

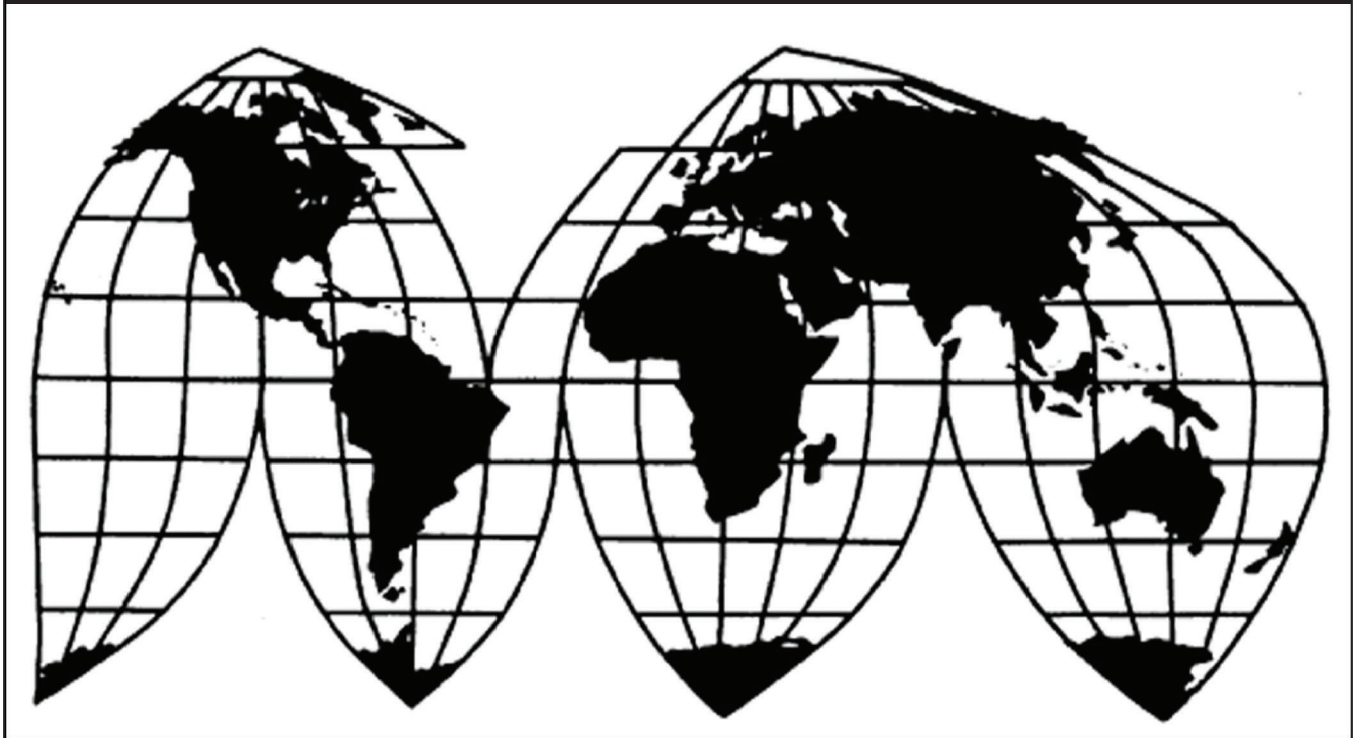
Sodium Sulfate Anhydrous from Canada

Investigation No. 731-TA-1446 (Preliminary)

Publication 4895

May 2019

U.S. International Trade Commission



Washington, DC 20436

U.S. International Trade Commission

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Note.—Information that would reveal confidential operations of individual concerns may not be published.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

UNITED STATES INTERNATIONAL TRADE COMMISSION

Investigation No. 731-TA-1446 (Preliminary)

Sodium Sulfate Anhydrous from Canada

DETERMINATION

On the basis of the record¹ developed in the subject investigation, 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 sodium sulfate anhydrous from Canada, provided for in subheadings 2833.11.10 and 2833.11.50 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 3}

COMMENCEMENT OF FINAL PHASE INVESTIGATION

Pursuant to section 207.18 of the Commission’s rules, the Commission also gives notice of the commencement of the final phase of its investigation. 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 an affirmative preliminary determination in the investigation under section 733(b) of the Act, or, if the preliminary determination is negative, upon notice of an affirmative final determination in that investigation under section 735(a) of the Act. Parties that filed entries of appearance in the preliminary phase of the investigation need not enter a separate appearance for the final phase of the investigation. 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 investigation.

BACKGROUND

On March 28, 2019, Cooper Natural Resources, Inc., Fort Worth, Texas; Elementis Global LLC, East Windsor, New Jersey; and Searles Valley Minerals, Inc., Overland Park, Kansas, filed a petition with the Commission and Commerce, alleging that an industry in the United States is materially injured or threatened with material injury by reason of LTFV imports of sodium sulfate anhydrous from Canada. Accordingly, effective March 28, 2019, the Commission, pursuant to section 733(a) of the Act (19 U.S.C. 1673b(a)), instituted antidumping duty

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 84 FR 17138 (April 29, 2019).

³ Chairman David S. Johanson and Commissioner Meredith M. Broadbent dissenting.

investigation No. 731-TA-1446 (Preliminary).

Notice of the institution of the Commission's investigation and of a public conference 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 April 3, 2019 (84 FR 13066). The conference was held in Washington, DC, on April 18, 2019, 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 this investigation, we determine that there is a reasonable indication that an industry in the United States is materially injured by reason of imports of sodium sulfate anhydrous (“SSA”) from Canada that are allegedly sold in the United States at less than fair value.¹

I. The Legal Standard for Preliminary Determinations

The legal standard for preliminary antidumping and countervailing 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.² 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.”³

II. Background

The petition in this investigation was filed on March 28, 2019, by Cooper Natural Resources, Inc. (“CNR”), Elementis Global LLC (“Elementis”), and Searles Valley Minerals, Inc. (“SVM”) (collectively “Petitioners”), domestic producers of SSA. Petitioners appeared at the conference and submitted a postconference brief. One respondent, Saskatchewan Mining and Minerals, Inc. (“SMMI” or “Respondent”), a producer and importer of SSA from Canada, appeared at the conference and submitted a postconference brief.

U.S. industry data are based on the questionnaire responses of seven firms that accounted for the vast majority of U.S. production of SSA in 2018.⁴ U.S. import data are based on official Commerce import statistics under Harmonized Tariff Schedule of the United States

¹ Chairman Johanson and Commissioner Broadbent determine that there is no reasonable indication that an industry in the United States is materially injured or threatened with material injury by reason of imports of SSA from Canada that are allegedly sold in the United States at less than fair value. See Separate and Dissenting Views of Chairman David S. Johanson and Commissioner Meredith M. Broadbent. They join Sections I through VI.B.3 of this opinion.

² 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*, 20 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.

³ *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).

⁴ Confidential Report (CR) at I-4; Public Report (“PR”) at I-3. JCI Controls, Inc. (“JCI”), a U.S. producer of synthetic SSA, did not respond to the Commission’s U.S. producer questionnaire. *Id.* at n.7. JCI accounted for approximately *** percent of total U.S. production of SSA in 2018, based ***. *Id.*

("HTSUS") statistical reporting number 2833.11.5010 and from the questionnaire responses of seven U.S. importers that account for *** percent of total U.S. imports of SSA in 2018 under that statistical reporting number.⁵ Foreign industry data are based on the questionnaire responses of two producers of subject merchandise in Canada, accounting for all production of SSA in Canada and all exports of SSA to the United States in 2018.⁶

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."⁷ 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."⁸ 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."⁹

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.¹⁰ No single factor is dispositive, and the Commission may consider other factors it deems relevant based on the facts of a particular investigation.¹¹ The Commission looks for clear dividing lines among possible like products and disregards minor variations.¹² Although the Commission must accept

⁵ CR at I-4 to I-5; PR at I-3 to I-4. Based on official import statistics, SMMI's importer questionnaire response accounted for the vast majority of subject imports from Canada during the 2016 to 2018 period of investigation ("POI"). *Id.* at I-5, n.8.

⁶ CR at I-5; PR at I-4. SMMI and TODA Advanced Chemicals ("TODA"), a synthetic producer of SSA in Canada, submitted foreign producer questionnaire responses. CR/PR at VII-3. SMMI was the sole exporter of SSA from Canada to the United States during the POI. *Id.*

⁷ 19 U.S.C. § 1677(4)(A).

⁸ 19 U.S.C. § 1677(4)(A).

⁹ 19 U.S.C. § 1677(10).

¹⁰ *See, e.g., Cleo Inc. v. United States*, 501 F.3d 1291, 1299 (Fed. Cir. 2007); *NEC Corp. v. Department of Commerce*, 36 F. Supp. 2d 380, 383 (Ct. Int'l Trade 1998); *Nippon Steel Corp. v. United States*, 19 CIT 450, 455 (1995); *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) price. *See Nippon*, 19 CIT at 455 n.4; *Timken Co. v. United States*, 913 F. Supp. 580, 584 (Ct. Int'l Trade 1996).

¹¹ *See, e.g., S. Rep. No. 96-249 at 90-91 (1979)*.

¹² *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*

Commerce's determination as to the scope of the imported merchandise that is subsidized and/or sold at less than fair value,¹³ the Commission determines what domestic product is like the imported articles Commerce has identified.¹⁴

A. Scope Definition

In its notice of initiation, Commerce defined the imported merchandise within the scope of this investigation as:

... sodium sulfate (Na_2SO_4) (Chemical Abstracts Service (CAS) Number 7757–82–6) that is anhydrous (*i.e.*, containing no water), regardless of purity, grade, color, production method, and form of packaging, in which the percentage of particles between 20 mesh and 100 mesh, based on U.S. mesh series screens, ranges from 10–95% and the percentage of particles finer than 100 mesh, based on U.S. mesh series screens, ranges from 5–90%.

Excluded from the scope of this investigation are specialty sodium sulfate anhydrous products, which are products whose particle distributions fall outside the described ranges. Glauber's salt ($\text{Na}_2\text{SO}_4 \cdot 10\text{H}_2\text{O}$), also known as sodium sulfate decahydrate, an intermediate product in the production of sodium sulfate anhydrous that has no known commercial uses, is not included within the scope of the investigation, although some end-users may mistakenly refer to sodium sulfate anhydrous as Glauber's salt. Other forms of sodium sulfate that are hydrous (*i.e.*, containing water) are also excluded from the scope of the investigation.

The merchandise subject to this investigation is classifiable under Harmonized Tariff Schedule of the United States (HTSUS) subheading 2833.11.5010. Subject merchandise may also be classified under 2833.11.1000, 2833.11.5050, and 2833.19.0000. Although the HTSUS subheadings and CAS registry number are

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.").

¹³ 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).

¹⁴ *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).

provided for convenience and customs purposes, the written description of the scope of the investigation is dispositive.¹⁵

SSA within the scope of this investigation is a white, granular, crystalized powder with the chemical formula Na_2SO_4 .¹⁶ SSA is generally used in the production of dry powder laundry and dishwasher detergents, food starches, textiles, pulp and paper, glass, and other products.¹⁷ SSA is either mined from natural sources or generated as part of a synthetic process.¹⁸

B. Arguments of the Parties

Petitioners argue that the Commission should define the domestic like product as all SSA coextensive with the scope of the investigation.¹⁹ They point out that, in the Commission's 2000 investigation of SSA from Canada, the Commission found that all SSA comprised a single like product with no clear demarcations by type, grade, size, or use.²⁰ Respondent does not dispute Petitioners' proposed definition of the domestic like product for purposes of the preliminary determination.²¹

C. Analysis

Based on the record in the preliminary phase of this investigation, we define a single domestic like product consisting of all SSA, both natural and synthetic, coextensive with Commerce's scope.

Physical Characteristics and Uses. All SSA is chemically identical, regardless of whether it is produced naturally or synthetically.²² Petitioners claim to be aware of only a small quantity of SSA purchased by one customer in the paper industry that requires SSA to be identified as naturally or synthetically produced.²³ The record indicates that one customer purchased only natural SSA for its particular end use because natural SSA complies with specifications in the Food Chemical Codex ("FCC") and is exempt from REACH registration in the European Union.²⁴

Manufacturing Facilities, Production Processes, and Employees. SSA is either mined naturally or generated as a part of a synthetic chemical process.²⁵ CNR and SVM, the two U.S.

¹⁵ *Sodium Sulfate Anhydrous From Canada: Initiation of Less-Than-Fair-Value Investigation*, 84 Fed. Reg. 17138, 17142 (Apr. 24, 2019).

¹⁶ CR at I-7; PR at I-6.

¹⁷ CR/PR at I-3.

¹⁸ CR at I-10; PR at I-7.

¹⁹ Petitioners' Postconference Brief at 5.

²⁰ Petitioners' Postconference Brief at 4. *See Anhydrous Sodium Sulfate from Canada*, Inv. No. 731-TA-884 (Preliminary), USITC Pub. 3345 (Sept. 2000) at 5.

²¹ Conf. Tr. at 167 (Heffner).

²² CR at I-7; PR at I-6.

²³ Petition at 13.

²⁴ U.S. Purchaser Response of *** at Question 4; *see also* Conf. Tr. at 177-78 (Avery), Petitioners' Postconference Brief at Exhibit 1.

²⁵ CR at I-10; PR at I-7.

producers of natural SSA, follow a similar production process in which they pump brines from a saline lake, cool them with chillers to precipitate Glauber’s salt, and then dry the Glauber’s salt to produce SSA.²⁶ SVM’s production process has preceding steps to extract other components of the brines that are then used to produce products other than SSA.²⁷ Synthetic SSA is produced in multiple processes that involve sulfuric acid.²⁸ For example, U.S. producer Elementis produces synthetic SSA as part of sodium dichromate manufacturing.²⁹ In that process, sulfuric acid is added to a boiling solution of sodium chromate that forms sodium dichromate and sodium sulfate.³⁰ The sodium sulfate is purified to remove chromium and other metal impurities, then it is dried to form SSA.³¹ Other major sources of U.S. synthetic SSA production include lead acid battery recycling, silica pigment production, and resorcinol production.³²

Channels of Distribution. U.S. producers sell SSA to distributors and end users. The two U.S. producers of natural SSA sold over two-thirds of their product to end users (***) percent) in 2018, while U.S. producers of synthetic SSA, ***, sold a little over half of their product to distributors (***) percent.³³

Interchangeability. Petitioners emphasize that despite the various manufacturing processes, all in-scope SSA, whether naturally or synthetically produced, can generally be used interchangeably.³⁴ Respondent SMMI concurs.³⁵

Producer and Customer Perceptions. Petitioners argue that producers generally do not distinguish between natural and synthetic SSA when marketing and selling SSA.³⁶ They assert that nearly all purchasers acquire SSA without regard to whether it is natural or synthetic.³⁷

Price. The record indicates that U.S. producers of natural SSA reported higher U.S. shipment average unit values (“AUVs”) than U.S. producers of synthetic SSA.³⁸

Conclusion. All SSA is chemically identical, used for the same purposes, and natural and synthetic SSA are largely interchangeable and perceived to be the same product. In light of these considerations, and the lack of any contrary argument, we define a single domestic like

²⁶ CR at I-10 to I-11; PR at I-7 to I-8.

²⁷ CR at I-10; PR at I-8.

²⁸ CR at I-11; PR at I-8.

²⁹ CR at I-11; PR at I-8.

³⁰ CR at I-11; PR at I-8 to I-9.

³¹ CR at I-11; PR at I-9.

³² CR at I-11 to I-12; PR at I-9. From an accounting perspective, CNR treats SSA as a primary product, while SVM and Elementis treat SSA as a co-product (or joint product). The remaining U.S. synthetic producers treat SSA as a byproduct. Primary and co-products are assigned fully absorbed manufacturing costs, whereas byproducts are not. CR/PR at VI-1, n.3.

³³ CR/PR at II-1, n.1.

³⁴ Petition at 11; *see also* Conf. Tr. at 31 (Wrenn) (“I can attest that natural and synthetic product are interchangeable in virtually every application and with few exceptions at every customer”).

³⁵ Conf. Tr. at 178 (Avery); *see also* U.S. Importer Questionnaire Response of SMMI at Questions III-18 and III-19.

³⁶ Petition at 13.

³⁷ Petition at 13.

³⁸ CR/PR at Tables III-8 and III-9.

product consisting of all SSA, whether naturally produced or synthetically produced, coextensive with the 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.”³⁹ 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 no related party issues in this investigation.⁴⁰ Petitioners and SMMI agree that Giles Chemical Industries, Inc. (“Giles”) and Saltex, which are marketers and distributors of domestically produced SSA, do not engage in sufficient production-related activities to be considered domestic producers.⁴¹ The available evidence in the record indicates that Giles and Saltex are engaged primarily in marketing and/or distribution activities for U.S. synthetic SSA producers,⁴² and that the sole arguably production-related activity they undertake entails bagging or packaging SSA.⁴³ This activity appears to entail minor costs and to add minimal value to SSA, as Giles and Saltex’s manufacturing/processing costs ranged from only *** percent in 2016 to *** percent in 2017 of net sales.⁴⁴ Accordingly, we define the domestic industry to include all domestic producers of SSA within the scope definition, but not to include Giles or Saltex.

V. Negligible Imports

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 three percent of all such merchandise imported into the United States during the most recent 12 months for

³⁹ 19 U.S.C. § 1677(4)(A).

⁴⁰ No U.S. producer directly imported subject merchandise or is related to a foreign exporter or a U.S. importer of subject merchandise. CR/PR at Table III-2; CR at III-2, III-14; PR at III-2, III-7.

⁴¹ Petitioners’ Postconference Brief at 5; Respondent’s Postconference Brief at 5.

⁴² Conf. Tr. at 111 (Wrenn) (“Largely, {Giles and Saltex} do take title but that’s really more of a just a formality... {Giles and Saltex} are {the U.S. synthetic producers’} marketing arm”).

⁴³ Conf. Tr. at 65-66 (Wrenn) (“Giles or Saltex doesn’t produce any sodium sulfate ... the only hard assets that Giles has in the ground is a bagging facility for the purposes of bagging and storing sodium sulfate.”)

⁴⁴ *Derived from* U.S. Producer Questionnaire Responses of Giles and Saltex at Question III-13. The costs and underlying activity that are reflected in Giles and Saltex’s manufacturing/processing costs include a combination of rail car and related expenses, as well as packaging. Conf. Trans, pp. 113-114 (Wrenn). As such, these ratios likely overstate to some extent the value of these firms’ actual production-related activities.

which data are available preceding the filing of the petition shall generally be deemed negligible.⁴⁵

Negligibility is not an issue in this investigation. Based on official Commerce import statistics under HTSUS statistical reporting number 2833.11.5010, subject imports from Canada accounted for 82.6 percent of total U.S. imports of SSA in the 12-month period (March 2018 to February 2019) preceding the filing of the petition.⁴⁶ Thus, we find that subject imports of SSA from Canada are not negligible.

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.⁴⁷ 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 operations.⁴⁸ The statute defines “material injury” as “harm which is not inconsequential, immaterial, or unimportant.”⁴⁹ 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.⁵⁰ 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.”⁵¹

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,⁵² it does not define the phrase “by reason of,” indicating that this aspect of the

⁴⁵ 19 U.S.C. §§ 1673b(a), 1677(24)(A)(i). The statute provides several exceptions to the general 3 percent negligibility threshold that are not applicable in this investigation.

⁴⁶ CR/PR at Table IV-3.

⁴⁷ 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.

⁴⁸ 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).

⁴⁹ 19 U.S.C. § 1677(7)(A).

⁵⁰ 19 U.S.C. § 1677(7)(C)(iii).

⁵¹ 19 U.S.C. § 1677(7)(C)(iii).

⁵² 19 U.S.C. §§ 1671b(a), 1673b(a).

injury analysis is left to the Commission's reasonable exercise of its discretion.⁵³ 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.⁵⁴

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 injury threshold.⁵⁵ In performing its examination, however, the Commission need not isolate the injury caused by other factors from injury caused by unfairly traded imports.⁵⁶ Nor does the

⁵³ *Angus Chemical Co. v. United States*, 140 F.3d 1478, 1484-85 (Fed. Cir. 1998) ("the statute does not 'compel the commissioners' to employ {a particular methodology}.", *aff'g* 944 F. Supp. 943, 951 (Ct. Int'l Trade 1996).

⁵⁴ 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).

⁵⁵ Uruguay Round Agreements Act Statement of Administrative Action (SAA), H.R. Rep. 103-316, Vol. I at 851-52 (1994) ("the 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.

⁵⁶ SAA at 851-52 ("the 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. ("the 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

“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.⁵⁷ It is clear that the existence of injury caused by other factors does not compel a negative determination.⁵⁸

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 the subject imports.”⁵⁹ Indeed, the Federal Circuit has examined and affirmed various Commission methodologies and has disavowed “rigid adherence to a specific formula.”⁶⁰

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.⁶¹ 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

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.”).

⁵⁷ S. Rep. 96-249 at 74-75; H.R. Rep. 96-317 at 47.

⁵⁸ 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.”).

⁵⁹ *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 *Swift-Train v. United States*, 793 F.3d 1355 (Fed. Cir. 2015), the Federal Circuit affirmed the Commission’s causation analysis as comports with the Court’s guidance in *Mittal*.

