich GmbH ("Habich") and SNCZ, whose exports accounted for approximately *** percent of subject merchandise from Austria and France, respectively, in 2017.[7]

III. Domestic Like Product

In determining whether there is a reasonable indication that an industry in the United States is materially injured or threatened with material injury by reason of imports of the subject merchandise, the Commission first defines the "domestic like product" and the "industry."[8] Section 771(4)(A) of the Tariff Act of 1930, as amended ("the Tariff Act"), defines the relevant domestic industry as the "producers as a whole of a domestic like product, or those producers whose collective output of a domestic like product constitutes a major proportion of the total domestic production of the product."[9] In turn, the Tariff Act defines "domestic like product" as "a product which is like, or in the absence of like, most similar in characteristics and uses with, the article subject to an investigation."[10]

The decision regarding the appropriate domestic like product(s) in an investigation is a factual determination, and the Commission has applied the statutory standard of "like" or "most similar in characteristics and uses" on a case-by-case basis.[11] No single factor is

---

[5] Confidential Report, INV-QQ-112 (Oct. 15, 2018) ("CR") at I-4 & n.7; Public Report ("PR") at I-3 & n.7. Except as noted, the staff report presents U.S. industry data based on the data in WPC's questionnaire response only. CR at I-5 & n.10, PR at I-4 & n.10. Select trade and financial data for *** toll-processing operations are presented in Appendix D and Part VI of the staff report.

[6] CR at I-5 & IV-1, PR at I-4 & IV-1.

[7] CR at VII-3 & VII-7, PR at VII-3 & VII-4. Habich is the only known producer of strontium chromate in Austria and SNCZ is the only known producer of strontium chromate in France. CR at I-4, PR at I-3.

[8] 19 U.S.C. § 1677(4)(A).

[9] 19 U.S.C. § 1677(4)(A).

[10] 19 U.S.C. § 1677(10).

[11] *See, e.g., Cleo Inc. v. United States,* 501 F.3d 1291, 1299 (Fed. Cir. 2007); *NEC Corp. v. Department of Commerce,* 36 F. Supp. 2d 380, 383 (Ct. Int'l Trade 1998); *Nippon Steel Corp. v. United States*, 19 CIT 450, 455 (1995); *Torrington Co. v. United States*, 747 F. Supp. 744, 749 n.3 (Ct. Int'l Trade 1990), *aff'd*, 938 F.2d 1278 (Fed. Cir. 1991) ("every like product determination 'must be made on the particular record at issue' and the 'unique facts of each case'"). The Commission generally considers a number of factors including the following: (1) physical characteristics and uses; (2) interchangeability; (3) channels of distribution; (4) customer and producer perceptions of the products; (5) common manufacturing facilities, production processes, and production employees; and, where appropriate, (6)

dispositive, and the Commission may consider other factors it deems relevant based on the facts of a particular investigation.[12] The Commission looks for clear dividing lines among possible like products and disregards minor variations.[13] Although the Commission must accept Commerce's determination as to the scope of the imported merchandise that is subsidized and/or sold at LTFV,[14] the Commission determines what domestic product is like the imported articles Commerce has identified.[15] The Commission may, where appropriate, include domestic articles in the domestic like product in addition to those described in the scope.[16]

A. Scope Definition

In its notices of initiation, Commerce defined the imported merchandise within the scope of these investigations as follows:

> The merchandise covered by these investigations is strontium chromate, regardless of form (including but not limited to, powder (sometimes known as granular), dispersions (sometimes known as paste), or in any solution). The chemical formula for strontium chromate is $SrCrO_4$ and the Chemical Abstracts Service (CAS) registry number is 7789-06-2.
>
> Strontium chromate that has been blended with another product or products is included in the scope if the resulting mix contains 15 percent or more of strontium chromate by total formula weight. Products with which strontium

---

price. *See Nippon*, 19 CIT at 455 n.4; *Timken Co. v. United States*, 913 F. Supp. 580, 584 (Ct. Int'l Trade 1996).

[12] *See*, *e.g.*, S. Rep. No. 96-249 at 90-91 (1979).

[13] *See*, *e.g.*, *Nippon*, 19 CIT at 455; *Torrington*, 747 F. Supp. at 748-49*; see also* S. Rep. No. 96-249 at 90-91 (Congress has indicated that the like product standard should not be interpreted in "such a narrow fashion as to permit minor differences in physical characteristics or uses to lead to the conclusion that the product and article are not 'like' each other, nor should the definition of 'like product' be interpreted in such a fashion as to prevent consideration of an industry adversely affected by the imports under consideration.").

[14] *See*, *e.g.*, *USEC, Inc. v. United States*, 34 Fed. App'x 725, 730 (Fed. Cir. 2002) ("The ITC may not modify the class or kind of imported merchandise examined by Commerce."); *Algoma Steel Corp. v. United States,* 688 F. Supp. 639, 644 (Ct. Int'l Trade 1988), *aff'd*, 865 F.3d 240 (Fed. Cir.), *cert. denied*, 492 U.S. 919 (1989).

[15] *Hosiden Corp. v. Advanced Display Mfrs.,* 85 F.3d 1561, 1568 (Fed. Cir. 1996) (the Commission may find a single like product corresponding to several different classes or kinds defined by Commerce); *Cleo*, 501 F.3d at 1298 n.1 ("Commerce's {scope} finding does not control the Commission's {like product} determination."); *Torrington*, 747 F. Supp. at 748-52 (affirming the Commission's determination defining six like products in investigations where Commerce found five classes or kinds).

[16] *See*, *e.g.*, *Pure Magnesium from China and Israel*, Inv. Nos. 701-TA-403 and 731-TA-895-96 (Final), USITC Pub. 3467 at 8 n.34 (Nov. 2001); *Torrington,* 747 F. Supp. at 748-49 (holding that the Commission is not legally required to limit the domestic like product to the product advocated by the petitioner, co-extensive with the scope).

chromate may be blended include, but are not limited to, water and solvents such as Aromatic 100 Methyl Amyl Ketone (MAK)/2-Heptanone, Acetone, Glycol Ether EB, Naphtha Leicht, and Xylene. Subject merchandise includes strontium chromate that has been processed in a third country into a product that otherwise would be within the scope of these investigations if processed in the country of manufacture of the in-scope strontium chromate.

The merchandise subject to these investigations is currently classified in the Harmonized Tariff Schedule of the United States (HTSUS) under subheading 2841.50.9100. Subject merchandise may also enter under HTSUS subheading 3212.90.0050. While the HTSUS subheadings and CAS registry number are provided for convenience and customs purposes, the written description of the scope is dispositive.[17]

Strontium chromate is a chemical compound that is a yellow powder or granular solid that is insoluble in water.[18] Its chemical formula is $SrCrO_4$.[19] Strontium chromate powder can also be combined with various solvents to make a paste form of the product.[20] Strontium chromate is a very effective corrosion inhibitor, and is widely used as a corrosion-resistant pigment in paints and coatings for the protection of steel, aluminum, and its alloys for commercial and military aircraft.[21] Strontium chromate generally is used on aerospace materials, coils, and durable goods.[22] For aerospace materials, the major uses for strontium chromate include primers, glues, bounding primers, anticorrosive paints, fillers and sealants, and jointing preparations and dry lubricant mixtures (dry lubricant films) for aerospace fasteners.[23]

B. Analysis

Petitioner argues that all of the pertinent factors support finding a single domestic like product consisting of all forms of strontium chromate coextensive with the scope.[24] Respondent SNCZ expressly does not contest the domestic like product definition proposed by Petitioner for purposes of the Commission's preliminary determinations.[25]

---

[17] *Strontium Chromate from Austria and France*, 83 Fed. Reg. 49543 (Oct. 2, 2018) (initiation of less than fair value investigations).

[18] CR/PR at I-3.

[19] CR/PR at I-3

[20] CR at I-3-4, PR at I-3. To create strontium chromate in paste form, strontium chromate powder is suspended in various solvent-based systems, including: aromatic 100 methyl amyl ketone (MAK)/2-heptanone, acetone, glycol ether EB, naphtha leicht, and xylene. CR at I-10, PR at I-7-8.

[21] CR at I-4, PR at I-3.

[22] CR at I-11, PR at I-8.

[23] CR at I-11, PR at I-8.

[24] WPC Postconf. Br. at 2-6; Petition at 11-16; Conf. Tr. at 26 (Neeley).

[25] Conf. Tr. at 63, 66 (Levinson).

Physical Characteristics and Uses. All forms of strontium chromate have the same chemical composition: $SrCrO_4$.[26] Strontium chromate comes in both powder and paste forms, although the vast majority of domestically produced strontium chromate is in powder form.[27] Strontium chromate powder is yellow in color, having a typical pH of 7.0-9.0, conductivity of 700-1700 µS/cm, and a ground particle size of 25-50 microns or 4-6 Hegman Fineness.[28] Strontium chromate powder may be suspended in solvent-based systems to form strontium chromate paste, which has a thicker, milkshake consistency compared to dry strontium chromate powder.[29] Regardless of whether in powder or paste form, all domestically produced strontium chromate is generally used as a corrosion inhibitor in paint and coating applications for commercial and military aircraft and ground vehicles, metal coils, and other durable goods.[30]

Manufacturing Facilities, Production Processes, and Employees. Information in the record indicates that there is considerable overlap in the production processes for all forms of domestically produced strontium chromate because the paste form is produced by adding liquid solvents to the powder form of the product at the end of the process.[31] In terms of manufacturing facilities and employees, WPC produced both powder and paste strontium chromate using the same employees at its facility in Milwaukee, Wisconsin until 2015.[32] Since closing its plant in Milwaukee and moving in 2016 to a new facility in Oak Creek, Wisconsin, however, WPC produces only strontium chromate powder at the new facility and uses a toller, ***, to convert its powder into paste form.[33] WPC indicates that it plans to resume producing strontium chromate in both powder and paste forms at its Oak Creek facility by ***.[34]

Channels of Distribution. Information on the record indicates that all domestically produced strontium chromate, regardless of form, is sold to both distributors and end-users.[35]

Interchangeability. Petitioner asserts that all forms of strontium chromate are generally interchangeable with each other for similar applications.[36] At the conference, one of the witnesses testifying on behalf of Petitioner indicated that some customers may sometimes prefer to purchase the paste form of the product due to greater safety concerns with the powder form of the product.[37]

Producer and Customer Perceptions. Petitioner asserts that the powder and paste forms of domestically produced strontium chromate are essentially the same product and that customers similarly perceive strontium chromate powder and paste to be the same product.[38]

---

[26] WPC Postconf. Br. at 3.
[27] Conf. Tr. at 21 (Klein).
[28] WPC Postconf. Br. at 3.
[29] WPC Postconf. Br. at 3; Conf. Tr. at 47 (Klein).
[30] WPC Postconf. Br. at 3-4.
[31] CR at I-13 to I-15, PR at I-10 to I-11; Conference Tr. at 45-46 (St. John).
[32] WPC Postconf. Br. at 5; Petition at 15-16.
[33] Petition at 15-16.
[34] Petition at 15-16.
[35] WPC Postconf. Br. at 4-5; Petition at 14.
[36] WPC Postconf. Br. at 4; Petition at 13.
[37] Conference Tr. at 48 (Klein); WPC Postconf. Br. at 6.
[38] WPC Postconf. Br. at 5; Petition at 14.

Price. While acknowledging that domestically produced strontium chromate paste generally is priced higher than domestically produced strontium chromate powder, Petitioner maintains that prices for both forms of the product vary along a continuum.[39] Information available in the current record indicates that strontium chromate paste is generally higher-priced than strontium chromate powder, although strontium chromate powder was higher priced for one of the pricing products (Product ***).[40]

Conclusion. Taking all of the factors into consideration, we find that that there is a single domestic like product consisting of both powder and paste. Available information shows that strontium chromate in both powder and paste forms have the same basic chemical composition, have the same anticorrosive properties, are used as an anticorrosive in paint and coating applications, are generally interchangeable, are sold in the same channels of distribution, are priced within a reasonable range of one another, and generally are perceived to be the same product by market participants. There is considerable overlap in their production processes given that strontium chromate paste is made from strontium chromate powder. Although WPC currently uses a toller (***) for converting strontium chromate powder into strontium chromate paste, WPC indicates that it intends to resume producing both strontium chromate powder and paste at the same facility by ***. To the extent there are differences between some powders and some pastes, there does not appear to be a "clear dividing line."

In light of the foregoing considerations, and absent any arguments by the parties to the contrary, we find that strontium chromate in both powder and paste forms are part of a single domestic like product. Accordingly, we define a single domestic like product, consisting of all strontium chromate, coextensive with Commerce's scope.

IV. Domestic Industry

The domestic industry is defined as the domestic "producers as a whole of a domestic like product, or those producers whose collective output of a domestic like product constitutes a major proportion of the total domestic production of the product."[41] In defining the domestic industry, the Commission's general practice has been to include in the industry producers of all domestic production of the like product, whether toll-produced, captively consumed, or sold in the domestic merchant market.

There are two domestic industry issues in the preliminary phase of these investigations. The first concerns whether WPC's toller, ***, engages in sufficient production-related activity

[39] WPC Postconf. Br. at 5-6; Petition at 16.

[40] CR/PR at Tables V-1 to V-4. For Product 1 (strontium chromate powder in small bags, conductivity 1500 maximum), U.S. prices ranged from $*** to $*** per pound during the POI. CR/PR at Table V-1. For Product 2 (strontium chromate powder in large bags), U.S. prices ranged from $*** to $*** per pound during the POI. CR/PR at Table V-2. For Product 3 (strontium chromate paste in drums), U.S. prices ranged from $*** to $*** per pound during the POI. CR/PR at Table V-3. For Product 4 (strontium chromate powder in small bags, conductivity over 1500 to 1700 maximum), U.S. prices ranged from $*** to $*** per pound during the POI. CR/PR at Table V-4.

[41] 19 U.S.C. § 1677(4)(A).

to be considered a member of the domestic industry.[42] The second issue concerns whether appropriate circumstances exist to exclude *** from the domestic industry pursuant to the related parties provision of the statute. We discuss both issues in turn below.

A. Sufficient Production-Related Activities

WPC argues that it is the sole domestic producer of strontium chromate because the conversion operations of its toller, ***, do not qualify as sufficient production-related activities.[43] Respondent does not contest the issue for purposes of the preliminary phase of these investigations.[44]

In deciding whether a firm qualifies as a domestic producer, the Commission generally has analyzed the overall nature of a firm's production-related activities in the United States, although production-related activity at minimum levels could be insufficient to constitute domestic production. The Commission generally considers six factors:

(1) source and extent of the firm's capital investment;
(2) technical expertise involved in U.S. production activities;
(3) value added to the product in the United States;
(4) employment levels;
(5) quantity and type of parts sourced in the United States; and
(6) any other costs and activities in the United States directly leading to production of the like product.[45]

[42] In defining the domestic industry, the Commission's practice has been to include tollers in the domestic industry so long as they are engaged in sufficient production-related activities. *See e.g.*, *Saccharin from* China, Inv. Nos. 731-TA-1013 (Second Review), USITC Pub. 4534 at 7-8 & n.32 (May 2015) (noting that "the Commission's practice generally is to include toll producers (as opposed to tollees) in the domestic industry definition since they actually produce the domestic like product" and defining the domestic industry to include toll producer of saccharin); *Chlorinated Isocyanurates from China and Japan*, Inv. Nos. 701-TA-501 & 731-TA-1226 (Final), USITC Pub. 4494 at 4 n.3, 8-10 (Nov. 2014) (defining the domestic industry to include tollers that tableted granular chlorinated isos because they were engaged in sufficient production-related activities).

[43] WPC Postconf. Br. at 7-9. WPC contracts with *** to convert strontium chromate powder into strontium chromate in paste form. According to WPC, *** takes the pigment produced by WPC, mixes the pigment with solvents, charges a fee for its labor, and sends the containers of dispersed product back to WPC for sale to customers. CR at III-3, PR at III-2. All of the strontium chromate paste sold by WPC is toll-processed by ***, and *** converts all of the strontium chromate powder it receives from WPC into strontium chromate paste for sale by WPC. CR at III-3, PR at III-2; Petition at 17.

[44] Conf. Tr. at 65-66 (Levinson).

[45] *See, e.g.*, *Drill Pipe and Drill Collars from China*, Inv. Nos. 701-TA-474 and 731-TA-1176 (Preliminary), USITC Pub. 4127 (March 2010) at 13; *Laminated Woven Sacks from China*, Inv. Nos. 701-TA-450 and 731-TA-1122 (Final), USITC Pub. 4025 at 7 n.36 (July 2008).

We discuss each of these factors below.[46]

Source and Extent of the Firm's Capital Investment. WPC contends that *** investment in conversion operations is minor compared to the investment by WPC in its strontium chromate facility.[47] In its questionnaire response, *** reported capital expenditures of $*** in 2017 and *** capital expenditures during the POI.[48] Although it claims that the estimated capital expenditures by *** in 2017 are overstated, WPC also estimates that it would need to invest approximately $*** in order to resume its own conversion operations rather than contract for *** conversion services.[49] WPC reported that its capital expenditures were $*** in 2015, $*** in 2016, $*** in 2017, $*** in interim 2017, and $*** in interim 2018.[50] Total assets reported by WPC were $*** in 2015, $*** in 2016, and $*** in 2017.[51] Total assets reported by *** were *** in 2015 and 2016 and $*** in 2017.[52]

Technical Expertise Involved in U.S. Production Activities. In its questionnaire response, *** indicates that there is *** technical expertise for employees involved in its conversion operations, by ***.[53] WPC argues that the technical expertise involved in conversion operations to produce paste from powder is minimal compared to the technical expertise required for producing strontium chromate in powder form.[54] The production of strontium chromate in powder form involves a succession of chemical processes and entails the production of hazardous materials.[55] By contrast, the process to convert strontium chromate powder into paste form gives the product a thicker consistency, but does not alter its chemistry.[56] WPC reported that workers producing the strontium chromate powder were paid approximately $*** per hour, and workers involved in *** converter operations for strontium chromate paste were paid approximately $*** per hour during the POI.[57]

*Value Added to the Product in the United State*s. Neither *** nor WPC provided estimates for the value added by conversion operations.[58] Based on questionnaire responses,

---

[46] We note that the information in the record on this issue reflects questionnaire responses from both WPC and ***. CR at III-3 to III-4, PR at III-2 to III-3; *** U.S. Producer Questionnaire at II-3f; WPC U.S. Producer Questionnaire at II-3f.

[47] WPC Postconf. Br. at 8-9.

[48] *** U.S. Producer Questionnaire at III-13.

[49] WPC U.S. Producer Questionnaire at II-3f; WPC Postconf. Br. at 8.

[50] WPC U.S. Producer Questionnaire at III-13.

[51] CR/PR at Table VI-6; WPC U.S. Producer Questionnaire at III-12.

[52] *** U.S. Producer Questionnaire at III-12.

[53] *** U.S. Producer Questionnaire at II-3f.

[54] WPC Postconf. Br. at 8-9.

[55] CR at I-13-14, PR at I-10-11; Conf. Tr. at 15 (St. John), 37 & 48-49 (Klein); *** & WPC U.S. Producer Questionnaires at II-3f.

[56] CR at I-14-15, PR at I-10-11.

[57] CR/PR at Table III-9; WPC U.S. Producer Questionnaires at II-10; *Derived from* *** U.S. Producer Questionnaire at II-10.

[58] *** reported that the value added of its conversion operations was that ***. *** U.S. Producer Questionnaire at II-3f. In its questionnaire response, WPC stated that the value added by *** conversion operations was to "***." *** U.S. Producer Questionnaire at II-3f.

*** costs to convert strontium chromate powder to paste ranged from *** percent to *** percent of the total costs of goods sold for producing strontium chromate in paste form during the POI.[59]

Employment Levels. *** reported *** full-time employees in its conversion operations during the POI.[60] By contrast, WPC reported *** production and related workers ("PRWs") in 2015, *** PRWs in 2016, *** PRWs in 2018, *** PRWs in interim 2017, and *** PRWs in interim 2018.[61]

Quantity and Type of Parts Sourced in the United States: The record indicates that ***.[62] In the final phase of these investigations, we intend to explore further what other materials are used by ***, and where those materials are sourced.

Other Costs and Activities in the United States Leading to Production of the Like Product. In its questionnaire response, *** did not identify any other significant costs for its conversion operations during the POI.[63] WPC, however, indicates that there are other costs associated with converting strontium chromate in powder form into strontium chromate in paste form, including additional costs related to equipment, environmental permits, and certification requirements.[64] As discussed above, WPC estimates that it would need to invest approximately *** in order to resume its own conversion operations to produce strontium chromate paste.[65]

Conclusion. We find this issue of whether *** engages in sufficient production-related activity to qualify as a domestic producer to be a fairly close question. On the one hand, *** capital investments during the POI totaled approximately $*** and were not insignificant, particularly given that *** only converts approximately *** percent of WPC's strontium chromate into paste.[66] The conversion operations to produce strontium chromate paste involve some technical expertise working with hazardous materials (*i.e.*, strontium chromate powder). Moreover, the available information shows that the value added by *** conversion operations ranged from *** percent to *** percent during the POI.[67] Each of these considerations could support a finding that *** engages in sufficient production-related activities to be considered a domestic producer.

On the other hand, *** capital investments in its processing operations to produce strontium chromate paste were small relative to WPC's capital investments for strontium chromate powder production during the POI. The process to convert strontium chromate powder into strontium chromate paste is considerably simpler than the process for production of strontium chromate powder, requires less technical expertise, and entails considerably fewer

[59] CR at VI-7, PR at VI-3. ***. CR at VI-7 n.9, PR at VI-3 n.9.

[60] *** U.S. Producer Questionnaire at II-3f.

[61] WPC U.S. Producer Questionnaire at II-10.

[62] *** U.S. Producer Questionnaire at II-3f.

[63] With respect to other costs, *** stated only that it "***." *** U.S. Producer Questionnaire Response at II-3f.

[64] WPC U.S. Producer Questionnaire at II-3f; Conf. Tr. at 49 (St. John).

[65] WPC U.S. Producer Questionnaire at II-3f.

[66] *Derived from* CR/PR at Table III-6.

[67] As noted earlier, ***. Consequently, the calculation of value added may be different based on a fair market value of the strontium chromate used as an input in *** production.

employees. Each of these factors support finding that *** does not engage in sufficient production-related activities to be considered a domestic producer.

On balance, based on the current record and in the absence of party arguments to the contrary, we conclude that *** does not engage in sufficient production operations to be considered a domestic producer for purposes of our preliminary determinations. However, we intend to examine this issue further in any final phase of these investigations.

B. Related Parties

We next consider whether any producer of the domestic like product should be excluded from the domestic industry pursuant to Section 771(4)(B) of the Tariff Act. This provision allows the Commission, if appropriate circumstances exist, to exclude from the domestic industry producers that are related to an exporter or importer of subject merchandise or which are themselves importers.[68] Exclusion of such a producer is within the Commission's discretion based upon the facts presented in each investigation.[69]

WPC argues that appropriate circumstances do not exist to warrant its exclusion from the domestic industry under the related parties provision.[70] Respondent did not address the issue of related parties.

WPC is a related party because it imported subject merchandise from ***.[71] It is the petitioner and the sole domestic producer during the January 2015-June 2018 period of investigation.[72] WPC imported *** pounds of strontium chromate from *** in 2015, *** pounds of strontium chromate from *** in 2016, and *** for the remainder of the POI.[73]

---

[68] *See Torrington Co. v. United States*, 790 F. Supp. 1161, 1168 (Ct. Int'l Trade 1992), *aff'd mem.*, 991 F.2d 809 (Fed. Cir. 1993); *Sandvik AB v. United States*, 721 F. Supp. 1322, 1331-32 (Ct. Int'l Trade 1989), *aff'd mem.,* 904 F.2d 46 (Fed. Cir. 1990); *Empire Plow Co. v. United States*, 675 F. Supp. 1348, 1352 (Ct. Int'l Trade 1987).

[69] 19 U.S.C. § 1677(4)(B). The primary factors the Commission has examined in deciding whether appropriate circumstances exist to exclude a related party include the following:

(1) the percentage of domestic production attributable to the importing producer;

(2) the reason the U.S. producer has decided to import the product subject to investigation (whether the firm benefits from the LTFV sales or subsidies or whether the firm must import in order to enable it to continue production and compete in the U.S. market);

(3) whether inclusion or exclusion of the related party will skew the data for the rest of the industry;

(4) the ratio of import shipments to U.S. production for the imported product; and

(5) whether the primary interest of the importing producer lies in domestic production or importation. *Changzhou Trina Solar Energy Co. v. USITC*, 100 F. Supp.3d 1314, 1326-31 (Ct. Int'l. Trade 2015); *see also Torrington Co. v. United States*, 790 F. Supp. at 1168.