⁶⁰ *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.”).

⁶¹ *Mittal Steel*, 542 F.3d at 875-79.

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.⁶² 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.⁶³

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.⁶⁴ Congress has delegated this factual finding to the Commission because of the agency's institutional expertise in resolving injury issues.⁶⁵

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.

⁶² *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).

⁶³ 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 information in the final phase of investigations in which there are substantial levels of nonsubject imports.

⁶⁴ We provide in our discussion below a full analysis of other factors alleged to have caused any material injury experienced by the domestic industry.

⁶⁵ *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.").

1. Demand Conditions

The primary driver of U.S. demand for SSA is demand for U.S.-produced downstream products, including powdered laundry detergent, glass, starch, paper and pulp, and textiles.⁶⁶ SSA accounts for a small-to-moderate share of the cost of these end-use products.⁶⁷

Most market participants reported a decrease or no change in U.S. demand.⁶⁸ U.S. importer *** and U.S. producer *** reported that demand for SSA is driven mostly by the powdered laundry detergent industry and since 2016 there has been less demand in the United States for powdered detergent.⁶⁹ U.S. producer *** indicated that U.S. demand for all applications of SSA is either flat or declining.⁷⁰

Apparent U.S. consumption of SSA rose by 2.5 percent from 2016 to 2018.⁷¹ Apparent U.S. consumption increased from 366,542 short tons in 2016 to 378,666 short tons in 2017 before decreasing slightly to 375,760 short tons in 2018.⁷²

2. Supply Conditions

The domestic industry was the largest source of supply in the U.S. market during the POI. Its share of apparent U.S. consumption declined from 86.8 percent in 2016 to 83.6 percent in 2017 and to 82.6 percent in 2018.⁷³ As previously discussed, the domestic like product is either naturally produced or synthetically produced.⁷⁴ Synthetic producers' SSA capacity and production is generally driven by the production and demand for the primary products resulting from the production process which also yields SSA as a byproduct or co-product.⁷⁵ While natural SSA producers were responsible for the majority of the domestic industry's capacity and production throughout the POI,⁷⁶ they exported a substantial proportion of their total shipments.⁷⁷ Hence, synthetic SSA producers were responsible for the majority of the domestic industry's U.S. shipments.⁷⁸

⁶⁶ CR at II-5; PR at II-4.

⁶⁷ CR at II-5–II-6; PR at II-4.

⁶⁸ CR/PR at Table II-4.

⁶⁹ CR at II-6; PR at II-5.

⁷⁰ CR at II-6–II-7; PR at II-5.

⁷¹ CR/PR at Table IV-4.

⁷² CR/PR at Table IV-4.

⁷³ CR/PR at Table IV-4.

⁷⁴ U.S. producers of natural SSA are CNR and SVM. CR/PR at Table III-1. U.S. producers of synthetic SSA are East Penn, Eco-Bat, Elementis, Evonik, GEO, and JCI. *Id.* As previously noted, JCI did not respond to the Commission's U.S. producer questionnaire.

⁷⁵ CR at III-3; PR at III-2. Synthetic SSA producers *** reported that the production of their primary products determined SSA production levels. Synthetic SSA producer *** reported that it had the ability to manufacture its primary product without producing SSA, but it is not preferred as it would decrease deep well flow capacity. CR at III-4; PR at III-3.

⁷⁶ Compare CR/PR at Tables III-5 and III-6.

⁷⁷ CR/PR at Table III-8.

⁷⁸ Compare CR/PR at Tables III-8 and III-9.

Subject imports were the second largest source of supply in the U.S. market.⁷⁹ Subject imports' share of apparent U.S. consumption increased from 10.6 percent in 2016 to 14.4 percent in 2017, and to 14.7 percent in 2018.⁸⁰

Nonsubject imports were the smallest source of supply in the U.S. market. Nonsubject imports' share of apparent U.S. consumption decreased from 2.5 percent in 2016 to 2.0 percent in 2017, before increasing to 2.6 percent in 2018.⁸¹ The largest sources of nonsubject imports during the POI were India, China, and Japan, which combined accounted for 81.1 percent of nonsubject imports in 2018.⁸²

3. Substitutability and Other Conditions

The record indicates that there is a moderate-to-high degree of substitutability between domestically produced SSA and subject imports.⁸³ U.S. producers reported that the domestic like product and subject imports were "always" or "frequently" interchangeable.⁸⁴ U.S. importers reported that the domestic like product was "frequently" or "sometimes" interchangeable with subject imports.⁸⁵

Price is an important factor in SSA purchasing decisions. When asked to identify the main purchasing factors considered in purchasing decisions, purchasers responding to the lost sales lost revenue survey indicated that price was a major factor, along with quality, availability, manufacturing relationship, meeting supplier specifications, compliance to the FCC, and reliability.⁸⁶ U.S. producers reported that differences other than price between the domestic like product and subject imports were "never" significant in purchasing decisions, while U.S. importers reported a variety of responses.⁸⁷

Raw material costs for the two natural U.S. producers appear to constitute a minimal portion of the total cost of SSA, while raw material costs for the one synthetic U.S. producer providing data constitute a substantially higher portion of the total cost of SSA.⁸⁸ The raw

⁷⁹ Canadian producer and U.S. importer SMMI, which accounted for the vast majority of subject imports from Canada during the POI, produces only natural SSA. CR at I-5, n.8; PR at I-4, n.8.

⁸⁰ CR/PR at Table IV-4.

⁸¹ CR/PR at Table IV-4.

⁸² CR at II-5; PR at II-3.

⁸³ CR at II-7; PR at II-5. The parties concur on this point. See Petitioners' Postconference Brief at 7; Respondent's Postconference Brief at 12.

⁸⁴ CR/PR at Table II-5.

⁸⁵ CR/PR at Table II-5. One of three U.S. importers (***) reported that the domestic like product was frequently interchangeable with subject imports and two of three reported that the domestic like product was sometimes interchangeable with subject imports. *Id.*; CR at II-8; PR at II-6.

⁸⁶ CR at II-8; PR at II-6.

⁸⁷ CR/PR at Table II-6. One U.S. importer reported that differences other than price were "always" significant, one (***) reported that they were "frequently" significant, and one reported that they were "sometimes" significant. *Id.*; CR at II-9; PR at II-7.

⁸⁸ For CNR and SVM, the two natural SSA producers, brine is a primary raw material with related costs including payments for corresponding mineral rights and royalties. CR at VI-12; PR at 8. The corresponding share of natural producers' raw material costs to total costs of goods sold ("COGS") is relatively low, ranging from *** percent to *** percent of COGS. *Id.* Synthetic producer Elementis,

material costs for the two natural U.S. producers and one synthetic U.S. producer combined accounted for only 10.6 percent of these U.S. producers' COGS in 2018.⁸⁹

U.S. producers sell the majority of their SSA under annual contracts, with some spot sales. U.S. importer *** reported selling the majority of its SSA under ***, with some sales under ***.⁹⁰

Finally, transportation costs for SSA are high relative to its value. U.S. producers and importers typically arrange transportation to their customers and quote prices on a delivered basis.⁹¹ Most U.S. producers estimated that their U.S. inland transportation costs accounted for 35 to 40 percent of the total cost of SSA, while U.S. importer *** estimated that its U.S. inland transportation costs accounted for *** percent.⁹²

C. Volume of Subject Imports⁹³

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."⁹⁴

Subject imports had an increasing presence in the U.S. market during the POI. Subject imports increased from 38,883 short tons in 2016 to 54,381 short tons in 2017 and 55,387 short tons in 2018, a level 42.4 percent above that of 2016.⁹⁵

Subject imports also increased their U.S. market share throughout the POI. Subject imports' share of apparent U.S. consumption increased from 10.6 percent in 2016 to 14.4

whose raw material cost share ranged from *** percent to *** percent of its total COGS, identified its raw material and related costs as ***. *Id.*

⁸⁹ CR/PR at V-1; Table VI-1.

⁹⁰ CR/PR at Table V-2.

⁹¹ CR at V-1, V-3; PR at V-1 to V-2.

⁹² CR/PR at V-1. U.S. synthetic producer *** estimated that its U.S. inland transportation costs accounted for 100 percent of the total cost of SSA. U.S. Producer Questionnaire Response of *** at Question IV-9.

⁹³ Chairman Johanson and Commissioner Broadbent do not join the remainder of this opinion. See their Separate and Dissenting Views.

⁹⁴ 19 U.S.C. § 1677(7)(C)(i).

⁹⁵ CR/PR at Table IV-2. SMMI reported that it had experienced supply constraints providing SSA it produced in Canada in light of low harvest years and depletion of its SSA reserves in 2014 and 2015. As a result, it purchased U.S.-produced SSA to satisfy its contracts with U.S. customers in 2015 and 2016. Respondent's Postconference Brief at 17-18. SMMI argues that subject imports from Canada in 2015 and 2016 were unusually low due to these supply constraints. Respondent's Postconference Brief at 18. It contends that its overall U.S. shipments of SSA actually dropped during the POI, and that subject import levels in 2017 and 2018 were comparable to those that prevailed before the supply constraints. *Id.* at 19-20.

We observe initially that Section 771(7)(C)(i) of the Tariff Act directs the Commission to consider the volume or any increase in volume of "imports of the {subject} merchandise" – not a U.S. importer's total U.S. shipments. Nevertheless, we will examine further in any final phase investigation the fluctuations in subject import volume during the POI, and in preceding years to the extent relevant, in the context of other conditions of competition in the market, such as apparent U.S. consumption.

percent in 2017 and 14.7 percent in 2018, an overall increase of 4.1 percentage points.⁹⁶ By contrast, the domestic industry's market share declined by 4.2 percentage points from 2016 to 2018.⁹⁷

In light of the foregoing, we find for purposes of our preliminary determination that the volume of subject imports and the increase in the volume of subject imports are significant in both absolute terms and relative to U.S. consumption.

D. Price Effects of the Subject Imports

Section 771(7)(C)(ii) of the Tariff Act provides that, in evaluating the price effects of subject imports, 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.⁹⁸

As addressed in Section VI.B.3 above, the record indicates that there is a moderate-to-high degree of substitutability between subject imports and the domestic like product and that price is an important factor in purchasing decisions.

The Commission collected quarterly pricing data from U.S. producers and importers on four SSA pricing products shipped to unrelated U.S. customers during the POI.⁹⁹ Five U.S. producers, ***, and one importer of SSA from Canada, SMMI, provided usable pricing data for sales of the requested products, although not all firms reported pricing for all products for all quarters.¹⁰⁰ Reported pricing data accounted for approximately 87.2 percent of the U.S. producers' U.S. commercial shipments and 100 percent of U.S. commercial shipments of subject imports in 2018.¹⁰¹ Subject imports consisting of *** short tons undersold the domestic like product in *** of *** quarterly comparisons, at margins ranging from *** percent to ***

⁹⁶ CR/PR at Table IV-4.

⁹⁷ CR/PR at Table IV-4. The domestic industry's market share was 86.8 percent in 2016, 83.6 percent in 2017, and 82.6 percent in 2018. *Id.*

⁹⁸ 19 U.S.C. § 1677(7)(C)(ii).

⁹⁹ Product 1 is SSA in bulk, hopper cars (approximately 100 short tons). Product 2 is SSA in bulk, trucks (approximately 25 short tons). Product 3 is SSA in 2,000 pound supersacs. Product 4 is SSA in 50 pound bags. CR at V-3; PR at V-2 to V-3.

¹⁰⁰ CR at V-4; PR at V-3.

¹⁰¹ CR at V-4; PR at V-3. The pricing data reflect the sales of one U.S. producer of synthetic SSA to Giles or Saltex. In any final phase investigation, we intend to collect additional quarterly pricing data from U.S. producers which sold synthetic SSA to Giles or Saltex. We invite the parties in their comments on the draft questionnaires to address the best manner to define pricing products to incorporate data on these sales.

percent.¹⁰² Subject imports consisting of *** short tons oversold the domestic like product in *** of *** quarterly comparisons, at margins ranging from *** percent to *** percent.¹⁰³

Petitioners questioned the probative value of the pricing comparison data in the record, arguing that if the sales terms, shipping points, and transport modes are not comparable, and all relevant costs, including transloading, are not accounted for, then f.o.b. U.S. point of shipment price comparisons between subject imports and the domestic like product are not meaningful. They also argued that the pricing data comparisons for the bulk pricing products (products 1 and 2) reflect differences in transportation costs rather than differences in prices to the customer.¹⁰⁴ Respondent SMMI contends that it followed the Commission's instructions in its U.S. Importer Questionnaire and reported subject import prices with all U.S. inland transportation costs deducted.¹⁰⁵ In any final phase investigation, we intend to collect pricing data on a delivered basis in addition to data on an f.o.b. basis. We invite the parties in their comments on the draft questionnaires to address how to improve the pricing product comparisons to account for all transportation costs and other logistical services that are reflected in the delivered price but not in the f.o.b. U.S. point of shipment price.

The record evidence indicates that subject import prices were not generally lower than the prices for the domestic like product. Similarly, information purchasers provided in response to the lost sales lost revenue survey do not indicate that subject imports were typically priced lower than the domestic like product.¹⁰⁶ Although we intend to reexamine relative pricing of U.S. and subject SSA in any final phase, we do not find for purposes of our preliminary determination that there was significant underselling by the subject imports.

We have also considered price trends for the domestic like product and subject imports during the POI. Prices for all four domestically produced pricing products declined over the POI, with decreases from the first quarter of 2016 to the fourth quarter of 2018 ranging from *** percent to *** percent.¹⁰⁷ Subject import prices decreased for pricing products 1 and 2, the highest volume products, by *** percent and *** percent, respectively.¹⁰⁸

¹⁰² CR/PR at Table V-8.

¹⁰³ CR/PR at Table V-8. The pricing data that Giles and Saltex provided in their questionnaire responses reflect sales by distributors and, therefore, not at the same level of trade as sales by U.S. producers or U.S. importer SMMI. Nevertheless, even for these data, subject imports predominately oversold the domestic like product sold by Giles and Saltex. CR/PR at Table D-8. In any final phase investigation, we intend to examine further how Giles and Saltex's participation in the market affects the pricing decisions of domestic producers.

¹⁰⁴ Petitioners' Postconference Brief at 8, 20.

¹⁰⁵ Conf. Tr. at 139-140 (Hironaka); *see also* Email from Douglas J. Heffner to Emily Burke, RE: Questions from Ms. Burke (May 3, 2019) (EDIS Doc. #675358).

¹⁰⁶ One of ten responding purchasers reported that subject imports were priced lower than the domestic like product. CR/PR at Table V-10. A different purchaser reported that price was a primary reason for its decision to purchase subject imports rather than domestic like product, but did not report that the subject imports were priced lower, and stated that it chose ***. *Id.*

¹⁰⁷ CR/PR at Table V-7.

¹⁰⁸ CR/PR at Table V-7. Subject import prices increased for lower volume pricing products 3 and 4 by *** percent and *** percent, respectively. *Id.*

We have examined several factors other than subject imports that do not explain why prices for domestically produced pricing products decreased during the POI.¹⁰⁹ Apparent U.S. consumption was steady and increased slightly overall during the POI.¹¹⁰ Available data indicate that domestic producers' average unit COGS showed only minor fluctuations during the POI.¹¹¹ Furthermore, synthetic producers' combined U.S. shipments of SSA grew commensurately with apparent U.S. consumption and consequently were not a source of oversupply in the market.¹¹²

In light of the foregoing, we do not conclude that there is a lack of causal nexus between the significant and increasing volume of subject imports that are moderate-to-high substitutes with the domestic like product and the observed price declines for domestically produced products. Thus, we also cannot find, for purposes of this preliminary determination, that subject imports did not have significant price effects.

E. Impact of the Subject Imports¹¹³

Section 771(7)(C)(iii) of the Tariff Act provides that the Commission, in examining the impact of the subject imports on the domestic industry, "shall evaluate all relevant economic factors which have a bearing on the state of the industry." These factors include output, sales, inventories, capacity utilization, market share, employment, wages, productivity, gross profits, net profits, operating profits, cash flow, return on investment, return on capital, ability to raise capital, ability to service debt, research and development, and factors affecting domestic prices. 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."¹¹⁴

U.S. demand for SSA was steady and grew slightly over the POI, with apparent U.S. consumption increasing by 3.3 percent from 2016 to 2017 and decreasing by 0.8 percent from

¹⁰⁹ One purchaser reported that U.S. producers had reduced prices in order to compete with lower-priced subject imports. CR/PR at Table V-11. This purchaser, ***, estimated that U.S. producers had reduced prices by *** percent. *Id.* In describing the price reductions, the purchaser indicated that ***. *Id.*

¹¹⁰ Apparent U.S. consumption increased from 366,542 short tons in 2016 to 378,666 short tons in 2017 before decreasing slightly to 375,760 short tons in 2018, for an overall increase of 2.5 percent. CR/PR at Table IV-4.

¹¹¹ Natural SSA producers CNR and SVM's average unit COGS was \$*** per short ton in 2016 and 2017 and *** to \$*** per short ton in 2018. CR/PR at Table VI-3. Synthetic SSA producer Elementis's average unit COGS was \$*** per short ton in 2016 and 2017 and *** to \$*** per short ton in 2018. *Id.*

¹¹² U.S. producers' shipments of synthetic SSA increased from *** short tons in 2016 to *** short tons in 2017 and to *** short tons in 2018, for an overall increase of *** percent. CR/PR at Table III-9. The absolute increase of *** short tons in synthetic SSA shipments is comparable to the increase of 9,218 short tons in apparent U.S. consumption from 2016 to 2018.

¹¹³ In its notice initiating the antidumping duty investigation on SSA from Canada, Commerce reported estimated dumping margins ranging from 43.37 to 170.08 percent. *Sodium Sulfate Anhydrous From Canada: Initiation of Less-Than-Fair-Value Investigation*, 84 Fed. Reg. 17138, 17141 (Apr. 24, 2019).

¹¹⁴ 19 U.S.C. § 1677(7)(C)(iii). This provision was amended by the Trade Preferences Extension Act of 2015, Pub. L. 114-27.

2017 to 2018, for an overall increase of 2.5 percent.¹¹⁵ Nevertheless, many of the domestic industry's trade and financial indicators declined during the POI.

The domestic industry's output-related indicators generally declined during the POI, notwithstanding some increases from 2016 to 2017. The domestic industry's capacity remained mostly stable, increasing by 0.2 percent from 2017 to 2018.¹¹⁶ Its total production increased by 2.4 percent from 2016 to 2017, then declined 3.6 percent from 2017 to 2018, for an overall decline of 1.3 percent from 2016 to 2018.¹¹⁷ Similarly, the domestic industry's capacity utilization rate increased 2.1 percentage points from 2016 to 2017, then decreased by 3.5 percentage points from 2017 to 2018, for an overall decrease of 1.3 percentage points from 2016 to 2018.¹¹⁸ The domestic industry's total U.S. shipments decreased by 2.5 percent from 2016 to 2018.¹¹⁹ The industry's market share decreased by 4.2 percentage points from 2016 to 2018.¹²⁰ The domestic industry's inventories increased by *** percent from 2016 to 2017, then decreased by *** percent from 2017 to 2018, for an overall increase of *** percent from 2016 to 2018.¹²¹

Trends in the domestic industry's employment factors were mixed. The number of production and related workers ("PRWs") remained mostly stable, increasing by 0.8 percent from 2017 to 2018.¹²² Total hours worked decreased by 3.2 percent from 2016 to 2018.¹²³

¹¹⁵ CR/PR at Table IV-4.

¹¹⁶ Capacity was 590,182 short tons in 2016 and 2017, and 591,182 short tons in 2018. CR/PR at Table III-4. Natural producers' capacity was *** short tons throughout the POI. CR/PR at Table III-5. Synthetic producers' capacity was *** short tons in 2016 and 2017 and *** short tons in 2018. CR/PR at Table III-6.

¹¹⁷ Production was 529,857 short tons in 2016, 542,506 short tons in 2017, and 522,915 short tons in 2018. CR/PR at Table III-4. Natural producers' production was *** short tons in 2016, *** short tons in 2017, and *** short tons in 2018. CR/PR at Table III-5. Synthetic producers' production was *** short tons in 2016, *** short tons in 2017, and *** short tons in 2018. CR/PR at Table III-6.

¹¹⁸ Capacity utilization was 89.8 percent in 2016, 91.9 percent in 2017, and 88.5 percent in 2018. CR/PR at Table III-4. Natural producers' capacity utilization was *** percent in 2016, *** percent in 2017, and *** percent in 2018. CR/PR at Table III-5. Synthetic producers' capacity utilization was *** percent in 2016, *** percent in 2017, and *** percent in 2018. CR/PR at Table III-6.

¹¹⁹ Total U.S. shipments were 318,324 short tons in 2016, 316,608 short tons in 2017, and 310,445 short tons in 2018. CR/PR at Table III-7. Natural producers' U.S. shipments were *** short tons in 2016, *** short tons in 2017, and *** short tons in 2018. CR/PR at Table III-8. Synthetic producers' U.S. shipments were *** short tons in 2016, *** short tons in 2017, and *** short tons in 2018. CR/PR at Table III-9.