[70] WPC Postconf. Br. at 11-12.

[71] CR/PR at Table III-8

[72] CR/PR at III-1.

[73] CR/PR at Table III-8.

WPC's imports represented *** percent of its domestic production in 2015 and *** of its domestic production in 2016.[74] WPC states that it imported strontium chromate from ***.[75]

The ***. Moreover, given that WPC is the sole U.S. producer in these investigations, the exclusion of WPC would result in the lack of any domestic industry data. Also, no party has argued that WPC be excluded from the definition of the domestic industry. Given these considerations, we find that appropriate circumstances do not exist to exclude WPC from the domestic industry.

Accordingly, for purposes of our preliminary determinations, we define the domestic industry as all U.S. producers of strontium chromate, namely WPC.

V. Cumulation[76]

A. In General

For purposes of evaluating the volume and price effects for a determination of reasonable indication of material injury by reason of subject imports, section 771(7)(G)(i) of the Tariff Act requires the Commission to cumulate subject imports from all countries as to which petitions were filed and/or investigations self-initiated by Commerce on the same day, if such imports compete with each other and with the domestic like product in the U.S. market. In assessing whether subject imports compete with each other and with the domestic like product, the Commission generally has considered four factors:

(1) the degree of fungibility between subject imports from different countries and between subject imports and the domestic like product, including consideration of specific customer requirements and other quality related questions;

(2) the presence of sales or offers to sell in the same geographic markets of subject imports from different countries and the domestic like product;

[74] CR/PR at Table III-8.

[75] CR/PR at Table III-8.

[76] Pursuant to Section 771(24) of the Tariff Act, imports from a subject country of merchandise corresponding to a domestic like product that account for less than 3 percent of all such merchandise imported into the United States during the most recent 12 months for which data are available preceding the filing of the petition shall be deemed negligible. 19 U.S.C. §§ 1671b(a), 1673b(a), 1677(24)(A)(i). Negligibility is not an issue in these investigations. The questionnaire data indicate imports from each subject country exceeded the requisite 3 percent statutory negligibility threshold for the most recent 12-month period prior to the filing of the petition for which data are available. From September 2017 to August 2018, subject imports from Austria accounted for *** percent of total U.S. imports of strontium chromate by quantity, and subject imports from France accounted for *** percent of total U.S. imports. CR/PR at Table IV-7.

(3) the existence of common or similar channels of distribution for subject imports from different countries and the domestic like product; and

(4) whether the subject imports are simultaneously present in the market.[77]

While no single factor is necessarily determinative, and the list of factors is not exclusive, these factors are intended to provide the Commission with a framework for determining whether the subject imports compete with each other and with the domestic like product.[78] Only a "reasonable overlap" of competition is required.[79]

B. Analysis

Petitioner argues that because the relevant criteria for cumulation are satisfied, the Commission should cumulate subject imports from Austria and France.[80] Respondent SNCZ does not contest cumulation of subject imports from Austria and France for purposes of the Commission's present material injury analysis in the preliminary phase of these investigations.[81]

In these investigations, the threshold criterion for cumulation is satisfied because Petitioner filed the antidumping duty petitions with respect to subject imports from Austria and France on the same day, September 5, 2018.[82] We thus examine whether there is a reasonable overlap of competition between subject imports from Austria and France and between subject imports from each source and the domestic like product.

Fungibility. The U.S. producer and the vast majority of responding U.S. importers reported that the domestic like product and subject imports from both subject countries are "always" or "frequently" interchangeable.[83] The U.S. producer and the vast majority of responding U.S. importers also reported that subject imports from Austria and France are

[77] *See Certain Cast-Iron Pipe Fittings from Brazil, the Republic of Korea, and Taiwan*, Inv. Nos. 731-TA-278-80 (Final), USITC Pub. 1845 (May 1986), *aff'd*, *Fundicao Tupy, S.A. v. United States*, 678 F. Supp. 898 (Ct. Int'l Trade), *aff'd*, 859 F.2d 915 (Fed. Cir. 1988).

[78] *See*, *e.g.*, *Wieland Werke, AG v. United States*, 718 F. Supp. 50 (Ct. Int'l Trade 1989).

[79] The Statement of Administrative Action ("SAA") to the Uruguay Round Agreements Act ("URAA"), expressly states that "the new section will not affect current Commission practice under which the statutory requirement is satisfied if there is a reasonable overlap of competition." H.R. Rep. No. 103-316, Vol. I at 848 (1994) (*citing Fundicao Tupy*, 678 F. Supp. at 902); *see Goss Graphic Sys., Inc. v. United States*, 33 F. Supp. 2d 1082, 1087 (Ct. Int'l Trade 1998) ("cumulation does not require two products to be highly fungible"); *Wieland Werke, AG*, 718 F. Supp. at 52 ("Completely overlapping markets are not required.").

[80] WPC Postconf. Br. at 10-12.

[81] At the conference, counsel for French Respondent SNCZ conceded that "cumulation is probably warranted" for purposes of the preliminary phase of these investigations. Conf. Tr. at 66 (Levinson). SNCZ did not address cumulation for present material injury in its postconference comments.

[82] CR/PR at I-1. None of the statutory exceptions to cumulation applies.

[83] CR/PR at Table II-5.

"always" or "frequently" interchangeable.[84] The U.S. producer reported that non-price differences are "never" significant in comparisons of the domestic like product and subject imports from both subject countries, as well as in comparisons of subject imports from Austria with subject imports from France.[85] However, the responses of importers were mixed. Most importers reported that non-price differences are "always" or "frequently" significant in comparisons of the domestic like product and subject imports from Austria and in comparisons between imports from the two subject countries.[86] In comparisons of the domestic like product and subject imports from France, half of the importers reported that non-price differences were "always" or "frequently" significant while the other half of importers reported that non-price differences were "sometimes" or "never" significant.[87]

We find that there is sufficient fungibility between and among subject imports from Austria, subject imports from France, and the domestic like product. As discussed above, market participants generally perceive products from different sources to be interchangeable. The record further indicates substantial overlap in shipments of strontium chromate in the U.S. market by subject imports from Austria, subject imports from France, and the domestic like product.[88]

Channels of Distribution. During the POI, the domestic like product was sold *** to paint producer end users with *** quantities also sold to distributors.[89] Subject imports from Austria and France were sold *** to paint producer end users with *** quantities sold to distributors.[90]

Geographic Overlap. Strontium chromate from all sources was sold in overlapping geographic regions. The domestic like product was sold in all regions of the United States except the Mountain region, and subject imports from both Austria and France were present in

[84] CR/PR at Table II-5.

[85] CR/PR at Table II-6.

[86] CR/PR at Table II-6.

[87] CR/PR at Table II-6.

[88] CR/PR at Table IV-4. U.S. producers and importers were asked to report their 2017 U.S. shipments by product type, with specific breakouts requested for powder/granular and dispersion/paste. During 2017, *** percent of U.S. shipments of subject imports from Austria, *** percent of U.S. shipments of subject imports from France, and *** percent of U.S. shipments of the domestic like product were of granular/powder product. *Id*. The dispersion/paste product accounted for *** percent of U.S. shipments of the domestic like product, *** percent of U.S. shipments of subject imports from Austria, and *** percent of U.S. shipments of subject imports from France. *Id*. The Commission's pricing data confirm that there was head-to-head competition between subject imports from Austria, subject imports from France, and the domestic like product with respect to pricing products 1 and 2, both of which are strontium chromate in powder/granular form. CR/PR at Tables V-1 & V-2.

[89] CR/PR at Table II-1. During the POI, the U.S. producer sold *** of its U.S. shipments to paint producers, and *** of its U.S. shipments to distributors. *Id*.

[90] CR/PR at Table II-1. During the POI, *** of subject imports from Austria were sold to paint producers and *** were sold to distributors. *Id*. During the POI, *** of subject imports from France were sold to paint producers and *** percent were sold to distributors. *Id*.

the Midwest, Southeast, and Pacific Coast regions of the United States during the POI.[91] All of the subject imports from Austria and the vast majority of subject imports from France entered the United States through U.S. ports located in the North region of the United States; smaller amounts of subject imports from France entered through U.S. ports in the East and South regions.[92]

Simultaneous Presence in Market. The domestic like product and subject imports from Austria were present in the U.S. market in every month from January 2015 to June 2018.[93] Subject imports from France were present in the U.S. market in 28 of the 42 months from January 2015 to June 2018.[94]

Conclusion. The record supports finding that subject imports from each subject country are fungible with the domestic like product and each other, that subject imports from each subject country and the domestic like product are sold in similar channels of distribution and in similar geographic markets, and have been simultaneously present in the U.S. market. In light of the foregoing, we find that there is a reasonable overlap of competition between the domestic like product and imports from each subject country and between imports from each subject country. Accordingly, we cumulate subject imports from Austria and France for our analysis of whether there is a reasonable indication of material injury by reason of subject imports.

VI. Reasonable Indication of Material Injury by Reason of Subject Imports

A. Legal Standard

In the preliminary phase of antidumping and countervailing duty investigations, the Commission determines whether there is a reasonable indication that an industry in the United States is materially injured or threatened with material injury by reason of the imports under investigation.[95] In making this determination, the Commission must consider the volume of subject imports, their effect on prices for the domestic like product, and their impact on domestic producers of the domestic like product, but only in the context of U.S. production

[91] CR/PR at Table II-2. Subject imports from Austria were also present in the Central Southwest region, but were not present in the Northeast or Mountain regions. *Id*. Subject imports from France were also present in the Northeast region, but were not present in the Central Southwest and Mountain regions. *Id*.

[92] CR/PR at Table IV-5.

[93] CR/PR at Tables IV-6 & V-1 to V-4.

[94] CR/PR at Table IV-6. Subject imports from France were not present in the U.S. market during the following months: January 2015, February 2015, April 2015, May 2015, June 2015, August 2015, September 2015, October 2015, September 2016, December 2016, September 2017, December 2017, March 2018, and April 2018. *Id*.

[95] 19 U.S.C. §§ 1671b(a), 1673b(a). The Trade Preferences Extension Act of 2015, Pub. L. 114-27, amended the provisions of the Tariff Act pertaining to Commission determinations of reasonable indication of material injury and threat of material injury by reason of subject imports in certain respects.

operations.[96] The statute defines "material injury" as "harm which is not inconsequential, immaterial, or unimportant."[97] In assessing whether there is a reasonable indication that the domestic industry is materially injured by reason of subject imports, we consider all relevant economic factors that bear on the state of the industry in the United States.[98] No single factor is dispositive, and all relevant factors are considered "within the context of the business cycle and conditions of competition that are distinctive to the affected industry."[99]

Although the statute requires the Commission to determine whether there is a reasonable indication that the domestic industry is "materially injured by reason of" unfairly traded imports,[100] it does not define the phrase "by reason of," indicating that this aspect of the injury analysis is left to the Commission's reasonable exercise of its discretion.[101] In identifying a causal link, if any, between subject imports and material injury to the domestic industry, the Commission examines the facts of record that relate to the significance of the volume and price effects of the subject imports and any impact of those imports on the condition of the domestic industry. This evaluation under the "by reason of" standard must ensure that subject imports are more than a minimal or tangential cause of injury and that there is a sufficient causal, not merely a temporal, nexus between subject imports and material injury.[102]

In many investigations, there are other economic factors at work, some or all of which may also be having adverse effects on the domestic industry. Such economic factors might include nonsubject imports; changes in technology, demand, or consumer tastes; competition among domestic producers; or management decisions by domestic producers. The legislative history explains that the Commission must examine factors other than subject imports to ensure that it is not attributing injury from other factors to the subject imports, thereby inflating an otherwise tangential cause of injury into one that satisfies the statutory material

---

[96] 19 U.S.C. § 1677(7)(B). The Commission "may consider such other economic factors as are relevant to the determination" but shall "identify each {such} factor ... {a}nd explain in full its relevance to the determination." 19 U.S.C. § 1677(7)(B).

[97] 19 U.S.C. § 1677(7)(A).

[98] 19 U.S.C. § 1677(7)(C)(iii).

[99] 19 U.S.C. § 1677(7)(C)(iii).

[100] 19 U.S.C. §§ 1671b(a), 1673b(a).

[101] *Angus Chemical Co. v. United States*, 140 F.3d 1478, 1484-85 (Fed. Cir. 1998) ("{T}he statute does not 'compel the commissioners' to employ {a particular methodology}."), *aff'g* 944 F. Supp. 943, 951 (Ct. Int'l Trade 1996).

[102] The Federal Circuit, in addressing the causation standard of the statute, has observed that "{a}s long as its effects are not merely incidental, tangential, or trivial, the foreign product sold at less than fair value meets the causation requirement." *Nippon Steel Corp. v. USITC*, 345 F.3d 1379, 1384 (Fed. Cir. 2003). This was re-affirmed in *Mittal Steel Point Lisas Ltd. v. United States*, 542 F.3d 867, 873 (Fed. Cir. 2008), in which the Federal Circuit, quoting *Gerald Metals, Inc. v. United States*, 132 F.3d 716, 722 (Fed. Cir. 1997), stated that "this court requires evidence in the record 'to show that the harm occurred "by reason of" the LTFV imports, not by reason of a minimal or tangential contribution to material harm caused by LTFV goods.'" *See also Nippon Steel Corp. v. United States*, 458 F.3d 1345, 1357 (Fed. Cir. 2006); *Taiwan Semiconductor Industry Ass'n v. USITC*, 266 F.3d 1339, 1345 (Fed. Cir. 2001).

injury threshold.[103] In performing its examination, however, the Commission need not isolate the injury caused by other factors from injury caused by unfairly traded imports.[104] Nor does the "by reason of" standard require that unfairly traded imports be the "principal" cause of injury or contemplate that injury from unfairly traded imports be weighed against other factors, such as nonsubject imports, which may be contributing to overall injury to an industry.[105] It is clear that the existence of injury caused by other factors does not compel a negative determination.[106]

Assessment of whether material injury to the domestic industry is "by reason of" subject imports "does not require the Commission to address the causation issue in any particular way" as long as "the injury to the domestic industry can reasonably be attributed to the subject imports" and the Commission "ensure{s} that it is not attributing injury from other sources to

[103] Uruguay Round Agreements Act Statement of Administrative Action (SAA), H.R. Rep. 103-316, Vol. I at 851-52 (1994) ("{T}he Commission must examine other factors to ensure that it is not attributing injury from other sources to the subject imports."); S. Rep. 96-249 at 75 (1979) (the Commission "will consider information which indicates that harm is caused by factors other than less-than-fair-value imports."); H.R. Rep. 96-317 at 47 (1979) ("in examining the overall injury being experienced by a domestic industry, the ITC will take into account evidence presented to it which demonstrates that the harm attributed by the petitioner to the subsidized or dumped imports is attributable to such other factors;" those factors include "the volume and prices of nonsubsidized imports or imports sold at fair value, contraction in demand or changes in patterns of consumption, trade restrictive practices of and competition between the foreign and domestic producers, developments in technology and the export performance and productivity of the domestic industry"); *accord Mittal Steel*, 542 F.3d at 877.

[104] SAA at 851-52 ("{T}he Commission need not isolate the injury caused by other factors from injury caused by unfair imports."); *Taiwan Semiconductor Industry Ass'n* , 266 F.3d at 1345. ("{T}he Commission need not isolate the injury caused by other factors from injury caused by unfair imports ... . Rather, the Commission must examine other factors to ensure that it is not attributing injury from other sources to the subject imports." (emphasis in original)); *Asociacion de Productores de Salmon y Trucha de Chile AG v. United States*, 180 F. Supp. 2d 1360, 1375 (Ct. Int'l Trade 2002) ("{t}he Commission is not required to isolate the effects of subject imports from other factors contributing to injury" or make "bright-line distinctions" between the effects of subject imports and other causes.); *see also Softwood Lumber from Canada*, Inv. Nos. 701-TA-414 and 731-TA-928 (Remand), USITC Pub. 3658 at 100-01 (Dec. 2003) (Commission recognized that "{i}f an alleged other factor is found not to have or threaten to have injurious effects to the domestic industry, *i.e*., it is not an 'other causal factor,' then there is nothing to further examine regarding attribution to injury"), *citing Gerald Metals,* 132 F.3d at 722 (the statute "does not suggest that an importer of LTFV goods can escape countervailing duties by finding some tangential or minor cause unrelated to the LTFV goods that contributed to the harmful effects on domestic market prices.").

[105] S. Rep. 96-249 at 74-75; H.R. Rep. 96-317 at 47.

[106] *See Nippon*, 345 F.3d at 1381 ("an affirmative material-injury determination under the statute requires no more than a substantial-factor showing. That is, the 'dumping' need not be the sole or principal cause of injury.").

the subject imports."[107] Indeed, the Federal Circuit has examined and affirmed various Commission methodologies and has disavowed "rigid adherence to a specific formula."[108]

The Federal Circuit's decisions in *Gerald Metals*, *Bratsk,* and *Mittal Steel* all involved cases in which the relevant "other factor" was the presence in the market of significant volumes of price-competitive nonsubject imports. The Commission interpreted the Federal Circuit's guidance in *Bratsk* as requiring it to apply a particular additional methodology following its finding of material injury in cases involving commodity products and a significant market presence of price-competitive nonsubject imports.[109] The additional "replacement/benefit" test looked at whether nonsubject imports might have replaced subject imports without any benefit to the U.S. industry. The Commission applied that specific additional test in subsequent cases, including the *Carbon and Certain Alloy Steel Wire Rod from Trinidad and Tobago* determination that underlies the *Mittal Steel* litigation.

Mittal Steel clarifies that the Commission's interpretation of *Bratsk* was too rigid and makes clear that the Federal Circuit does not require the Commission to apply an additional test nor any one specific methodology; instead, the court requires the Commission to have "evidence in the record 'to show that the harm occurred 'by reason of' the LTFV imports,'" and requires that the Commission not attribute injury from nonsubject imports or other factors to subject imports.[110] Accordingly, we do not consider ourselves required to apply the replacement/benefit test that was included in Commission opinions subsequent to *Bratsk*.

The progression of *Gerald Metals*, *Bratsk*, and *Mittal Steel* clarifies that, in cases involving commodity products where price-competitive nonsubject imports are a significant factor in the U.S. market, the Court will require the Commission to give full consideration, with adequate explanation, to non-attribution issues when it performs its causation analysis.[111]

---

[107] *Mittal Steel*, 542 F.3d at 877-78; *see also id.* at 873 ("While the Commission may not enter an affirmative determination unless it finds that a domestic industry is materially injured 'by reason of' subject imports, the Commission is not required to follow a single methodology for making that determination ... {and has} broad discretion with respect to its choice of methodology.") *citing United States Steel Group v. United States*, 96 F.3d 1352, 1362 (Fed. Cir. 1996) and S. Rep. 96-249 at 75. In its decision in *Swiff-Train v. United States*, 793 F.3d 1355 (Fed. Cir. 2015), the Federal Circuit affirmed the Commission's causation analysis as comporting with the Court's guidance in *Mittal*.

[108] *Nucor Corp. v. United States*, 414 F.3d 1331, 1336, 1341 (Fed. Cir. 2005); *see also Mittal Steel*, 542 F.3d at 879 ("*Bratsk* did not read into the antidumping statute a Procrustean formula for determining whether a domestic injury was 'by reason' of subject imports.").

[109] *Mittal Steel*, 542 F.3d at 875-79.

[110] *Mittal Steel*, 542 F.3d at 873 (quoting from *Gerald Metals*, 132 F.3d at 722), 875-79 & n.2 (recognizing the Commission's alternative interpretation of *Bratsk* as a reminder to conduct a non-attribution analysis).

[111] To that end, after the Federal Circuit issued its decision in *Bratsk*, the Commission began to present published information or send out information requests in the final phase of investigations to producers in nonsubject countries that accounted for substantial shares of U.S. imports of subject merchandise (if, in fact, there were large nonsubject import suppliers). In order to provide a more complete record for the Commission's causation analysis, these requests typically seek information on capacity, production, and shipments of the product under investigation in the major source countries that export to the United States. The Commission plans to continue utilizing published or requested

The question of whether the material injury threshold for subject imports is satisfied notwithstanding any injury from other factors is factual, subject to review under the substantial evidence standard.[112] Congress has delegated this factual finding to the Commission because of the agency's institutional expertise in resolving injury issues.[113]

B. Conditions of Competition and the Business Cycle

The following conditions of competition inform our analysis of whether there is a reasonable indication of material injury by reason of subject imports.

1. Demand Conditions

U.S. demand for strontium chromate depends on the demand for U.S.-produced paint and coating products in which it is used.[114] Reported end uses for strontium chromate include industrial coatings and anticorrosive paints for coils, durable goods, and aerospace materials.[115]

Petitioner reported that U.S. demand for strontium chromate had not changed since January 1, 2015.[116] A plurality of importers reported that U.S. demand for strontium chromate either had fluctuated or had not changed since January 1, 2015.[117]

Apparent U.S. consumption of strontium chromate increased from *** pounds in 2015 to *** pounds in 2016 and declined to *** pounds in 2017, which represented an increase overall of *** percent between 2015 and 2017.[118] Apparent U.S. consumption of strontium chromate was *** percent higher in interim 2018, at *** pounds, than in interim 2017, at *** pounds.[119]

2. Supply Conditions

The domestic industry and cumulated subject imports were the two main sources of supply to the U.S. market during the POI.[120] While the domestic industry supplied the majority

---

information in the final phase of investigations in which there are substantial levels of nonsubject imports.

[112] We provide in our discussion below a full analysis of other factors alleged to have caused any material injury experienced by the domestic industry.

[113] *Mittal Steel*, 542 F.3d at 873; *Nippon Steel Corp.*, 458 F.3d at 1350, *citing U.S. Steel Group*, 96 F.3d at 1357; S. Rep. 96-249 at 75 ("The determination of the ITC with respect to causation is ... complex and difficult, and is a matter for the judgment of the ITC.").

[114] CR at II-8, PR at II-5.

[115] CR at II-9, PR at II-5; CR at I-11, PR at I-8.

[116] CR/PR at Table II-4.

[117] CR/PR at Table II-4. Two importers reported that U.S. demand for strontium chromate had not changed since January 1, 2015, two importers reported that demand fluctuated, and one reported that demand increased. *Id.*

[118] CR/PR at Tables IV-7, C-1.

[119] CR/PR at Tables IV-7, C-1.

[120] CR/PR at Table IV-8, C-1.

share of the U.S. market at the beginning of the POI, the majority of the market was supplied by cumulated subject imports by the end of the POI.[121]

As discussed above, WPC is the sole domestic producer of strontium chromate.[122] WPC closed its former plant in Milwaukee, Wisconsin, in June 2015, with plans to commence operations at its new facility in Oak Creek, Wisconsin within six months; however, permitting issues resulted in the delay in operations at the new facility until March 2016.[123]

The domestic industry's share of apparent U.S. consumption declined from *** percent in 2015 to *** percent in 2016 and *** percent in 2017.[124] The domestic industry's share of apparent U.S. consumption was lower in interim 2018, at *** percent, than in interim 2017, at *** percent.[125]

There are very few foreign suppliers of strontium chromate.[126] During the POI, Habich was the only known subject producer of strontium chromate in Austria and SNCZ was the only known subject producer of strontium chromate in France.[127] Cumulated subject imports' share of apparent U.S. consumption increased from *** percent in 2015 to *** percent in 2016 and *** percent in 2017.[128] Cumulated subject imports' share of apparent U.S. consumption was higher in interim 2018, at *** percent, than in interim 2017, at *** percent.[129]

Nonsubject imports had a very small presence in the U.S. market throughout the POI. Nonsubject imports' share of apparent U.S. consumption was *** percent in 2015, *** percent in 2016, and nonsubject imports were not present in the U.S. market for the remainder of the POI.[130] During the POI, nonsubject imports were from *** only.[131]

3. Substitutability

Based on the record in the preliminary phase of these investigations, we find that there is a high degree of substitutability among domestically produced strontium chromate and strontium chromate from both subject sources.[132] WPC, the sole domestic producer of strontium chromate, reported that the domestic like product and subject imports were

[121] CR/PR at Tables IV-8, C-1.

[122] CR/PR at Table III-1.

[123] CR/PR at Table III-2; CR/PR at III-2.

[124] CR/PR at Tables IV-8, C-1.

[125] CR/PR at Tables IV-8, C-1.

[126] CR at I-4 & VII-16 to VII-17, PR at I-3 & VII-9; CR at Conf. Tr. at 56 (Esselin). In the final phase of these investigations, we intend to further investigate global supply and demand conditions for strontium chromate.

[127] CR/PR at Tables VII-1 & VII-3.

[128] CR/PR at Table IV-8, C-1.

[129] CR/PR at Tables IV-8, C-1.

[130] CR/PR at Tables IV-8, C-1.

[131] CR at IV-4 & n.8, PR at IV-2 n.8; CR/PR at Tables IV-8, C-1.

[132] CR at II-10, PR at II-7.

"always" interchangeable.[133] The vast majority of importers reported that the domestic like product was "always" or "frequently" interchangeable with subject imports.[134]

We also find that price is an important factor in purchasing decisions for strontium chromate. U.S. purchasers identified price among the major factors in purchasing decisions for strontium chromate.[135] At the conference, a witness testifying on behalf of Respondent acknowledged that purchasers mainly consider price in purchasing decisions for strontium chromate.[136] Other factors, however, are also important in purchasing decisions, with purchasers identifying quality, availability, and security of supply, among others, as additional major purchasing factors.[137] Although U.S. producer WPC reported that non-price differences were "never" significant in purchasing decisions for strontium chromate, most importers reported that non-price differences were "always" or "frequently" significant in comparisons of the domestic like product and subject imports from Austria and in comparisons between subject imports from the subject countries.[138] In comparisons of the domestic like product and subject imports from France, half of the importers reported that non-price differences were "always" or "frequently" significant while the other half of importers reported that non-price differences were "sometimes" or "never" significant.[139]

4. Other Conditions

The major raw materials involved in the production of strontium chromate are strontium (typically either strontium chloride or strontium carbonate) and chrome (typically sodium chromate, chrome acid flakes, or sodium dichromate).[140] Raw materials accounted for between *** percent and *** percent of the cost of goods sold ("COGS") for U.S. production of strontium chromate during the POI.[141] Although price indices for the raw materials of strontium chromate are not publically available, WPC reported that the cost of sodium dichromate *** between 2015 and 2018, and that the cost of strontium carbonate *** during the same period.[142]

Strontium chromate is a known human carcinogen; the Cr (VI) present in the product is classified as Group A – known human carcinogen by the inhalation route of exposure.[143]

---

[133] CR/PR at Table II-5.

[134] CR/PR at Table II-5. *** importers reported that the domestic like product was "always" interchangeable with subject imports and *** importers reported that the domestic like product was "frequently" interchangeable with subject imports. *Id.*

[135] CR at II-11, PR at II-7.

[136] Conf. Tr. at 71 (Esselin).

[137] CR at II-11, PR at II-7.

[138] CR/PR at Table II-6.

[139] CR/PR at Table II-6.

[140] CR/PR at V-1. The strontium material is primarily sourced from Mexico or Spain while the chrome material is primarily sourced from South Africa or Turkey. CR/PR at V-1.

[141] CR/PR at Table VI-1.

[142] Petitioner's Postconference Br. at Exh. 5; CR/PR at V-1.

[143] CR at I-12, PR at I-9.

Strontium chromate is associated with an increased risk of developing lung cancer and cancer of the sinonasal cavity.[144] Due to environmental and human health concerns, strontium chromate uses are largely limited to industries where there are no viable alternatives.[145] Moreover, the Registration, Evaluation, Authorisation, and Restriction of Chemicals ("REACH") is a European Union (EU) regulation that, by 2016, had led to a phase out of the use of strontium chromate in applications other than aerospace in the EU.[146] The last EU production line using strontium chromate for non-aerospace uses closed in 2016.[147] The Petitioner contends that this phase out has resulted in excess supply of strontium chromate in the EU and created an incentive for European producers to seek out new export markets.[148] In the final phase of these investigations, we intend to explore the effects of REACH on the U.S. strontium chromate market.

The U.S. market for strontium chromate is heavily concentrated with just a few large purchasers, which are paint and coating suppliers.[149] In 2017, four firms accounted for 88 percent of total reported purchases of strontium chromate in the United States.[150]

Finally, strontium chromate is almost always sold from inventory with generally comparable lead times for both the domestic like product and subject imports.[151]

C. Volume of Cumulated Subject Imports

Section 771(7)(C)(i) of the Tariff Act provides that the "Commission shall consider whether the volume of imports of the merchandise, or any increase in that volume, either in absolute terms or relative to production or consumption in the United States, is significant."[152]

Cumulated subject imports had a substantial and increasing presence in the U.S. market throughout the POI. The volume of subject imports increased from *** pounds in 2015 to *** pounds in 2016 and *** pounds in 2017, a level *** percent above that of 2015.[153] Cumulated subject imports were *** percent higher in interim 2018, at *** pounds, than in interim 2017, at *** pounds.[154]

---

[144] CR at I-12, PR at I-9.

[145] CR at I-13, PR at I-9; Conf. Tr. at 46 (St. John).

[146] CR at I-13 n.45, PR at I-9 n.45; CR at II-2, PR at II-1; Conf. Tr. at 71-72 (Esselin).

[147] Conf. Tr. at 72 (Esselin).

[148] Petitioner's Postconference Br. at 32.

[149] CR/PR at II-1; Conf. Tr. at 35-36 (St. John) & 56 (Esselin).

[150] CR/PR at II-1. The four largest U.S. purchasers of strontium chromate were ***. *Id*.

[151] WPC reported that *** percent of its shipments during the POI were from inventory, with lead times averaging *** days. CR at II-11, PR at II-7. U.S. importers of subject merchandise reported that *** percent of their commercial shipments were from U.S. inventory, with lead times averaging *** days. *Id*. U.S. importers also reported that the remaining *** percent of their commercial shipments were from foreign inventories, with lead times averaging *** days. *Id*.

[152] 19 U.S.C. § 1677(7)(C)(i).

[153] CR/PR at Table IV-2.

[154] CR/PR at Table IV-2.

Cumulated subject imports gained significant market share at the expense of the domestic industry. Cumulated subject imports' share of apparent U.S. consumption increased from *** percent in 2015 to *** percent in 2016 and *** percent in 2017, an overall increase of *** percentage points.[155] Their share of apparent U.S. consumption was *** percentage points higher in interim 2018, at *** percent of apparent U.S. consumption, than in interim 2017, when it was *** percent.[156] By contrast, the domestic industry's market share declined by *** percentage points from 2015 to 2017 and was *** percentage points lower in interim 2018 than in interim 2017.[157] Cumulated subject imports as a share of U.S. production also rose, from *** percent in 2015 to *** percent in 2016 and *** percent in 2017.[158] This share was *** percent in interim 2017 and *** percent in interim 2018.[159]

In light of the foregoing, we find that the volume of cumulated subject imports and the increase in that volume are significant in both absolute terms and relative to U.S. production and consumption.

D. Price Effects of the Cumulated Subject Imports

As addressed in section VI.B.3 above, the record indicates a high degree of substitutability among subject imports and the domestically produced product, and that price is an important consideration in purchasing decisions.

The Commission collected quarterly data for the total quantity and f.o.b. value of four pricing products shipped to unrelated U.S. customers between January 2015 and June 2018.[160] WPC and five importers provided usable pricing data for sales of the requested products, although not all firms reported pricing data for all products for all quarters.[161] Cumulated

---

[155] CR/PR at Table IV-8.

[156] CR/PR at Table IV-8.

[157] CR/PR at Table IV-8. The domestic industry's market share was *** percent in 2015, *** percent in 2016, and *** percent in 2017. *Id.* It was *** percent in interim 2017 and *** percent in interim 2018. *Id.*

[158] CR/PR at Table IV-2.

[159] CR/PR at Table IV-2.

[160] CR at V-3 to V-4; PR at V-2. The four pricing products are: (1) Strontium chromate powder, chemical formula $SrCrO_4$ conductivity (micro Siemens) 1500 maximum, packaged in small bags (ranging between 20kg and 30 kg per bag); (2) Strontium chromate powder, chemical formula $SrCrO_4$ conductivity (micro Siemens) 1500 maximum, packaged in large bags (ranging between 450kg and 500 kg per bag); (3) Strontium chromate dispersed/slurried in a solvent (also known as a Paste/Dispersion), packaged in drums (ranging between 200kg and 300kg per drum); and (4) Strontium chromate powder, chemical formula $SrCrO_4$ conductivity (micro Siemens) over 1500 to 1700 maximum, packaged in small bags (ranging between 20kg and 30 kg per bag). CR at V-3 to V-4, PR at V-2 to V-3.

[161] CR at V-4; PR at V-3. Reported pricing data accounted for approximately *** percent of the domestic producer's U.S. commercial shipments in 2017, *** percent of U.S. commercial shipments of subject imports from Austria in 2017, and *** percent of U.S. commercial shipments of subject imports from France in 2017. CR at V-4, PR at V-3. U.S. commercial shipments of imports of strontium chromate from Austria accounted for *** percent of total U.S. imports from Austria whereas U.S. commercial

subject imports consisting of *** pounds of strontium chromate undersold the domestic like product in 4 of 61 quarterly comparisons, at margins ranging from *** percent to *** percent.[162] Cumulated subject imports consisting of *** pounds of strontium chromate oversold the domestic like product in 57 of 61 quarterly comparisons, at margins ranging from*** percent to *** percent.[163]

Most subject imports entered the United States as direct imports by importers/end-users.[164] The Commission received import purchase cost data for two of the four pricing products (Products 1 and 2) from three importers.[165] Reported purchase cost data reflected far greater quantities of imports than the importers' pricing data for shipments to unrelated purchasers.[166] The record shows that the direct import purchase costs of cumulated subject imports were lower than the sales prices for the domestically produced product in *** quarterly comparisons, or *** percent of comparisons.[167] Moreover, on a quantity basis, there were *** pounds of direct imports in quarters in which the purchase cost was lower than the price for the domestic like product, and no direct imports for which the purchase cost was higher than the price for the domestic like product.[168]

We are aware that the direct import purchase costs may not account for the total costs of importing. Consequently, the questionnaires also requested that direct importers provide additional estimated costs above landed duty paid value associated with their importing activities. We attempted to collect such data, consistent with our practice in other investigations, to enable us to assess the direct import purchase cost data in light of purchasers' costs for direct importing. Only two of three direct importers provided estimates.[169] *** estimated that the additional costs associated with importing strontium chromate was ***, or ***, and *** estimated these costs were *** percent, or ***.[170] The average difference

---

shipments of imports of strontium chromate from France accounted for *** U.S. imports from France. CR at V-4 n.8, PR at V-3 n.8.

[162] CR/PR at Table V-8.

[163] CR/PR at Table V-8.

[164] The import purchase cost data pertains to direct imports of strontium chromate from Austria, and accounted for *** percent of total imports of strontium chromate from Austria during the POI. CR at V-13, PR at V-4. There were no direct imports of strontium chromate from France during the POI. *Id*.

[165] CR at V-13; PR at V-4.

[166] Importers reported direct purchase cost data on a total of *** pounds of strontium chromate and pricing data on a total of *** pounds of strontium chromate. *Derived from* CR/PR at Tables V-5, V-6, V-8.

[167] *Derived from* CR/PR at Tables V-5 & V-6. Although the purchase cost data may be overstated because importer *** was unable to breakout inland transportation costs from its reported purchase costs (CR/PR at Table V-6), as stated above the direct import purchase cost of the subject imports nonetheless was lower than the sales prices for the domestically produced product in *** quarterly comparisons.

[168] *Derived from* CR/PR at Table V-5 & V-6.

[169] We intend to collect further information on additional estimated costs in any final phase of these investigations.

[170] CR at V-14, PR at V-5. Importers *** did not provide further breakout of their import service costs by type of cost. CR at V-14 n.11, PR at V-5 n.11.

between direct import purchase costs and domestic like product prices for the *** quarters in which direct import purchase costs were lower than domestic like product prices was *** percent.[171] In addition, we observe that most importers reported saving money by having directly imported.[172] Based on this record, the purchase cost data for direct imports demonstrate that subject imports were generally available at a lower cost to importers/end-users than the sales prices of the domestic like product.

Information collected in response to lost sales allegations further supports a finding that cumulated subject imports were often priced lower than the domestic like product. Seven of 11 responding purchasers reported that, since 2015, they had purchased subject merchandise instead of the domestic like product.[173] Five of these seven purchasers reported that subject import prices were lower than domestic like product prices.[174] Thus, a majority of purchasers that purchased subject imports rather than the domestically produced product reported that subject imports were lower priced.

In light of the record evidence indicating that cumulated subject import prices were generally lower than the prices for the domestic like product, we find for purposes of our preliminary determinations that the underselling by cumulated subject imports was significant.

We have also considered price trends for the domestic like product and cumulated subject imports. During the POI, prices declined for three of the four domestically produced pricing products (Products 1, 2, and 4), including the domestic industry's highest volume product (Product 2).[175] During the POI, prices and purchase costs[176] for cumulated subject imports also declined for pricing products 1 and 2.[177] These price declines occurred as demand was increasing, with apparent U.S. consumption increasing by *** percent during the full years of the POI and an additional *** percent in the interim period.[178] Moreover, two purchasers, including the largest purchaser in the U.S. market, reported that the domestic producer

---

[171] *Derived from* CR/PR at Tables V-5 & V-6.

[172] CR at V-14; PR at V-4 to V-5.

[173] CR/PR at Tables V-10 & V-11.

[174] CR/PR at Tables V-10 & V-11. We note that one of these purchasers reported that price was a primary reason for the decision to purchase subject imports rather than domestic like product while the other six purchasers identified non-price reasons for purchasing subject imports rather than the domestic like product, including WPC's supply issues in 2015. CR/PR at Table V-10; CR at V-23 to V-24, PR at V-8.

[175] CR/PR at Tables V-1, V-2, V-4, and V-7. During the POI, domestic prices declined by *** percent for Product 1, *** percent for Product 2, and *** percent for Product 4. *Id*. Domestic prices for Product 3 increased by *** percent. CR/PR at Tables V-3 & V-7.

[176] As discussed above, the purchase costs of cumulated subject imports were lower than the sales prices for the domestic like product for *** quarterly comparisons. CR/PR at Tables V-5 to V-7.

[177] For Products 1 and 2, price declines for cumulated subject imports ranged from *** percent to *** percent while declines in purchase costs for subject merchandise ranged from *** percent to *** percent. CR/PR at Table V-7. For Product 3, subject import prices increased by *** percent. *Id*. No purchase cost data was reported for subject imports for Product 3 and no price or purchase cost data was reported for subject imports for Product 4. *Id*.

[178] CR/PR at Table C-1.

lowered prices to compete with the lower-priced subject imports.[179] Accordingly, based on the current record, we find that cumulated subject imports had significant price-depressing effects on domestic prices for strontium chromate during the POI.

We have also examined whether subject imports prevented price increases, which would have otherwise occurred, to a significant degree during the POI. As discussed above, apparent U.S. consumption increased *** percent from 2015 to 2017, and was *** percent higher in interim 2018 than in interim 2017.[180] U.S. prices generally declined over this period of investigation, and the domestic industry's COGS as a ratio to net sales increased steadily from *** percent in 2015 to *** percent in 2017, and was *** percent in interim 2018.[181] Consequently, the domestic industry was unable to price its strontium chromate at levels that permitted it to cover its rising costs during a period of increasing demand.[182] Given these considerations, and the increasing volume of low-priced subject imports in the market, we find that cumulated subject imports prevented price increases for the domestic like product, which otherwise would have occurred, to a significant degree and thereby had significant price-suppressing effects.

In light of the foregoing, we find for purposes of these preliminary determinations that there was a significant and increasing volume of cumulated subject imports that significantly undersold the domestic like product. Moreover, these imports had significant price-depressing effects and prevented price increases that would otherwise have occurred to a significant degree. We consequently find that the cumulated subject imports had significant adverse price effects.

E. Likely Impact of the Cumulated Subject Imports[183]

The domestic industry's output-related indicators generally declined during the POI, notwithstanding modest improvements for some indicia in interim 2018. Due to WPC's

[179] CR at V-25, PR at V-9. As discussed above, two of 11 responding purchasers, including the largest U.S. purchaser of strontium chromate, reported that WPC had reduced prices in order to compete with lower-priced subject imports from Austria, with estimated price reductions ranging from *** percent to *** percent. CR at V-25, PR at V-9; CR/PR at Tables V-12 & V-13. In its questionnaire response, the largest U.S. purchaser of strontium chromate, *** reported as follows: "." CR/PR at Table V-12.

[180] CR/PR at Table C-1.

[181] As a ratio to net sales, the domestic industry's COGS were *** percent in 2015, *** percent in 2016, *** percent in 2017, *** percent in interim 2017, and *** percent in interim 2018. CR/PR at Tables VI-1, C-1.

[182] CR/PR at Tables IV-7, VI-1, VI-2, C-1. WPC reported that it had *** to its customers. CR/PR at V-1.

[183] In its notice initiating antidumping duty investigations, Commerce reported estimated antidumping duty margins of 90.97 percent for imports of strontium chromate from Austria and 47.91 percent for imports of strontium chromate from France. *Strontium Chromate from Austria and France*, 83 Fed. Reg. 49543, 49546 (Oct. 2, 2018).

shutdown in 2015 and relocation to a new facility in 2016, the domestic industry's capacity increased by *** percent from 2015 to 2017.[184] However, all of the other output-related indicia for the domestic industry declined from 2015 to 2017: production declined by *** percent,[185] capacity utilization declined by *** percentage points,[186] net sales (by quantity) declined by *** percent,[187] and U.S. shipments (by quantity) declined by *** percent.[188] The domestic industry's net sales and U.S. shipments (by quantity) were both lower in interim 2018 than in interim 2017,[189] although its production and capacity utilization were somewhat higher in interim 2018 than in interim 2017,[190] and its capacity was unchanged between the interim periods.[191] Inventories increased throughout the POI.[192]

The domestic industry's employment indicia were mixed. From 2015 to 2017, the domestic industry's number of production related workers ("PRWs") declined by *** percent,[193] hours worked declined by *** percent,[194] wages paid declined by ***percent,[195] and hourly wages declined by *** percent.[196] Total hours worked remained constant between interim 2017 and interim 2018, PRWs were *** lower in interim 2018 than in interim 2017, and

---

[184] The domestic industry's capacity increased from *** pounds in 2015 to *** pounds in 2016 and *** pounds in 2017. CR/PR at Table III-3.

[185] The domestic industry's production increased from *** pounds in 2015 to *** pounds in 2016 and then declined to *** pounds in 2017. CR/PR at Table III-3.

[186] The domestic industry's production capacity utilization declined from *** percent in 2015 to *** percent in 2016 and *** percent in 2017. CR/PR at Table III-3.

[187] The domestic industry's net sales (by quantity) declined from *** pounds in 2015 to *** pounds in 2016 and *** pounds in 2017. CR/PR at Table VI-1.

[188] The domestic industry's U.S. shipments (by quantity) declined from *** pounds in 2015 to*** pounds in 2016 and *** pounds in 2017. CR/PR at Table III-4.

[189] The domestic industry's net sales, by quantity, were *** in interim 2017 and *** in interim 2018. CR/PR at Table VI-1. The domestic industry's U.S. shipments, by quantity, were *** in interim 2017 and *** pounds in interim 2018. CR/PR at Table III-4.

[190] The domestic industry's production was *** pounds in interim 2017 and *** pounds in interim 2018. Its capacity utilization was ***percent in interim 2017 and *** percent in interim 2018. CR/PR at Table III-3.

[191] The domestic industry's capacity was *** pounds in interim 2017 and interim 2018. CR/PR at Table III-3.

[192] The domestic industry's end-of-period inventories increased by *** percent from 2015 to 2017, increasing from *** pounds in 2015 to *** pounds in 2016, and *** pounds in 2017. CR/PR at Table III-7. Its end-of-period inventories were *** percent higher in interim 2018, at *** pounds, than in interim 2017, at *** pounds. *Id*.

[193] The number of PRWs were *** in 2015, *** in 2016, and *** in 2017. CR/PR at Table III-9.

[194] Total hours worked declined from *** hours in 2015 to *** hours in 2016 and *** hours in 2017. CR/PR at Table III-9.

[195] Wages paid declined from $*** in 2015 to $*** in 2016 and $*** in 2017. CR/PR at Table III-9. In its questionnaire response, WPC indicated that ***. CR at III-13, PR at III-6; WPC U.S. Producer Questionnaire at II-10.

[196] Hourly wages declined from $*** in 2015 to $*** in 2016 and $*** in 2017. CR/PR at Table III-9.

wages paid and hourly wages were *** higher in interim 2018 than in interim 2017.[197] Worker productivity increased irregularly from 2015 to 2017, and was higher in interim 2018 than in interim 2017.[198]

The domestic industry's financial performance was generally poor during the POI, as the industry experienced *** throughout the period. The domestic industry's net sales revenues declined by *** percent from 2015 to 2017, and were *** percent lower in interim 2018 than in interim 2017.[199] Its gross profits declined by *** percent from 2015 to 2017, and were *** percent lower in interim 2018 than in interim 2017.[200] Its operating income decreased by *** percent between 2015 and 2017, and was *** higher in interim 2018 than in interim 2017.[201] Its operating income margin decreased by *** percentage points from 2015 to 2017, and was *** percentage points higher in interim 2018 than in interim 2017.[202] In addition to experiencing *** throughout the POI, the domestic industry's net income margin decreased by *** percentage points from 2015 to 2017, and was *** percentage points lower in interim 2018 than in interim 2017.[203]

The domestic industry's capital expenditures fell overall by *** percent between 2015 and 2017 and were *** percent lower in interim 2018 than in interim 2017, although this was likely due mostly to the plant relocation in 2015.[204] The domestic industry's assets and return

---

[197] The number of PRWs were *** in interim 2017 and *** in interim 2018. CR/PR at Table III-9. Total hours worked were *** hours in interim 2017 and 2018. *Id*. Wages paid were $*** in interim 2017 and $*** in interim 2018. *Id*. Hourly wages were $*** in interim 2017 and $*** in interim 2018. *Id*.

[198] Productivity was *** pounds per hour in 2015, *** pounds per hour in 2016, *** pounds per hour in 2017, *** pounds per hour in interim 2017, and *** pounds per hour in interim 2018. CR/PR at Table III-9.

[199] The domestic industry's net sales revenues were $*** in 2015, $*** in 2016, $*** in 2017, $*** in interim 2017, and $*** in interim 2018. CR/PR at Tables VI-1, C-1.

[200] The domestic industry's gross profits were $*** in 2015, $*** in 2016, $*** in 2017, $*** in interim 2017, and $*** in interim 2018. CR/PR at Tables VI-1, C-1.

[201] The domestic industry's operating income was *** in 2015, *** in 2016, *** in 2017, *** in interim 2017, and *** in interim 2018. CR/PR at Tables VI-1, C-1.

[202] The domestic industry's operating income as a share of net sales was *** percent in 2015, *** percent in 2016, *** percent in 2017, *** percent in interim 2017, and *** percent in interim 2018. CR/PR at Tables VI-1, C-1.

[203] The domestic industry's net income was *** in 2015, *** in 2016, *** in 2017, *** in interim 2017, and *** in interim 2018. CR/PR at Tables VI-1, C-1. The domestic industry's net income as a share of net sales was *** percent in 2015, *** percent in 2016, *** percent in 2017, *** percent in interim 2017, and *** percent in interim 2018. *Id*.

[204] CR/PR at Tables VI-5, C-1. The domestic industry's capital expenditures were $*** in 2015, $*** in 2016, $*** in 2017, $*** in interim 2017, and $*** in interim 2018. *Id*. The domestic industry's research and development ("R&D") expenses were $*** in 2015, $*** in 2016, and $*** in 2017. CR/PR at Table VI-5. The domestic industry's R&D expenses were $*** in interim 2017 and interim 2018. *Id*.

on assets also decreased from 2015 to 2017.[205] Finally, WPC, the sole domestic producer of strontium chromate, reported negative effects on investment and on growth and development due to subject imports during the POI.[206]

In light of the domestic industry's deteriorating financial condition during the POI, the significant volume of cumulated subject imports, the high degree of substitutability between the domestic like product and cumulated subject imports, the importance of price in purchasing decisions, the significant underselling by cumulated subject imports, and the significant price-depressing and price-suppressing effects by cumulated subject imports discussed above, we find for purposes of these preliminary determinations that cumulated subject imports have had a significant adverse impact on the domestic industry. Low-priced cumulated subject imports increased significantly in absolute terms and relative to U.S. production and consumption during the POI and significantly undersold the domestic like product, taking market share from the domestic industry. Moreover, the increasing and significant volume of low-priced cumulated subject imports coincided with domestic price declines for strontium chromate and precluded the domestic industry from increasing prices to sufficiently recover its costs. As a result, the domestic industry's U.S. shipments, employment, revenues, and profits were lower than they would have been otherwise throughout the POI. Given these considerations, we find that cumulated subject imports had a significant impact on the domestic industry.