¹²⁰ The domestic industry's market share was 86.8 percent in 2016, 83.6 percent in 2017, and 82.6 percent in 2018. CR/PR at Table IV-4.

¹²¹ End-of-period inventories were *** short tons in 2016, *** short tons in 2017, and *** short tons in 2018. CR/PR at Table III-10. Natural producers' inventories were *** short tons in 2016, *** short tons in 2017, and *** short tons in 2018. CR/PR at Table III-11. Synthetic producers' inventories were *** short tons in 2016, *** short tons in 2017, and *** short tons in 2018. CR/PR at Table III-12.

¹²² PRWs were 131 in 2016 and 2017, and 132 in 2018. CR/PR at Table III-13. Natural producers' PRWs were *** throughout the POI. CR/PR at Table III-14. Synthetic producers' PRWs were *** in 2016 and 2017 and *** in 2018. CR/PR at Table III-15.

Total wages paid increased by 1.2 percent from 2016 to 2017, then declined by 0.2 percent from 2017 to 2018, for an overall increase of 1.0 percent from 2016 to 2018.¹²⁴ Hourly wages increased by 4.3 percent from 2016 to 2018.¹²⁵ Productivity increased by 4.0 percent from 2016 to 2017, then decreased by 2.0 percent from 2017 to 2018, for an overall increase of 1.9 percent from 2016 to 2018.¹²⁶

The financial performance of natural producers CNR and SVM and synthetic producer Elementis – the three producers that characterized SSA as a primary or co-product in their production process – was generally poor during the POI, and these firms experienced decreasing gross, operating, and net income throughout the period. Their combined total net sales revenues decreased by 15.2 percent from 2016 to 2018.¹²⁷ Their combined gross profits,¹²⁸ operating income,¹²⁹ net income,¹³⁰ and the ratio of operating income to net sales¹³¹

¹²³ Total hours worked were 286,000 hours in 2016, 282,000 hours in 2017, and 277,000 hours in 2018. CR/PR at Table III-13. Natural producers' total hours worked were *** hours in 2016, *** hours in 2017, and *** hours in 2018. CR/PR at Table III-14. Synthetic producers' total hours worked were *** hours in 2016, *** hours in 2017, and *** hours in 2018. CR/PR at Table III-5.

¹²⁴ Wages paid were \$10.5 million in 2016 and \$10.6 million in 2017 and 2018. CR/PR at Table III-13. Natural producers' wages paid were \$*** in 2016, \$*** in 2017, and \$*** in 2018. CR/PR at Table III-14. Synthetic producers' wages paid were \$*** in 2016, \$*** in 2017, and \$*** in 2018. CR/PR at Table III-15.

¹²⁵ Hourly wages were \$36.54 per hour in 2016, \$37.56 per hour in 2017, and \$38.13 per hour in 2018. CR/PR at Table III-13. Natural producers' hourly wages were \$*** per hour in 2016, \$*** per hour in 2017, and \$*** per hour in 2018. CR/PR at Table III-14. Synthetic producers' hourly wages were \$*** per hour in 2016, \$*** per hour in 2017, and \$*** per hour in 2018. CR/PR at Table III-15.

¹²⁶ Productivity per thousand hours was 1,852 short tons in 2016, 1,925 short tons in 2017, and 1,888 short tons in 2018. CR/PR at Table III-13. Natural producers' productivity per thousand hours was *** short tons in 2016, *** short tons in 2017, and *** short tons in 2018. CR/PR at Table III-14. Synthetic producers' productivity per thousand hours was *** short tons in 2016, *** short tons in 2017, and *** short tons per 1,000 hours in 2018. CR/PR at Table III-15.

¹²⁷ Natural producers CNR and SVM's total net sales revenues were \$*** in 2016, \$*** in 2017, and \$*** in 2018. CR/PR at Table VI-3. Synthetic producer Elementis's total net sales revenues were \$*** in 2016, \$*** in 2017, and \$*** in 2018. *Id.* Their combined total net sales revenues were \$34.3 million in 2016, \$29.3 million in 2017, and \$29.1 million in 2018. CR/PR at Table VI-1.

¹²⁸ Natural producers CNR and SVM's gross profits were *** in 2016, *** in 2017, and *** in 2018. CR/PR at Table VI-3. Synthetic producer Elementis's gross profits were \$*** in 2016, \$*** in 2017, and \$*** in 2018. *Id.* Their combined gross profits were a loss of \$ 1.3 million in 2016, a loss of \$5.2 million in 2017, and a loss of \$7.4 million in 2018. CR/PR at Table VI-1.

¹²⁹ Natural producers CNR and SVM's operating income was *** in 2016, *** in 2017, and *** in 2018. CR/PR at Table VI-3. Synthetic producer Elementis's operating income was \$*** in 2016, \$*** in 2017, and \$*** in 2018. *Id.* Their combined operating income was a loss of \$3.7 million in 2016, a loss of \$7.4 million in 2017, and a loss of \$9.7 million in 2018. CR/PR at Table VI-1.

¹³⁰ Natural producers CNR and SVM's net income was *** in 2016, *** in 2017, and *** in 2018. CR/PR at Table VI-3. Synthetic producer Elementis's net income was \$*** in 2016, \$*** in 2017, and \$*** in 2018. *Id.* Their combined net income was a loss of \$3.6 million in 2016, a loss of \$7.6 million in 2017, and a loss of \$9.6 million in 2018. CR/PR at Table VI-1.

¹³¹ Natural producers CNR and SVM's ratio of operating income to net sales was *** percent in 2016, *** percent in 2017, and *** percent in 2018. CR/PR at Table VI-3. Synthetic producer

all decreased each year from 2016 to 2018 and remained negative throughout the POI.¹³² The domestic industry's capital expenditures, however, increased from 2016 to 2018.¹³³

As previously indicated, subject import volume increased during the POI and subject imports gained market share at the expense of the domestic industry.¹³⁴ As we explained above, we cannot conclude for purposes of this preliminary determination that this increasing volume of subject imports did not have the effect of causing the observed declines in domestic prices. Consequently, the record of this preliminary phase investigation does not clearly establish that the subject imports did not cause the domestic industry's U.S. shipments and revenues to be lower than they would have been otherwise, or that the observed declines in domestic industry shipments, revenues, or financial performance were unrelated to the subject imports.¹³⁵ In light of these considerations, we cannot find that subject imports did not have a significant impact on the domestic industry.¹³⁶

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. Nonsubject imports maintained a very small presence in

Elementis's ratio of operating income to net sales was *** percent in 2016, *** percent in 2017, and *** percent in 2018. *Id.* Their combined ratio of operating income to net sales was negative 10.9 percent in 2016, negative 25.4 percent in 2017, and negative 33.3 percent in 2018. CR/PR at Table VI-1.

¹³² Synthetic producers East Penn, Eco-Bat, Evonik, and GEO, which each sells its synthetic SSA to Giles and Saltex and accounts for these sales as a byproduct, experienced *** total byproduct revenues of \$*** in 2016, \$*** in 2017, and \$*** in 2018. CR/PR at Table VI-4. These producers' average per short ton byproduct revenues were lower compared to that of *** and *** average per short ton revenues and appear to reflect *** for most of these producers. CR at VI-11; PR at 8. Their net byproduct revenue (total byproduct revenues less separable byproduct costs and expenses) were \$*** in 2016, \$*** in 2017, and \$*** in 2018. CR/PR at Table VI-4.

¹³³ Natural producers CNR and SVM's capital expenditures were \$*** in 2016, *** in 2017, and \$*** in 2018. CR/PR at Table VI-7. Synthetic producer Elementis's capital expenditures were \$*** in 2016, \$*** in 2017, and \$*** in 2018. *Id.* Synthetic producers East Penn, Eco-Bat, Evonik, and GEO's capital expenditures were \$*** in 2016, \$*** in 2017, and \$*** in 2018. *Id.* Their combined capital expenditures were \$1.2 million in 2016, \$2.4 million in 2017, and \$5.2 million in 2018. CR/PR at Table VI-7. Only synthetic producer *** incurred \$*** in research and development expenses in 2018, the only such expenses incurred by any domestic producer. *Id.*

¹³⁴ As noted above, in any final phase investigation we intend to further consider fluctuations in subject import volume over the POI in the context of other market conditions.

¹³⁵ We realize that the domestic industry's AUVs on export sales are *** lower than those for its domestic shipments. CR/PR at Table III-7. We will examine the relationship between the domestic industry's export sales AUVs and its financial performance and prices for U.S. shipments further in any final phase investigation.

¹³⁶ As we indicated in section VI.C. above, we will examine further in any final phase investigation whether any adverse effects in the domestic industry's shipments and revenues were a result of resolution of SMMI's supply constraints. We would observe, however, that even assuming *arguendo* that SMMI's resolution of its supply constraints could explain the shifts in market share observed during the POI, it would not necessarily indicate that any price depression was not caused by the subject imports.

the U.S. market during the POI. Their market share ranged from 2.0 percent to 2.6 percent.¹³⁷ Nonsubject imports, therefore, cannot explain the magnitude of the domestic industry's revenue and market share losses during the POI.¹³⁸ Furthermore, as previously discussed, the record does not indicate that U.S. producers of synthetic SSA caused the observed declines in prices for the domestic like product, because synthetic production and U.S. shipments generally increased commensurately with apparent U.S. consumption and consequently did not cause oversupply in the market.¹³⁹ Moreover, the current record indicates that both natural and synthetic producers experienced declining financial performance throughout the POI.¹⁴⁰

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 SSA from Canada that are allegedly sold in the United States at less than fair value.

¹³⁷ CR/PR at Table IV-4.

¹³⁸ The information available on the record also indicates that nonsubject imports had higher AUVs than subject imports. CR/PR at Table IV-2. This may be due in part to product mix and/or packaging differences for nonsubject imports. CR/PR at IV-2, n.9.

¹³⁹ Compare Tables III-6 and III-9 and IV-4.

¹⁴⁰ For each year of the POI, natural producers CNR and SVM experienced *** total net sales revenues, and *** for gross profits, operating income, net income, and ratio of operating income to net sales. CR/PR Table VI-3. Similarly, synthetic producer Elementis experienced year-over-year *** gross profits, operating income, net income, and ratio of operating income to net sales. *Id.* Synthetic producers East Penn, Eco-Bat, Evonik, and GEO experienced *** net byproduct revenues. CR/PR at Table VI-4. In any final phase investigation, we intend to examine further the nature of competition between domestic synthetic and natural producers.

Dissenting Views of Chairman David S. Johanson and Commissioner Meredith M. Broadbent

Based on the record in the preliminary phase of this investigation, we determine that there is no reasonable indication that an industry in the United States is materially injured or threatened with material injury by reason of imports of sodium sulfate anhydrous (“SSA”) from Canada that are allegedly sold in the United States at less than fair value. We join Sections I-VI.B.3 of the Views of the Commission.

Our separate negative determination rests primarily upon the evidence that supports findings that: (1) subject imports increased from an abnormally low volume in 2016 to historically modest levels in 2017 and 2018 due to the primary exporter, SMMI, resolving temporary supply difficulties in Canada; (2) subject imports were sold at consistently higher prices than the domestic like product, and therefore did not significantly depress or suppress U.S. producers’ prices; (3) the domestic industry’s output and financial indicia did not worsen due to subject import competition; (4) the domestic industry’s consistent financial losses were due *** to *** average unit values of its export shipments, which cannot be linked to subject import competition; and (5) subject imports are not likely to increase significantly and do not threaten material injury to the domestic industry in the imminent future.

I. Legal Standard for Preliminary Determinations

In preliminary phase investigations, the Commission is required to determine whether there is a “reasonable indication” of material injury or a threat of material injury by reason of the subject imports.¹ In *American Lamb Co. v. United States*,² the Federal Circuit held that the “reasonable indication” standard does not mean that the Commission is to determine only whether there is a “possibility” of material injury.³ Instead, the Federal Circuit stated that the Commission may appropriately weigh the record evidence in a preliminary determination in order to determine 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.”⁴ Indeed, the Federal Circuit has stated that “{t}he

¹ 19 U.S.C. §§ 1671b(a)(I) & 1673b(a)(I).

² 785 F.2d 994, 1001-04 (Fed. Cir. 1986).

³ *Id.* at 1004.

⁴ *Id.* at 1001. With respect to the “clear and convincing evidence” standard articulated in *American Lamb*, the Court of International Trade (“CIT”) has stated that the Commission need not find each piece of evidence to be clear and convincing, but instead has found that *American Lamb* requires only that “‘the record as a whole’ contain clear and convincing evidence that there is no material injury or threat of material injury by reason of imports.” *Celanese Chemicals Ltd. v. United States*, 31 CIT 279, 285 (2007) (“each piece of evidence” need not be clear and convincing, but the record as a whole); *Connecticut Steel Corp. v. United States*, 426 F. Supp. 2d 1322, 1330 (Ct. Int’l Trade 2006) at 15; *Connecticut Steel Corp. v. United States*, 852 F. Supp. 1061, 1064 (Ct. Int’l Trade 1994). Moreover, the CIT has reaffirmed that in applying the reasonable indication “standard for making a preliminary determination regarding material injury or threat of material injury, the Commission may weigh all

(continued...)

statute calls for a reasonable indication of injury, not a reasonable indication of need for further inquiry.”⁵ In addition, the Federal Circuit has stated that Congress intended the Commission to use preliminary determinations to avoid the cost and disruptions to trade caused by unnecessary investigations.⁶

II. No Material Injury by Reason of Subject Imports

A. Volume of 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.”⁷

The volume of subject imports increased from 38,883 short tons in 2016 to 55,387 short tons in 2018, an increase of 42.4 percent.⁸ Subject imports’ market share increased from 10.6 percent in 2016 to 14.7 percent in 2018, or by 4.1 percentage points.⁹ In light of the foregoing, we find that the volume of subject imports, and the increase in subject imports, were significant both in absolute terms and relative to consumption. As detailed below, we further conclude that the apparent increase in subject imports over this period of investigation reflected anomalous conditions affecting the Canadian industry in the base year of this investigation, 2016.

Canadian producer SMMI, which accounted for the vast majority of subject imports throughout the period of investigation,¹⁰ reported that subject import volumes in 2016 were at historically low levels due to a temporary production shortage at its Canadian facility and its subsequent reliance on a U.S. producer, SVM, to fulfill its supply obligations to the U.S. market.¹¹ *** makes *** of its sales to the U.S. market under long-term contracts, under which

(...continued)

evidence before it and resolve conflicts in the evidence.” *Ranchers-Cattlemen Action Legal Foundation v. United States*, 74 F. Supp. 2d 1353, 1368 (Ct. Intl. Trade 1999).

In the Commission’s analysis of whether no likelihood exists that contrary evidence will arise in a final investigation, the CIT has stated that the Commission “must analyze the ‘best information available’ contained in the record at the time of its determination and judge the likelihood that evidence contrary to that already gathered will arise in a final determination that would support an affirmative determination.” *Calabrian Corp. v. U.S. Int’l Trade Comm’n*, 794 F. Supp. 377, 386 (Ct. Int’l Trade 1992). Additionally, the CIT has stated that “a showing of likelihood requires more than speculation, or the indication that something might happen.” *Committee for Fair Coke Trade v. United States*, 28 CIT 1140, 1163 (2004).

⁵ *Texas Crushed Stone Co. v. United States*, 35 F.3d 1535, 1543 (Fed. Cir. 1994).

⁶ *American Lamb*, 785 F.2d at 1004.

⁷ 19 U.S.C. § 1677(7)(C)(i).

⁸ CR/PR at Table IV-2.

⁹ CR/PR at Table C-1.

¹⁰ CR/PR at Tables IV-1 and VII-1.

¹¹ CR/PR at IV-2 n.5. Petitioners confirm that SVM supplied SMMI’s existing U.S. customers with sales contracts negotiated by SMMI. Petitioners Postconference Brief, Answers to Questions at 6.

prices and quantities are fixed.¹² Despite having these long-term obligations, SMMI reported that it experienced unfavorable weather conditions that reduced its upstream extraction of Glauber's salt at its Lake Chaplin facility in 2014 and 2015, substantially reducing its production of SSA in 2015 and 2016.¹³ In addition, SMMI was at that time also working on a project to evaluate the possibility of producing sodium hydroxide, or caustic soda, from its sodium sulfate. To support that project, SMMI had slowly depleted its SSA reserves at Lake Chaplin.¹⁴ In order to meet its long-term obligations, SMMI purchased SSA from U.S. producer SVM between 2014 and 2016 in order to supplement SMMI's lower Canadian production, enabling SMMI to supply its U.S. customers at contracted volumes despite the reduction in its imports from Canada.¹⁵

SMMI's description of these events is supported by its reported U.S. shipment data between 2010 and 2018. These data show that SMMI supplied the U.S. market solely from its Canadian facility in all years other than 2014 to 2016, during which it supplied its customers with large volumes of SSA purchased from SVM in addition to far more limited subject imports.¹⁶ The quantity of SMMI's imports from its Canadian facility from 2010 to 2013 were high relative to more recent levels, ranging from 74,561 short tons to 86,495 short tons. However, with the supply difficulties and the increased purchases from SVM that began in 2014, the quantity of SMMI's imports from Canada decreased from 68,919 short tons in 2014 to 23,343 short tons in 2015, and increased to only 38,125 short tons in 2016.¹⁷ Subsequently, after its supply issues were resolved and its purchases from SVM ceased, the quantity of SMMI's imports from Canada increased to 50,647 short tons in 2017 and 52,718 short tons in 2018.¹⁸ Therefore, these data show that the volume of imports from Canada in 2016 were anomalously low as a result of SMMI's supply conditions and that the volume of imports in 2017 and 2018 were also at substantially reduced levels compared to prior years despite these supply conditions being resolved. In addition, the data demonstrate that SMMI's overall shipments to the U.S. market (including sales contracted through SVM) actually decreased over the period of investigation, falling from 69,601 short tons in 2016 to 50,647 short tons in 2017 and 52,718 short tons in 2018.¹⁹ Therefore, the increase in subject imports that occurred was a

¹² CR/PR at Table V-2; CR at V-3; PR at V-2.

¹³ SMMI Postconference brief at 17; CR at VII-6, PR at VII-3.

¹⁴ SMMI Postconference brief at 17; CR at VII-6, PR at VII-3-4. IHS Chemical reports that as part of a long-term diversification plan, SMMI decided to reduce sodium sulfate capacity by approximately 40 percent in early 2015 to allocate resources for a new caustic soda and ammonium sulfate plant. The new facility was built adjacent to the existing sulfate plant and will utilize an internally developed proprietary process. *Chemical Economics Handbook: Sodium Sulfate*, IHS, November 2016, p. 20.

¹⁵ SMMI Postconference brief at 17-18; CR at VII-6 n.7, PR at VII-4 n.7.

¹⁶ SMMI's reported purchases from SVM totaled 7,710 short tons in 2014, 47,728 short tons in 2015, and 31,476 short tons in 2016. SMMI Postconference Brief at 19.

¹⁷ SMMI Postconference Brief at 19.

¹⁸ SMMI Postconference Brief at 19.

¹⁹ SMMI Postconference Brief at 19.

result of SMMI's return to supplying the U.S. market solely from its Canadian production rather than it gaining sales in the U.S. market.²⁰

Petitioners do not dispute the evidence provided by SMMI concerning its supply difficulties²¹ or the historical volumes of its Canadian exports to the U.S. market. Instead, Petitioners assert that SMMI's prior larger volumes of exports do not give it "ownership or right" to a certain volume of sales within the U.S. market.²² As stated above, we find that the volume of subject imports, and the increase in subject imports, were significant both in absolute terms and relative to consumption. Nonetheless, our analysis of the volume of subject imports within a historical context (showing them to be much smaller than prior years) and under specific supply conditions (with SMMI resuming the supply of its existing customers in the United States solely from its Canadian factory) is relevant in our analysis of the price effects and impact of subject imports.

B. Price Effects of the Subject Imports

Section 771(7)(C)(ii) of the Tariff Act provides that, in evaluating the price effects of subject imports, 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.²³

As addressed in section VI.B.3 of the Views of the Commission, the record indicates that there is a moderate-to-high degree of substitutability between domestically produced SSA and subject imports from Canada, and that price is an important factor in purchasing decisions for this market.

The Commission sought quarterly data on the total quantity and f.o.b. value of four SSA products from domestic producers and U.S. importers, with these products differentiated only by delivery method.²⁴ Five U.S. producers and one importer (***) provided usable data.

²⁰ Petitioners state that SVM chose to end the arrangement under which it supplied SMMI's existing U.S. customers after 2016. Petitioners Postconference Brief, Answers to Questions at 6. Therefore, SMMI's continued supply to the U.S. market using solely Canadian imports beginning in 2017 — and the accompanying increase in subject imports that occurred as a result — was at least in part due to SVM's own decision to end its arrangement with SMMI.

²¹ Conference Tr. at 195 (Trendl), 198 (Rogers).

²² Petitioners Postconference Brief, Answers to Questions at 7.

²³ 19 U.S.C. § 1677(7)(C)(ii).

²⁴ CR at V-3; PR at V-2.