We have also considered whether there are other factors that may have had an impact on the domestic industry during the POI to ensure that we are not attributing injury from such other factors to subject merchandise.

Respondent argues that WPC was unable to supply customers in 2015 and 2016 due to a supply shortfall from the closure of its Milwaukee facility and delays in opening its new facility in Oak Creek, Wisconsin.[207] They further maintain that the harm to WPC's reputation from the supply shortage and the desire for dual sourcing led various U.S. customers to continue sourcing cumulated subject imports in 2017 and 2018.[208] WPC counters that, notwithstanding any supply disruptions due to the shutdown and delays in opening its new facility, it was able to supply the U.S. market for strontium chromate with inventories and imports of subject merchandise from Austria, and that the new facility commenced production operations in March 2016.[209] We recognize that the record indicates that customers reported supply disruptions and/or imported subject merchandise in the aftermath of WPC's shutdown and delays in opening its new facility.[210] However, the record also shows that increasing volumes of low-priced cumulated subject imports continued to enter the U.S. market, at declining prices, resulting in rising domestic inventory levels and lower domestic production and capacity utilization even after WPC resumed strontium chromate production at its new facility in March

[205] Total net assets were $*** in 2015, $*** in 2016, and $*** in 2017. CR/PR at Table VI-6. The return on assets was *** percent in 2015, *** percent in 2016, and *** percent in 2017. *Id.*

[206] CR/PR at Tables VI-7 & VI-8.

[207] Conf. Tr. at 57-58 (Esselin).

[208] Conf. Tr. at 57-58, 85-87 (Esselin) & 67 (Levinson).

[209] *See e.g.*, WPC Postconf. Br. at 28-30.

[210] CR at II-2 & II-7 to II-8, PR at II-1 & II-4 to II-5.

2016.[211] We intend to examine these supply issues further in any final phase of these investigations.

Finally, we have considered the role of nonsubject imports. They maintained a very small presence in the U.S. market during the POI. Their market share ranged from *** percent to *** percent and the total volume of nonsubject imports declined during the POI.[212] Nonsubject imports, therefore, cannot explain the domestic industry's sales and market share losses throughout the POI or the magnitude of declines in the domestic industry's output.

VII. Conclusion

For the reasons stated above, we determine that there is a reasonable indication that an industry in the United States is materially injured by reason of subject imports of strontium chromate from Austria and France that are allegedly sold in the United States at less than fair value.

[211] CR/PR at Table C-1.

[212] CR/PR at Table IV-8.

PART I: INTRODUCTION

BACKGROUND

These investigations result from petitions filed with the U.S. Department of Commerce ("Commerce") and the U.S. International Trade Commission ("USITC" or "Commission") by Lumimove Inc., d.b.a. WPC Technologies ("WPC"), Oak Creek, Wisconsin, on September 5, 2018, alleging that an industry in the United States is materially injured and threatened with material injury by reason of less-than-fair-value ("LTFV") imports of strontium chromate[1] from Austria and France. The following tabulation provides information relating to the background of these investigations.[2] [3]

Effective date	Action
September 5, 2018	Petitions filed with Commerce and the Commission; institution of Commission investigations (83 FR 46189, September 12, 2018)
September 25, 2018	Commerce's notice of initiation (83 FR 49543, October 2, 2018)
September 26, 2018	Commission's conference
October 19, 2018	Commission's vote
October 22, 2018	Commission's determinations
October 29, 2018	Commission's views

STATUTORY CRITERIA AND ORGANIZATION OF THE REPORT

Statutory criteria

Section 771(7)(B) of the Tariff Act of 1930 (the "Act") (19 U.S.C. § 1677(7)(B)) provides that in making its determinations of injury to an industry in the United States, the Commission--

> *shall consider (I) the volume of imports of the subject merchandise, (II) the effect of imports of that merchandise on prices in the United States for domestic like products, and (III) the impact of imports of such merchandise on domestic producers of domestic like products, but only in the context of production operations within the United States; and. . . may consider such other economic factors as are relevant to the*

[1] See the section entitled "The Subject Merchandise" in *Part I* of this report for a complete description of the merchandise subject in this proceeding.

[2] Pertinent *Federal Register* notices are referenced in appendix A, and may be found at the Commission's website (www.usitc.gov).

[3] A list of witnesses appearing at the conference is presented in appendix B of this report.

determination regarding whether there is material injury by reason of imports.

Section 771(7)(C) of the Act (19 U.S.C. § 1677(7)(C)) further provides that--[4]

In evaluating the volume of imports of merchandise, the Commission shall consider whether the volume of imports of the merchandise, or any increase in that volume, either in absolute terms or relative to production or consumption in the United States is significant.. . .In evaluating the effect of imports of such merchandise on prices, the Commission shall consider whether. . .(I) there has been significant price underselling by the imported merchandise as compared with the price of domestic like products of the United States, and (II) the effect of imports of such merchandise otherwise depresses prices to a significant degree or prevents price increases, which otherwise would have occurred, to a significant degree.. . . In examining the impact required to be considered under subparagraph (B)(i)(III), the Commission shall evaluate (within the context of the business cycle and conditions of competition that are distinctive to the affected industry) all relevant economic factors which have a bearing on the state of the industry in the United States, including, but not limited to. . . (I) actual and potential decline in output, sales, market share, gross profits, operating profits, net profits, ability to service debt, productivity, return on investments, return on assets, and utilization of capacity, (II) factors affecting domestic prices, (III) actual and potential negative effects on cash flow, inventories, employment, wages, growth, ability to raise capital, and investment, (IV) actual and potential negative effects on the existing development and production efforts of the domestic industry, including efforts to develop a derivative or more advanced version of the domestic like product, and (V) in {an antidumping investigation}, the magnitude of the margin of dumping.

In addition, Section 771(7)(J) of the Act (19 U.S.C. § 1677(7)(J)) provides that—[5]

(J) EFFECT OF PROFITABILITY.—The Commission may not determine that there is no material injury or threat of material injury to an industry in the United States merely because that industry is profitable or because the performance of that industry has recently improved.

[4] Amended by PL 114-27 (as signed, June 29, 2015), Trade Preferences Extension Act of 2015.
[5] Ibid.

Organization of report

Part I of this report presents information on the subject merchandise, alleged dumping margins, and domestic like product. *Part II* of this report presents information on conditions of competition and other relevant economic factors. *Part III* presents information on the condition of the U.S. industry, including data on capacity, production, shipments, inventories, and employment. *Parts IV* and *V* present the volume of subject imports and pricing of domestic and imported products, respectively. *Part VI* presents information on the financial experience of U.S. producers. *Part VII* presents the statutory requirements and information obtained for use in the Commission's consideration of the question of threat of material injury as well as information regarding nonsubject countries.

MARKET SUMMARY

Strontium chromate is a chemical compound that is a yellow powder or granular solid and insoluble in water. Its chemical formula is $SrCrO_4$. Strontium chromate powder can also be combined with various solvents to make dispersion, or paste, products. Strontium chromate is a very effective corrosion inhibitor, and is widely used as a corrosion-resistant pigment in paints and coatings for the protection of steel, aluminum, and its alloys. As the most effective pigment grade corrosion inhibitor, chromium-based corrosion inhibitive pigments for coil, aircraft, and general primer coating applications are very common.[6]

Petitioner WPC is the only confirmed U.S. producer of strontium chromate in its basic powder form. *** processes a portion of the strontium chromate that WPC produces and sells into a dispersion or paste on a toll basis.[7] In the United States, WPC produces strontium chromate in powder form, and currently uses a toller, ***, to convert some of its strontium chromate into a dispersion/paste form. There are six known producers of strontium chromate outside of the United States, including Habich GmbH ("Habich") of Austria, Société Nouvelle des Couleurs Zinciques ("SNCZ") of France, Sambochemical Co. Ltd. of Korea, Kikuchi Color & Chemicals Corporation of Japan, and two producers from China.[8] The leading U.S. importers of strontium chromate from Austria are ***, while the leading U.S. importers of strontium chromate from France are ***. Only one importer, ***, reported imports of strontium chromate from a nonsubject country during the period for which data were collected.

Apparent U.S. consumption of strontium chromate totaled approximately *** dry pounds, valued at $***, in 2017. Petitioner WPC's U.S. shipments of strontium chromate totaled *** dry pounds ($***) in 2017, and accounted for *** percent of apparent U.S. consumption by quantity and *** percent by value in that year. U.S. imports from subject sources totaled *** dry pounds ($***) in 2017 and accounted for *** percent of apparent U.S.

[6] Petition, pp. 5-6.

[7] Appendix D presents data reported by *** regarding its processing operations.

[8] Ibid., exh. II-16.

consumption by quantity and *** percent by value. There were no reported U.S. imports from nonsubject sources in 2017.[9]

SUMMARY DATA AND DATA SOURCES

A summary of data collected in these investigations is presented in appendix C. Except as noted, U.S. industry data are based on the questionnaire response of WPC,[10] which accounted for all known U.S. production of strontium chromate during 2017.[11]

U.S. imports are based on the questionnaire responses of eight firms that accounted for *** of U.S. imports of strontium chromate in 2017 from France and Austria. According to official import statistics for HTS statistical reporting number 2841.50.9100 (the predominant statistical reporting number under which strontium chromate enters the United States), U.S. imports of strontium chromate from Austria totaled 3,038,521 dry pounds in 2017, compared to *** dry pounds reported by responding U.S. importers under this same HTS statistical reporting number.[12] According to official import statistics, U.S. imports of strontium chromate imported from France under this HTS statistical reporting number totaled 449,923 dry pounds in 2017, compared to *** reported by responding U.S. importers under this same HTS statistical reporting number.[13] According to the petition, there is one producer in each of the subject countries, Austria and France,[14] and staff received importer questionnaires from all U.S. importers identified by these foreign producers as having imported strontium chromate into the U.S. during the period for which data were collected.

---

[9] In 2015, U.S. imports from nonsubject sources totaled *** dry pounds, and accounted for *** percent of U.S. apparent consumption by quantity and *** percent by value. In 2016, U.S. imports from nonsubject sources totaled *** dry pounds, and accounted for *** percent of U.S. apparent consumption by quantity and *** percent by value.

[10] Select data from WPC's toller, ***, are presented in Part VI and in Appendix D.

[11] In its petition, WPC stated it was not aware of any other U.S. producers of strontium chromate during the last three years. WPC noted that a company named Nichem Corp. produced a small amount of strontium chromate at one time. ***. WPC also identified Alfa Aesar, a subsidiary of Thermo Fisher Scientific, and American Elements as companies that may only produce small amounts of lab samples of strontium chromate from time to time, but WPC has not seen them in the marketplace. Petition, p. 3. ***.

[12] Import volumes from Austria reported in official import statistics under HTS 2841.50.9100 are understated, as strontium chromate from Austria is also known to be imported under HTSUS subheading 3212.90.00.

[13] Import volumes from France reported in official import statistics under HTS 2841.50.9100 may be understated, as strontium chromate from France is also known to be imported under HTSUS subheading 3206.20.00. Alternatively, import volumes may be overstated, as some volume from France that was reported in official import statistics under HTS 2841.50.9100, ***.

[14] Petition, p. 9 and exh. I-9.

As noted previously, there were no U.S. imports of strontium chromate from nonsubject countries in 2017.[15] According to the petition, the subject producers in Austria and France are the only two foreign producers active in the U.S. market. While there are four known producers in Asia (Sambochemical Co. Ltd. of Korea, Kikuchi Color & Chemicals Corporation of Japan, and two producers from China[16]), they have sold little to date in the U.S. market.[17] Staff surveyed a number of importers, but only one indicated that it imported strontium chromate from a nonsubject source during the period for which data were collected.[18]

PREVIOUS AND RELATED INVESTIGATIONS

Strontium chromate has not been the subject of any prior or related countervailing or antidumping duty investigations in the United States.[19]

NATURE AND EXTENT OF ALLEGED SUBSIDIES AND SALES AT LTFV

On October 2, 2018, Commerce published a notice in the *Federal Register* of the initiation of its antidumping duty investigations on strontium chromate from Austria and France. Commerce has initiated antidumping duty investigations based on estimated dumping margins of 90.97 percent for strontium chromate from Austria and 47.91 percent for strontium chromate from France.[20]

THE SUBJECT MERCHANDISE

Commerce's scope

In the current proceeding, Commerce has defined the scope as follows:[21]

---

[15] According to official import statistics, 152,315 dry pounds of strontium chromate were imported in 2017 from nonsubject sources under HTS number 2841.50.9100, however, ***.

[16] ***. See email from ***, EDIS document 658144, October 3, 2018.

[17] Petition, p.1 and exh II-16.

[18] *** indicated in its questionnaire response ***. U.S. importer questionnaire response, question II-8a.

[19] Petition, p. 4.

[20] *Strontium Chromate from Austria and France: Initiation of Less-Than-Fair-Value Investigations,* 83 FR 49543, October 2, 2018.

[21] The definition of the scope of the merchandise in the petitions varied somewhat from that defined by Commerce in its initiation of the investigations. In its initiation, Commerce explained that they contacted the petitioner to clarify the description of merchandise covered by the Petitions, and the scope as presented in its initiation reflects these clarifications. Commission staff note that the scope was modified in the initiation to specify products with which strontium chromate may be blended. The scope was also modified to remove "and other subheadings" in the following sentence: "Subject merchandise may also enter under HTSUS subheading 3212.90.00 or other subheadings." Petition, p. 8 and *Strontium*

(*continued*...)

The merchandise covered by these investigations is strontium chromate, regardless of form (including but not limited to, powder (sometimes known as granular), dispersions (sometimes known as paste), or in any solution). The chemical formula for strontium chromate is $SrCrO_4$ and the Chemical Abstracts Service (CAS) registry number is 7789-06-2.

Strontium chromate that has been blended with another product or products is included in the scope if the resulting mix contains 15 percent or more of strontium chromate by total formula weight. Products with which strontium chromate may be blended include, but are not limited to, water and solvents such as Aromatic 100 Methyl Amyl Ketone (MAK)/2-Heptanone, Acetone, Glycol Ether EB, Naphtha Leicht, and Xylene. Subject merchandise includes strontium chromate that has been processed in a third country into a product that otherwise would be within the scope of these investigations if processed in the country of manufacture of the in-scope strontium chromate.

The merchandise subject to these investigations is currently classified in the Harmonized Tariff Schedule of the United States (HTSUS) under subheading 2841.50.9100. Subject merchandise may also enter under HTSUS subheading 3212.90.0050. While the HTSUS subheadings and CAS registry number are provided for convenience and customs purposes, the written description of the scope is dispositive.[22]

Tariff treatment

Based upon the scope set forth by the Department of Commerce, information available to the Commission indicates that the merchandise subject to these investigations is imported under statistical reporting numbers 2841.50.9100and 3212.90.0050 of the Harmonized Tariff Schedule of the United States ("HTS"). [23] The column 1-general rate of duty is 3.1 percent ad valorem under subheadings 2841.50.91 and 3212.90.0050.[24] Decisions on the tariff

(…*continued*)
Chromate from Austria and France: Initiation of Less-Than-Fair-Value Investigations, 83 FR 49543, October 2, 2018.

[22] *Strontium Chromate from Austria and France: Initiation of Less-Than-Fair-Value Investigations,* 83 FR 49543, October 2, 2018.

[23] Staff note that *** percent of strontium chromate imported from France during the period for which data were collected was imported under HTSUS subheading 3206.20.00, which is not identified in the petition or Commerce's scope.

[24] HTS subheadings 2841.50.91 and 3212.90.00 are currently under China section 301 tariffs, 9903.88.03. These tariffs were part of 'tranche three' went into effect on September 24, 2018, the rate of additional duty is initially 10 percent ad valorem. On January 1, 2019, the rate of additional duty will increase to 25 percent ad valorem. *Notice of Modification of Section 301 Action: China's Acts, Policies,*
(*continued*...)

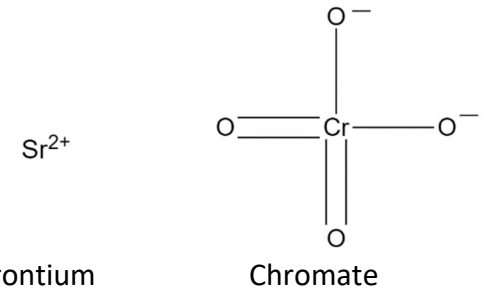
classification and treatment of imported goods are within the authority of U.S. Customs and Border Protection.

THE PRODUCT

Description and applications

The imported products subject to these investigations are collectively referred to as strontium chromate ($SrCrO_4$),[25] covering both powders and dispersions.[26] Strontium chromate is a yellow powder with a ground particle size range of 25-50 microns.[27] Structurally, strontium chromate is a salt, in which the chromium ion exists in its hexavalent (VI) oxidation state within the chromate ion, CrO_4^{2-}(figure I-1).[28]

Figure I-1
Strontium chromate: Structural formula



Source: Anses, "Proposal for Identification of a substance as a category 1A or 1B CMR, PBT, vPvB or a substance of an equivalent level of Concern," Annex XV – Identification of SVHC Format p. 5.

Strontium chromate properties include a pH that falls within the range of 7.0-9.0 and a general conductivity of 700-1700 µS/cm.[29] [30] In strontium chromate dispersions, the strontium

(…*continued*)
and Practices related to Technology Transfer, Intellectual Property, and Innovation, 83 FR 47974, September 21, 2018.

[25] Chemical abstracts service (CAS) number 7789-06-2. Color index (C.I.) Pigment Yellow (P.Y.) 32.

[26] Dispersions are also referred to as pastes. Strontium chromate in its powdered form is the core product, and strontium chromate as dispersions are dependent on strontium chromate powder. WPC's postconference brief, p.3.

[27] Or a 4-6 on the Hegman Fineness scale. WPC postconference brief, p. 3.

[28] Hexavalent chromium induces irreversible health damage, significantly increases an individual's risk of lung cancer. Gharbi, Thomas, Smith, Birbilis, "Chromate replacement: what does the future hold?" npj Materials degradation, April 12, 2018, https://www.nature.com/articles/s41529-018-0034-5.

[29] MicroSiemen per centimeter. Sometimes reported as micromhos (umho) per centimeter: umho/cm.

[30] Chromate coatings are electrically conductive and help maintain an electrically conductive metal surface. Non-conductive metal surfaces can cause grounding issues on electronic equipment. Kaehr

(*continued*...)

chromate powder is suspended in various solvent-based systems. Some examples of solvents systems used include: aromatic 100 methyl amyl ketone (MAK)/2-heptanone, acetone, glycol ether EB,[31] naphtha leicht,[32] and xylene.[33] Strontium chromate dispersions are dependent on having strontium chromate powder as an input to the solvent systems.[34] [35]

Both strontium chromate powders and dispersions[36] have the same end-use: coatings that incorporate $SrCrO_4$ for corrosion protection.[37] Strontium chromate containing coatings are particularly adept at protecting metal surfaces[38] that require anti-corrosion protection. Specifically, strontium chromate is used on coils, durable goods, and aerospace materials.[39] In aerospace materials, strontium chromate primary uses include primers, glues, bounding primers, anticorrosive paints, in fillers and sealants, jointing preparations and dry lubricant mixtures (dry lubricant films) for aerospace fasteners and in top coats.[40]

Chromium-based coatings are defined by corrosion resistance due to chromate's ability to provide corrosion resistance over a wide pH range and electrolyte concentrations, features unable to be matched by alternative inhibiting compounds.[41] Chromates have the unique ability to restrict the rate of metal dissolution and reduce the rate of reduction reactions (including both oxygen and water reduction) even at low concentrations. When a failure occurs in a chromated coating or primer, the chromate ion, CrO_4^{2-}, leaches into active sites and undergoes cathodic reduction initiating "self-healing" of the surface (figure I-2). This self-healing mechanism forms a protective chromium oxide (Cr_2O_3) film on the site defect. A "universal"

(…*continued*)
Coatings, "Chromate – Clear and Yellow," http://www.kaehr.com/chromate-conversion-coatings.cfm, retrieved October 9, 2018.

[31] Chemical abstracts service (CAS) number 111-76-2.

[32] Chemical abstracts service (CAS) number 64742-95-6.

[33] These are representative examples beyond water solvent systems. WPC's postconference brief, pp. 3-4.

[34] WPC's postconference brief, p. 3.

[35] WPC sells both powder and dispersion forms of strontium chromate but most of the customer demand is strontium chromate powder. Conference transcript, p. 22 (Klein).

[36] ASTM D-153 is a test method used to measure the specific gravity of dry powder. ASTM D1475 is the test method for liquids to determine specific gravity. ASTM D16 is a standard used in the paints and coatings industry. Pigment is in this standard is defined as a "fine solid particle used in the preparation of paint or printing ink and substantially insoluble in the vehicle." There is no definition for paste but WPC states that paste is a term used interchangeably for dispersions in industry when it applies to strontium chromate. WPC's postconference brief pp.4-5.

[37] WPC's postconference brief, p. 4.

[38] Typical surfaces include Iron, steel, zinc, aluminum, titanium, nickel based and Cres alloys. Anses, "Proposal for Identification of a substance as a category 1A or 1B CMR, PBT, vPvB or a substance of an equivalent level of Concern," Annex XV – Identification of SVHC Format, pp. 15, 21.

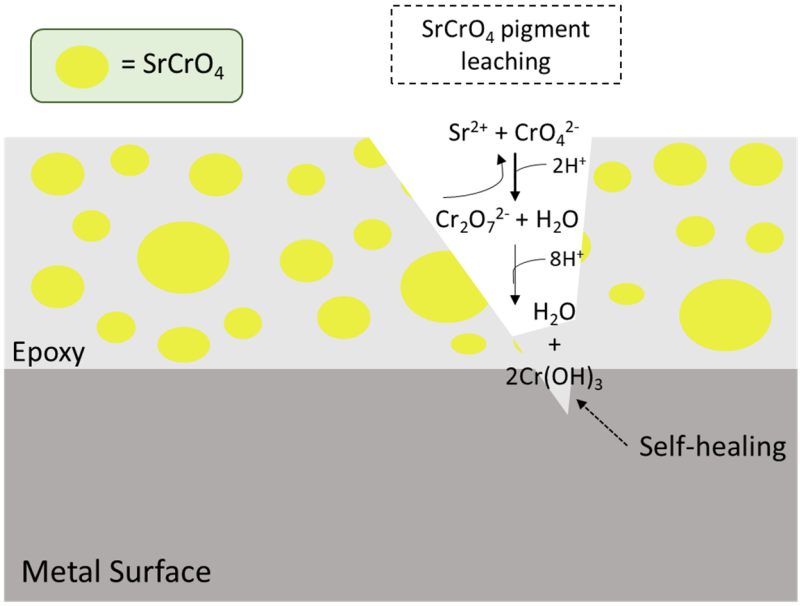
[39] WPC's postconference brief, pp. 4-5.

[40] Anses, "Proposal for Identification of a substance as a category 1A or 1B CMR, PBT, vPvB or a substance of an equivalent level of Concern," Annex XV – Identification of SVHC Format, p. 21.

[41] Other alternative inhibitor compounds have a finite operating pH, minimum concentration requirements, and are not as cost-effective.

anti-corrosion compound comparable to chromate containing coatings has not been identified.[42]

Figure I-2
Schematic illustration of inhibition scenario in the presence of a Sr-Cr based primer



Source: Adapted from Gharbi, Thomas, Smith, Birbilis, "Chromate replacement: what does the future hold?" npj Materials degradation, April 12, 2018, https://www.nature.com/articles/s41529-018-0034-5.

Strontium chromate is a known human carcinogen; the Cr (VI) present in the product is classified as Group A – known human carcinogen by the inhalation route of exposure.[43] Strontium chromate is associated with and increased risk of developing lung cancer and cancer of the sinonasal cavity.[44] Due to environmental and human health concerns, strontium chromate is highly regulated (i.e., REACH),[45] and strontium chromates uses are largely limited to industries where there is no viable alternatives. [46]

---

[42] Conference transcript, p. 46 (St. John).

[43] Customers may prefer dispersion strontium chromate because it alleviates the potential that workers may inhale strontium chromate dust/powder. Conference transcript, p. 48 (Klein).

[44] National Center for Biotechnology Information. PubChem Compound Database; CID=24599, https://pubchem.ncbi.nlm.nih.gov/compound/24599, retrieved October 5, 2018.

[45] REACH is a regulation of the European Union, adopted to improve the protection of human health and the environment from the risks that can be posed by chemicals, while enhancing the competitiveness of the chemicals industry. ECHA, "Understanding REACH," https://echa.europa.eu/regulations/reach/understanding-reach, retrieved October 3, 2018.

[46] Conference transcript, p. 46 (St. John).

Manufacturing processes

In general, the manufacturing of strontium chromate involves three steps: 1) receipt and storage of raw materials, 2) powder manufacturing from the raw materials by chemical reaction (wet process), and 3) packaging of the powder and cleaning of the equipment.[47]

Specifically, strontium chromate production involves a controlled precipitation reaction of a strontium source,[48] typically strontium carbonate ($SrCO_3$),[49] reacting under controlled conditions with a chrome containing source,[50] usually sodium dichromate ($Na_2Cr_2O_7$).[51] The resulting strontium chromate liquid is dried, [52] milled and packaged in bags or sacks ranging in size from 50 to 1,000 pounds.[53] [54] WPC's strontium chromate process is delineated in the process flow diagram figure I-3. The step-by-step production of strontium chromate processes may vary slightly at different manufacturing sites, however, overall strontium chromate production is the same.[55]

Figure I-3
Strontium chromate: Process flow diagram

* * * * * * *

All of WPC's strontium chromate dispersions[56] are currently processed under a toll arrangement between WPC and its toller ***.[57] This process involves taking the strontium chromate powder and dispersing it in a solvent. This involves the use of an explosion-proof high-speed disperser, analogous to a blender. First, part of the solvent package (i.e., total

[47] Pigment powders are usually fine dusts with an average particle size lower than 5 µm. Anses, "Proposal for Identification of a substance as a category 1A or 1B CMR, PBT, vPvB or a substance of an equivalent level of Concern," Annex XV – Identification of SVHC Format, p. 14.

[48] Another commonly used strontium source is strontium chloride, $SrCl_2$. Petition, Vol.I, p. 7.

[49] Strontium carbonate is a white powder. Conference transcript, p. 31 (St. John) and p. 68 (Esselin).

[50] Other commonly used 'chrome-containing' sources includes chrome acid flakes and strontium chromate. Petition, Vol. I, p. 7.

[51] Sodium dichromate is typically a liquid. Conference transcript, p. 31 (St. John) and p. 68 (Esselin).

[52] Chromium content (measured as CrO_3) falls within the range of being approximately 40-50 % in the final product. Petition Vol. I, p. 7.

[53] Petition, Vol. I p. 7.

[54] Anses, "Proposal for Identification of a substance as a category 1A or 1B CMR, PBT, vPvB or a substance of an equivalent level of Concern," Annex XV – Identification of SVHC Format, p. 14.

[55] WPC does have a proprietary process, so there are differences in their process compared to their competitors. Respondent agrees that there are slight differences in process due to proprietary methods unique to each company. Conference transcript, p. 41 (St. John) and p. 75 (Esselin).

[56] SNCZ does not produce strontium chromate dispersions. Conference transcript, pp. 77-78 (Esselin).

[57] Conference transcript, p. 45 (St. John).

amount of desired solvent) is added to a stainless steel or other non-ferrous tank[58] that is at least *** times the volume as the anticipated final volume. The solvent in the tank is stirred at a low speed and slowly ramped up as the strontium chromate powder is added. Once all the powder is added, more solvent is added to reach the anticipated final volume, and an additive is added to keep the powder suspended in the in the dispersion.[59] Barrels containing the dispersion are then returned to WPC for sale and shipment to the intended customer.[60] [61]

DOMESTIC LIKE PRODUCT ISSUES

The Commission's decision regarding the appropriate domestic product(s) that are "like" the subject imported product is based on a number of factors including: (1) physical characteristics and uses; (2) interchangeability; (3) channels of distribution; (4) common manufacturing facilities, production processes, and production employees; (5) customer and producer perceptions; and (6) price.

The petitioner proposes that the Commission should find a single domestic like product, coextensive with the scope of the investigations.[62] Respondents do not contest the petitioner's proposed like product definition for the purposes of the preliminary phase of these investigations.[63]

[58] This tank is grounded to avoid static discharge and equipped with a *** inch coupling to allow removal of the product. WPC's postconference brief, Response to staff questions, p. 1.

[59] WPC's postconference brief, Response to staff questions p. 1.

[60] Conference transcript, p. 45 (St. John).

[61] Dispersions are packaged into steel drums of various sizes: 200 kilograms, 300 kilograms, and a 600 pounds (600 pounds = 272 kg). Conference transcript, p. 48 (Klein).

[62] Petition, p. 11 and petitioner's postconference brief, p. 3.

[63] Conference transcript, p. 63 (Levinson).

`

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

U.S. MARKET CHARACTERISTICS

Strontium chromate is a corrosion inhibitor that is widely used as corrosion-resistant pigment in paints and coatings, including as a coating for the protection of steel, aluminum, and its alloys.[1] Strontium chromate is specified in many commercial and military applications, with no direct substitutes.[2] It is sold primarily in powder form, but can be sold as a dispersion or paste.[3] Strontium chromate is produced in the United States in its primary form, powder, by petitioner WPC (with a portion processed on a toll basis into dispersions). There is one Austrian producer (Habich), one French producer (SNCZ), and four producers in Asia.[4] There are a few large purchasers of strontium chromate with no new entrants into the market.[5] The four largest purchasers/importers are, in descending order, *** and accounted for 88 percent of reported purchases and imports by purchasers in 2017.

In June 2015, WPC relocated its plant and was shut down until March 2016, which was longer than expected. WPC had built up inventories in anticipation of the move, but ran down these inventories and then imported strontium chromate from Habich in order to maintain volumes when the plant did not come back online when expected.[6] During this timeframe, larger purchasers, such as *** began importing strontium chromate themselves.[7]

REACH regulations in the EU have led to a phase out of the use of strontium chromate in applications other than aerospace.[8] According to WPC, these regulations have made exporting strontium chromate from the United States to the EU uneconomical.[9] [10]

Apparent U.S. consumption of strontium chromate fluctuated during 2015-17. Overall, apparent U.S. consumption in 2017 was *** percent higher than in 2015, with a *** percent increase from 2015 to 2016 and a *** percent decline from 2016 to 2017.[11]

---

[1] Petition, p. 6.

[2] Petition, p. 21. Petitioner WPC stated that they do produce an environmentally-friendly alternative to strontium chromate that is 80 percent as effective as strontium chromate and prohibitively expensive. Conference transcript, p. 39 (St. John).

[3] The terms dispersion and paste are used interchangeably in the strontium chromate industry.

[4] Petition, p. 9.

[5] Conference transcript, pp. 35-36 (St. John), p. 56 (Esselin).

[6] Conference transcript, p. 16 (St. John).

[7] See U.S. importers' questionnaire, question III-3b.

[8] Conference transcript, p. 71 (Esselin)

[9] Petition, p. 20.

[10] REACH requires the approval and subsequent registration of WPC to be able to sell strontium chromate into the EU.

[11] Apparent U.S. consumption was *** percent higher in January-June 2018 than in January-June 2017.

`

CHANNELS OF DISTRIBUTION

As shown in table II-1, U.S. producers and importers shipped mainly to paint producers; importers *** internally consumed what they imported.

Table II-1
Strontium chromate: U.S. producers' and importers' U.S. shipments, by sources and channels of distribution, 2015-17, January-June 2017, January-June 2018

* * * * * * *

GEOGRAPHIC DISTRIBUTION

WPC reported selling strontium chromate to the Northeast, Midwest, Southeast, Central Southwest, and Pacific Coast (table II-2). Importers of product from Austria and France reported selling strontium chromate to the Midwest, Southeast, and Pacific Coast. For WPC, *** percent of sales were within 100 miles of their production facility, *** percent were between 101 and 1,000 miles, and *** percent were over 1,000 miles. Importers sold 22 percent within 100 miles of their U.S. point of shipment, 66 percent between 101 and 1,000 miles, and 12 percent over 1,000 miles.

Table II-2
Strontium chromate: Geographic market areas in the United States served by U.S. producers and importers

Region	U.S. producers	Subject importers		
		Austria	France	Total
Northeast	***	---	***	1
Midwest	***	***	***	4
Southeast	***	***	***	3
Central Southwest	***	***	---	1
Mountain	---	---	---	---
Pacific Coast	***	***	***	3
Other[1]	---	---	---	---
All regions (except Other)	---	---	---	---
Reporting firms	1	2	3	5

[1] All other U.S. markets, including AK, HI, PR, and VI.

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

`

SUPPLY AND DEMAND CONSIDERATIONS

U.S. supply

Table II-3 provides a summary of the supply factors regarding strontium chromate from U.S. producers and from subject countries. WPC has *** while Habich and SNCZ have ***.

Table II-3
Strontium chromate: Supply factors that affect the ability to increase shipments to the U.S. market

	Capacity (1,000 dry pounds)		Capacity utilization (percent)		Ratio of inventories to total shipments (percent)		Shipments by market, 2017 (percent)		Able to shift to alternate products
Country	2015	2017	2015	2017	2015	2017	Home market shipments	Exports to non-U.S. markets	No. of firms reporting "yes"
United States	***	***	***	***	***	***	***	***	0 of 1
Austria	***	***	***	***	***	***	***	***	0 of 1
France	***	***	***	***	***	***	***	***	1 of 1

Note.--Responding U.S. producers accounted for all of U.S. production of strontium chromate in 2017. Responding foreign producer/exporter firms accounted for all U.S. imports of strontium chromate from Austria and France during 2017. For additional data on the number of responding firms and their share of U.S. production and of U.S. imports from each subject country, please refer to Part I, "Summary Data and Data Sources."

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

Domestic production

Based on available information, WPC has the ability to respond to changes in demand with large changes in the quantity of shipments of U.S.-produced strontium chromate to the U.S. market. The main contributing factors to this degree of responsiveness of supply are the availability of unused capacity and inventories. Factors mitigating responsiveness of supply include limited ability to shift shipments from alternate markets and limited ability to shift production to or from alternate products.

WPC's capacity *** while production *** from 2015 to 2017.[12] WPC stated that it exports strontium chromate to ***. WPC added that it cannot expand into the EU as REACH regulations (EC 1907/2006) for environmental protections make transportation and sale of strontium chromate uneconomical for it.[13] WPC reported that it cannot produce other products on the same equipment as it produces strontium chromate because the production of strontium chromate requires a dedicated production line due to environmental and potential product contamination issues.

[12] WPC's capacity utilization was *** percent in January-June 2017 and *** percent in January-June 2018.

[13] Petition, p. 22.

`

Subject imports from Austria

Based on available information, the producer of strontium chromate from Austria, Habich, has the ability to respond to changes in demand with small-to-moderate changes in the quantity of shipments of strontium chromate to the U.S. market. The main contributing factors to this degree of responsiveness of supply are the ability to shift shipments from alternate markets or inventories. Factors mitigating responsiveness of supply include limited availability of unused capacity, limited ability to shift shipments from inventories, and limited ability to shift production to or from alternate products.

Habich's capacity and production *** during 2015-17.[14] Habich reported that it exports to ***. Habich added that it has no ability to shift production capacity between products due to the danger of cross contamination of other products as strontium chromate is hazardous.

Subject imports from France

Based on available information, the producer of strontium chromate from France, SNCZ, has the ability to respond to changes in demand with large changes in the quantity of shipments of strontium chromate to the U.S. market. The main contributing factors to this degree of responsiveness of supply are the ability to shift shipments from alternate markets and inventories and the ability to shift production to or from alternate products. Limited unused capacity mitigates responsiveness.

SNCZ's capacity *** while production *** during 2015-17.[15] SNCZ reported that it exports to ***. Other products that it reportedly can produce on the same equipment as strontium chromate are ***. Factors affecting foreign producers' ability to shift production include cost and time associated with cleaning production lines.

Imports from nonsubject sources

There were no nonsubject imports of strontium chromate in 2017. Nonsubject imports from *** accounted for *** percent of total imports since January 1, 2015.

Supply constraints

WPC stated that, in 2015, it moved its plant from Milwaukee, Wisconsin, to Oak Creek, Wisconsin, and that it built up inventory to cover a 6 month period. Then, due to state permitting regulations, resuming production took much longer than anticipated and WPC needed to import strontium chromate for one quarter to supply its customers.

---

[14] Habich's capacity utilization was *** percent in January-June 2017 and was *** percent in January-June 2018.

[15] SNCZ's capacity utilization was *** percent in January-June 2017 and was *** percent from January-June 2018.

`

Importer *** stated that it incurred significant costs and major disruptions at its main manufacturing location due to lack of material from the domestic source and that it narrowly avoided severe impact to its major customers by using alternate sources of strontium chromate.

No importers reported experiencing supply constraints of their own.

U.S. demand

Based on available information, the overall demand for strontium chromate is likely to experience small changes in response to changes in price. The main contributing factors are the lack of appropriate substitute products and the moderately small cost share of strontium chromate in most of its end-use products.

End uses and cost share

U.S. demand for strontium chromate depends on the demand for U.S.-produced paint and coatings in which strontium chromate is used.[16] Reported end uses include industrial coatings and anti-corrosive paints.

Strontium chromate accounts for a small-to-moderate share of the cost of the end-use products in which it is used. WPC estimated that strontium chromate accounts for 5 percent of the total end-use product while importers *** estimated that it accounts for 19-20 percent.

Business cycles

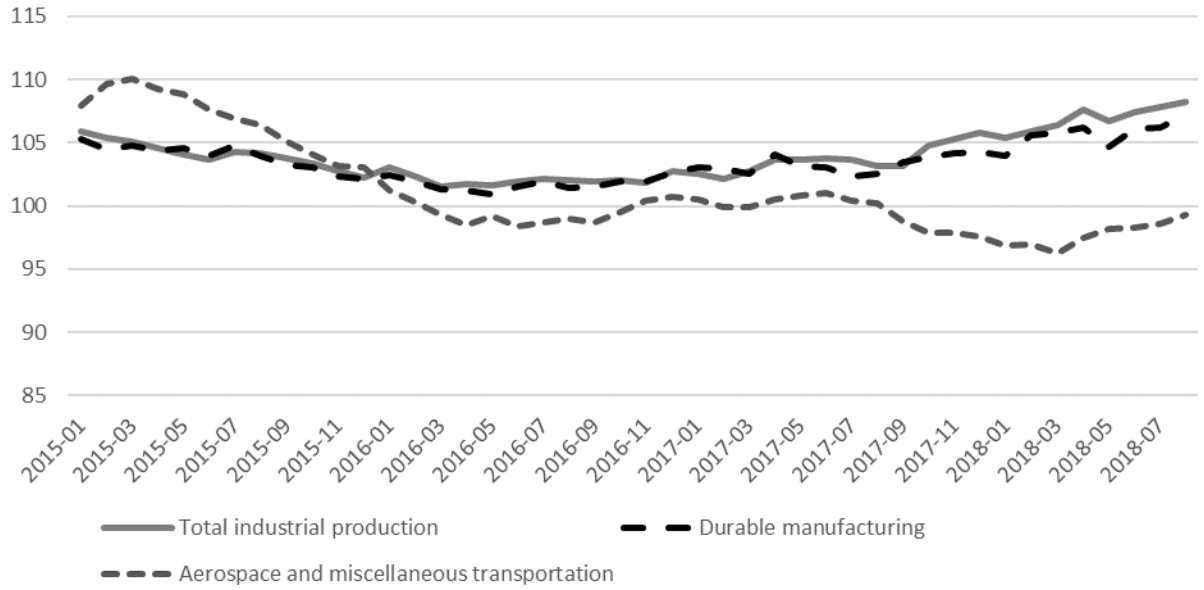
*** six of seven importers indicated that the market was not subject to business cycles or conditions of competition. Importer *** stated that the market is seasonal based on the construction season. WPC stated that customers integrate strontium chromate into their coating products to protect metals for use in coil, durable goods, aircraft, and other items requiring corrosion protection.[17] WPC tracks durable goods demand and demand in the aerospace industry to reflect demand in the strontium chromate industry, and stated that demand strengthened for durable goods while aerospace-related demand remained basically flat.[18] Total industrial production and durable goods production increased by 2 percent while aerospace and miscellaneous transportation production declined by 8 percent from January 2015 to August 2018 (figure II-1).

[16] Petition, p. 18.
[17] Petition, p. 14.
[18] Petition, pp. 18-19.

`

Figure II-1

Industrial production, durable goods production, and aerospace and miscellaneous transportation production indices, January 2015 to August 2018, Base index 2012=100



Source: Federal Reserve, https://www.federalreserve.gov/releases/g17/Current/default.htm, accessed October 2, 2018.

Demand trends

WPC reported that U.S. demand for strontium chromate has *** while importers reported that demand either fluctuated or has not changed since January 1, 2015 (table II-4).

Table II-4
Strontium chromate: Firms' responses regarding U.S. demand and demand outside the United States

Item	Increase	No change	Decrease	Fluctuate
Demand in the United States				
U.S. producers	---	1	---	---
Importers	1	2	---	2
Demand outside the United States				
U.S. producers	---	---	1	---
Importers	2	---	---	1

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

Substitute products

WPC and five of six responding importers reported that there were no substitutes. Importer *** reported polyphosphates and ion exchange silica as substitutes for coil coatings.

`

SUBSTITUTABILITY ISSUES

The degree of substitution between domestic and imported strontium chromate depends upon such factors as relative prices, quality (e.g., grade standards, defect rates, etc.), and conditions of sale (e.g., price discounts/rebates, lead times between order and delivery dates, reliability of supply, product services, etc.). Based on available data, staff believes that there is a high degree of substitutability between domestically produced strontium chromate and strontium chromate imported from subject sources. All three major producers of strontium chromate are approved for use by large customers. Since 2015, large purchasers purchased or imported strontium chromate from Austria and France, as well as purchased domestically produced strontium chromate.[19]

Lead times

Strontium chromate is primarily sold from inventory. WPC reported that *** percent of its shipments are from inventory, with lead times of *** days. Importers reported that *** percent of their commercial shipments were from U.S. inventory, with lead times averaging *** days. The remaining *** percent of their commercial shipments came from foreign inventories, with lead times averaging *** days.

Factors affecting purchasing decisions

Purchasers responding to lost sales lost revenue allegations[20] were asked to identify the main purchasing factors their firm considered in their purchasing decisions for strontium chromate. The major purchasing factors identified by firms include quality, availability, security of supply, price, delivery performance, approved material, location, financial stability, flexibility, and capacity to grow.

Comparison of U.S.-produced and imported strontium chromate

In order to determine whether U.S.-produced strontium chromate can generally be used in the same applications as imports from Austria and France, U.S. producers and importers were asked whether the products can always, frequently, sometimes, or never be used interchangeably. As shown in table II-5, WPC reported that its domestically produced strontium chromate is *** interchangeable with strontium chromate from any other source. Most importers reported that domestically produced strontium chromate is frequently interchangeable with strontium chromate imported from Austria and France. Importer *** stated that strontium chromate for its aerospace market customers is not interchangeable with strontium chromate imported from any other country unless evaluated and specified by the

[19] See Part V for additional information.

[20] This information is compiled from responses by purchasers identified by petitioner WPC to the lost sales lost revenue allegations. See Part V for additional information.

customer. Importer *** stated that as long as the dispersion properties of strontium chromate are the same across sources, it can use the strontium chromate interchangeably in its process. It continued that domestically produced strontium chromate and strontium chromate imported from Austria meet its dispersion specifications and are approved as substitutes for each other.

Table II-5
Strontium chromate: Interchangeability between strontium chromate produced in the United States and in other countries, by country pair

Country pair	Number of U.S. producers reporting				Number of U.S. importers reporting			
	A	F	S	N	A	F	S	N
U.S. vs. subject countries: U.S. vs. Austria	***	***	***	***	1	3	1	---
U.S. vs. France	***	***	***	***	1	2	---	1
Subject countries comparisons: Austria vs. France	***	***	***	***	1	2	1	---
Nonsubject countries comparisons: U.S. vs. nonsubject	---	---	---	---	---	---	2	---
Austria vs. nonsubject	---	---	---	---	---	---	2	---
France vs. nonsubject	---	---	---	---	---	---	2	---

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

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

In addition, producers and importers were asked to assess how often differences other than price were significant in sales of strontium chromate from the United States, subject, or nonsubject countries. As seen in table II-6, WPC reports that there are never any significant factors other than price in sales from any source while importers were mixed. SNCZ stated that purchasers mainly consider price because the three main suppliers of strontium chromate, WPC, Habich, and SNCZ, are all approved with the major customers of the world.[21] Importer *** stated that it provides custom package sizes as specified for use in the customer's plant.

[21] Conference transcript, p. 71 (Esselin).

`

Table II-6
Strontium chromate: Significance of differences other than price between strontium chromate produced in the United States and in other countries, by country pair

Country pair	Number of U.S. producers reporting				Number of U.S. importers reporting			
	A	F	S	N	A	F	S	N
U.S. vs. subject countries:								
U.S. vs. Austria	***	***	***	***	1	2	1	---
U.S. vs. France	***	***	***	***	1	1	1	1
Subject countries comparisons:								
Austria vs. France	***	***	***	***	1	1	---	---
Nonsubject countries comparisons:								
U.S. vs. nonsubject	---	---	---	---	1	---	1	---
Austria vs. nonsubject	---	---	---	---	1	---	1	---
France vs. nonsubject	---	---	---	---	1	---	1	---

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

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

PART III: U.S. PRODUCER'S PRODUCTION, SHIPMENTS, AND EMPLOYMENT

The Commission analyzes a number of factors in making injury determinations (see 19 U.S.C. §§ 1677(7)(B) and 1677(7)(C)). Information on the dumping margins was presented in *Part I* of this report and information on the volume and pricing of imports of the subject merchandise is presented in *Part IV* and *Part V*. Information on the other factors specified is presented in this section and/or *Part VI* and (except as noted) is based on the questionnaire response of petitioner WPC, which accounted for U.S. production of strontium chromate in its primary, powdered form.

U.S. PRODUCER

The Commission issued a U.S. producer questionnaire to five firms based on information contained in the petition.[1] Petitioner WPC provided complete and usable data on their productive operations.[2]

Table III-1 presents WPC's production locations, position on the petition, and shares of total production.

Table III-1
Strontium chromate: WPC's position on the petition, location of production, and share of reported production, 2017

Firm	Position on petition	Production location(s)	Share of production (percent)
WPC	Petitioner	Milwaukee, WI Oak Creek, WI	100.0
Total			100.0

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

WPC is not related to or affiliated with any foreign producers of strontium chromate or U.S. importers of strontium chromate. As discussed in greater detail below, WPC directly imported strontium chromate ***, but has not purchased imports of strontium chromate from U.S. importers.

[1] U.S. producer questionnaires were sent to WPC, Nichem Corp., Alfa Aesar, American Elements, and ***. *** have indicated that they have not produced strontium chromate since January 1, 2015. EDIS documents 657597 and 656583. *** was unresponsive to staff requests to fill out the U.S. producer questionnaire. However, *** was identified in the petition as a company that may only produce small amounts of lab samples of strontium chromate from time to time, but has not been seen by WPC in the marketplace. Petition, p.3.

[2] A questionnaire was also received from ***. *** trade data were generally not combined with WPC's because there were inconsistencies between the quantities and values reported by *** and WPC. *** processing operations are presented separately under the section titled *Production-related activities of WPC's toller*, and its trade data are presented in Appendix D.

Table III-2 presents WPC's reported changes in operations since January 1, 2015. WPC closed its former plant in Milwaukee, Wisconsin, in June 2015, with a plan to relocate to a new plant in Oak Creek, Wisconsin, within six months.[3] According to WPC, a delay in obtaining an air permit from the Wisconsin Department of Natural Resources caused a one-quarter delay in the opening of the new Oak Creek plant, which began operations in March of 2016.[4]

WPC planned to install production equipment required to make powder into other forms, such as dispersions and pastes, at the new Oak Creek facility, as it had done in-house at its old facility.[5] According to WPC, this expansion has been delayed due to unfair pricing by the producers in Austria and France, so this production step has been subcontracted out since December 2015, with a plan to bring this process back in-house within 12 months.[6]

Table III-2
Strontium chromate: WPC's reported changes in operations, since January 1, 2015

* * * * * * *

Production-related activities of WPC's toller

WPC contracts with ***, to process strontium chromate powder into a dispersion/paste form.[7] According to WPC, *** takes the pigment produced by WPC, mixes the pigment with solvents, charges a fee for its labor, and returns the containers of dispersed product back to WPC for shipment to end customers.

In its questionnaire response, WPC's toller *** provided the following details on the nature and extent of its processing operations under the following six factors the Commission generally considers when deciding whether a firm qualifies as a producer of the domestic like product:

- **Capital investments:** ***.[8]
- **Technical expertise:** ***.
- **Value-added:** ***.
- **Employment:** ***.