Reported pricing data accounted for approximately 87.2 percent of the value of the domestic industry's U.S. shipments of SSA and 100 percent of subject imports from Canada.²⁵

The pricing data indicate that subject imports were higher priced than domestic producers' U.S. shipments for most sales made over the period of investigation. Subject imports oversold the domestic product in *** quarterly comparisons by an average margin of *** percent and undersold the domestic product in *** quarterly comparisons by an average margin of *** percent.²⁶ The volume of subject imports that oversold the domestic product, at *** short tons, also far exceeded the volume of subject imports that undersold the domestic product, at *** short tons.²⁷ For the two pricing products that accounted for the vast majority of the volume of subject imports, products 1 and 2, subject imports oversold the domestic product in *** quarterly comparisons by margins ranging from *** percent.²⁸ Similarly, information that purchasers provided in response to the lost sales/lost revenue survey do not indicate that subject imports were typically priced lower than the domestic like product.²⁹ Therefore, the record indicates that subject imports did not undersell the domestic like product to a significant degree.

Petitioners raise arguments regarding the reliability and usability of the pricing data gathered by the Commission in the preliminary phase of these investigations. First, they argue that importer SMMI did not provide pricing data on a basis that allows for an appropriate comparison with U.S. producers' pricing data, which is reported on an f.o.b. basis.³⁰ However, SMMI confirmed that it reported its data in a manner consistent with questionnaire instructions, removing all U.S. inland transportation costs.³¹

Petitioners also assert that the prices reported by SMMI for pricing products 1 and 2 (bulk products) are higher than U.S. producers' prices for those products because they are sold within a closer geographic proximity to end users. Petitioners argue that apparent overselling in these products is therefore a function of valuation methodologies: they assert that customers do not care where a supplier is located, only that the final delivered price is the lowest price possible, and therefore suppliers shipping shorter distances are able to charge

²⁵ CR at V-4; PR at V-3.

²⁶ CR/PR at Table V-8.

²⁷ CR/PR at Table V-8.

²⁸ CR/PR at Tables V-3-4. The *** of underselling was at a margin of *** percent. CR/PR at Table V-8.

²⁹ Purchasers responding to the lost sales/lost revenue survey all reported purchasing subject imports instead of the domestic product during the period of investigation, but only one purchaser (*** indicated that subject import prices were lower-priced, and this firm indicated that it preferred subject imports *** rather than price. All other purchasers reported that they purchased subject imports instead of the domestic product for a variety of non-price reasons, including quality, availability, consistency, and long-term relationships. CR/PR at Table V-10.

³⁰ Petitioners Postconference Brief at 14-17.

³¹ EDIS Doc. 675358; Conference Tr. at 139-40, 171 (Hironaka). Petitioners assert that because substantial volumes of SMMI's ***, SMMI's pricing data were likely reported from a point of shipment other than the U.S. port of entry for those imports. Petitioners Postconference Brief at 14-16. However, SMMI confirmed that while it ***. EDIS Doc. 675358.

higher f.o.b. prices.³² Petitioners therefore suggest that price data collected on an f.o.b. basis may not allow for accurate comparisons within the SSA market.³³ As a preliminary matter, we note that Petitioners never requested within the petition or prior to the questionnaires being issued that the Commission collect pricing data on a delivered basis, and as a result, the Commission followed its normal pricing data collection methodology by asking for data on an f.o.b. basis.³⁴ In addition, pricing comparisons of subject imports with the domestic product based on an alternative price reporting basis, such as a delivered price basis, would not likely result in a greater preponderance of underselling comparisons. As discussed within the Views of the Commission, most U.S. producers estimated that their U.S. inland transportation costs accounted for 35 to 40 percent of the total cost of SSA, while U.S. importer *** estimated that its U.S. inland transportation costs accounted for *** percent of the total cost of SSA.³⁵ Even if this data were unrepresentative and domestically produced SSA were shipped a longer distance and incurred higher transportation costs and other fees compared to subject imports, these greater costs would be unlikely to be of a sufficient magnitude to overcome substantial f.o.b. price overselling margins.³⁶ As noted above, purchasers also generally did not report that subject imports were priced lower than the domestic like product. Therefore, available information on this record indicates that there is no likelihood that contrary evidence supporting a finding of significant underselling would arise in a final investigation even if the Commission were to collect pricing data on a delivered basis.

As discussed in greater detail within our analysis of volume trends, subject imports increased from an abnormally low baseline in 2016, as SMMI resumed supplying the U.S. market solely from its Canadian facility. As established above, subject imports were generally sold at prices that were higher than domestically produced SSA over the period of investigation, and most purchasers reported that they purchased subject imports instead of the domestic product for reasons other than subject merchandise being sold at a lower price. Therefore, the record before the Commission does not indicate that significant underselling by subject imports from Canada resulted in a market share shift at the domestic industry's expense.

We have also considered price trends for the domestic like product and subject imports during the period of investigation. Prices for all four domestically produced pricing products declined over the period of investigation with decreases from the first quarter of 2016 to the fourth quarter of 2018 ranging from *** percent to *** percent.³⁷ However, subject imports

³² Petitioners Postconference Brief at 17-21.

³³ Petitioners Postconference Brief at 13-14.

³⁴ Petition at 17; Conference Tr. at 78 (Burke, Rogers).

³⁵ CR/PR at V-1. U.S. producers reported that *** percent of sales were between 101 and 1,000 miles of their production facility and *** were over 1,000 miles. *** sold *** percent within 100 miles of their U.S. point of shipment, *** percent between 101 and 1,000 miles, and *** percent over 1,000 miles. CR at II-2; PR at II-1. However, this information does not capture transportation from the U.S. port of entry to ***. EDIS Doc. 675358.

³⁶ As noted above, the average overselling margin was *** percent, and for certain pricing products the average overselling margin was far higher.

³⁷ CR/PR at Table V-7.

were generally sold at higher prices throughout the period of investigation, and therefore did not contribute to these trends.³⁸ U.S. prices fell at similar rates for products 1 and 2, where subject imports generally oversold by substantial margins, as they did for products 3 and 4, in which there were some instances of subject import underselling.³⁹ Only one of ten responding purchasers reported that U.S. producers had reduced prices in order to compete with lower-priced subject imports.⁴⁰ In addition, the declines in the domestic industry's prices for U.S. shipments were consistent with the overall declining unit values for its exports, which comprised a large share of the domestic industry's total shipments.⁴¹ The average unit value ("AUV") of the domestic industry's export shipments declined by even more, on a percentage basis, than did the AUV of U.S. shipments and there is no evidence or argument by any party that this decline was caused by subject imports.⁴² We conclude that while U.S. prices fell during a period of generally steady demand and stable industry unit costs,⁴³ the evidence on this record indicates that higher-priced subject imports did not cause significant price depression.

Moreover, we do not find that subject imports significantly suppressed domestic prices. The domestic industry's cost of goods sold ("COGS")/net sales ratio increased from 103.9 percent in 2016 to 125.3 percent in 2018.⁴⁴ As discussed in greater detail below, the domestic industry's COGS/net sales ratio remained at high levels throughout the period of investigation due primarily to the fact that a large volume of the industry's sales were exported at unit values that were far below unit COGS, while U.S. shipment unit values were consistently above unit

³⁸ An analysis of supplier-specific pricing information indicates that *** was almost never the lowest-priced supplier in the U.S. market. For pricing product 1, *** sold at higher prices than *** in all quarterly comparisons, and sold at higher prices than *** in half of these quarterly comparisons. For pricing product 2, *** sold at higher prices than *** in all or all but one quarterly comparisons. For pricing product 3, *** sold at higher prices than *** in *** quarterly comparisons, at higher prices than *** in *** quarterly comparisons, and at lower prices than *** in all quarterly comparisons. However, *** sold at higher prices than the ***, in all but two quarterly comparisons for product 3. For pricing product 4, *** sold at lower prices than *** in all quarterly comparisons, but at higher prices than *** in all quarterly comparisons. See *** responses to U.S. Producers' Questionnaire at question IV-2 and *** responses to U.S. Importers' Questionnaire at question III-2; CR/PR at Table D-6. These data suggest that, to the extent U.S. prices fell due to low-priced competition, *** was not the low-priced supplier in the market.

³⁹ CR/PR at Tables V-7 and V-8.

⁴⁰ CR/PR at Table V-11. *** estimated that U.S. producers had reduced prices by *** percent. *Id.* In describing the price reductions, however, the purchaser indicated that ***. *Id.* The lack of affirmative responses to this question is not surprising in light of the lack of affirmative responses to the question of whether subject imports were lower priced than the domestic like product. CR/PR at Table V-10.

⁴¹ CR/PR at Tables III-7, C-1.

⁴² While the AUV of the domestic industry's U.S. shipments declined by 9.9 percent from 2016 to 2018, the AUV of the domestic industry's export shipments declined by *** percent. CR/PR at Tables III-7, C-1.

⁴³ CR/PR at Table C-1.

⁴⁴ CR/PR at Table C-1.

COGS.⁴⁵ Although the increase in the industry's COGS/net sales ratio was caused by a decline in both U.S. shipment and export AUVs, we have found that higher-priced subject imports did not contribute to the decrease in U.S. prices. In addition, it is unlikely that steady demand or stable industry unit costs would have resulted in price increases over this period of investigation. Thus, we do not find that subject imports prevented price increases, which otherwise would have occurred, to a significant degree.

In sum, we find that subject imports did not have significant effects on U.S. prices during the period of investigation.

C. Impact of the Subject Imports⁴⁶

Section 771(7)(C)(iii) of the Tariff Act provides that the Commission, in examining the impact of the subject imports on the domestic industry, "shall evaluate all relevant economic factors which have a bearing on the state of the industry." These factors include output, sales, inventories, capacity utilization, market share, employment, wages, productivity, gross profits, net profits, operating profits, cash flow, return on investment, return on capital, ability to raise capital, ability to service debt, research and development, and factors affecting domestic prices. 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."⁴⁷

While several of the domestic industry's performance indicators were steady or slightly declining, others, especially those related to the industry's financial performance, began the period weak and worsened significantly between 2016 and 2018.

The domestic industry's capacity was steady, increasing by only 0.2 percent from 2016 to 2018.⁴⁸ Production declined by 1.3 percent from 2016 to 2018, declining irregularly from 529,857 short tons in 2016 to 522,915 short tons in 2018.⁴⁹ Capacity utilization also declined irregularly from 89.8 percent in 2016 to 88.5 percent in 2018.⁵⁰

⁴⁵ The domestic industry's unit value of net sales decreased from \$80 per short ton in 2016 to \$68 per short ton in 2018. The domestic industry's unit value of U.S. shipments decreased from \$101 per short ton in 2016 to \$91 per short ton in 2018. The domestic industry's unit value of export shipments decreased from \$*** per short ton in 2016 to \$*** per short ton in 2018. The domestic industry's unit COGS remained stable, rising slightly from \$83 per short ton in 2016 to \$85 per short ton in 2018. CR/PR at Table C-1.

⁴⁶ The statute instructs the Commission to consider the "magnitude of the dumping margin" in an antidumping proceeding as part of its consideration of the impact of imports. 19 U.S.C. § 1677(7)(C)(iii)(V). In its notice initiating the antidumping duty investigation on SSA from Canada, Commerce reported estimated dumping margins ranging from 43.37 to 170.08 percent. *Sodium Sulfate Anhydrous From Canada: Initiation of Less-Than-Fair-Value Investigation*, 84 Fed. Reg. 17138, 17141 (Apr. 24, 2019).

⁴⁷ 19 U.S.C. § 1677(7)(C)(iii).

⁴⁸ CR/PR at Tables III-4, C-1.

⁴⁹ CR/PR at Tables III-4, C-1.

⁵⁰ CR/PR at Tables III-4, C-1.

Net sales quantity declined irregularly by 0.3 percent from 2016 to 2018, declining from 430,415 short tons in 2016 to 429,232 in 2018.⁵¹ U.S. shipments declined by 2.5 percent from 2016 to 2018, declining steadily from 318,324 short tons in 2016 to 310,445 short tons in 2018.⁵² Export shipments increased irregularly from 2016 to 2018, increasing from *** short tons in 2016 to *** short tons in 2018, an increase of *** percent.⁵³ The domestic industry's share of apparent U.S. consumption declined steadily from 86.8 percent in 2016 to 82.6 percent in 2018, a decline of 4.2 percentage points.⁵⁴ The domestic industry's end-of-period inventories rose irregularly by *** percent, increasing from *** short tons in 2016 to *** short tons in 2018.⁵⁵

Employment increased by only 0.8 percent from 2016 to 2018, increasing from 131 production-related workers (PRWs) in 2016 to 132 PRWs 2018.⁵⁶ Hours worked declined by 3.2 percent from 2016 to 2018, declining steadily from 286,000 hours in 2016 to 277,000 hours in 2018.⁵⁷ Wages paid rose by 1.0 percent from 2016 to 2018, increasing from \$10.5 million in 2016 to \$10.6 million in 2018.⁵⁸ Labor productivity increased by 1.9 percent, increasing from 1,852 short tons per 1,000 hours in 2016 to 1,888 short tons per 1,000 hours in 2018.⁵⁹

The domestic industry's financial indicators declined substantially from 2016 to 2018. Revenues declined by 15.2 percent, decreasing steadily from \$34.3 million in 2016 to \$29.1 million in 2018.⁶⁰ Total COGS increased by 2.2 percent from 2016 to 2018, increasing from \$35.6 million in 2016 to \$36.4 million in 2018.⁶¹ The domestic industry's gross income decreased steadily from a loss of \$1.3 million in 2016 to a loss of \$7.4 million in 2018.⁶² The domestic industry's operating income decreased steadily from a loss of \$3.7 million in 2016 to a loss of \$9.7 million in 2018.⁶³ The operating income margin of the domestic industry decreased steadily from a margin of negative 10.4 percent in 2016 to a margin of negative 33.1 percent in 2018.⁶⁴ The domestic industry's net income decreased steadily from a net loss of \$3.6 million in

⁵¹ CR/PR at Tables VI-1, C-1.

⁵² CR/PR at Tables III-7, C-1.

⁵³ CR/PR at Tables III-7, C-1.

⁵⁴ CR/PR at Tables IV-4, C-1.

⁵⁵ CR/PR at Tables III-10, C-1.

⁵⁶ CR/PR at Tables III-13, C-1.

⁵⁷ CR/PR at Tables III-13, C-1.

⁵⁸ CR/PR at Tables III-13, C-1.

⁵⁹ CR/PR at Tables III-13, C-1.

⁶⁰ CR/PR at Tables VI-1, C-1.

⁶¹ CR/PR at Tables VI-1, C-1.

⁶² CR/PR at Tables VI-1, C-1.

⁶³ CR/PR at Tables VI-1, C-1.

⁶⁴ CR/PR at Tables VI-1, C-1.

2016 to a net loss of \$9.6 million in 2018.⁶⁵ Capital expenditures increased by 332.9 percent, rising steadily from \$1.2 million in 2016 to \$5.2 million in 2018.⁶⁶

The overall picture of the domestic industry is that while production measures were down slightly and employment measures were mixed, the financial performance of the industry as a whole began the period in a weak state and worsened significantly over the period. With the domestic industry's production levels and net sales quantities remaining stable over the period, the erosion in the domestic industry's financial performance is almost entirely attributable to declines in prices.⁶⁷ The domestic industry's AUV of net sales decreased by 15.0 percent from 2016 to 2018, dropping from \$80 per short ton in 2016 to \$68 per short ton in 2018.⁶⁸ At the same time, the domestic industry's unit COGS increased by 2.5 percent, rising from \$83 in 2016 to \$85 in 2018.⁶⁹ Therefore, the domestic industry began the period with net sales AUVs that were lower than unit costs, and net sales AUVs declined while unit COGS slightly increased.

The domestic industry's consistent poor financial performance was due to the fact that the AUV of the domestic industry's export shipments was *** lower than the AUV of its U.S. shipments. The *** of the domestic industry's exports were made by the natural SSA producers⁷⁰ and *** the losses sustained by the domestic industry originated in the natural SSA segment.⁷¹ While the AUV of U.S. shipments by natural SSA producers was \$*** per short ton in 2016, \$*** in 2017, and \$*** in 2018, the AUV of export shipments was \$*** per short ton in 2016, \$*** in 2017, and \$*** in 2018.⁷² The unit COGS of natural SSA producers was \$*** per short ton in 2016, \$*** in 2017, and \$*** in 2018.⁷³ Thus, even at its highest level in the first year of the period (2016), the AUV of export shipments by the natural SSA producers was equivalent to only *** percent of the AUV of those firms' U.S. shipments and, importantly, only *** percent of their unit COGS.⁷⁴ *** the domestic industry's losses therefore stem from the natural SSA producers' export shipments. Synthetic SSA producers, whose exports shipments were *** (***) in 2017 and no more than *** percent of total shipments by quantity in 2016

⁶⁵ CR/PR at Tables VI-1, C-1.

⁶⁶ CR/PR at Table VI-7. The domestic industry incurred research and development ("R&D") expenses of \$*** in 2018. *Id.*

⁶⁷ As covered in our discussion above of subject import volume, we have already concluded that the domestic industry's loss of 4.1 percentage points of market share was fully explained by an anomalous supply shortage in Canada early in the period of investigation. We do not consider the increase in subject imports from this low baseline to be injurious to the domestic industry.

⁶⁸ CR/PR at Tables VI-1, C-1.

⁶⁹ CR/PR at Tables VI-1, C-1.

⁷⁰ Export shipments accounted for a *** of natural SSA producers' total shipments by quantity, registering a *** percent share in 2016 and 2017 and a *** percent share in 2018. CR/PR at Table III-8.

⁷¹ CR/PR at Table VI-3.

⁷² CR/PR at Tables III-8, C-2.

⁷³ CR/PR at Table VI-3.

⁷⁴ By contrast, the AUV of U.S. shipments by natural SSA producers, at its lowest level in 2018, was equivalent to *** percent of their unit COGS.

and 2018),⁷⁵ posted financial performance that was *** than that of natural SSA producers. The operating income margins reported by synthetic SSA producer *** were ***: *** percent in 2016, *** percent in 2017, and *** percent in 2018.⁷⁶ The available evidence leads us to conclude, therefore, that the domestic industry's poor financial performance was *** in its export shipments and that subject imports had no negative impact on the value of those export shipments. Although U.S. prices declined and also contributed to reductions in the domestic industry's financial performance over the period, we have also found that subject imports did not lead to U.S. price declines. We therefore conclude that subject imports did not cause the domestic industry's financial condition to worsen over the period of investigation.

In view of the foregoing, we find no reasonable indication that subject imports from Canada are having a significant impact on the domestic industry. Accordingly, we find that there is no reasonable indication that the domestic industry is materially injured by reason of imports of sodium sulfate anhydrous from Canada that are allegedly sold in the United States at less than fair value.

III. No Threat of Material Injury by Reason of Subject Imports

a. Legal Standard

Section 771(7)(F) of the Tariff Act directs the Commission to determine whether the U.S. industry is threatened with material injury by reason of the subject imports by analyzing 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."⁷⁷ The Commission may not make such a determination "on the basis of mere conjecture or supposition," and considers the threat factors "as a whole" in making its determination whether dumped or subsidized imports are imminent and whether material injury by reason of subject imports would occur unless an order is issued.⁷⁸ In making our determination, we consider all statutory threat factors that are relevant to this investigation.⁷⁹

⁷⁵ CR/PR at Table III-9.

⁷⁶ CR/PR at Tables VI-3. These data represent the financial performance of ***. As is the case with the domestic industry as a whole, the entire decline in the operating income margin of this synthetic SSA producer was due to a decline in the AUV of net sales (the quantity of net sales increased and unit COGS declined), which declined steadily from \$*** in 2016 to \$*** in 2018. CR/PR at Table VI-3. We again emphasize our conclusion, already stated in the price effects discussion, that such decreases in AUVs were not attributable to the presence of subject imports in the U.S. market.

⁷⁷ 19 U.S.C. § 1677(7)(F)(ii).

⁷⁸ 19 U.S.C. § 1677(7)(F)(ii).

⁷⁹ These factors are as follows:

(l) 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,

(continued...)

b. Likely Volume

As discussed above, we have found that the volume of subject imports, and the increase in the volume of subject imports, was significant. Nonetheless, most of the increase in subject imports occurred between 2016 and 2017 due to SMMI's resolution of certain supply issues affecting shipments from its Canadian facility that lasted from 2014 to 2016. After increasing by 39.9 percent from 2016 to 2017 from this abnormally low baseline, subject imports increased by only 1.8 percent between 2017 and 2018.⁸⁰ Therefore, subject imports from Canada increased as a result of normalization of SMMI's operations and have since stabilized, and do not foreshadow a surge of subject imports into the U.S. market in the imminent future.

The Commission issued questionnaires to two Canadian firms believed to produce and/or export SSA, and received usable responses from both firms: SMMI, a natural SSA producer, and TODA Advanced Chemicals ("TODA"), a synthetic SSA producer. SMMI is the sole exporter of SSA to the United States from Canada, and accounted for all exports to the United States between 2016 and 2018. These firms' production as reported in their questionnaire responses accounts for all known SSA production in Canada.⁸¹

Based on the information submitted by these firms, Canadian capacity increased by *** percent between 2016 and 2018 due to TODA initiating SSA production in 2017. Production increased by *** percent over the same period due primarily to SMMI's supply issues that it experienced from 2014 to 2016, which are described in greater detail above.⁸² As a result, the

(...continued)

(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,

(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,

...