---

[3] Conference transcript, p. 25 (St. John).
[4] Conference transcript, p. 25 (St. John).
[5] Petition, pp. 15-16 and conference transcript, p. 45 (St. John).
[6] Petition, pp. 15-16 and conference transcript, p. 45 (St. John).
[7] Petition, p. 15.
[8] ***. Petitioner's postconference brief, p. 8. At the Commission staff's request, the toller provided the following additional details on the capital investments made:
***
See email from ***, EDIS document 658792.

- **Quantity, type, and source of parts:** ***.

- **Costs and activities: ***.**

U.S. PRODUCTION, CAPACITY, AND CAPACITY UTILIZATION

Table III-3 and figure III-1 present WPC's production, capacity, and capacity utilization over the annual periods of 2015 through 2017, January-June 2017 ("interim 2017"), and January-June 2018 ("interim 2018"). The annual capacity of WPC's new facility is the same as the old one, *** pounds per year, however, due to the shutdown of the old facility for six months in 2015 and for three months in 2016, capacity decreased in these years to *** pounds and *** pounds, respectively.[9] ***, WPC was producing *** during the months it was in operation during 2015.[10] Despite operating for all twelve months in 2017, as opposed to only nine months in 2016, production decreased by *** percent between 2016 and 2017, with capacity utilization decreasing from *** percent to *** percent. However, production in interim 2018 was *** percent higher than interim 2017, and capacity utilization was *** percentage points higher.

Table III-3
Strontium chromate: WPC's capacity, production, and capacity utilization, 2015-17, January to June 2017, and January to June 2018

* * * * * * *

Figure III-1
Strontium chromate: WPC's capacity, production, and capacity utilization, 2015-17, January to June 2017, and January to June 2018

* * * * * * *

Alternative products

Nonsubject products such as zinc chromates or calcium chromates are often made in WPC's facility, but they require different machines and different production areas within the facility. The production of the subject strontium chromate is distinct and does not share any part of the production process with these products.[11]

---

[9] See email from ***, EDIS document 657002, September 25, 2018.

[10] See email from ***, EDIS document 657002, September 25, 2018. In comparison, WPC was operating at *** percent capacity in 2013, and at *** percent capacity in 2014. Petition, exhibit 2.

[11] Petition, p. 15. In its questionnaire response, WPC indicated ***. U.S. producer questionnaire, question II-3e.

U.S. PRODUCER'S U.S. SHIPMENTS AND EXPORTS

Table III-4 presents WPC's U.S. shipments, export shipments, and total shipments. *** of WPC's U.S. shipments are commercial shipments, as it reported *** internal consumption or transfers to related firms. U.S. shipments declined from 2015 to 2017 by *** percent, and were *** percent lower in interim 2018 than interim 2017, by quantity. Similarly, exports shipments decreased by *** percent between 2015 and 2017, by quantity. Export shipments were *** percent higher in interim 2018 than interim 2017. Unit values for U.S. shipments and export shipments, on the other hand, increased during this same period by *** percent and *** percent, respectively. Unit values for U.S. shipments were *** percent lower between interim 2017 and interim 2018, while unit values for export shipments were *** percent higher. WPC's export shipments ranged from a high of *** percent of total shipments in 2015 to a low of *** percent in 2016. WPC's principal export markets include ***.[12]

Table III-4
Strontium chromate: WPC's U.S. shipments, exports shipments, and total shipments, 2015-17, January to June 2017, and January to June 2018

* * * * * * *

U.S. producer's historical U.S. shipments

Because 2015 and 2016 included the shutdown of WPC's facility from July 2015 to March 2016, table III-5 presents WPC's historical U.S. shipment data from 2012 to 2014. WPC's U.S. shipments increased in quantity between 2012 and 2013 by *** percent, then decreased between 2013 and 2014 by *** percent.

Table III-5
Strontium chromate: WPC's historical U.S. shipments, 2012-14

* * * * * * *

U.S. producer's U.S. shipments by product form

Table III-6 presents WPC's U.S. shipments by product form (i.e., powder/granular vs. dispersion/paste form). WPC's U.S. shipments of powder fell by *** percent, by quantity, between 2015 and 2017, while its shipments of paste fell by *** percent, by quantity. Given the *** decrease of U.S. shipments of powder compared to paste between these years, the powder form dropped from *** percent of WPC's total U.S shipments, by quantity, in 2015 to *** percent of total U.S. shipments, by quantity, in 2017. However, U.S. shipments of paste were

[12] WPC's questionnaire response, question II-7.

*** percent lower, by quantity, in interim 2018 than interim 2017, while U.S. shipments of powder were *** percent lower, by quantity, in interim 2018 than interim 2017.

Table III-6
Strontium chromate: WPC's U.S. shipments by product form, 2015-17, January to June 2017, and January to June 2018

* * * * * * *

U.S. PRODUCER'S INVENTORIES

Table III-7 presents WPC's end-of-period inventories and the ratio of these inventories to WPC's production, U.S. shipments, and total shipments. At the end of 2015, WPC's end-of-period inventories stood at only *** pounds, equivalent to *** percent of annual total shipments for the year.[13] Inventories increased between 2015 and 2017, and were *** percent higher in interim 2018 compared to interim 2017.

Table III-7
Strontium chromate: WPC's inventories, 2015-17, January to June 2017, and January to June 2018

* * * * * * *

U.S. PRODUCER'S IMPORTS AND PURCHASES

WPC's direct imports of strontium chromate are presented in table III-8. WPC did not report any purchases of strontium chromate.[14]

Table III-8
Strontium chromate: WPC's U.S. production and imports, 2015-17, January to June 2017, and January to June 2018

* * * * * * *

[13] WPC notes that in 2015, the year of the shutdown, it serviced customers through inventory. Petitioner's postconference brief, p. 27.

[14] WPC specified that it began importing from Austria when it realized its inventory was getting extremely low in the fall of 2015. It wanted to keep one of its biggest customers in supply, so it had no other choice but to go to its competitor and purchase product. WPC was the importer of record and air freighted the product, incurring an estimated $250,000 in air freight charges. When it received the product, it re-bagged the product in its bags and shipped it to the customer. Conference transcript, pp. 25 and 52-53 (St. John and Klein).

U.S. EMPLOYMENT, WAGES, AND PRODUCTIVITY

Table III-9 shows WPC's employment-related data. Production and related workers fell from *** workers in 2015 to *** workers in 2016, but has increased to *** as of interim 2018. Wages paid and hourly wages dropped between 2015 and 2017 by *** percent and *** percent, respectively. WPC explained in its questionnaire response that ***.[15] Unit labor costs decreased by *** percent between 2015 and 2017, while productivity rose by *** percent.

Table III-9
Strontium chromate: WPC's average number of production and related workers, hours worked, wages paid to such employees, hourly wages, productivity, and unit labor costs, 2015-17, January to June 2017, and January to June 2018

* * * * * * *

[15] WPC's questionnaire response, question II-10.

PART IV: U.S. IMPORTS, APPARENT U.S. CONSUMPTION, AND MARKET SHARES

U.S. IMPORTERS

The Commission issued importer questionnaires to 33 firms believed to be importers of subject strontium chromate, as well as to all U.S. producers of strontium chromate.[1] Usable questionnaire responses were received from eight companies,[2] representing virtually all of U.S. imports of strontium chromate from Austria and France in 2017, *** percent of nonsubject imports in 2017,[3] and virtually all of U.S. imports in 2017 under HTS statistical reporting number 2841.50.9100. The petitioner also identified HTS subheading 3212.90.00[4] as the most common HTS subheading under which the paste form of strontium chromate is imported, noting that imports under this category are not as "clean" as those under HTS statistical reporting number 2841.50.9100, as there other products that enter under this category.[5] U.S. Importer questionnaires represented *** percent of U.S. imports from Austria under the HTS subheading 3212.90.00. This percentage increases to *** percent if ***. No firms reported importing strontium chromate from France under the HTS subheading 3212.90.00, and ***.

Table IV-1 lists all responding U.S. importers of strontium chromate from Austria, France, and other sources, their locations, and their shares of U.S. imports, in 2017.

Table IV-1
Strontium chromate: U.S. importers, their headquarters, and share of total imports by source, 2017

* * * * * * *

[1] The Commission issued questionnaires to those firms identified in the petition, along with firms that, based on a review of data provided by U.S. Customs and Border Protection ("Customs"), may have accounted for more than one percent of total imports under HTS statistical reporting number 2841.50.9100 in 2017. Questionnaires were also sent to firms that imported under HTS subheading 3212.90.00, a basket category, from the subject countries that, based on Customs data, may have accounted for more than one percent of total imports in 2017. Questionnaires were also sent to firms that imported large quantities under HTS subheading 3212.90.00 from nonsubject countries known to have producers of strontium chromate (e.g., China, Japan, and Korea) and Germany (a country that may be exporting strontium chromate of Austrian origin).

[2] Fifteen of the 33 firms returned signed certification pages indicating they had not been an importer of record for any strontium chromate imported into the U.S. since January 1, 2015.

[3] According to official import statistics, 152,315 pounds of product were imported in 2017 from nonsubject sources under HTS number 2841.50.9100, however, ***.

[4] Staff note that Commerce's scope narrowed the HTS subheading 3212.90.00 provided in the petition to the HTS statistical reporting number 3212.90.0050.

[5] Petition, p. 5.

U.S. IMPORTS

Petitioners stated they believed virtually all strontium chromate in powder form from Austria and France had been properly classified under HTSUS statistical reporting number 2841.50.9100, and dispersion/paste forms are most commonly imported under HTSUS 3212.90.00.[6] Importer questionnaires confirmed that all dispersion/paste forms of strontium chromate were imported under HTSUS 3212.90.00 during the period for which data were collected. Importer questionnaires also confirmed that all powder forms of strontium chromate from Austria were imported under HTSUS statistical reporting number 2841.50.9100, as indicated by petitioners. However, over *** of strontium chromate imports in powder form from France, from January 2015 to June 2018, were not imported under either of the HTSUS numbers identified by petitioners, but under a third HTSUS subheading, 3206.20.00. Given that strontium chromate is imported under three different HTSUS subheadings, two of which are broad categories, and staff believes importer coverage is high with the questionnaires for reasons discussed in Part I, staff used questionnaire data rather than official import statistics for data presented in Part IV. Further, there was close alignment between the import quantities reported by U.S. importers and the U.S. export quantities reported by foreign producers.[7]

Table IV-2 presents data for U.S. imports of strontium chromate from Austria, France, and all other sources. U.S. imports by quantity increased from 2015 to 2017 by *** percent from Austria, by *** percent from France, and *** percent for all import sources. Import quantities were higher in interim 2018 than interim 2017 for all subject countries and all import sources.

Unit values, on the other hand, dropped between 2015 and 2017 by *** percent for imports from Austria and by *** percent for imports from France. The unit values for imports from Austria were lower than the unit values for imports from France during all time periods. Unit values for imports from Austria were *** percent lower in 2015, *** percent lower in 2016, *** percent lower in 2017, *** percent lower in interim 2017, and *** percent lower in interim 2018 than unit values for imports from France.

More than *** percent of U.S. imports of strontium chromate came from subject sources, Austria and France, during the period for which data were collected. Only one importer reported importing strontium chromate from a nonsubject source in 2015 and 2016.[8] As a ratio to U.S. production, imports from subject sources increased by *** percentage points from 2015 to 2016, and by *** percentage points from 2015 to 2017.

---

[6] Petition, pp. 4-5.

[7] Habich reported exporting *** pounds of strontium chromate to the U.S. in 2017, compared to U.S. importers reporting a total of *** pounds of imports of strontium chromate from Austria in 2017. SNCZ reported exporting *** pounds of strontium chromate to the U.S. in 2017, compared to U.S. importers reporting a total of *** pounds of imports of strontium chromate from France in 2017.

[8] *** indicated in its questionnaire response that it imported *** pounds in 2015 and *** pounds in 2016 from ***. U.S. importer questionnaire response, question II-8a.

Table IV-2
Strontium chromate: U.S. imports by source, 2015-17, January to June 2017, and January to June 2018

* * * * * * *

Figure IV-1
Strontium chromate: U.S. import volumes and prices, 2015-17, January to June 2017, and January to June 2018

* * * * * * *

NEGLIGIBILITY

The statute requires that an investigation be terminated without an injury determination if imports of the subject merchandise are found to be negligible.[9] Negligible imports are generally defined in the Act, as amended, as imports from a country of merchandise corresponding to a domestic like product where such imports account for less than 3 percent of the volume of all such merchandise imported into the United States in the most recent 12-month period for which data are available that precedes the filing of the petition or the initiation of the investigation. However, if there are imports of such merchandise from a number of countries subject to investigations initiated on the same day that individually account for less than 3 percent of the total volume of the subject merchandise, and if the imports from those countries collectively account for more than 7 percent of the volume of all such merchandise imported into the United States during the applicable 12-month period, then imports from such countries are deemed not to be negligible.[10] Imports from Austria accounted for *** percent and France accounted for *** percent of total imports of strontium chromate by quantity from September 2017 to August 2018.

Table IV-3
Strontium chromate: U.S. imports in the twelve month period preceeding the filing of the petition, September 2017 through August 2018

* * * * * * *

CUMULATION CONSIDERATIONS

In assessing whether imports should be cumulated, the Commission determines whether U.S. imports from the subject countries compete with each other and with the domestic like product and has generally considered four factors: (1) fungibility, (2) presence of

[9] Sections 703(a)(1), 705(b)(1), 733(a)(1), and 735(b)(1) of the Act (19 U.S.C. §§ 1671b(a)(1), 1671d(b)(1), 1673b(a)(1), and 1673d(b)(1)).

[10] Section 771 (24) of the Act (19 U.S.C § 1677(24)).

sales or offers to sell in the same geographical markets, (3) common or similar channels of distribution, and (4) simultaneous presence in the market. Information regarding channels of distribution, market areas, and interchangeability appear in Part II. Additional information concerning fungibility, geographical markets, and simultaneous presence in the market is presented below.

Fungibility

Table IV-4 and figure IV-2 present data for the U.S. producer's and U.S. importers' U.S. shipments by product type for 2017. U.S. shipments by product type data are categorized by powder/granular or dispersion/paste. For U.S. producers and U.S. importers, powder/granular was the most common type of strontium chromate shipment, representing *** percent of WPC's U.S. shipments in 2017, *** percent of U.S. shipments from France, and *** percent of U.S. shipments from Austria. For the U.S. producer and all U.S. importers combined, strontium chromate powder/granular accounted for *** percent of all U.S. shipments in 2017. Almost *** of all U.S. shipments of dispersion/paste in 2017 came from WPC, with the remaining *** percent coming from Austria. For the granular/powder form, *** percent of 2017 U.S. shipments came from Austria, *** percent came from WPC, and *** percent came from France.

Table IV-4
Strontium chromate: U.S. producer's and U.S. importers' U.S. shipments by product type, 2017

* * * * * * *

Figure IV-2
Strontium chromate: WPC's and U.S. importers' U.S. shipments by product type, 2017

* * * * * * *

Geographical markets

As illustrated in table IV-5, U.S. Customs districts located in the North[11] accounted for the largest share of imports entered under HTS statistical reporting number 2841.50.9100 during 2017, at 94.9 percent. All imports from Austria and 80.0 percent of imports from France, classified under HTS statistical reporting number 2841.50.9100 entered from U.S. Customs districts located in the North. The East was the second most common border of entry, with 5.0 percent of total imports entered under HTS statistical reporting number 2841.50.9100. Roughly half (52.2 percent) of these imports were from nonsubject sources, with the remaining imports

[11] The "North" includes the following Customs entry districts: Chicago, Illinois; Cleveland, Ohio; Detroit, Michigan; Duluth, Minnesota; Great Falls, Montana; Milwaukee, Wisconsin; Minneapolis, Minnesota; and Pembina, North Dakota.

(47.8 percent) coming from France.[12] A total of just 3,000 pounds of strontium chromate (0.1 percent of total 2017 imports) from France entered from U.S. Customs districts located in the South, and no strontium chromate was imported from U.S. Customs districts located in the West.

Table IV-5
Strontium chromate (HTS 2841.50.9100): U.S. imports by border of entry, 2017

Item	Border of entry				
	East	North	South	West	All borders
	Quantity (1,000 dry pounds)				
U.S. imports from.--					
Austria	---	3,039	---	---	3,039
France	87	360	3	---	450
Subject sources	87	3,399	3	---	3,488
Nonsubject sources	95	58	---	---	152
All import sources	181	3,456	3	---	3,641
	Share across (percent)				
U.S. imports from.--					
Austria	---	100.0	---	---	100.0
France	19.3	80.0	0.7	---	100.0
Subject sources	2.5	97.4	0.1	---	100.0
Nonsubject sources	62.2	37.8	---	---	100.0
All import sources	5.0	94.9	0.1	---	100.0
	Share down (percent)				
U.S. imports from.--					
Austria	---	87.9	---	---	83.5
France	47.8	10.4	100.0	---	12.4
Subject sources	47.8	98.3	100.0	---	95.8
Nonsubject sources	52.2	1.7	---	---	4.2
All import sources	100.0	100.0	100.0	---	100.0

Note.--Data may be understated, as strontium chromate is also known to be imported under HTSUS subheadings 3212.90.00 and 3206.20.00. Data may be overstated, as some volume from France and nonsubject sources ***.

Source: Compiled from official U.S. import statistics using HTS statistical reporting number 2841.50.9100, accessed September 27, 2018.

Presence in the market

Table IV-6 presents monthly U.S. imports of strontium chromate from January 2015 to June 2018. U.S. imports from Austria entered the U.S. market in each of the 42 months, while U.S. imports from France entered the U.S. market in 28 of the 42 months. Nonsubject imports entered the U.S. market in 29 of the 42 months.

[12] According to official import statistics, 152,315 pounds of product were imported from nonsubject countries in 2017 under HTS statistical reporting number 2841.50.9100, however, ***.

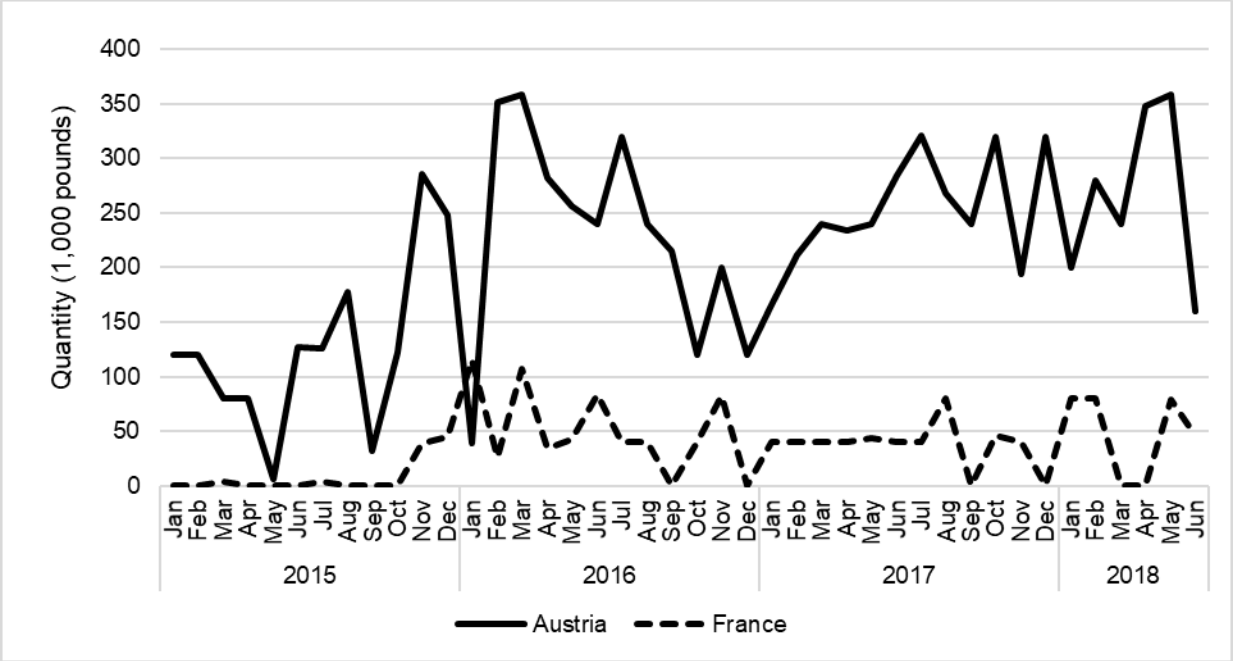
Table IV-6
Strontium chromate (HTS 2841.50.9100): U.S. imports by month, 2017

Item	U.S. imports				
	Austria	France	Subject sources	Nonsubject sources	All import sources
	Quantity (1,000 pounds)				
2015.--					
January	120	---	120	43	163
February	120	---	120	7	127
March	80	4	84	2	87
April	80	---	80	9	89
May	6	---	6	13	20
June	127	---	127	---	127
July	126	4	130	5	135
August	178	---	178	---	178
September	32	---	32	---	32
October	122	---	122	50	172
November	286	39	325	---	325
December	248	45	294	87	380
2016.--					
January	39	115	154	93	248
February	351	26	378	11	389
March	358	108	466	4	470
April	282	35	316	---	316
May	256	43	299	0	299
June	240	83	323	---	323
July	320	40	360	---	360
August	240	40	280	4	284
September	215	---	215	---	215
October	120	40	160	---	160
November	200	83	283	---	283
December	120	---	120	7	127
2017.--					
January	166	40	206	4	210
February	212	40	252	2	254
March	240	40	280	48	328
April	234	40	274	---	274
May	240	43	283	1	284
June	284	40	324	29	353
July	321	40	361	44	405
August	268	80	348	2	350
September	240	---	240	---	240
October	320	47	367	9	375
November	194	40	234	---	234
December	320	---	320	12	332
2018.--					
January	200	80	280	72	352
February	280	80	360	13	373
March	240	---	240	2	242
April	348	---	348	4	352
May	359	79	438	6	444
June	160	47	207	17	223

Note.--Data may be understated, as strontium chromate is also known to be imported under HTSUS subheadings 3212.90.00 and 3206.20.00. Data may be overstated, as some volume from France and nonsubject sources ***.

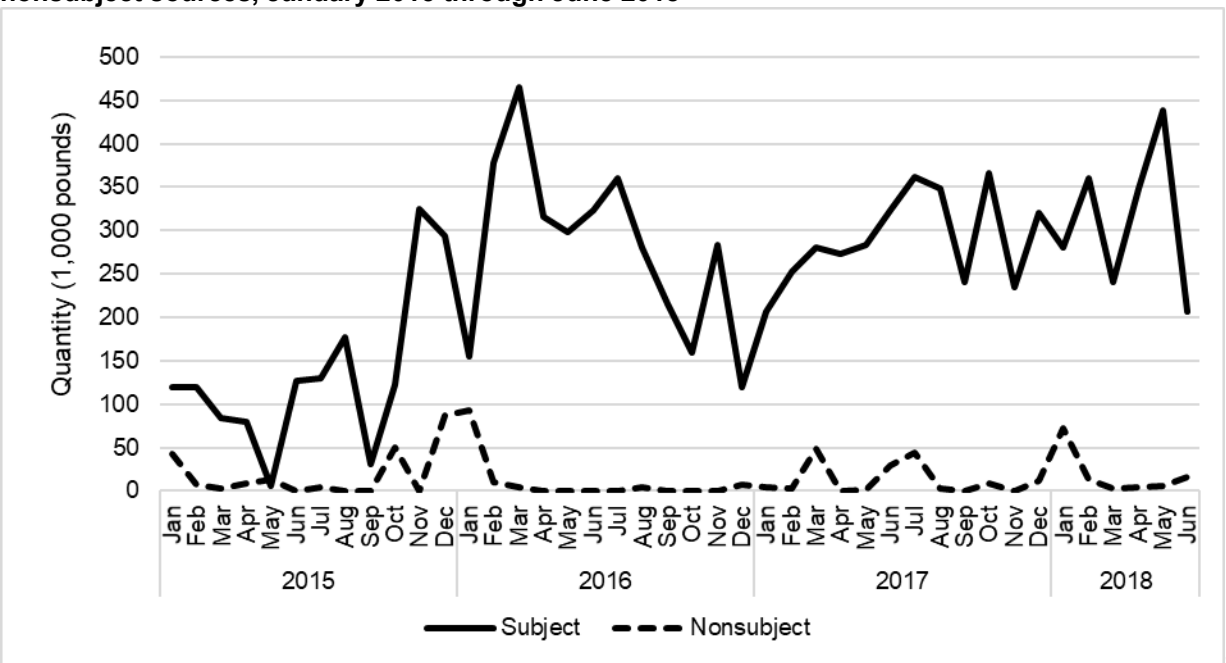
Source: Compiled from official U.S. import statistics using HTS statistical reporting number 2841.50.9100, accessed September 27, 2018.