(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).

¹⁹ U.S.C. § 1677(7)(F)(i).

⁸⁰ CR/PR at Table C-1.

⁸¹ CR/PR at VII-3.

⁸² CR at VII-6; PR at VII-3.

Canadian industry's capacity utilization increased from *** percent in 2016 to *** percent in 2018, and is projected to continue to increase to *** percent in 2019 and 2020 as ***.⁸³ The Canadian industry is reliant on exports to the United States to a large extent, but has increased its relative share of total shipments to the Canadian home market due to SMMI gaining a new Canadian customer in 2018.⁸⁴ As a result, the Canadian industry's share of total shipments exported to the United States decreased from *** percent in 2016 to *** percent in 2018, and is projected to decline further to *** percent in 2019 and 2020.^{85 86}

The data relevant to threat analysis indicate that the Canadian industry is highly export oriented, with a focus on serving the U.S. market; however, they do not suggest the likelihood of substantially increased imports in the imminent future. Subject imports have been stable since the resolution of supply issues at SMMI's Canadian facility, and high capacity utilization and additional market opportunities in Canada will likely continue to limit future increases in subject imports. Therefore, we find that the volume of subject imports will not likely increase significantly in the imminent future.

c. Likely Price Effects

Subject imports did not significantly undersell the domestic like product during the period of investigation. Across most quarterly price comparisons and in the highest volume products, subject imports predominantly oversold the domestic like product throughout the period of investigation. Of particular relevance to our analysis of likely price effects, subject import prices actually increased for pricing products 3 and 4, the only pricing products where there were multiple quarterly comparisons with apparent underselling. Although subject import prices decreased for products 1 and 2, they remained well above U.S. producers' prices in *** quarterly comparisons.⁸⁷ Although U.S. prices declined and the industry's COGS/net sales ratio increased, these price changes were not caused by competition with higher-priced

⁸³ CR/PR at Table VII-3; CR at VII-6; PR at VII-4.

⁸⁴ CR at VII-6-7; PR at VII-4.

⁸⁵ CR/PR at Table VII-3.

⁸⁶ We have also considered the other statutory threat factors, none of which indicate that a significant increase in the volume of subject imports is imminent. The Canadian industry's end-of-period inventories relative to its reported total shipments fluctuated but declined, with this ratio falling from *** percent in 2016 to *** percent in 2018, and projected to be *** percent in 2019 and *** percent in 2020. CR/PR at Table VII-3. U.S. importers' inventories similarly fluctuated at a modest level as a ratio to U.S. shipments of the imports of subject merchandise, rising slightly from *** percent in 2016 to *** percent in 2018. CR/PR at Table VII-5.

SSA, whether naturally or synthetically produced, is the only product produced on the same equipment and machinery, and therefore the Canadian producers cannot shift production from other products to production of SSA. CR at VII-9; PR at VII-4.

There are no known trade barriers in third-country markets covering Canadian exports of SSA. CR at VII-12; PR at VII-6.

⁸⁷ CR/PR at Tables V-7 and V-8.

subject imports. In addition, the volume of subject imports stabilized between 2017 and 2018, and we have not found it likely that the volume of subject imports will increase significantly in the imminent future. Domestic producers will therefore not be forced to lower their prices to avoid losing sales or market share to subject imports. For all of these reasons, we do not find it likely that subject imports will significantly undersell the domestic like product in the imminent future.

Therefore, we find that imports of SSA from Canada are not likely to enter at prices that will have a significant depressing or suppressing effect on domestic prices or to increase demand for further imports.

d. Likely Impact

As discussed above, we have found no significant causal relationship between subject imports and the domestic industry's performance during the period of investigation. Subject imports increased over the period of investigation, but reflected an increase from an anomalously low baseline volume in 2016 due to certain supply issues experienced by SMMI. Subject imports were generally sold at higher prices than the domestic like product, and did not cause significant price depression or significant price suppression. Therefore, while the domestic industry experienced mixed output indicia and substantial financial losses, these were not caused by subject import competition. To the contrary, the domestic industry's poor financial performance was the result of its exports to other markets, which were sold at AUVs that were *** lower than its costs. As a result, we have found no reasonable indication that subject imports from Canada are having a significant impact on the domestic industry.

As discussed above, we do not find it likely that there will be a significant increase of subject imports in the imminent future. Subject imports are also likely to continue to oversell the domestic like product, as occurred throughout the POI, and therefore they are not likely to have significant price depressing or suppressing effects on prices for U.S. SSA. Based on these considerations, we find that subject imports are not likely to have a significant impact on the domestic industry in the imminent future.

In view of the foregoing, we conclude that an industry in the United States is not threatened with material injury by reason of subject imports.

IV. Conclusion

For the reasons stated above, we determine that there is no reasonable indication that an industry in the United States is either materially injured or threatened with material injury by reason of subject imports of sodium sulfate anhydrous from Canada that are allegedly sold in the United States at less than fair value.

PART I: INTRODUCTION

BACKGROUND

This investigation results from a petition filed with the U.S. Department of Commerce (“Commerce”) and the U.S. International Trade Commission (“USITC” or “Commission”) by Cooper Natural Resources, Inc. (“CNR”), Fort Worth, Texas; Elementis Global LLC (“Elementis”), East Windsor, New Jersey; and Searles Valley Minerals, Inc. (“SVM”), Overland Park, Kansas, on March 28, 2019, 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 sodium sulfate anhydrous (“SSA”)¹ from Canada. The following tabulation provides information relating to the background of this investigation.^{2 3}

Effective date	Action
March 28, 2019	Petition filed with Commerce and the Commission; institution of Commission investigation (84 FR 13066, April 3, 2019)
April 17, 2019	Commerce’s notice of initiation (84 FR 17138, April 24, 2019)
April 18, 2019	Commission’s conference
May 10, 2019	Commission’s vote
May 13, 2019	Commission’s determination
May 20, 2019	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

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.

the context of production operations within the United States; and. . . may consider such other economic factors as are relevant to the 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 Amended by PL 114-27 (as signed, June 29, 2015), Trade Preferences Extension Act of 2015.

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

SSA is generally used in the production of dry powder laundry and dishwasher detergents, food starches, textiles, pulp and paper, glass, and other products.⁶ The leading U.S. producers of SSA are CNR, Elementis, and SVM, while leading producers of SSA outside the United States include Saskatchewan Mining and Minerals Inc. ("SMMI") of Canada. The leading U.S. importer of SSA from Canada is SMMI, while the leading importers of SSA from nonsubject countries (primarily China and India) include ***. U.S. purchasers of SSA are firms that are involved in the powdered laundry detergent, textile, paper, and glass industries; leading purchasers include Procter and Gamble, Nippon Dynawave, and Ahlstrom.

Apparent U.S. consumption of SSA totaled approximately 375,760 short tons (\$35.8 million) in 2018. Currently, eight firms are known to produce SSA in the United States.⁷ U.S. producers' U.S. shipments of SSA totaled 310,445 short tons (\$28.3 million) in 2018, and accounted for 82.6 percent of apparent U.S. consumption by quantity and 79.0 percent by value. U.S. imports from subject sources totaled 55,387 short tons (\$5.8 million) in 2018 and accounted for 14.7 percent of apparent U.S. consumption by quantity and 16.1 percent by value. U.S. imports from nonsubject sources totaled 9,929 short tons (\$1.7 million) in 2018 and accounted for 2.6 percent of apparent U.S. consumption by quantity and 4.8 percent by value.

SUMMARY DATA AND DATA SOURCES

A summary of data collected in this investigation is presented in appendix C. Except as noted, U.S. industry data are based on questionnaire responses of seven firms that accounted for the vast majority of U.S. production of SSA during 2018. U.S. imports are based on official Commerce statistics and the questionnaire responses of seven firms that are believed to

⁶ Petition, p. 7.

⁷ JCI Controls, Inc. ("JCI"), a synthetic SSA producer, did not respond to the Commission's questionnaire in this preliminary phase investigation. JCI is believed to account for approximately *** percent of total U.S. production in 2018, based ***.

account for the vast majority of U.S. imports of SSA from Canada and *** percent of total U.S. imports during 2018.^{8 9} Foreign industry data and related information are based on the questionnaire responses of two producers of SSA that accounted for all known production of SSA in Canada and all exports of SSA to the United States during 2018.

PREVIOUS AND RELATED INVESTIGATIONS

SSA from Canada has been the subject of a prior antidumping duty investigation in the United States. On July 10, 2000, a petition was filed by CNR, Tulsa, Oklahoma, and IMC Chemicals, Inc., New York, New York, alleging that an industry in the United States was materially injured and threatened with material injury by reason of LTFV imports of SSA from Canada. Accordingly, the Commission instituted antidumping duty investigation No. 731-TA-884 (Preliminary).¹⁰ On August 24, 2000, the Commission determined that there was no reasonable indication that an industry in the United States was materially injured or threatened with material injury, or that the establishment of an industry in the United States was materially retarded, by reason of imports of SSA from Canada that were alleged to be sold in the United States at LTFV.¹¹

NATURE AND EXTENT OF ALLEGED SALES AT LTFV

On April 24, 2019, Commerce published a notice in the *Federal Register* of the initiation of its antidumping duty investigation on SSA from Canada.¹² Commerce has initiated an antidumping duty investigation based on estimated dumping margins of 43.37 to 170.08 percent.

⁸ SMMI accounted for the vast majority of subject imports from Canada during 2016-18.

⁹ Import coverage for firms that responded to the Commission's importer questionnaire is based on official Commerce statistics using HTS statistical reporting number 2833.11.5010.

¹⁰ *Anhydrous Sodium Sulfate From Canada*, 65 FR 44075, July 17, 2000.

¹¹ *Anhydrous Sodium Sulfate From Canada*, 65 FR 52783, August 30, 2000. See also *Anhydrous Sodium Sulfate From Canada: Investigation No. 731-TA-884 (Preliminary)*, USITC Publication 3345 (September 2000).

¹² *Sodium Sulfate Anhydrous From Canada: Initiation of Less-Than-Fair-Value Investigation*, 84 FR 17138, April 24, 2019.

THE SUBJECT MERCHANDISE

Commerce's scope

In the current proceeding, Commerce has defined the scope as follows:¹³

The scope of this investigation covers sodium sulfate (Na_2SO_4) (Chemical Abstracts Service (CAS) Number 7757-82-6) that is anhydrous (i.e., containing no water), regardless of purity, grade, color, production method, and form of packaging, in which the percentage of particles between 20 mesh and 100 mesh, based on U.S. mesh series screens, ranges from 10-95% and the percentage of particles finer than 100 mesh, based on U.S. mesh series screens, ranges from 5-90%.

Excluded from the scope of this investigation are specialty sodium sulfate anhydrous products, which are products whose particle distributions fall outside the described ranges. Glauber's salt ($\text{Na}_2\text{SO}_4 \cdot 10\text{H}_2\text{O}$), also known as sodium sulfate decahydrate, an intermediate product in the production of sodium sulfate anhydrous that has no known commercial uses, is not included within the scope of the investigation, although some end-users may mistakenly refer to sodium sulfate anhydrous as Glauber's salt. Other forms of sodium sulfate that are hydrous (i.e., containing water) are also excluded from the scope of the investigation.

The merchandise subject to this investigation is classifiable under Harmonized Tariff Schedule of the United States (HTSUS) subheading 2833.11.5010. Subject merchandise may also be classified under 2833.11.1000, 2833.11.5050, and 2833.19.0000. Although the HTSUS subheadings and CAS registry number are provided for convenience and customs purposes, the written description of the scope of the investigation is dispositive.

Tariff treatment

Based upon the scope set forth by Commerce, information available to the Commission indicates that the merchandise subject to this investigation is imported under statistical reporting number 2833.11.5010 of the Harmonized Tariff Schedule of the United States ("HTS"), a provision that describes only this compound.¹⁴ Subject merchandise may also be reported by importers under subheading 2833.11.10 (which covers disodium sulfate in the form of salt cake), statistical reporting number 2833.11.5050 (disodium sulfate other than salt cake or anhydrous), and subheading 2833.19.00 (other sodium sulfates not specifically named).¹⁵ The

¹³ Ibid.

¹⁴ Ibid.

¹⁵ Conference transcript, pp. 115-118 (Kane), 181-182 (Cozart).

general rate of duty is free for HTS subheadings 2833.11.10 and 2833.19.00 and 0.4 percent ad valorem for HTS subheading 2833.11.50. Originating goods of Canada under the latter provision are eligible for duty-free entry under the North American Free Trade Agreement. Decisions on the tariff classification and treatment of imported goods are within the authority of U.S. Customs and Border Protection.

THE PRODUCT

Description and applications

Anhydrous sodium sulfate (SSA) is a white, granular, crystalized powder with the chemical formula Na_2SO_4 . Anhydrous indicates that there is no water of crystallization present, unlike sodium sulfate decahydrate ($\text{Na}_2\text{SO}_4 \cdot 10\text{H}_2\text{O}$, Glauber's Salt), which is an intermediate product in the production of SSA and outside the scope of the investigation.¹⁶ SSA is hygroscopic, requiring a low moisture environment during transport and storage to prevent caking.

Anhydrous sodium sulfate does not typically exist as universally defined grades, and manufacturers designate products based on suitability for certain applications. The principal differences in grades relate to color and particle size. For example, paper production specifies acceptable color, while detergents require the appropriate color for appearance and particle size to create a homogeneous formulation. Despite these differences, the different grades tend to be interchangeable.¹⁷ The petitioners cite that commercial SSA is generally sold at 99 percent purity or greater.¹⁸

Salt cake, as a grade or form of sodium sulfate, imports of which enter under HTS statistical reporting number 2833.11.1000, is within the scope of the investigation. Petitioners explain that salt cake is a term used by the pulp and paper industry to refer to SSA,¹⁹ although no U.S. producers specifically manufacture a salt cake product.²⁰ Historically, the SSA producers state that the salt cake grade may have contained higher levels of impurities, but any salt cake used currently would be interchangeable with other forms of SSA.²¹

Approximately *** percent of the SSA consumed in the United States is used to manufacture detergents, where it is used as a filler and diluent in powdered formulations.²² Less SSA is used in concentrated detergents and none in liquid detergents. Glassmaking accounts for approximately *** percent of consumption. SSA acts as a fining agent in the glass melt to remove bubbles and impurities while also serving as a flux to prevent the formation of

¹⁶ Petition, p. 7.

¹⁷ Ibid; Conference transcript, pp. 63-64 (Kane), pp. 64-65 (Cortese), pp. 186-187 (Avery).

¹⁸ Ibid.

¹⁹ Conference transcript, pp. 63-64 (Kane), pp. 64-65 (Cortese).

²⁰ Conference transcript, pp. 115-117 (Kane).

²¹ Conference transcript, pp.131-132 (McCann).

²² *Sodium Sulfate* by Adam Gao, Chiyo Funada, Samantha Witlisbach, and Sean Davis in *Chemical Economics Handbook*, November 2016.

silica scum.²³ The pulp and paper industry uses SSA as an input to the kraft process²⁴ as a source of sodium sulfide (Na₂S) in the pulping liquor, accounting for approximately *** percent of U.S. consumption. Other applications representing less than *** percent of consumption include textiles (where it is used to allow dyes to evenly penetrate fibers), carpet freshening, starch, animal feed, and coal conditioning.²⁵

The petitioners have indicated that there are a number of potential substitutes for SSA depending on the application. Sodium chloride (NaCl) could be used in detergents and textile processing, but may increase the corrosion of producers' or users' equipment. SSA could be replaced by gypsum (calcium sulfate dihydrate, CaSO₄·2H₂O) or other salts for glassmaking,²⁶ and is used by some producers, although it cannot be a source of sodium oxide like SSA to change the thermal properties of the finished glass. There are two replacements for the pulp and paper industry currently in use—sodium hydrosulfide (NaHS) or a mixture of emulsified sulfur and sodium hydroxide (NaOH).

Manufacturing processes

SSA is either mined (natural) or generated as a part of chemical processes (synthetic);²⁷ figure I-1 shows generalized block flow diagrams of natural and synthetic processes. Both U.S. and Canadian natural SSA are currently produced from brines derived from saline lakes. Petitioner CNR pumps sub-surface brines from Cedar Lake, Texas, cooling them with chillers to precipitate Glauber's salt. SSA is then made by drying the Glauber's salt.²⁸

²³ *Influence of Fining Agents on Glass Melting: a Review, Part 1* by Miroslava Hujová and Miroslava Vernerová in *Ceramics-Silikáty*, 2017, Volume 61, pp 19-126.

²⁴ For a description of the kraft process, see: *Pulp* by J. F. Kadla and Q. Dai in *Kirk-Othmer Encyclopedia of Chemical Technology*, 2006.

²⁵ *Sodium Sulfate* by Adam Gao, Chiyo Funada, Samantha Witlisbach, and Sean Davis in *Chemical Economics Handbook*, November 2016.

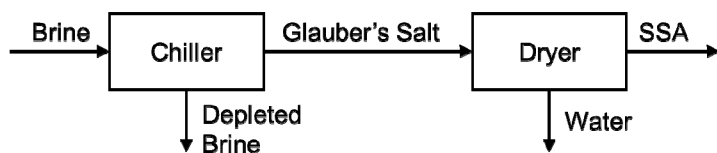
²⁶ *Anhydrous Sodium Sulfate From Canada: Investigation No. 731-TA-884 (Preliminary)*, USITC Publication 3345 (September 2000), pp. I-5; Petition, pp. 8-9.

²⁷ *Sodium Sulfates and Sulfides* by David Butts and David R. Bush in *Kirk-Othmer Encyclopedia of Chemical Technology*, 2013.

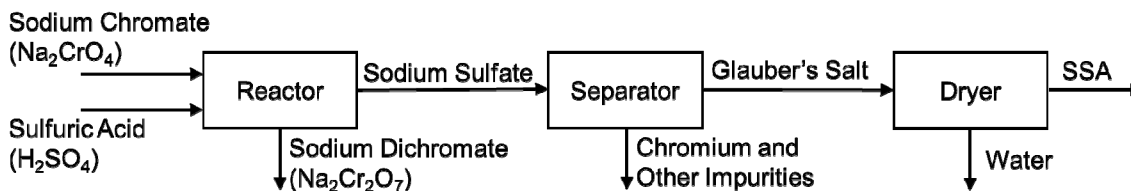
²⁸ Petition, p. 8.

Figure I-1
SSA: Production Block Flow Diagrams

Natural



Synthetic (Dichromate)



Source: Based on conference transcript p. 26 (Ford), pp. 132-133 (McCann), and p. 120 (Cortese); petition, p. 8; petitioners' postconference brief, exhibit 1, pp. 22-23; and *Chemicals from Brine* by David Butts in *Kirk-Othmer Encyclopedia of Chemical Technology*, 2003.

Production by petitioner SVM follows a similar process, albeit with preceding steps to extract other components of the brine. Sodium carbonate (Na_2CO_3) is removed from the brine first by adding carbon dioxide (CO_2)²⁹ to form sodium hydrogen carbonate (NaHCO_3), which crystallizes out.³⁰ The brine, depleted of sodium carbonate, is then cooled to recover borax crystals (sodium tetraborate decahydrate $\text{Na}_2\text{B}_4\text{O}_7 \cdot 10\text{H}_2\text{O}$). Further cooling the remaining brine yields Glauber's salt, which is dried to complete the production of SSA.

The respondent, SMMI, differs from the domestic producers insofar as it utilizes natural temperature changes to precipitate Glauber's salt rather than mechanical refrigeration.³¹ Brine is produced by diverting fresh water over sodium sulfate-containing soils to extract Glauber's salt in the spring and summer. That brine is then pumped and concentrated through evaporation in the summer heat. Glauber's salt precipitates in the fall and winter, which is melted and filtered before being dried to form SSA. SMMI states that the yield of the manufacturing process is heavily dependent on the weather due to its reliance on natural temperature changes and precipitation.³² SMMI reports that it experienced reduced SSA production due to abnormal weather during the 2014-2016 harvesting seasons.³³

Synthetic SSA can be produced in multiple processes that involve sulfuric acid. Petitioner Elementis produces it as part of sodium dichromate ($\text{Na}_2\text{Cr}_2\text{O}_7$) manufacturing.³⁴ In that

²⁹ Conference transcript, p. 26 (Ford); and Petitioners' postconference brief, exhibit 1, pp. 22-23.

³⁰ *Chemicals from Brine* by David Butts in *Kirk-Othmer Encyclopedia of Chemical Technology*, 2003.

³¹ Conference transcript, pp. 132-133 (McCann), 187-188 (Avery and Hironaka).

³² Conference transcript, pp. 133-134 (McCann), pp. 160-161 (McCann).

³³ Conference transcript, p. 134 (McCann), p. 142 (Kearney), pp. 157-158 (Avery), p. 158 (Hironaka).