Figure IV-3
Strontium chromate (HTS 2841.50.9100): Monthly U.S. imports from Austria and France, January 2015 through June 2018



Source: Compiled from official U.S. import statistics using HTS statistical reporting number 2841.50.9100, accessed September 27, 2018.

Figure IV-4
Strontium chromate (HTS 2841.50.9100): Monthly U.S. imports from subject sources and nonsubject sources, January 2015 through June 2018



Source: Compiled from official U.S. import statistics using HTS statistical reporting number 2841.50.9100, accessed September 27, 2018.

APPARENT U.S. CONSUMPTION

Table IV-7 presents data on apparent U.S. consumption and U.S. market shares for strontium chromate. Apparent consumption increased overall between 2015 and 2017 by *** percent. There was a *** percent decrease in apparent consumption between 2016 and 2017, but apparent consumption was *** percent higher in interim 2018 than interim 2017. Between 2015 and 2017, the U.S. producer's U.S. shipments decreased by *** percent, while subject sources' U.S. shipments increased by *** percent (*** percent for imports from Austria and *** percent for imports from France). U.S. shipments from nonsubject sources were minimal in 2015 and 2016, and nonexistent in 2017 and interim 2018.

Table IV-7
Strontium chromate: U.S. shipments of domestic product, U.S. shipments of imports, and apparent U.S. consumption, 2015-17, January to June 2017, and January to June 2018

* * * * * * *

Figure IV-5
Strontium chromate: Apparent U.S. consumption, 2015-17, January to June 2017, and January to June 2018

* * * * * * *

U.S. MARKET SHARES

U.S. market share data are presented in table IV-8. Between 2015 and 2017, market share for WPC decreased by *** percentage points by quantity and *** percentage points by value. During this same period, market share for imports from Austria increased by *** percentage points (by quantity), and market share for imports from France increased by *** percentage points.[13] U.S. producer market share was *** percentage points lower in interim 2018 than interim 2017, market share of imports from Austria were *** percentage points lower, and market share of imports from France were *** percentage points higher.

Table IV-8
Strontium chromate: U.S. consumption and market shares, 2015-17, January to June 2017, and January to June 2018

* * * * * * *

[13] According to SNCZ, a supply shortage caused by WPC's prolonged shutdown provided an opportunity for SNCZ to introduce themselves to the U.S. market and to U.S. customers. SNCZ continued that this allowed it to enter the U.S. market in a meaningful way in 2015 and 2016 and convinced U.S. customers that it was absolutely necessary to have multiple sources of supply. Conference transcript, pp. 12-13 (Levinson).

PART V: PRICING DATA

FACTORS AFFECTING PRICES

Raw material costs

Strontium chromate is a dry powder or paste produced by a chemical reaction process that combines strontium (typically either strontium chloride or strontium carbonate), chrome (typically sodium chromate, chrome acid flakes, or sodium dichromate), and various other raw materials.[1] Raw materials are sourced globally by all manufacturers of the product; the strontium material is primarily sourced from Mexico or Spain while the chrome material is primarily sourced from South Africa and Turkey.[2] WPC's raw material costs, accounted for *** percent of total cost of goods sold in 2017, compared to *** percent in 2015.[3]

Price indices for the raw materials of strontium chromate are not publically available. WPC provided the price it paid for raw materials on an annual basis. It reported that *** between 2015 and 2018.[4]

WPC reported that the cost of raw materials *** since January 1, 2015, and that it has *** to its customers. Importers were mixed: two reported that raw material costs fluctuated since January 2015, three reported that they increased, and one reported that they decreased. Importer *** reported that its strontium chromate prices increased with the market. Importer *** reported that it passes all price increases on to its customers.

Transportation costs to the U.S. market

Transportation costs for strontium chromate shipped from subject countries to the United States averaged 7 percent for Austria and 4 percent for France during 2017. These estimates were derived from official import data and represent the transportation and other charges on imports.[5]

---

[1] Petition, p. 7.

[2] Petition, p. 27. Conference transcript, p. 68 (Esselin).

[3] WPC's raw material costs, accounted for *** percent total cost of goods sold from January-June 2018, compared to *** percent in January-June 2017.

[4] WPC's postconference brief, Exhibit 5.

[5] The estimated transportation costs were obtained by subtracting the customs value from the c.i.f. value of the imports for 2017 and then dividing by the customs value based on the HTS subheading 2841.50.9100.

U.S. inland transportation costs

WPC and four of five importers reported that their customers typically arrange transportation. WPC reported that its U.S. inland transportation costs are *** to *** percent while importers reported costs of 1 percent or less.

Firms importing Austrian and/or French strontium chromate for their own use were requested to estimate U.S. inland transportation costs (from the port of importation to the point of use). *** responded that U.S. inland transportation costs for own-use imports of Austrian strontium chromate were *** percent, *** estimated that U.S. inland transportation costs were between *** and *** percent, and *** estimated that U.S. inland transportation costs were *** percent.

PRICING PRACTICES

Pricing methods

*** importers sell via transaction-by-transaction negotiations. *** importers reported selling *** of their strontium chromate in the spot market.

Purchasers provided a general description of their firms' method of purchase for strontium chromate. Six of ten responding purchasers reported individual purchases or periodic purchase orders and *** purchasers are contracted distributors for WPC. *** reported purchasing via contracts.

Sales terms and discounts

WPC and importers typically quote prices on an f.o.b. basis. WPC and all responding importers do not offer discounts.

PRICE DATA

The Commission requested U.S. producers and importers to provide quarterly data for the total quantity and f.o.b. value of the following strontium chromate products shipped to unrelated U.S. customers during January 2015-June 2018.

Product 1.-- Strontium chromate powder, chemical formula $SrCrO_4$ conductivity (micro Siemens) 1500 maximum, packaged **in small bags** (ranging between 20 kg and 30 kg per bag).

Product 2.-- Strontium chromate powder, chemical formula $SrCrO_4$ conductivity (micro Siemens) 1500 maximum, packaged **in large bags** (ranging between 450 kg and 500 kg per bag).

Product 3.-- Strontium chromate dispersed/slurried in a solvent (also known as a Paste/Dispersion), packaged **in drums** (ranging between 200 kg and 300 kg per drum).

Product 4.-- Strontium chromate powder, chemical formula $SrCrO_4$ conductivity (micro Siemens) over 1500 to 1700 maximum, packaged **in small bags** (ranging between 20 kg and 30 kg per bag).

WPC and five importers provided usable pricing data for sales of the requested products, although not all firms reported pricing for all products for all quarters.[6] [7] Pricing data reported by these firms accounted for approximately *** percent of WPC's commercial shipments of U.S. produced strontium chromate, *** percent of U.S. commercial shipments of subject imports from Austria, and *** percent of U.S. commercial shipments of subject imports from France in 2017.[8] Price data for products 1-4 are presented in tables V-1 to V-4 and figures V-1 to V-4.

Table V-1
Strontium chromate: Weighted-average f.o.b. prices and quantities of domestic and imported product 1, and margins of underselling/(overselling), by quarters, January 2015-June 2018

* * * * * * *

Table V-2
Strontium chromate: Weighted-average f.o.b. prices and quantities of domestic and imported product 2, and margins of underselling/(overselling), by quarters, January 2015-June 2018

* * * * * * *

Table V-3
Strontium chromate: Weighted-average f.o.b. prices and quantities of domestic and imported product 3, and margins of underselling/(overselling), by quarters, January 2015-June 2018

* * * * * * *

[6] *** reported price data with respect to imports from Austria and *** reported price data with respect to imports from France.

[7] Per-unit pricing data are calculated from total quantity and total value data provided by U.S. producers and importers. The precision and variation of these figures may be affected by rounding, limited quantities, and producer or importer estimates.

[8] Commercial shipments of imports of strontium chromate from Austria accounted for *** percent of total imports from Austria whereas commercial shipments of imports of strontium chromate from France accounted for *** imports from France.

Table V-4
Strontium chromate: Weighted-average f.o.b. prices and quantities of domestic and imported product 4, and margins of underselling/(overselling), by quarters, January 2015-June 2018

* * * * * * *

Figure V-1
Strontium chromate: Weighted-average prices and quantities of domestic and imported product 1, by quarters, January 2015-June 2018

* * * * * * *

Figure V-2
Strontium chromate: Weighted-average prices and quantities of domestic and imported product 2, by quarters, January 2015-June 2018

* * * * * * *

Figure V-3
Strontium chromate: Weighted-average prices and quantities of domestic and imported product 3, by quarters, January 2015-June 2018

* * * * * * *

Figure V-4
Strontium chromate: Weighted-average prices and quantities of domestic and imported product 4, by quarters, January 2015-June 2018

* * * * * * *

Import purchase costs

In addition to price data, the Commission also requested that importers provide landed duty-paid values and quantities for imports used for internal consumption (direct imports). Imports for internal consumption accounted for *** percent of total imports from Austria during January 2015-June 2018. *** importers provided such data,[9] and their purchase cost data for imports of products 1 and 2 are presented in tables V-5 to V-6 and figures V-5 to V-6, along with U.S. sales prices (previously presented).[10]

These importers were asked to identify the benefits of direct importing strontium chromate as opposed to purchasing it from a U.S. producer or importer. *** stated that it was forced to approve an alternate source for its strontium chromate usage, as it is a critical raw material in certain coatings, due to supply issues from the U.S. producer in late 2015 and 2016. It continued that it currently has multiple sources for strontium chromate to minimize supply

[9] These importers were ***.
[10] ***.

disruptions. *** stated the benefit was for security of supply. *** cited pricing and product availability as benefits.

*** provide an estimated percent saved by importing itself rather than purchasing. *** reported that it did not save anything by importing itself and stated that it was able to negotiate lower pricing from the Austrian supplier due to the required large volume caused by the domestic producer's inability to supply. *** estimated that it saved *** percent by importing strontium chromate itself.

*** estimated that the additional costs associated with importing strontium chromate itself was *** percent, or ***, and *** estimated these costs were *** percent, or ***.[11]

Table V-5
Strontium chromate: Purchase costs. Weighted-average f.o.b. prices of domestic product 1 and f.o.b. landed duty-paid values and quantities of imported product 1, by quarter, January 2015-June 2018

* * * * * * *

Table V-6
Strontium chromate: Purchase costs. Weighted-average f.o.b. prices of domestic product 2 and f.o.b. landed duty-paid values and quantities of imported product 2, by quarter, January 2015-June 2018

* * * * * * *

Figure V-5
Strontium chromate: Purchase costs. Weighted-average f.o.b. prices of domestic product 1 sold to end users and f.o.b. landed duty-paid values and quantities of imported product 1, by quarters, January 2015-June 2018

* * * * * * *

Figure V-6
Strontium chromate: Purchase costs. Weighted-average f.o.b. prices of domestic product 2 sold to end users and f.o.b. landed duty-paid values and quantities of imported product 2, by quarters, January 2015-June 2018

* * * * * * *

[11] *** did not provide further breakout of their import service costs by type of cost.

Price and purchase cost trends

In general, prices decreased during January 2015-June 2018. Table V-7 summarizes the price trends, by country and by product. As shown in the table and figure V-7, domestic price declines ranged from *** to *** percent for products 1, 2, and 4 during January 2015-June 2018 while domestic prices increased by *** percent for product 3. Import price decreases ranged from *** to *** percent for products 1 and 2 while the price of imported strontium chromate from Austria increased *** percent for product 3. Purchase costs reported for strontium chromate imported from Austria declined *** percent for product 1 and *** percent for product 2.

Table V-7
Strontium chromate: Summary of weighted-average f.o.b. prices for products 1-4 from the United States, Austria, and France

* * * * * * *

Figure V-7
Strontium chromate: U.S. producers indexed prices, January 2015 to June 2018

* * * * * * *

Price comparisons

As shown in table V-8, prices for product imported from Austria were below those for U.S.-produced product in 2 of 33 instances (*** pounds dry weight); margins of underselling ranged from *** to *** percent. In the remaining 31 instances (*** pounds dry weight), prices for product from Austria were between *** and *** percent above prices for the domestic product. Prices for product imported from France were below those for U.S.-produced product in 2 of 28 instances (*** pounds dry weight); margins of underselling ranged from *** to *** percent. In the remaining 26 instances (*** pounds dry weight), prices for product from France were between *** and *** percent above prices for the domestic product.

Table V-8
Strontium chromate: Instances of underselling/overselling and the range and average of margins, by country, January 2015-June 2018

Source	Underselling				
	Number of quarters	Quantity[1] (1,000 pounds per dry weight)	Average margin (percent)	Margin range (percent)	
				Min	Max
Product 1	***	***	***	***	***
Product 2	***	***	***	***	***
Product 3	***	***	***	***	***
Product 4	***	***	***	***	***
Total	4	***	***	***	***
Austria	2	***	***	***	***
France	2	***	***	***	***
Total	4	***	***	***	***
Source	**(Overselling)**				
	Number of quarters	Quantity[1] (1,000 pounds per dry weight)	Average margin (percent)	Margin range (percent)	
				Min	Max
Product 1	***	***	***	***	***
Product 2	***	***	***	***	***
Product 3	***	***	***	***	***
Product 4	***	***	***	***	***
Total	57	***	***	***	***
Austria	31	***	***	***	***
France	26	***	***	***	***
Total	57	***	***	***	***

[1] These data include only quarters in which there is a comparison between the U.S. and subject product.

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

LOST SALES AND LOST REVENUE

The Commission requested that U.S. producers of strontium chromate report purchasers where they experienced instances of lost sales or revenue due to competition from imports of strontium chromate from Austria during January 2015-June 2018. WPC reported that it had to reduce prices, roll back announced price increases, and had lost sales. WPC submitted lost sales and lost revenue allegations and identified 5 firms where it lost sales and revenue. Three allegations were with respect to strontium chromate imported from Austria and two were of unknown origin. WPC alleges strontium chromate powder sales amounted to more than $*** in losses to ***, to *** beginning in 2016, and to ***. It also alleges that it lost *** per month of paste/dispersion sales to *** and $*** per year of paste/dispersion sales to ***.

Staff contacted 13 purchasers and received responses from 11 purchasers.[12] Responding purchasers reported purchasing *** pounds dry weight of strontium chromate during January 2015-June 2018 (table V-9).

During 2017, responding purchasers purchased or imported *** percent from U.S. producers, *** percent from Austria, *** percent from France, and *** percent from "unknown source" countries. Of the responding purchasers, 6 reported decreasing purchases from domestic producers, 1 reported increasing purchases, 2 reported no change, 2 reported fluctuating purchases.[13] *** explained that it increased purchases of domestic product because of supply issues with imported products. WPC's availability issues, cited by ***, and not being an ISO certified supplier, cited by ***, were reasons for decreasing purchases of domestic product.

Table V-9
Strontium chromate: Purchasers' responses to purchasing patterns

* * * * * * *

Of the 11 responding purchasers, 5 reported that, since 2015, they had purchased imported strontium chromate from Austria instead of U.S.-produced product. Three of these purchasers reported that subject import prices were lower than U.S.-produced product, and none of these purchasers reported that price was a primary reason for the decision to purchase imported product rather than U.S.-produced product (tables V-10-11). Purchasers identified WPC's supply issues in 2015 as non-price reasons for purchasing imported strontium chromate from Austria rather than U.S.-produced product.

Of the 11 responding purchasers, 5 reported that they had purchased imported strontium chromate from France instead of U.S.-produced product. Three of these purchasers reported that subject import prices were lower than U.S.-produced product, and one of these purchasers reported that price was a primary reason for the decision to purchase imported product rather than U.S.-produced product. *** estimated it purchased *** pounds dry weight of strontium chromate from France instead of domestic product. Purchasers identified WPC's supply issues in 2015 as non-price reasons for purchasing imported strontium chromate from France rather than U.S.-produced product.

Table V-10
Strontium chromate: Purchasers' responses to purchasing subject imports instead of domestic product

* * * * * * *

[12] WPC provided contact information for 13 unique customers in its petition at General Exhibit 15; all five firms listed in the lost sales lost revenue allegations were included in this list. Staff contacted eight purchasers in addition to the firms listed in the lost sales lost revenue allegations.

[13] Of the 11 responding purchasers, 1 purchaser indicated that it did not know the source of the strontium chromate it purchased.

Table V-11
Strontium chromate: Purchasers' responses to purchasing subject imports instead of domestic product, by country

Source	Count of purchasers reporting subject instead of domestic	Count of purchasers reported that imports were priced lower	Count of purchasers reporting that price was a primary reason for shift	Quantity subject purchased (pounds dry weight)
Austria	5	4	---	---
France	5	3	1	***
Any subject source	7	5	1	***

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

Of the 11 responding purchasers, two reported that the U.S. producer had reduced prices in order to compete with lower-priced imports from Austria (tables V-12-13; six reported that they did not know). The reported estimated price reduction ranged from *** to *** percent with respect to Austria.

Table V-12
Strontium chromate: Purchasers' responses to U.S. producer price reductions

* * * * * * *

Table V-13
Strontium chromate: Purchasers' responses to U.S. producer price reductions, by country

Source	Count of purchasers reporting U.S. producers reduced prices	Simple average of estimated U.S. price reduction (percent)	Range of estimated U.S. price reductions (percent)
Austria	2	***	***
France	---	---	***
All subject sources	2	***	***

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

In responding to the lost sales lost revenue survey, some purchasers provided additional information on purchases and market dynamics. *** stated that in 2015, WPC was not able to obtain the proper permits on time when it moved equipment from the old site to the new site, putting *** supply at risk so it needed to find an alternate supplier. It continued that WPC even recommended other European sources. Lastly, *** stated that the fact that WPC is also not an ISO certified supplier and showed a poor quality control/quality management system led it to move this business. *** stated that due to concerns with the financial viability of the U.S. producer, it made the decision to diversify its supply base to more than one supplier. As a result, it currently purchases from the U.S. and Austrian suppliers, with flexibility to introduce other approved sources depending on market conditions.

PART VI: FINANCIAL EXPERIENCE OF U.S. PRODUCERS

BACKGROUND

WPC, the only U.S. producer of strontium chromate in its primary powder form, provided financial data on its strontium chromate operations. In addition, one firm, ***, provided financial data on its toll processing. Both responding companies reported financial data on a calendar year and GAAP basis.[1]

***.

OPERATIONS ON STRONTIUM CHROMATE

Table VI-1 presents data on WPC's operations in relation to strontium chromate, while table VI-2 presents corresponding changes in average per short ton values.[2]

Table VI-1
Strontium chromate: Results of operations of WPC, 2015-17, January-June 2017, and January-June 2018

* * * * * * *

Table VI-2
Strontium chromate: Changes in AUVs for WPC, between calendar years and between partial year periods

* * * * * * *

Net sales

WPC's net sales of strontium chromate decreased by *** percent and *** percent, by quantity and value, respectively, from 2015 to 2017 and were lower in January-June 2018 than during the same period in 2017. The average unit value ("AUV") of net sales increased from $*** per dry pound in 2015 to $*** per dry pound in 2016, but decreased to $*** per dry pound in 2017. The net sales AUV was lower in the first half of 2018 ($*** per dry pound) compared to the first half of 2017 ($*** per dry pound).

Cost of goods sold and gross profit or (loss)

Raw materials were the largest component of COGS, accounting for between *** percent and *** percent of total COGS during the period for which data were collected. On a per-dry pound basis, raw materials increased from $*** in 2015 to $*** in 2016, and remained

[1] WPC has a fiscal year end of December 31. ***.
[2] ***.

at that level in 2017. In the first half of 2018, the per-dry pound cost of raw materials was slightly lower ($***) than in the same period in 2017 ($***).[3]

Other factory costs was the next largest component of COGS and accounted for between *** percent and *** percent of total COGS. Despite a decrease in net sales, other factory costs increased by *** percent from 2015 to 2016, and remained at this level in 2017. On a per pound basis, other factory costs increased from $*** in 2015 to $*** in 2017, and was *** higher in January-June 2018 than during the same period in 2017. In response to questions by staff, WPC indicated this increase was due to ***.

The last component of COGS, direct labor, accounted for between *** percent of *** percent of total COGS during the period for which data were collected. On a per dry pound basis, direct labor increased from $*** in 2015 to $*** in 2016, but declined to $*** in 2017. In January to June 2018 direct labor was $*** per dry pound, compared to $*** per dry pound during the same period in 2017. The company attributed this increase in the cost of direct labor per dry pound to the move and shut down of the old facilities.[4]

Although the average unit value of net sales increased from 2015 to 2017, the average unit value of COGS increased to a greater extent (see table VI-2), which, coupled with the decrease in sales volume, led to a decrease in gross profit from 2015 to 2017. WPC's gross profit declined from $*** in 2015 to $*** in 2017, and was lower during the first half of 2018 (at $***) compared to the same period in 2017 (at $***).

SG&A expenses and operating income

WPC's reported SG&A expenses decreased from $*** in 2015 to $*** in 2017, and were lower in January-June 2018 ($***) than during the same period in 2017 ($***). WPC indicated that the decrease in SG&A expenses between 2015 and 2017 was because in 2015 the company ***.[5] As a share of sales, SG&A expenses increased from *** percent in 2015 to *** percent in 2017, and were *** percent in both interim periods.[6] WPC's operating income decreased irregularly from *** in 2015 to *** in 2017, and was lower in January-June 2018 compared to the same period in 2017.[7]

[3] In response to questions by staff, WPC indicated that while the company has experienced a ***. Brent St. John, Chairman and CEO of WPC, email to USITC auditor, September 20, 2018 and Jeffrey Neeley, counsel to WPC, email to USITC auditor, October 5, 2018.

[4] Brent St. John, Chairman and CEO of WPC, email to USITC auditor, September 20, 2018.

[5] Jeffrey Neeley, counsel to WPC, email to USITC auditor, September 28, 2018.

[6] ***. Ibid.

[7] As mentioned in footnote 2, ***. *** operating income from its strontium chromate operations was $*** in 2015, $*** in 2016, $*** in 2017, $*** in January-June 2017, and $*** in January-June 2018. *** and WPC's combined operating income was *** in 2015, *** in 2016, *** in 2017, *** in January-June 2017, and *** in January-June 2018.

All other expenses and net income

Classified below the operating income level are interest expense, other expense, and other income. WPC's reported interest expense accounted for *** of all other expense items, and decreased from $*** in 2015 to $*** in 2017, and was $*** January-June 2017 and January-June 2018. The company indicated that the decrease in interest expense was a result of ***.[8]

WPC's net income followed a similar trend as its operating income, decreasing from *** in 2015 to ***, but improved to *** in 2017. Net income was lower in January-June 2018 (***) than during the same period in 2017 (***).

Valued added by ***

In general, the Commission calculates "value added" by determining the share of conversion costs (direct labor and other factory costs) to total COGS. Based on the information reported to the Commission, value added calculated for *** was *** percent in 2015, *** percent in 2016, *** percent in 2017 and January-June 2017, and *** in January-June 2018.[9]

Variance analysis

A variance analysis for the strontium chromate operations of WPC is presented in table VI-4.[10] The information for this variance analysis is derived from table VI-1. The analysis shows that the decline in operating income from 2015 to 2017 is primarily attributable to a higher unfavorable net cost/expense variance despite a favorable price variance (that is, costs and expenses increased more than the net sales AUV). When examining the comparable interim periods, the analysis shows that the lower operating income in interim 2018 is attributable to a higher unfavorable price variance, despite a small favorable net cost/expense variance (that is, net sales AUVs decreased more than costs and expenses).

---

[8] Brent St. John, Chairman and CEO of WPC, email to USITC auditor, September 20, 2018.

[9] As mentioned previously, ***.

[10] The Commission's variance analysis is calculated in three parts: Sales variance, cost of sales variance (COGS variance), and SG&A expense variance. Each part consists of a price variance (in the case of the sales variance) or a cost or expense variance (in the case of the COGS and SG&A expense variance), and a volume variance. The sales or cost/expense variance is calculated as the change in unit price or per-unit cost/expense times the new volume, while the volume variance is calculated as the change in volume times the old unit price or per-unit cost/expense. Summarized at the bottom of the table, the price variance is from sales; the cost/expense variance is the sum of those items from COGS and SG&A variances, respectively, and the volume variance is the sum of the volume components of the net sales, COGS, and SG&A expense variances. The overall volume component of the variance analysis is generally small.