³⁴ Conference transcript, p. 23 (Cortese).

process, sulfuric acid (H₂SO₄) is added to a boiling solution of sodium chromate (Na₂CrO₄), which forms the sodium dichromate and sodium sulfate.³⁵ The sodium sulfate stream is purified to remove chromium and other metal impurities, then it is dried to form SSA.³⁶ Other major sources of U.S. synthetic SSA include lead acid battery recycling, silica pigment production, and resorcinol production. Other major processes outside of the U.S. and Canada that produce synthetic SSA include two hydrochloric acid (HCl) manufacturing methods³⁷ and rayon production.³⁸

DOMESTIC LIKE PRODUCT ISSUES

No issues with respect to domestic like product have been raised in this investigation. The petitioner proposes a single domestic like product consisting of SSA, co-extensive with the scope of the investigation.³⁹ Respondents agree with petitioners' proposed domestic like product definition for purposes of this preliminary-phase investigation, but reserve the right to contest it in any final-phase investigation.⁴⁰

³⁵ $2\text{Na}_2\text{CrO}_4 + \text{H}_2\text{SO}_4 \longrightarrow \text{Na}_2\text{Cr}_2\text{O}_7 + \text{Na}_2\text{SO}_4 + \text{H}_2\text{O}$.

³⁶ Conference transcript, p. 120 (Cortese).

³⁷ Mannheim process: $2\text{NaCl} + \text{H}_2\text{SO}_4 \longrightarrow \text{Na}_2\text{SO}_4 + 2\text{HCl}$.

Hargreaves process: $4\text{NaCl} + 2\text{SO}_2 + \text{O}_2 + 2\text{H}_2\text{O} \longrightarrow 2\text{Na}_2\text{SO}_4 + 4\text{HCl}$.

³⁸ *Sodium Sulfates and Sulfides* by David Butts and David R. Bush in *Kirk-Othmer Encyclopedia of Chemical Technology*, 2013.

³⁹ Petition, p. 2; conference transcript, p. 12 (Trendl); and Petitioners' postconference brief, pp. 3-5.

⁴⁰ Conference transcript, p. 167 (Heffner).

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

U.S. MARKET CHARACTERISTICS

Sodium sulfate anhydrous (“SSA”) is either mined (“natural”) or produced through a chemical process (“synthetic”), with natural SSA using brine from saline lakes. SSA sold in the U.S. market is almost exclusively produced by U.S. synthetic or natural producers and Canadian firm SMMI. SSA is used in a variety of end uses, with over half of purchases of SSA used in the production of detergents and in glassmaking. There are several substitutes for SSA, however, each substitute can change the characteristics of the final product in which it is used.

Apparent U.S. consumption of SSA increased during 2016-18. Overall, apparent U.S. consumption in 2018 was 2.5 percent higher than in 2016.

CHANNELS OF DISTRIBUTION

U.S. producers sold almost equally to end users (***) percent) and distributors (***) percent), while importers sold mainly to end users, as shown in table II-1.¹

Table II-1

SSA: U.S. producers’ and importers’ U.S. commercial shipments, by sources and channels of distribution, 2016-18

* * * * *

GEOGRAPHIC DISTRIBUTION

U.S. producers reported selling SSA to all regions in the contiguous United States (table II-2). Importers reported selling to the Midwest, Southeast, Mountains, and Pacific Coast. For U.S. producers, *** percent of sales were between 101 and 1,000 miles of their production facility and *** percent were over 1,000 miles. *** sold *** percent within 100 miles of their U.S. point of shipment, *** percent between 101 and 1,000 miles, and *** percent over 1,000 miles.²

¹ U.S. producers of natural SSA *** sold over two-thirds of their product to end users (***) percent) in 2018, while producers of synthetic SSA *** sold a little over half of their product to distributors (***) percent) in 2018.

² *** pays a fee for warehousing, logistical, and transportation services to third-party warehouses and logistic companies.

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

Region	U.S. producers	Importers
Northeast	2	---
Midwest	3	***
Southeast	3	***
Central Southwest	3	---
Mountain	2	***
Pacific Coast	2	***
Other ¹	---	---
All regions (except Other)	1	---
Reporting firms	4	3

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 SSA from U.S. producers and from Canada.

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

Country	Capacity (short tons)		Capacity utilization (percent)		Ratio of inventories to total shipments (percent)		Shipments by market, 2018 (percent)		Able to shift to alternate products
	2016	2018	2016	2018	2016	2018	Home market shipments	Exports to non-U.S. markets	No. of firms reporting "yes"
United States	590,182	591,182	89.8	88.5	***	***	***	***	0 of 7
Canada	***	***	***	***	***	***	***	***	0 of 2

Note.—Responding U.S. producers accounted for the vast majority of U.S. production of SSA in 2018. Responding foreign producer/exporter firms accounted for the vast majority of U.S. imports of SSA from Canada during 2018. For additional data on the number of responding firms and their share of U.S. production and of U.S. imports from Canada, 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, U.S. producers of SSA have the ability to respond to changes in demand with moderate changes in the quantity of shipments of U.S.-produced SSA

to the U.S. market. The main contributing factors to this degree of responsiveness of supply are the availability of unused capacity or inventories³ and ability to shift shipments from alternate markets. Factors mitigating responsiveness of supply include being unable to shift production to or from alternate products.

Between 2016 and 2018, U.S. producers' capacity utilization remained relatively unchanged, decreased by 1.3 percentage points, while capacity increased by less than one percent and production decreasing by 1.3 percent. No U.S. producers reported producing other products on the same equipment as SSA. Factors affecting U.S. producers' ability to shift production include SSA being dependent on the silica amount produced or SSA being the only product viable from the brine deposit.

Subject imports from Canada

Based on available information, producers of SSA from Canada have the ability to respond to changes in demand with moderate changes in the quantity of shipments of SSA to the U.S. market. The main contributing factors to this degree of responsiveness of supply are the availability of unused capacity or inventories and ability to shift shipments from the Canadian market. Factors mitigating responsiveness of supply include being unable to shift shipments from alternate markets or shift production to or from alternate products.

Canadian producers' capacity utilization increased by *** percentage points between 2016-18, with both capacity and production increasing during the same period. Canadian producers did not report any shipments outside the United States and Canada, and reportedly can not produce other products on the same equipment as SSA.

Imports from nonsubject sources

Imports from nonsubject sources accounted for 15.2 percent of total U.S. imports in 2018. The largest sources of nonsubject imports during 2016-18 were India, China, and Japan. Combined, these countries accounted for 81.1 percent of nonsubject imports in 2018.

Supply constraints

One of four responding U.S. producers and two of six responding importers reported that they had experienced supply constraints since January 1, 2016. U.S. producer Elementis reported a three week outage caused by Hurricane Florence. Canadian producer and importer *** reported purchasing SSA from U.S. producers to satisfy contracts in 2016.

³ U.S. producers only keep, at a maximum, two to three months' worth of SSA production in inventories due to associated costs. Conference transcript, p. 68 (Murphy). U.S. producers of by-product SSA sell their SSA directly to U.S. distributor Giles and Saltex.

U.S. demand

Based on available information, the overall demand for SSA is likely to experience small-to-moderate changes in response to changes in price. The main contributing factors are the somewhat limited range of substitute products and the small-to-moderate cost share of SSA in most of its end-use products.

End uses and cost share

U.S. demand for SSA depends on the demand for U.S.-produced downstream products. Reported end uses include glass, powdered laundry detergent, starch, paper, batteries, and water treatments.

SSA accounts for a small-to-moderate share of the cost of the end-use products in which it is used.⁴ Reported cost shares for some end uses were as follows:

- Laundry detergent – 18 percent
- Water treatment – 5 percent
- Starch – 1 percent
- Glass – 1 percent
- Pulp and paper – 1 percent

Business cycles

No U.S. producers or importers indicated that the market was subject to business cycles, while two of 6 importers reported the market was subject to distinct conditions of competition. Specifically, a storm can knock out the power supply needed for the production of SSA.

Demand trends

Most firms reported a decrease or no change in U.S. demand for SSA since January 1, 2016 (table II-4).

⁴ *** reported cost shares of *** for laboratory/research use and textile dyeing.

Table II-4

SSA: 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	2	---
Importers	2	1	2	---
Demand outside the United States				
U.S. producers	2	1	---	---
Importers	2	---	---	1

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

Canadian producer and importer *** and U.S. producer *** report that demand for SSA is driven mostly by the powdered laundry detergent industry, and since 2016 there has been less demand in the United States for powdered detergent. U.S. producer *** indicated that demand for all applications of SSA (i.e., detergent, paper, textile, starch, and glass) are either flat or in decline within the United States.

Substitute products

Substitutes for SSA are limited to gypsum, sodium hydrosulfide, and sodium chloride.⁵ Most U.S. producers (2 of 4 responding) and importers (4 of 5 responding) reported that there were no substitutes.

SUBSTITUTABILITY ISSUES

The degree of substitution between domestic and imported SSA 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 moderate-to-high degree of substitutability between domestically produced SSA and SSA imported from subject sources. Purchasers identified quality, quantity, delivery and lead times, and supplier relationship as factors for purchasing imported rather than U.S.-produced product.

Lead times

SSA is primarily sold from inventory. U.S. producers reported that *** percent of their commercial shipments were from inventories, with lead times averaging 5 days. *** reported *** percent of shipments from U.S. inventories and *** percent of shipments from foreign inventories, with lead times averaging *** and *** days respectively.

⁵ Please see Part I for further information on substitutes and specific end uses.

Factors affecting purchasing decisions

Purchasers responding to lost sales lost revenue allegations⁶ were asked to identify the main purchasing factors their firm considered in their purchasing decisions for SSA. The major purchasing factors identified by firms include price, quality, availability, manufacturer relationship, meeting supplier specifications, compliance to the Food Chemical Codex (“FCC”), and reliability.

Comparison of U.S.-produced and imported SSA

In order to determine whether U.S.-produced SSA can generally be used in the same applications as imports from Canada, 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, U.S. producers reported that SSA is “always” or “frequently” interchangeable with SSA from Canada or nonsubject countries. U.S. importers reported domestic SSA and Canadian product being “frequently” or “sometimes” interchangeable, while reporting a variety of responses on the interchangeability of nonsubject SSA with domestic and Canadian SSA. Canadian producers and importer *** reported that domestic and Canadian SSA are *** interchangeable. U.S. importer *** who reported that domestic and Canadian SSA are “sometimes” interchangeable and domestic and nonsubject SSA are “never” interchangeable stated, “Only Spain can produce necessary and specific particle size. Quality of Canadian production is more consistent than US.”

Table II-5
SSA: Interchangeability between SSA 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. Canada	2	2	---	---	***	***	***	***
Nonsubject countries comparisons: U.S. vs. nonsubject	1	3	---	---	***	***	***	***
Canada vs. nonsubject	1	1	---	---	***	***	***	***

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

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

⁶ This information is compiled from responses by purchasers identified by Petitioners to the lost sales lost revenue allegations. See Part V for additional information.

In addition, producers and importers were asked to assess how often differences other than price were significant in sales of SSA from the United States, subject, or nonsubject countries. As seen in table II-6, U.S. producers reported that factors other than price are “never” significant between domestic and Canadian SSA, while importers reported a variety of responses. U.S. producers reported factors other than price are “sometimes” or “never” significant between domestic and nonsubject SSA. Canadian producers and importer *** reported that factors other than price are *** significant.

Table II-6

SSA: Significance of differences other than price between SSA 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. Canada	---	---	---	2	***	***	***	***
Nonsubject countries comparisons: U.S. vs. nonsubject	---	---	2	1	***	***	***	***
Canada vs. nonsubject	---	---	1	2	***	***	***	***

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

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

PART III: U.S. PRODUCERS' 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 responses of seven firms that accounted for the vast majority of U.S. production of SSA during 2018.

U.S. PRODUCERS

The Commission issued a U.S. producer questionnaire to eight firms based on information contained in the petition. Seven firms provided usable data on their productive operations.¹ Staff believes that these responses represent the vast majority of U.S. production of SSA.

Table III-1 lists U.S. producers of SSA, their production locations, positions on the petition, and shares of total production.

Table III-1

SSA: U.S. producers of SSA, their positions on the petition, production locations, and shares of reported production, 2018

Firm	Position on petition	Production location(s)	Natural: Share of production (percent)	Synthetic: Share of production (percent)	SSA: Share of production (percent)
CNR	Petitioner	Loop, TX	***	***	***
Eco-Bat	***	Middletown, NY	***	***	***
East Penn	***	Lyon Station, PA	***	***	***
Elementis	Petitioner	Castle Hayne, NC	***	***	***
Evonik	***	Etowah, TN	***	***	***
GEO	***	Deer Park, TX	***	***	***
SVM	Petitioner	Trona, CA	***	***	***
Total			***	***	***

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

¹ JCI Controls, Inc. ("JCI"), a synthetic SSA producer, did not respond to the Commission's questionnaire in this preliminary phase investigation. JCI is believed to account for approximately *** percent of total U.S. production in 2018, based ***. A ninth firm, Viscofan was not issued a U.S. producer questionnaire in this preliminary phase investigation, but is also believed to produce small quantities of SSA as a cellulose by-product. IHS Chemical, "Sodium Sulfate: Chemical Economics Handbook," October 2016, p. 10.

Table III-2 presents information on U.S. producers' ownership, related and/or affiliated firms of SSA.

Table III-2
SSA: U.S. producers' ownership, related and/or affiliated firms

* * * * *

As indicated in table III-2, no U.S. producers are related to foreign producers of the subject merchandise and no U.S. producers are related to U.S. importers of the subject merchandise. In addition, as discussed in greater detail below, no U.S. producers directly import the subject merchandise or purchase the subject merchandise from U.S. importers.

Table III-3 presents U.S. producers' reported changes in operations since January 1, 2016. Elementis reported temporary production curtailments in October 2018 due to hurricane Florence.² However, there have been no major production curtailments or plant shutdowns during the period of investigation.³

Table III-3
SSA: U.S. producers' reported changes in operations, since January 1, 2016

* * * * *

U.S. PRODUCTION, CAPACITY, AND CAPACITY UTILIZATION

Tables III-4 through III-6 and figures III-1 through III-3 present U.S. producers' production, capacity, and capacity utilization for all SSA producers, natural SSA producers, and synthetic SSA producers. Domestic producers' SSA production decreased by 1.3 percent during 2016-18, while capacity remained relatively stable. The overall decrease in production is driven by the natural SSA producers (***) , whose production decreased by *** percent, while the synthetic producers' SSA production increased by *** percent. Synthetic producers' SSA capacity and production is generally driven by the production and demand for their primary products. However, a representative for synthetic producer Elementis testified that its business model considers SSA equally with its other products (co-product rather than by-product).⁴ Capacity utilization was high during the period of investigation and ranged from 88.5 percent and 91.9 percent. High capacity utilization rates are common in the SSA industry, as SSA production is highly capital intensive and operations typically run continuously 24 hours per day, 7 days per week for 350 days of the year, with scheduled maintenance that last one to two days at a time.⁵

² Conference transcript, p. 89 (Cortese).

³ Conference transcript, p. 53 (Rogers).

⁴ Conference transcript, pp. 23-24 (Cortese).

⁵ Conference transcript, pp. 21-23, 50-51 (Kane, Ford, Murphy)

Six of seven responding U.S. producers reported constraints in the manufacturing process. Synthetic SSA producers *** reported that the production of their primary products determined SSA production levels. Synthetic SSA producer *** reported that it had the ability to manufacture its primary product without producing SSA, but it is not preferred as it would decrease deep well flow capacity; the firm also reported that capacity is determined by manufacturing design limits such as mechanical reliability, maintenance, and operational resources. Natural SSA producer *** similarly reported that plant capacity and production limitations were constraints on its SSA production. Natural SSA producer *** reported that low prices due to unfairly traded imports has constrained its production, as it cannot properly invest in maintaining the facility and cannot produce at optimum levels.

Table III-4
SSA: U.S. producers' production, capacity, and capacity utilization, 2016-18

Item	Calendar year		
	2016	2017	2018
Capacity (short tons)			
CNR	***	***	***
East Penn	***	***	***
Eco-Bat	***	***	***
Elementis	***	***	***
Evonik	***	***	***
GEO	***	***	***
SVM	***	***	***
Total capacity	590,182	590,182	591,182
Production (short tons)			
CNR	***	***	***
East Penn	***	***	***
Eco-Bat	***	***	***
Elementis	***	***	***
Evonik	***	***	***
GEO	***	***	***
SVM	***	***	***
Total production	529,857	542,506	522,915
Capacity utilization (percent)			
CNR	***	***	***
East Penn	***	***	***
Eco-Bat	***	***	***
Elementis	***	***	***
Evonik	***	***	***
GEO	***	***	***
SVM	***	***	***
Average capacity utilization	89.8	91.9	88.5

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

Table III-5
Natural SSA: U.S. producers' capacity, production, and capacity utilization, 2016-18

* * * * *

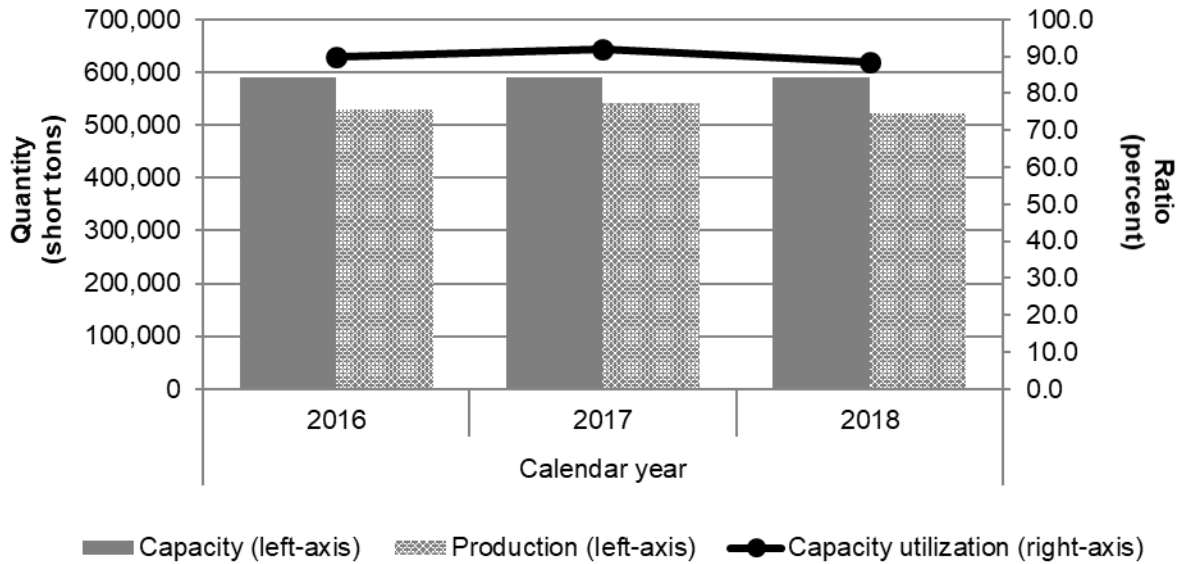
Table III-6

Synthetic SSA: U.S. producers' capacity, production, and capacity utilization, 2016-18

* * * * *

Figure III-1

SSA: U.S. producers' production, capacity, and capacity utilization, 2016-18



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

Figure III-2

Natural SSA: U.S. producers' capacity, production, and capacity utilization, 2016-18

* * * * *

Figure III-3

Synthetic SSA: U.S. producers' capacity, production, and capacity utilization, 2016-18

* * * * *

Alternative products

Natural SSA producers' equipment, machinery, and workers are dedicated solely to SSA production. Synthetic producers' production of their primary products are not produced on the same equipment and machinery, although they may use the same employees to process the SSA by-product.

U.S. PRODUCERS' U.S. SHIPMENTS AND EXPORTS

Tables III-7 through III-9 present U.S. producers' U.S. shipments, export shipments, and total shipments. U.S. shipments by quantity and value decreased overall during 2016-18, by 2.5 percent and 12.2 percent, respectively. Unit values decreased by 9.9 percent during this period, from \$101 per short ton to \$91 per short ton. U.S. producers' U.S. shipments accounted for the majority of total shipments (***) percent in 2018), though export shipments as a share of total shipments increased by *** percentage points between 2016 and 2018, from *** percent to *** percent. Three of seven U.S. producers reported export shipments during 2016-18, with *** accounting for the majority. Export unit values were *** lower when compared to U.S. shipment unit values. SVM reported that "export values can and typically are lower than U.S. shipments due to logistics costs and market factors in various regions of the world. Export shipments have both inland and ocean freight versus SVM's typical one freight rate in the U.S."⁶

Table III-7

SSA: U.S. producers' U.S. shipments, exports shipments, and total shipments, 2016-18

Item	Calendar year		
	2016	2017	2018
	Quantity (short tons)		
U.S. shipments	318,324	316,608	310,445
Export shipments	***	***	***
Total shipments	***	***	***
	Value (1,000 dollars)		
U.S. shipments	32,182	30,534	28,269
Export shipments	***	***	***
Total shipments	***	***	***
	Unit value (dollars per short ton)		
U.S. shipments	101	96	91
Export shipments	***	***	***
Total shipments	***	***	***
	Share of quantity (percent)		
U.S. shipments	***	***	***
Export shipments	***	***	***
Total shipments	***	***	***
	Share of value (percent)		
U.S. shipments	***	***	***
Export shipments	***	***	***
Total shipments	***	***	***

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

⁶ Petitioners' post-conference brief, exh. 1, p. 14.

Table III-8

Natural SSA: U.S. producers' U.S. shipments, export shipments, and total shipments, 2016-18

* * * * *

Table III-9

Synthetic SSA: U.S. producers' U.S. shipments, export shipments, and total shipments, 2016-18

* * * * *

U.S. PRODUCERS' INVENTORIES

Tables III-10 through III-12 present U.S. producers' end-of-period inventories and the ratio of these inventories to U.S. producers' production, U.S. shipments, and total shipments. The U.S. industry's inventories of SSA peaked in 2017 and increased overall by *** percent during 2016-18. The ratio of inventories to production also peaked in 2017 and ranged between *** percent and *** percent. The ratio of inventories to U.S. shipments similarly peaked in 2017 and ranged between *** percent and *** percent. A representative from Elementis testified that the company tries to minimize inventory due to the associated costs and keeps "a month's worth of production in inventory."⁷ A representative from SVM testified that SVM ensures that it has inventory to supply its customer base during planned and unplanned maintenance and downtime.⁸ A representative from SMMI also testified that synthetic SSA producers generally "do not have significant long-term storage facilities for sodium sulfate."⁹

Table III-10

SSA: U.S. producers' inventories, 2016-18

* * * * *

Table III-11

Natural SSA: U.S. producers' inventories, 2016-18

* * * * *

Table III-12

Synthetic SSA: U.S. producers' inventories, 2016-18

* * * * *

⁷ Conference transcript, p. 68 (Murphy).

⁸ Conference transcript, p. 119 (Ford).

⁹ Conference transcript, p. 136 (McCann).

U.S. PRODUCERS' IMPORTS AND PURCHASES

U.S. producers did not import or purchase imports of SSA during 2016-18. Two U.S. producers (***) reported purchasing small quantities from domestic sources (***)

U.S. EMPLOYMENT, WAGES, AND PRODUCTIVITY

Tables III-13 through III-15 present U.S. producers' employment-related data. As shown in table III-13, PRWs, wages paid, hourly wages, productivity, and unit labor costs increased between 2016 and 2018, while hours worked and hours worked per PRW decreased during the same period.

Table III-13

SSA: Average number of production and related workers, hours worked, wages paid to such employees, hourly wages, productivity, and unit labor costs, 2016-18

Item	Calendar year		
	2016	2017	2018
Production and related workers (PRWs) (number)	131	131	132
Total hours worked (1,000 hours)	286	282	277
Hours worked per PRW (hours)	2,184	2,151	2,098
Wages paid (\$1,000)	10,453	10,582	10,561
Hourly wages (dollars per hour)	\$36.54	\$37.56	\$38.13
Productivity (short tons per 1,000 hours)	1,852	1,925	1,888
Unit labor costs (dollars per short ton)	\$19.73	\$19.51	\$20.20

Note.--***.

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

Table III-14

Natural SSA: U.S. producers' employment related data, 2016-18

* * * * *

Table III-15

Synthetic SSA: U.S. producers' employment related data, 2016-18

* * * * *

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

U.S. IMPORTERS

The Commission issued importer questionnaires to 35 firms believed to be importers of subject SSA, as well as to all U.S. producers of SSA.¹ Usable questionnaire responses were received from seven companies, representing *** percent and *** percent of U.S. imports from Canada and all other sources in 2018, respectively.^{2 3} In light of the questionnaire coverage, U.S. imports are based on official Commerce statistics, HTS statistical reporting number 2833.11.5010.⁴ Table IV-1 lists all responding U.S. importers of SSA from Canada and other sources, their locations, and their shares of U.S. imports, in 2018.

Table IV-1
SSA: U.S. importers by source, 2018

Firm	Headquarters	Share of imports by source (percent)		
		Canada	Nonsubject sources	All import sources
ACS	Point Pleasant, NJ	***	***	***
DuPont/Danisco	Wilmington, DE	***	***	***
Ecolab	St. Paul, MN	***	***	***
Fisher Scientific	Fair Lawn, NJ	***	***	***
L.A. Supply	Santa Fe Springs, CA	***	***	***
Royale	Paramus, NJ	***	***	***
SMMI	Chaplin, SK	***	***	***
Total		***	***	***

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

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 numbers 2833.11.1000, 2833.11.5010, 2833.11.5050, and 2833.19.0000 during 2016-18.

² SMMI accounted for the vast majority of subject imports from Canada during 2016-18.

³ *** submitted a questionnaire response too late to incorporate in this report. Nine firms certified that they did not import SSA from any source since January 1, 2016. In addition, the Commission received questionnaire responses from four firms that subsequently confirmed that they were not the importer of record. ***.

⁴ SSA imports are believed to enter under other HTS statistical reporting numbers that are “basket categories,” thus import data presented in this report may be understated.

U.S. IMPORTS

Table IV-2 and figure IV-1 present data for U.S. imports of SSA from Canada and all other sources. During 2016-18, total U.S. imports increased overall by 35.5 percent, based on quantity. Similarly, subject U.S. imports increased by 42.4 percent during the same period.⁵ Subject imports accounted for 84.8 percent of total U.S. imports in 2018. Imports from nonsubject sources increased by 6.4 percent during 2016-18 and accounted for 15.2 percent of total U.S. imports in 2018, respectively. Average unit values from both subject and nonsubject sources decreased overall between 2016 and 2018.⁶ The ratio of subject imports to U.S. production increased by 3.3 percentage points during 2016-18. Subject imports were equivalent to 10.6 percent of U.S. production in 2018.

⁵ Respondent SMMI, which accounted for the vast majority of subject imports, noted that 2016 import volumes from Canada were at historically low levels due to a production shortage at its Canadian facility. Rather than supplying its U.S. customers with imported product from its Canadian facility, SMMI purchased SSA from domestic producer SVM to continue to supply its U.S. customers in 2015 and 2016. SMMI also reported that its imports to the U.S. have generally declined since 2010. Conference transcript, pp. 133-135, 141, 157-159 (McCann, Avery, Kearney, Hironaka, and Heffner).

⁶ Petitioners noted that the average unit values for imports from nonsubject sources are higher than what they have observed in the U.S. market for this product. They also noted that they have not seen the relatively high nonsubject import volumes in the market, and speculated whether the product was being sold to unknown customers or misclassified. Conference transcript, pp. 45-47 (Rogers). Responding importers of SSA from nonsubject sources reported higher average unit values than importers of subject merchandise or U.S. producers, which is consistent with official import statistics. This may be due in part to product mix and/or differences in packaging. For example, an importer of SSA from India reported that the SSA it imports is ACS grade or electronic grade that is six times more expensive than commodity SSA. Staff correspondence with ***, April 17, 2019. An importer from India and Japan similarly reported that its SSA is high purity and lab grade. Staff correspondence with ***, April 29, 2019. Another firm reported importing SSA from China and India in “bulk sizes for eventual repackaging in smaller catalog sizes. For example, a bulk order of 200kg of SSA is purchased and would be used to fulfill orders as small as 100mg....” Importer questionnaire response of *** at question II-8. *See also generally* the importer questionnaire responses of ***.

Table IV-2
SSA: U.S. imports by source, 2016-18

Item	Calendar year		
	2016	2017	2018
	Quantity (short tons)		
U.S. imports from.-- Canada (subject)	38,883	54,381	55,387
India	2,447	1,470	3,858
China	3,599	1,606	2,844
Japan	2,361	2,461	1,348
All other sources	928	2,138	1,878
Nonsubject sources	9,335	7,676	9,929
All import sources	48,218	62,058	65,315
	Value (1,000 dollars)		
U.S. imports from.-- Canada (subject)	4,683	5,895	5,775
India	341	247	432
China	849	570	808
Japan	201	220	111
All other sources	257	352	384
Nonsubject sources	1,648	1,391	1,734
All import sources	6,332	7,285	7,509
	Unit value (dollars per short ton)		
U.S. imports from.-- Canada (subject)	120	108	104
India	139	168	112
China	236	355	284
Japan	85	90	82
All other sources	277	165	204
Nonsubject sources	177	181	175
All import sources	131	117	115
	Share of quantity (percent)		
U.S. imports from.-- Canada (subject)	80.6	87.6	84.8
India	5.1	2.4	5.9
China	7.5	2.6	4.4
Japan	4.9	4.0	2.1
All other sources	1.9	3.4	2.9
Nonsubject sources	19.4	12.4	15.2
All import sources	100.0	100.0	100.0
	Share of value (percent)		
U.S. imports from.-- Canada (subject)	74.0	80.9	76.9
India	5.4	3.4	5.7
China	13.4	7.8	10.8
Japan	3.2	3.0	1.5
All other sources	4.1	4.8	5.1
Nonsubject sources	26.0	19.1	23.1
All import sources	100.0	100.0	100.0

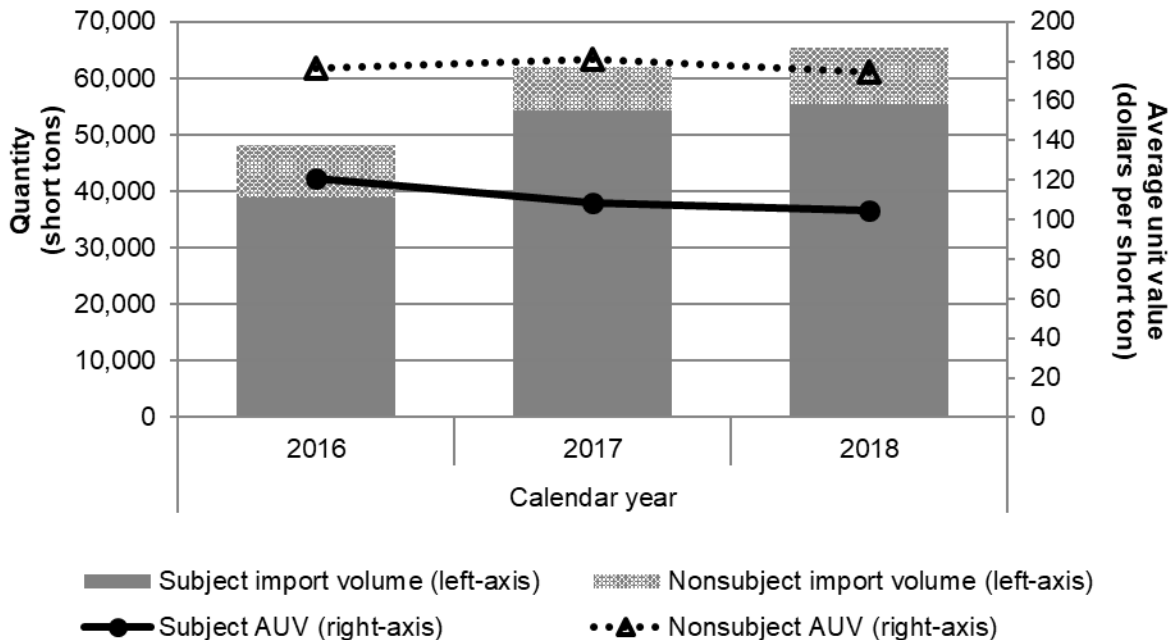
Table continued on next page.

Table IV-2--Continued
SSA: U.S. imports by source, 2016-18

Item	Calendar year		
	2016	2017	2018
	Ratio to U.S. production		
U.S. imports from.-- Canada (subject)	7.3	10.0	10.6
India	0.5	0.3	0.7
China	0.7	0.3	0.5
Japan	0.4	0.5	0.3
All other sources	0.2	0.4	0.4
Nonsubject sources	1.8	1.4	1.9
All import sources	9.1	11.4	12.5

Source: Compiled from official U.S. imports statistics using HTS statistical reporting number 2833.11.5010, accessed April 19, 2019.

Figure IV-1
SSA: U.S. import volumes and average unit values, 2016-18



Source: Compiled from official U.S. imports statistics using HTS statistical reporting number 2833.11.5010, accessed April 19, 2019.

NEGLIGENCE

The statute requires that an investigation be terminated without an injury determination if imports of the subject merchandise are found to be negligible.⁷ 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.⁸ As presented in table IV-3, imports from Canada accounted for 82.6 percent of total imports of SSA by quantity during March 1, 2018 through February 28, 2019, the most recent 12-month period for which data are available.

Table IV-3

SSA: U.S. imports in the twelve month period preceding the filing of the petition, March 2018 through February 2019

Item	March 1, 2018 through February 1, 2019	
	Quantity (short tons)	Share of quantity (percent)
U.S. imports from.-- Canada	54,806	82.6
Nonsubject sources	11,558	17.4
All import sources	66,363	100.0

Source: Compiled from official U.S. imports statistics using HTS statistical reporting number 2833.11.5010, accessed April 19, 2019.

⁷ 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)).

⁸ Section 771 (24) of the Act (19 U.S.C § 1677(24)).

APPARENT U.S. CONSUMPTION AND MARKET SHARES

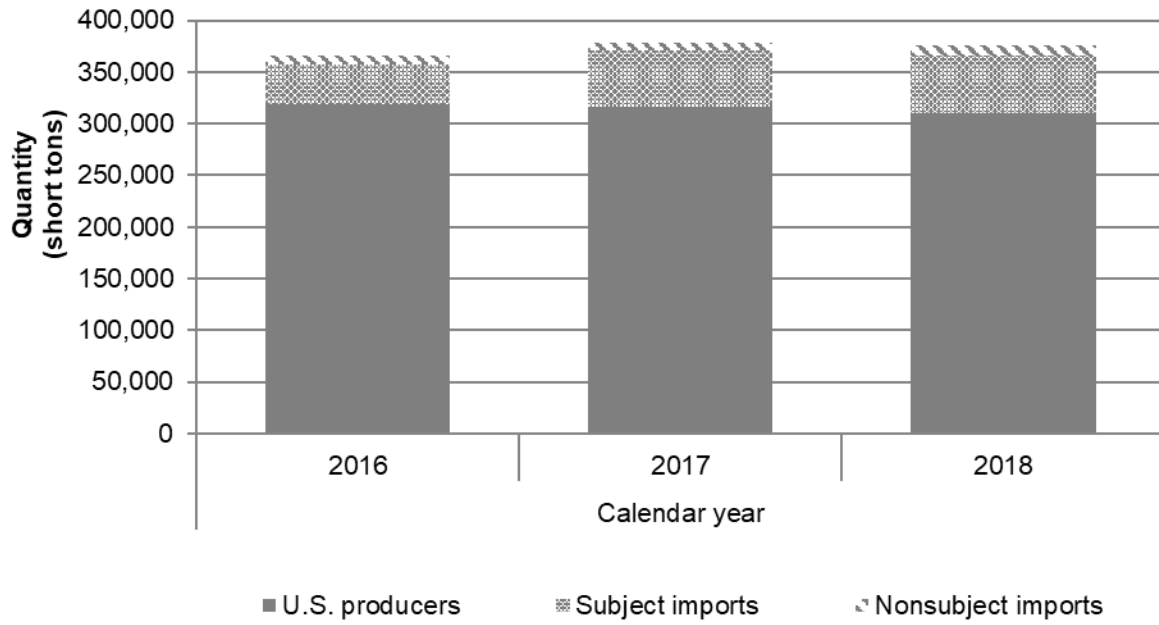
Table IV-4 and figure IV-2 present data on apparent U.S. consumption and U.S. market shares for SSA. Apparent U.S. consumption increased by 2.5 percent based on quantity between 2016 and 2018 and decreased by 7.1 percent based on value. U.S. producers' market share decreased by 4.2 percentage points between 2016 and 2018. Subject and nonsubject import market shares increased by 4.1 and 0.1 percentage points, respectively, during the same period.

Table IV-4
SSA: U.S. shipments of domestic product, U.S. imports, and apparent U.S. consumption, 2016-18

Item	Calendar year		
	2016	2017	2018
	Quantity (short tons)		
U.S. producers' U.S. shipments	318,324	316,608	310,445
U.S. imports from.--			
Canada	38,883	54,381	55,387
Nonsubject sources	9,335	7,676	9,929
All import sources	48,218	62,058	65,315
Apparent U.S. consumption	366,542	378,666	375,760
	Value (1,000 dollars)		
U.S. producers' U.S. shipments	32,182	30,534	28,269
U.S. imports from.--			
Canada	4,683	5,895	5,775
Nonsubject sources	1,648	1,391	1,734
All import sources	6,332	7,285	7,509
Apparent U.S. consumption	38,514	37,819	35,778
	Share of quantity (percent)		
U.S. producers' U.S. shipments	86.8	83.6	82.6
U.S. imports from.--			
Canada	10.6	14.4	14.7
Nonsubject sources	2.5	2.0	2.6
All import sources	13.2	16.4	17.4
	Share of value (percent)		
U.S. producers' U.S. shipments	83.6	80.7	79.0
U.S. imports from.--			
Canada	12.2	15.6	16.1
Nonsubject sources	4.3	3.7	4.8
All import sources	16.4	19.3	21.0

Source: Compiled from data submitted in response to Commission questionnaires and official U.S. imports statistics using HTS statistical reporting number 2833.11.5010, accessed April 19, 2019.

Figure IV-2
SSA: Apparent U.S. consumption, 2016-18



Source: Compiled from data submitted in response to Commission questionnaires and official U.S. imports statistics using HTS statistical reporting number 2833.11.5010, accessed April 19, 2019.

PART V: PRICING DATA

FACTORS AFFECTING PRICES

Raw material costs

The main raw material for SSA is lake brine. U.S. producers pay mineral royalties to mineral owners at a particular rate based on various factors, known as the mineral royalty rate.¹ Raw material costs make up a minimal portion of the total cost of SSA, accounting for 10.6 percent of U.S. producers costs of goods sold in 2018.

Transportation costs to the U.S. market

Transportation costs for SSA shipped from Canada to the United States averaged 4.4 percent during 2018. These estimates were derived from official import statistics and represent the transportation and other charges on imports.²

U.S. inland transportation costs

Most responding U.S. producers (3 of 4) and all importers reported that they typically arrange transportation to their customers. Most U.S. producers reported that their U.S. inland transportation costs ranged from 35 to 100 percent while importers reported costs of *** percent.

PRICING PRACTICES

Pricing methods

As presented in table V-1, both U.S. producers and importers reported using transaction-by-transaction negotiations and contracts, with importers also reporting market prices set by ACS quality. Canadian producer and importer *** reported using *** and ***, and ***.

¹ Conference transcript, p. 80 (Kane).

² The estimated transportation costs were obtained by subtracting the customs value from the c.i.f. value of the imports for 2018 and then dividing by the customs value based on the HTS subheading 2833.11.5010.

Table V-1
SSA: U.S. producers' and importers' reported price setting methods, by number of responding firms¹

Method	U.S. producers	Importers
Transaction-by-transaction	3	2
Contract	4	1
Set price list	---	---
Other	---	2
Responding firms	4	4

¹ The sum of responses down may not add up to the total number of responding firms as each firm was instructed to check all applicable price setting methods employed.

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

U.S. producers sell the vast majority of their SSA under annual contracts, with some spot sales, while importer *** reported selling all their SSA under *** and *** contracts. As shown in table V-2, U.S. producers and importers reported their 2018 U.S. commercial shipments of SSA by type of sale.

Table V-2
SSA: U.S. producers' and importers' shares of U.S. commercial shipments by type of sale, 2018

* * * * *

Three of four responding U.S. producers reported no price renegotiation for their annual contracts,³ one reported fixing price, one reported fixing quantity, and two reported fixing both price and quantity. U.S. importer *** does ***.

Sales terms and discounts

U.S. producers and importers typically quote prices on a delivered basis. The majority of U.S. producers (3 of 4) and importers (3 of 3) 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 SSA products shipped to unrelated U.S. customers during 2016-18.

Product 1.-- Sodium sulfate anhydrous in bulk, hopper cars (approximately 100 short tons).

Product 2.-- Sodium sulfate anhydrous in bulk, trucks (approximately 25 short tons).

³ Two U.S. producers reported price renegotiation for their long-term contracts of SSA.

Product 3.-- Sodium sulfate anhydrous in 2,000 pound supersacs.

Product 4.—Sodium sulfate anhydrous in 50 pound bags.

Five U.S. producers and one importer *** provided usable pricing data for sales of the requested products, although not all firms reported pricing for all products for all quarters.^{4 5} Pricing data reported by these firms accounted for approximately 87.2 percent of U.S. producers' shipments of SSA and 100 percent of U.S. shipments of subject imports from Canada in 2018.

Price data for products 1-4 are presented in tables V-3 to V-6 and figures V-1 to V-4. Synthetic SSA distributors' Giles and Saltex prices are presented in Appendix D. Giles and Saltex make the ultimate sale of by-product SSA to end users.

Table V-3
SSA: Weighted-average f.o.b. prices and quantities of domestic and imported product 1 and margins of underselling/(overselling), by quarters, January 2016 through December 2018

* * * * *

Table V-4
SSA: Weighted-average f.o.b. prices and quantities of domestic and imported product 2 and margins of underselling/(overselling), by quarters, January 2016 through December 2018

* * * * *

Table V-5
SSA: Weighted-average f.o.b. prices and quantities of domestic and imported product 3 and margins of underselling/(overselling), by quarters, January 2016 through December 2018

* * * * *

Table V-6
SSA: Weighted-average f.o.b. prices and quantities of domestic and imported product 4¹ and margins of underselling/(overselling), by quarters, January 2016 through December 2018

* * * * *

Figure V-1
SSA: Weighted-average prices and quantities of domestic and imported product 1, by quarters, January 2016 through December 2018

⁴ 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.