Table VI-4
Strontium chromate: Variance analysis on the operations of WPC, between calendar years and between partial year periods

* * * * * * *

CAPITAL EXPENDITURES AND RESEARCH AND DEVELOPMENT EXPENSES

Table VI-5 presents capital expenditures and research and development ("R&D") expenses by firm. Capital expenditures decreased from $*** in 2015 to $*** in 2017, and were lower in the first half of 2018 ($***) compared to the first half of 2017 ($***). In its U.S. producer questionnaire, WPC reported ***. *** reported that its capital expenditures reported ***.[11] R&D expenses decreased from $*** in 2015 to $*** in 2017, and was $*** in both January-June 2017 and January-June 2018. ***.

Table VI-5
Strontium chromate: Capital expenditures and research and development expenses of * and WPC, January-June 2017, and January-June 2018**

* * * * * * *

ASSETS AND RETURN ON ASSETS

Table VI-6 presents data on the U.S. producers' total assets and their operating return on assets (operating income divided by total assets).[12] Total net assets decreased from $*** in 2015 to $*** in 2017. The *** of the assets were reported by WPC.[13]

Table VI-6
Strontium chromate: * and WPC's total assets and return on assets, 2015-17**

* * * * * * *

[11] *** U.S. producer questionnaire, section III-13.

[12] With respect to a company's overall operations, staff notes that total asset value (i.e., the bottom line number on the asset side of a company's balance sheet) reflects an aggregation of a number of assets which are generally not product specific. Accordingly, high level corporate allocations may be required in order to report a total asset value for strontium chromate.

[13] ***. In response to questions from staff asking for more detail in ***.

CAPITAL AND INVESTMENT

The Commission requested U.S. producers of strontium chromate to describe any actual or potential negative effects of imports of strontium chromate from Austria and France on their firms' growth, investment, ability to raise capital, development and production efforts, or the scale of capital investments. Table VI-7 presents the number of firms reporting an impact in each category and table VI-8 provides their narrative responses.

Table VI-7
Strontium chromate: Actual and anticipated negative effects of imports on investment, growth, and development, since January 1, 2015

* * * * * * *

Table VI-8
Strontium chromate: Narratives relating to actual and anticipated negative effects of imports on investment and growth and development, since January 1, 2015

* * * * * * *

PART VII: THREAT CONSIDERATIONS AND INFORMATION ON NONSUBJECT COUNTRIES

Section 771(7)(F)(i) of the Act (19 U.S.C. § 1677(7)(F)(i)) provides that—

> *In determining whether an industry in the United States is threatened with material injury by reason of imports (or sales for importation) of the subject merchandise, the Commission shall consider, among other relevant economic factors*[1]*--*
>
> *(I) if a countervailable subsidy is involved, such information as may be presented to it by the administering authority as to the nature of the subsidy (particularly as to whether the countervailable subsidy is a subsidy described in Article 3 or 6.1 of the Subsidies Agreement), and whether imports of the subject merchandise are likely to increase,*
>
> *(II) any existing unused production capacity or imminent, substantial increase in production capacity in the exporting country indicating the likelihood of substantially increased imports of the subject merchandise into the United States, taking into account the availability of other export markets to absorb any additional exports,*
>
> *(III) a significant rate of increase of the volume or market penetration of imports of the subject merchandise indicating the likelihood of substantially increased imports,*
>
> *(IV) whether imports of the subject merchandise are entering at prices that are likely to have a significant depressing or suppressing effect on domestic prices, and are likely to increase demand for further imports,*
>
> *(V) inventories of the subject merchandise,*

---

[1] Section 771(7)(F)(ii) of the Act (19 U.S.C. § 1677(7)(F)(ii)) provides that "The Commission shall consider {these factors} . . . as a whole in making a determination of whether further dumped or subsidized imports are imminent and whether material injury by reason of imports would occur unless an order is issued or a suspension agreement is accepted under this title. The presence or absence of any factor which the Commission is required to consider . . . shall not necessarily give decisive guidance with respect to the determination. Such a determination may not be made on the basis of mere conjecture or supposition."

(VI) the potential for product-shifting if production facilities in the foreign country, which can be used to produce the subject merchandise, are currently being used to produce other products,

(VII) in any investigation under this title which involves imports of both a raw agricultural product (within the meaning of paragraph (4)(E)(iv)) and any product processed from such raw agricultural product, the likelihood that there will be increased imports, by reason of product shifting, if there is an affirmative determination by the Commission under section 705(b)(1) or 735(b)(1) with respect to either the raw agricultural product or the processed agricultural product (but not both),

(VIII) the actual and potential negative effects on the existing development and production efforts of the domestic industry, including efforts to develop a derivative or more advanced version of the domestic like product, and

(IX) any other demonstrable adverse trends that indicate the probability that there is likely to be material injury by reason of imports (or sale for importation) of the subject merchandise (whether or not it is actually being imported at the time).[2]

Information on the volume and pricing of imports of the subject merchandise is presented in *Parts IV* and *V*; and information on the effects of imports of the subject merchandise on U.S. producers' existing development and production efforts is presented in *Part VI*. Information on inventories of the subject merchandise; foreign producers' operations, including the potential for "product-shifting;" any other threat indicators, if applicable; and any dumping in third-country markets, follows. Also presented in this section of the report is information obtained for consideration by the Commission on nonsubject countries.

THE INDUSTRY IN AUSTRIA

The Commission issued a foreign producer or exporter questionnaire to one firm, Habich GmbH ("Habich"), believed to produce and/or export strontium chromate from Austria.[3]

---

[2] Section 771(7)(F)(iii) of the Act (19 U.S.C. § 1677(7)(F)(iii)) further provides that, in antidumping investigations, ". . . the Commission shall consider whether dumping in the markets of foreign countries (as evidenced by dumping findings or antidumping remedies in other WTO member markets against the same class or kind of merchandise manufactured or exported by the same party as under investigation) suggests a threat of material injury to the domestic industry."

[3] This firm was identified through a review of information submitted in the petition and contained in *** records.

A usable response to the Commission's questionnaire was received from this firm. Habich's exports to the United States accounted for approximately *** percent of U.S. imports of strontium chromate from Austria in 2017.[4] The production of strontium chromate in Austria reported in Habich's questionnaire accounts for *** percent of overall production of strontium chromate in Austria. Table VII-1 presents information on the strontium chromate operations of Habich.

Table VII-1
Strontium chromate: Summary data for Austrian producer Habich, 2017

* * * * * * *

Changes in operations

Habich *** operational and organizational changes since January 1, 2015.

Operations on strontium chromate

Table VII-2 presents information on Habich's strontium chromate operations. Annual capacity increased between 2015 to 2016 by *** percent, and remained at the 2016 level therafter.[5] Production increased by *** percent from 2015 to 2017, and was *** percent higher in interim 2018 than interim 2017. Capacity utilization increased from *** percent in 2015 to *** percent in 2017, and reached *** percent in January-June 2018.

Habich exported *** of its shipments during the period for which data were collected. Exports (by quantity) to the United States increased by *** percent between 2015 and 2017, and were *** percent higher in interim 2018 than interim 2017. The United States was the destination market for *** percent of Habich's export shipments in 2015 and increased to the destination market for *** percent of its exports in 2017. Exports to all other markets increased by *** percent between 2015 and 2017, and was *** percent lower in interim 2018 than interim 2017. Habich's other export markets include ***.

Table VII-2
Strontium chromate: Data for Austrian producer Habich, 2015-17, January to June 2017, January to June 2018, and projection calendar years 2018 and 2019

* * * * * * *

[4] Habich indicated in its questionnaire response that it accounted for *** percent of exports of strontium chromate from Austria into the U.S. in 2017. Foreign producer questionnaire response, question II-6. Export quantities in 2017 to the U.S. reported in Habich's questionnaire response were equivalent to *** percent of 2017 imports reported in importer questionnaires and *** percent of 2017 imports reported in official import statistics for HTS statistical reporting number 2841.50.9100.

[5] Habich reported that it increased production capacity ***

Alternative products

Habich *** production of other products on the same equipment and machinery used to produce strontium chromate.

Exports

No GTA data was found on exports of strontium chromate from Austria under HS subheading 2841.50. Available export information provided in Habich's questionnaire response is presented and discussed in the section above, Operations on Strontium Chromate.

THE INDUSTRY IN FRANCE

The Commission issued foreign producers' or exporters' questionnaires to two firms believed to produce and/or export strontium chromate from France.[6] A usable response to the Commission's questionnaire was received from one firm, SNCZ.[7] This firm's exports to the United States accounted for *** percent of U.S. imports of strontium chromate from France in 2017.[8] The production of strontium chromate in France reported in SNCZ's questionnaire accounts for *** percent of overall production of strontium chromate in France. Table VII-3 presents information on the strontium chromate operations of SNCZ.

Table VII-3
Strontium chromate: Summary data for French producer SNCZ, 2017

* * * * * * *

Changes in operations

SNCZ *** operational and organizational changes since January 1, 2015.

[6] These firms were identified through a review of information submitted in the petition and contained in *** records.

[7] The second firm, *** provided certification that it has not produced or exported strontium chromate since January 1, 2015.

[8] SNCZ indicated in its questionnaire response that it accounted for *** percent of exports of strontium chromate from France into the U.S. in 2017. Foreign producer questionnaire response, question II-6. Export quantities in 2017 to the U.S. reported in SNCZ's questionnaire response were equivalent to *** percent of 2017 imports reported in importer questionnaires and *** percent of 2017 imports reported in official import statistics for HTS statistical reporting number 2841.50.9100.

Operations on strontium chromate

Table VII-4 presents information on SNCZ's strontium chromate operations. Capacity increased between 2015 and 2017 by *** percent, but was *** percent lower in interim 2018 than interim 2017. Production increased by *** percent from 2015 to 2017, but was *** percent lower in interim 2018 than interim 2017. Capacity utilization peaked in 2016 to *** percent, and has been in the *** in all other time periods.[9] End-of-period inventories increased by *** percent from 2015 to 2017 and were *** percent higher in 2018 than 2017.

SNCZ exported more than *** percent of its total shipments in each of the years for which data were collected. Unlike Habich, the United States is not a major export destination for SNCZ's exports of strontium chromate, although its share has increased over the period for which data were collected.[10] In 2015, *** percent of SNCZ's exports of strontium chromate were sent to the United States. This percentage increased to *** percent in 2016, and then decreased to *** percent in 2017. Exports by quantity to the United States increased by *** percent between 2015 and 2016 and by *** percent between 2015 and 2017.[11] Exports to all other markets increased by *** percent between 2015 and 2017, and was *** percent lower in interim 2018 than interim 2017.

Table VII-4
Strontium chromate: Data for French producer SNCZ, 2015-17, January to June 2017, January to June 2018, and projection calendar years 2018 and 2019

* * * * * * *

Alternative products

As shown in table VII-5, SNCZ produced other products on the same equipment and machinery used to produce strontium chromate. Nonsubject products produced using the same equipment as subject production accounted for less than *** percent of production during 2015-17. These other products included ***.

---

[9] SNCZ reported that it is operating at nearly full capacity and has no plan to expand strontium chromate production in its future strategy. Rather, SNCZ is focusing on new anticorrosive pigment development to eventually replace chromate pigment in the future, so there is no threat of an onslaught of massive exports from France to the United States in the imminent future. Conference transcript, p. 59 (Esselin).

[10] SNCZ reported that the United States is not one of SNCZ's primary markets. It sells 74 percent of its total production of strontium chromate to Asia Pacific. Its largest market in this region is Taiwan. Conference transcript, p. 59 (Esselin).

[11] SNCZ reported that from approximately November 2015 to March 2016, many customers had no choice but to source from SNCZ and other foreign suppliers, even at considerable costs, due to the supply shortage caused by WPC. Conference transcript, pp. 58-59 (Esselin).

Table VII-5
Strontium chromate: French producer SNCZ's overall capacity and production on the same equipment as subject production, 2015-17, January to June 2017 and January to June 2018

* * * * * * *

Exports

According to GTA, the leading export markets for products entered under HS subheading 2841.50[12] (salts of oxometallic or peroxometallic acids: other chromates and dichromates; peroxochromates) from France are Malaysia and Austria (table IV-6).

Table VII-6:
HS subheading 2841.50: Exports from France, 2015-17

Exporter	Calendar year		
	2015	2016	2017
	Quantity (1,000 dry pounds)		
Exports from France to the United States	9	4	10
Exports from France to other major destination markets.--			
Malaysia	106	85	124
Austria	75	53	33
United Kingdom	16	15	17
Taiwan	16	11	13
Belgium	14	10	11
New Zealand	5	4	10
Italy	8	7	10
Germany	2	3	8
All other destination markets	299	212	51
Total exports from France	549	405	289
	Value (1,000 dollars)		
Exports from France to the United States	17	8	19
Exports from France to other major destination markets.--			
Malaysia	183	144	225
Austria	139	88	58
United Kingdom	35	35	42
Taiwan	59	38	53
Belgium	27	24	27
New Zealand	12	13	27
Italy	19	18	28
Germany	8	13	21
All other destination markets	532	369	161
Total exports from France	1,030	750	661

Table continued on next page.

[12] HTS statistical reporting number 2841.50.9100 is believed to include virtually all strontium chromate in powder form from Austria and approximately *** of all strontium chromate from France. However, GTA data are only available at the HS 6-digit level, which includes out of scope products, so the data are not exclusively strontium chromate.

Table VII-6—Continued
HS subheading 2841.50: Exports from France, 2015-17

Exporter	Calendar year		
	2015	2016	2017
	Unit value (dollars per dry pound)		
Exports from France to the United States	1.9	1.8	1.9
Exports from France to other major destination markets.--			
Malaysia	1.7	1.7	1.8
Austria	1.9	1.7	1.7
United Kingdom	2.2	2.2	2.4
Taiwan	3.7	3.6	4.0
Belgium	1.9	2.3	2.4
New Zealand	2.4	2.9	2.6
Italy	2.4	2.7	2.8
Germany	5.1	3.9	2.6
All other exporters	1.8	1.7	3.1
Total exports from France	1.9	1.9	2.3
	Share of quantity (percent)		
Exports from France to the United States	1.6	1.1	3.4
Exports from France to other major destination markets.--			
Malaysia	19.4	21.1	43.0
Austria	13.7	13.1	11.6
United Kingdom	2.9	3.8	5.9
Taiwan	2.9	2.6	4.6
Belgium	2.6	2.5	3.9
New Zealand	0.9	1.1	3.5
Italy	1.4	1.7	3.5
Germany	0.3	0.8	2.8
All other exporters	54.4	52.2	17.8
Total exports from France	100.0	100.0	100.0

Note.—Data reported under subheading may include some merchandise outside the scope of this investigation.

Source: Official exports statistics under HS subheading 2841.50 reported by France in the Global Trade Atlas database, accessed October 4, 2018.

SUBJECT COUNTRIES COMBINED

Table VII-7 presents combined summary data on strontium chromate operations of the reporting subject producers in the subject countries.

Table VII-7
Strontium chromate: Data on the industry in subject countries, 2015-17, January to June 2017, and January to June 2018 and projection calendar years 2018 and 2019

* * * * * * *

U.S. INVENTORIES OF IMPORTED MERCHANDISE

Table VII-8 presents data on U.S. importers' reported inventories of strontium chromate. End-of-period inventories of imports from Austria decreased from 2015 to 2016 by *** percent, and remained at the same level between 2016 and 2017. Inventories of imports from Austria were *** percent lower in interim 2017 than in interim 2018. The ratio of inventories to U.S. imports, U.S. shipments of imports, and total shipments of imports from Austria decreased from 2015 to 2016 by approximately *** percentage points, and by between *** percentage points from 2016 to 2017.

End-of-period inventories of imports from France increased from 2015 to 2016 by *** percent, then decreased from 2016 to 2017 by *** percent. Inventories of imports from France were *** percent higher in interim 2018 than in interim 2017. The ratio of end-of-period inventories to U.S. imports, U.S. shipments of imports, and total shipments of imports from France all decreased from 2015 to 2017 by between *** percentage points.

Table VII-8
Strontium chromate: U.S. importers' end-of-period inventories of imports by source, 2015-17, January to June 2017, and January to June 2018

* * * * * * *

U.S. IMPORTERS' OUTSTANDING ORDERS

The Commission requested importers to indicate whether they imported or arranged for the importation of strontium chromate from Austria and France after June 30, 2018. These data are reported in table VIII-9.

Table VII-9
Strontium chromate: Arranged imports, July 2018 through June 2019

* * * * * * *

ANTIDUMPING OR COUNTERVAILING DUTY ORDERS IN THIRD-COUNTRY MARKETS

There are no antidumping or countervailing duty orders in third-country markets.

INFORMATION ON NONSUBJECT COUNTRIES

Strontium chromate production outside of the subject countries is limited. According to published sources, worldwide production and consumption of strontium chromate was estimated to be at around 9,000 tons/year in 2010.[13] Perception is that since 2010 available strontium chromate market channels have further decreased due to increased regulations tied to environmental and human health concerns (i.e., REACH).[14]

Manufacturing of strontium chromate outside of the U.S. and Europe is limited to Asia.[15] Production in Asia includes:[16] Sambo Chemical Co. Ltd. of Korea, and Kikuchi Color & Chemicals Corporation of Japan,[17] and Chongquin Jiangnan Chemical Co., Ltd of China.[18] [19] Product from nonsubject sources is imported into the United States on a limited basis, if at all.[20] Global exports of products classified under HS subheading 2841.50,[21] by exporter, as published by GTA, are presented in table VII-9.

---

[13] Anses, "Proposal for Identification of a substance as a category 1A or 1B CMR, PBT, vPvB or a substance of an equivalent level of Concern," Annex XV – Identification of SVHC Format, p. 14.

[14] REACH is a regulation of the European Union, adopted to improve the protection of human health and the environment from the risks that can be posed by chemicals, while enhancing the competitiveness of the chemicals industry. ECHA, "Understanding REACH," https://echa.europa.eu/regulations/reach/understanding-reach, retrieved October 3, 2018.

[15] SNCZ states that there are four manufacturers total in the world, the fourth company located in China. Conference transcript (Esselin) p. 56.

[16] Staff notes that there may be other companies in China that produce strontium chromate, this is not an exhaustive list.

[17] Petition, pp. 5-6.

[18] Chongquing Jiangnan Chemical Co., Ltd., "Pigments—Anti-corrosive pigments," http://www.cjchem.com/Products/Pigments/Anticorrosivepigments/tabid/99/Default.aspx, retrieved October 3, 2018

[19] Staff notes that they are ***. *Chemical Economics Handbook:* Inorganic Pigments, IHS, June 2015, pp.162-163.

[20] Conference transcript (Esselin) p. 56.

[21] HTS statistical reporting number 2841.50.9100 is believed to include virtually all strontium chromate in powder form from Austria and approximately *** of all strontium chromate from France. However, GTA data are only available at the HS 6-digit level, (HS subheading 2841.50: Salts of oxometallic or peroxometallic acids: Other chromates and dichromates; peroxochromates), which includes out of scope products, so the data are not exclusively strontium chromate.

Table VII-9
HS subheading 2841.50: Global exports by exporter, 2015-17

Exporter	Calendar year		
	2015	2016	2017
	Quantity (1,000 dry pounds)		
United States	854	689	5,260
Austria	---	---	---
France	549	405	289
All other major reporting exporters.-- Spain	8	5	3,320
China	2,834	2,019	2,217
Kazakhstan	2,056	1,989	1,832
Russia	1,233	1,596	1,766
South Korea	1,289	1,843	1,705
India	905	989	1,218
Chile	1,608	1,129	935
Japan	224	407	647
Lithuania	36	63	157
Netherlands	104	76	106
All other exporters	735	556	471
Total global exports	12,436	11,766	19,924
	Value (1,000 dollars)		
United States	2,060	2,028	5,141
Austria	---	---	---
France	1,030	750	661
All other major reporting exporters.-- Spain	60	73	500
China	2,988	2,297	2,411
Kazakhstan	1,704	1,242	1,536
Russia	5,982	3,737	8,579
South Korea	1,949	2,675	2,656
India	1,087	1,251	1,520
Chile	2,605	1,828	1,515
Japan	571	991	1,395
Lithuania	181	155	546
Netherlands	241	213	453
All other exporters	2,305	1,922	1,786
Total global exports	22,763	19,164	28,699

Table continued on next page.

Table VII-9--Continued
HS subheading 2841.50: Global exports by exporter, 2015-17

Exporter	Calendar year		
	2015	2016	2017
	Unit value (dollars per dry pound)		
United States	2.41	2.94	0.98
Austria	---	---	---
France	1.88	1.85	2.29
All other major reporting exporters.-- Spain	7.15	15.25	0.15
China	1.05	1.14	1.09
Kazakhstan	0.83	0.62	0.84
Russia	4.85	2.34	4.86
South Korea	1.51	1.45	1.56
India	1.20	1.27	1.25
Chile	1.62	1.62	1.62
Japan	2.55	2.44	2.16
Lithuania	4.97	2.45	3.47
Netherlands	2.31	2.79	4.27
All other exporters	3.14	3.46	3.79
Total global exports	1.83	1.63	1.44
	Share of quantity (percent)		
United States	6.9	5.9	26.4
Austria	---	---	---
France	4.4	3.4	1.4
All other major reporting exporters.-- Spain	0.1	0.0	16.7
China	22.8	17.2	11.1
Kazakhstan	16.5	16.9	9.2
Russia	9.9	13.6	8.9
South Korea	10.4	15.7	8.6
India	7.3	8.4	6.1
Chile	12.9	9.6	4.7
Japan	1.8	3.5	3.2
Lithuania	0.3	0.5	0.8
Netherlands	0.8	0.6	0.5
All other exporters	5.9	4.7	2.4
Total global exports	100.0	100.0	100.0

[1] Global Trade Atlas was unable to provide values and quantity of product under HS subheading 2841.50 from Austria during 2015-2017.

Note.--Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent.

Source: Official exports statistics under HS subheading 2841.50 reported by various national statistical authorities in the Global Trade Atlas database, accessed October 4, 2018.

APPENDIX A

FEDERAL REGISTER NOTICES

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

Citation	Title	Link
83 FR 46189 September 12, 2018	*Strontium Chromate From Austria and France; Institution of Anti-Dumping Duty Investigations and Scheduling of Preliminary Phase Investigations*	https://www.gpo.gov/fdsys/pkg/FR-2018-09-12/pdf/2018-19790.pdf
83 FR 49543 October 2, 2018	*Strontium Chromate From Austria and France: Initiation of Less-Than-Fair-Value Investigations*	https://www.gpo.gov/fdsys/pkg/FR-2018-10-02/pdf/2018-21406.pdf

APPENDIX B

LIST OF STAFF CONFERENCE WITNESSES

CALENDAR OF PUBLIC PRELIMINARY CONFERENCE

Those listed below appeared as witnesses at the United States International Trade Commission's preliminary conference:

Subject: Strontium Chromate from Austria and France

Inv. Nos.: 731-TA-1422 and 1423 (Preliminary)

Date and Time: September 26, 2018 - 9:30 a.m.

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

OPENING REMARKS:

In Support of Imposition (**Jeffrey S. Neeley**, Husch Blackwell LLP)
In Opposition to Imposition (**Lizbeth Levinson**, Fox Rothschild LLP)

In Support of the Imposition of Antidumping Duty Orders:

Husch Blackwell LLP
Washington, DC
on behalf of

WPC Technologies

Brent St. John, Chairman and Chief Executive Officer, WPC Technologies

Laura Klein, Sales Director, WPC Technologies

Gary Krall, Consultant, WPC Technologies, Retired Chief Financial Officer, WPC Technologies

Jeffrey S. Neeley)
) – OF COUNSEL
Stephen Brophy)

In Opposition to the Imposition of
Antidumping Duty Orders:

Fox Rothschild LLP
Washington, DC
on behalf of

SNCZ

Claude Esselin, Sales and Marketing Manager, SNCZ

Mark A. Maroon, Chief Technology Officer,
Maroon Group LLC

Lizbeth Levinson) – OF COUNSEL

REBUTTAL/CLOSING REMARKS:

In Support of Imposition (**Jeffrey S. Neeley**, Husch Blackwell LLP)
In Opposition to Imposition (**Lizbeth Levinson**, Fox Rothschild LLP)

APPENDIX C

SUMMARY DATA

Table C-1
Strontium chromate: Summary data concerning the U.S. market, 2015-17, January to June 2017, and January to June 2018

* * * * * * *

APPENDIX D

SELECTED DATA REGARDING TOLL PROCESSING

Table D-1
Strontium chromate: Summary data regarding the toller, 2015-17, January to June 2017, and January to June 2018

* * * * * * *