⁵ Staff received pricing data for Product 1 from U.S. producer *** too late in the investigation to incorporate into Part V.

* * * * *

Figure V-2
SSA: Weighted-average prices and quantities of domestic and imported product 2, by quarters, January 2016 through December 2018

* * * * *

Figure V-3
SSA: Weighted-average prices and quantities of domestic and imported product 3, by quarters, January 2016 through December 2018

* * * * *

Figure V-4
SSA: Weighted-average prices and quantities of domestic and imported product 4, by quarters, January 2016 through December 2018

* * * * *

Price trends

In general, prices decreased during January 2016 to December 2018. Table V-7 summarizes the price trends, by country and by product. As shown in the table, domestic price decreases ranged from *** during 2016-18, while import price increases ranged from *** and decreases ranged from ***.

Table V-7
SSA: Summary of weighted-average f.o.b. prices for products 1-4 from the United States and Canada

* * * * *

Price comparisons

As shown in table V-8, prices for product imported from Canada were below those for U.S.-produced product in *** instances (*** short tons); margins of underselling ranged from *** percent.⁶ In the remaining *** instances (*** short tons), prices for product from Canada were between *** percent above prices for the domestic product.

⁶ No instances of underselling were reported for ***.

Table V-8
SSA: Instances of underselling/overselling and the range and average of margins, by product, January 2016 through December 2018

* * * * *

LOST SALES AND LOST REVENUE

The Commission requested that U.S. producers of SSA report purchasers where they experienced instances of lost sales or revenue due to competition from imports of SSA from Canada during 2016-18. All four responding U.S. producers reported that they had to either reduce prices or roll back announced price increases, and two reported that they had lost sales. Three U.S. producers submitted lost sales and lost revenue allegations identifying three firms where they lost sales or revenue (one consisting of lost sales allegations, one consisting of lost revenue allegations, and two consisting of both types of allegations).

Staff contacted three purchasers and received responses from ten purchasers. Responding purchasers reported purchasing 312,736 short tons of SSA during 2016-18 (table V-9).

During 2018, responding purchasers purchased or imported 74.5 percent from U.S. producers, 23.2 percent from Canada, and 2.3 percent from nonsubject countries. Of the responding purchasers, one reported decreasing purchases from domestic producers, one reported increasing purchases, one reported fluctuating purchases, and seven did not purchase any domestic product. Purchaser *** reported decreasing purchases of domestic product due to awarding a contract based on a sourcing bid.

All 10 responding purchasers reported that, since 2016, they had purchased imported SSA from Canada instead of U.S.-produced product. One purchaser reported that subject import prices were lower than U.S.-produced product, and one purchaser reported that price was a primary reason for the decision to purchase imported product rather than U.S.-produced product. *** estimated it purchased over *** of SSA from Canada instead of domestic product (table V-10). Purchasers identified quality, quantity, delivery and lead times, and supplier relationship as non-price reasons for purchasing imported rather than U.S.-produced product.

Of the 10 responding purchasers, one reported that U.S. producers had reduced prices by *** percent in order to compete with lower-priced imports from Canada (table V-11; four reported that they did not know). In describing the price reductions, purchaser *** indicated that U.S. producers missed bid deadlines and did not offer price reductions on multi-year contracts. It reported choosing the supplier with the best overall benefits when comparing U.S.-bids and Canadian bids.

Table V-9
SSA: Purchasers' responses to purchasing patterns

Purchaser	Purchases in 2016-18 (short tons)			Change in domestic share ² (pp, 2016-18)	Change in subject country share ² (pp, 2016-18)
	Domestic	Subject	All other ¹		
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
Totals	221,259	81,923	9,554	10.2	(9.1)

¹ Includes all other sources and unknown sources.

² Percentage points (pp) change: Change in the share of the firm's total purchases of domestic and/or subject country imports between first and last years.

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

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

Purchaser	Purchased imports instead of domestic (Y/N)	Imports priced lower (Y/N)	If purchased imports instead of domestic, was price a primary reason		
			Y/N	If Yes, quantity purchased instead of domestic (short tons)	If No, non-price reason
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
Totals	Yes--10; No--0	Yes--1; No--9	Yes--1; No--8	***	

Note – Purchaser *** reported that it was not certain whether imports were priced lower, stating, “for one customer, Canadian priced material worked out and I obtained the business and for another customer, domestic pricing offered by others was cheaper and I did not get the business.

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

Table V-11
SSA: Purchasers' responses to U.S. producer price reductions

Purchaser	U.S. producers reduced prices to compete with subject imports (Y/N)	If U.S. producers reduced prices	
		Estimated U.S. price reduction (percent)	Additional information, if available
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
Total / average	Yes--1; No--5	***	

Note – Purchaser *** also reported *** whether U.S. producers reduced prices to compete with subject imports.

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

PART VI: FINANCIAL EXPERIENCE OF U.S. PRODUCERS

BACKGROUND

Seven U.S. producers provided SSA financial results data to the Commission: CNR and SVM (natural SSA producers) and East Penn, Eco-Bat, Elementis, Evonik, and GEO (synthetic SSA producers).¹ Elementis and Evonik are part of larger, publicly held corporations. The remaining U.S. producers are privately held corporations.²

CNR is the only U.S. producer whose establishment operations are focused primarily on SSA. In contrast, Elementis and SVM are SSA co-product producers with SSA accounting for a *** component of their establishment operations. The remaining U.S. producers manufacture SSA as a byproduct.³

The primary and co-product sales volume of CNR, Elementis, and SVM represents *** percent of overall SSA sales volume with byproduct SSA producers accounting for the remaining *** percent.⁴

¹ With the exception of ***, U.S. producers reported their SSA financial results on the basis of generally accepted accounting principles (GAAP). The majority of U.S. producers also reported their financial results for calendar-year periods. The exception was ***, which reported on a fiscal year basis ending May 31.

² USITC preliminary-phase notes. ***.

³ With regard to the distinction between co-products (or joint products) and byproducts from an accounting perspective, “[j]oint products, also called main products, result from those manufacturing operations in which companies simultaneously produce two or more products of significant value. Byproducts are merely incidental products resulting from the processing of another product. The distinction between joint and byproducts is largely dependent on the market value of the products. Companies produce joint products in larger quantities. Joint products have larger market values and make a more meaningful contribution to revenue than byproducts.” Cost Accounting: Using a Cost Management Approach, L. Gayle Rayburn, Irwin, 1993, pp. 258-259. Inherent in this description is the notion that byproducts have value, albeit less than corresponding primary or co products.

Primary and co-products are routinely assigned fully-absorbed manufacturing costs, whereas byproducts are not. As such, measuring product-specific financial results through standard levels of profitability is only applicable to primary and co-product operations. For byproduct activity, financial results presented in this section of the report are limited to net byproduct revenue, which represents byproduct revenue less additional costs/expenses required to sell byproduct (see tables VI-4, VI-5, and VI-6).

⁴ The designation “overall” refers to combined primary and co-product SSA sales and byproduct SSA sales. Narrative in this section of the report, however, will generally refer to total category-specific amounts; e.g., primary and co-product SSA versus byproduct SSA.

*** accounted for the largest company-specific share of total sales volume (*** percent) followed by *** and *** (each separately accounting for *** percent). Company-specific byproduct share of total sales volume ranged from a low of *** percent (***) to a high of *** percent (***)

OPERATIONS ON SSA

Table VI-1 presents income-and-loss data for U.S. producers' primary and co-product SSA operations. Corresponding changes in average per short ton values and selected primary and co-product financial information by firm are presented in tables VI-2 and VI-3, respectively.⁵ Financial results information specific to byproduct SSA operations is presented in table VI-4 (see footnote 3). Corresponding changes in average per short ton values and selected company-specific byproduct financial results information are presented in tables VI-5 and VI-6, respectively.

Revenue

The substantial majority of overall SSA revenue represents commercial sales with relatively small amounts classified as transfers to related firms.⁶ Given the predominance of commercial sales, a single revenue line item is presented in relevant tables.⁷

Quantity

The two categories of SSA revenue (primary/co-product SSA and byproduct SSA), followed different directional patterns of sales volume: total primary and co-product sales volume declined in 2017 and then increased in 2018, to a level close to 2016 sales volume, while total byproduct sales volume increased in 2017 and declined in 2018. Within each category, U.S. producers were mixed in terms of the directional pattern and magnitude of sales volume change. Among the primary and co-product producers, *** reported declines in sales volume throughout the period. *** overall sales volume, the ***, declined in 2017 and then increased in 2018.⁸ *** sales volume declined somewhat in 2017 and then increased in 2018. In contrast with ***, *** represent a relatively small share of its total sales.

Value

Table VI-3 shows that *** and *** reported average per short ton sales values that were in a similar range, while *** average per short ton sales values were lower. The pattern of ***

⁵ Given differences in company-specific average sales values, which were attributed primarily to differences in total freight costs, a variance analysis is not presented in this section of the report.

⁶ ***, *** U.S. producer questionnaire, response to II-9.

⁷ Giles/Saltex makes the ultimate sale of byproduct SSA to end users (see also footnotes 11 and 12).

⁸ As described by SVM, "Due to logistics, export markets have always been important for SVM's sodium sulfate business. From SVM's perspective, the variations in export volume over the period would be considered to be normal." Petitioners' postconference brief (Exhibit 1), p. 14. ***.

average per short ton sales values (declining in 2017 and then increasing in 2018, but remaining below the level reported in 2016) reflects, at least in part, an increasing share of ***.⁹ For

Table VI-1
SSA: Financial results of U.S. producers' primary and co-product operations, 2016-18

Item	Calendar year		
	2016	2017	2018
	Quantity (short tons)		
Total net sales	430,415	417,411	429,232
	Value (actual dollars)		
Total net sales	34,313,479	29,305,420	29,083,538
Cost of goods sold.--			
Raw materials	3,709,117	3,547,440	3,869,165
Direct labor	6,682,441	6,618,876	6,710,648
Other factory costs	25,254,420	24,302,589	25,858,335
Total COGS	35,645,978	34,468,905	36,438,148
Gross profit or (loss)	(1,332,499)	(5,163,485)	(7,354,610)
SG&A expense	2,394,552	2,267,701	2,333,308
Operating income or (loss)	(3,727,051)	(7,431,186)	(9,687,918)
Interest expense	***	***	***
All other expenses	***	***	***
All other income	***	***	***
Net income or (loss)	(3,569,656)	(7,593,978)	(9,615,118)
Depreciation/amortization	2,364,583	2,270,032	2,402,829
Cash flow	(1,205,073)	(5,323,946)	(7,212,289)
	Ratio to net sales (percent)		
Cost of goods sold.--			
Raw materials	10.8	12.1	13.3
Direct labor	19.5	22.6	23.1
Other factory costs	73.6	82.9	88.9
Average COGS	103.9	117.6	125.3
Gross profit or (loss)	(3.9)	(17.6)	(25.3)
SG&A expense	7.0	7.7	8.0
Operating income or (loss)	(10.9)	(25.4)	(33.3)
Net income or (loss)	(10.4)	(25.9)	(33.1)
	Ratio to total COGS (percent)		
Cost of goods sold.--			
Raw materials	10.4	10.3	10.6
Direct labor	18.7	19.2	18.4
Other factory costs	70.8	70.5	71.0

Table continued on next page.

⁹ *** average per short ton U.S. commercial shipment value was lower but in the same general range as *** average per short ton commercial sales value. As such, *** lower overall average sales value is largely attributable to its larger share of ***. With regard to its exports, SVM stated, "From our plant in California, SVM ships product by rail direct to the port. Net export values can be and typically are lower than U.S. shipments due to logistics costs and market factors in various regions of the world. Export shipments have both inland and ocean freight versus SVM's typical one freight rate in the U.S." Ibid.

Table VI-1—Continued

SSA: Financial results of U.S. producers' primary and co-product operations, 2016-18

Item	Calendar year		
	2016	2017	2018
	Ratio to total COGS (percent)		
Cost of goods sold.--			
Raw materials	10.4	10.3	10.6
Direct labor	18.7	19.2	18.4
Other factory costs	70.8	70.5	71.0
	Unit value (dollars per short ton)		
Total net sales	79.72	70.21	67.76
Cost of goods sold.--			
Raw materials	8.62	8.50	9.01
Direct labor	15.53	15.86	15.63
Other factory costs	58.67	58.22	60.24
Average COGS	82.82	82.58	84.89
Gross profit	(3.10)	(12.37)	(17.13)
SG&A expense	5.56	5.43	5.44
Operating income or (loss)	(8.66)	(17.80)	(22.57)
Net income or (loss)	(8.29)	(18.19)	(22.40)
	Number of firms reporting		
Operating losses	***	***	***
Net losses	***	***	***
Data	3	3	3

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

Table VI-2

SSA: Changes in average per short ton values of U.S. producers' primary and co-product operations, 2016-18

Item	Between fiscal years		
	2016-18	2016-17	2017-18
	Change in AUVs (dollars per short ton)		
Total net sales	(11.96)	(9.51)	(2.45)
Cost of goods sold.--			
Raw materials	0.40	(0.12)	0.52
Direct labor	0.11	0.33	(0.22)
Other factory costs	1.57	(0.45)	2.02
Average COGS	2.07	(0.24)	2.31
Gross profit	(14.04)	(9.27)	(4.76)
SG&A expense	(0.13)	(0.13)	0.00
Operating income or (loss)	(13.91)	(9.14)	(4.77)
Net income or (loss)	(14.11)	(9.90)	(4.21)

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

Table VI-3

SSA: Financial results U.S. producers' primary and co-product operations, by firm, 2016-18

Item	Calendar year		
	2016	2017	2018
	Total net sales (short tons)		
CNR (natural primary product)	***	***	***
SVM (natural co-product)	***	***	***
Natural production sales volume	***	***	***
Elementis (synthetic co-product)	***	***	***
Total net sales quantity	430,415	417,411	429,232
	Total net sales (actual dollars)		
CNR (natural primary product)	***	***	***
SVM (natural co-product)	***	***	***
Natural production sales value	***	***	***
Elementis (synthetic co-product)	***	***	***
Total net sales value	34,313,479	29,305,420	29,083,538
	Unit net sales value (dollars per short ton)		
CNR (natural primary product)	***	***	***
SVM (natural co-product)	***	***	***
Natural production average sales value	***	***	***
Elementis (synthetic co-product)	***	***	***
Total average sales value	80	70	68
	Unit raw materials (dollars per short ton)		
CNR (natural primary product)	***	***	***
SVM (natural co-product)	***	***	***
Natural production raw materials costs	***	***	***
Elementis (synthetic co-product)	***	***	***
Total average raw materials costs	9	8	9
	Unit direct labor (dollars per short ton)		
CNR (natural primary product)	***	***	***
SVM (natural co-product)	***	***	***
Natural production average direct labor	***	***	***
Elementis (synthetic co-product)	***	***	***
Total average direct labor cost	16	16	16
	Unit other factory costs (dollars per short ton)		
CNR (natural primary product)	***	***	***
SVM (natural co-product)	***	***	***
Natural production average other factory costs	***	***	***
Elementis (synthetic co-product)	***	***	***
Total average other factory costs	59	58	60

Table continued on next page.

Table VI-3—Continued

SSA: Financial results U.S. producers' primary and co-product operations, by firm, 2016-18

Item	Calendar year		
	2016	2017	2018
	Unit COGS (dollars per short ton)		
CNR (natural primary product)	***	***	***
SVM (natural co-product)	***	***	***
Natural production average COGS	***	***	***
Elementis (synthetic co-product)	***	***	***
Total average COGS	83	83	85
	Gross profit or (loss) (dollars)		
CNR (natural primary product)	***	***	***
SVM (natural co-product)	***	***	***
Natural production gross profit or (loss)	***	***	***
Elementis (synthetic co-product)	***	***	***
Total gross profit or (loss)	(1,332,499)	(5,163,485)	(7,354,610)
	Gross profit or (loss) to net sales ratio (percent)		
CNR	***	***	***
SVM	***	***	***
Natural production gross profit or (loss) ratio	***	***	***
Elementis (synthetic co-product)	***	***	***
Total gross profit or (loss) ratio	(3.9)	(17.6)	(25.3)
	SG&A expense (dollar)		
CNR	***	***	***
SVM	***	***	***
Natural production SG&A expenses	***	***	***
Elementis (synthetic co-product)	***	***	***
Total SG&A expenses	2,394,552	2,267,701	2,333,308
	SG&A expense to net sales ratio (percent)		
CNR	***	***	***
SVM	***	***	***
Natural production SG&A expense ratio	***	***	***
Elementis (synthetic co-product)	***	***	***
Total SG&A expenses ratio	7.0	7.7	8.0
	Operating income or (loss) (dollars)		
CNR	***	***	***
SVM	***	***	***
Natural production operating income or (loss)	***	***	***
Elementis (synthetic co-product)	***	***	***
Total operating income or (loss)	(3,727,051)	(7,431,186)	(9,687,918)

Table continued on next page.

Table VI-3—Continued

SSA: Financial results U.S. producers' primary and co-product operations, by firm, 2016-18

Item	Calendar year		
	2016	2017	2018
	Operating income or (loss) to net sales (percent)		
CNR	***	***	***
SVM	***	***	***
Natural production operating income or (loss) ratio	***	***	***
Elementis (synthetic co-product)	***	***	***
Total gross profit or (loss)	(10.9)	(25.4)	(33.3)
	Net income or (loss) (dollars)		
CNR	***	***	***
SVM	***	***	***
Natural production net income or (loss)	***	***	***
Elementis (synthetic co-product)	***	***	***
Total net income or (loss)	(3,569,656)	(7,593,978)	(9,615,118)
	Net income or (loss) to net sales ratio (percent)		
CNR	***	***	***
SVM	***	***	***
Natural production operating income or (loss) ratio	***	***	***
Elementis (synthetic co-product)	***	***	***
Total net income or (loss) ratio	(10.4)	(25.9)	(33.1)

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

Table VI-4

SSA: Financial results of U.S. producers' byproduct operations, 2016-18

Table continued on next page.

* * * * *

Table VI-5

SSA: Changes in U.S. producers' average per short ton byproduct values, 2016-18

* * * * *

Table VI-6

SSA: Financial results of U.S. producers' byproduct operations, by firm, 2016-18

* * * * *

primary and co-product producers as a whole, average per short ton sales values declined throughout the period. Company-specific differences in average per short ton sales value, in general, were attributed to differences in freight cost with product and customer mix not considered important explanatory factors.¹⁰

Average per short byproduct revenue, which was lower compared to primary and co-product average per short ton sales values, appears to reflect *** for most byproduct producers (see table VI-4).¹¹ Since byproduct producers do not sell SSA directly into the market, instead selling to Giles/Saltex,¹² average per short ton byproduct revenue and primary and co-product average per short ton sales values are not directly comparable.

Cost of goods sold and gross profit or loss

Raw materials

For CNR and SVM, the two natural SSA producers, brine is a primary raw material with related costs including payments for corresponding mineral rights and royalties.^{13 14} The corresponding share of natural producers' raw material costs to total cost of goods sold (COGS) is relatively low, ranging from *** percent of total COGS (2016) to *** percent (2018).

Synthetic co-product producer Elementis, whose raw material cost share ranged from *** percent of its total COGS (2018) to *** percent (2017), identified its raw material and

¹⁰ Petitioners' postconference brief, p. 21 n 56.

¹¹ During the staff conference, members of the petitioners' panel provided testimony that the byproduct revenue received by byproduct producers is analogous to revenue sharing and is not a fixed amount. As described by a Giles/Saltex official, "Our agreement with our producers is that of a revenue-sharing, where our compensation is based on how high the average sales price is." Conference transcript, p. 29 (Wrenn). Further discussion suggested that the manner in which the byproduct producers reported revenue is incorrect inasmuch as it appears to reflect a flat amount for revenue. Conference transcript, p. 112 (Rogers). Petitioners' postconference brief, p. 21 (footnote 66). As shown in table VI-6, *** of the byproduct producers appear to have reported revenue in a *** manner; i.e., revenue appears to reflect *** throughout the period.

¹² As described by a Giles/Saltex official, "We are responsible for all sales and prices as well as directing where each ton of production is shipped as it leaves the co-production (sic) facilities, responsible for all rail car costs and lease, as well as other transportation costs. We have a fiduciary responsibility to our producers to move 100 percent of their production in a way that is best for them, and a large part of that is selling at the highest prices the market can support." Conference transcript, p. 29 (Wrenn).

¹³ Conference transcript, p. 80 (Kane), p. 99 (Ford). ***. Petitioners' postconference brief (Exhibit 1), p. 12. USITC preliminary-phase notes.

¹⁴ The brine used by CNR and SVM is different in terms of mineral concentration, which generally helps to explain why SVM produces SSA along with multiple other co-products and CNR produces SSA as a primary product. Conference transcript, pp. 97-98 (Kane, Ford).

related costs as ***.¹⁵ Not surprisingly, given the relatively *** natural raw material cost share noted above, *** reported the *** average per short ton raw material cost (see table VI-3).

Direct labor and other factory costs

For primary and co-product producers, other factory costs account for the largest share of total COGS, on an overall basis ranging from *** percent of total COGS (2017) to *** percent (2018). This relatively large share is generally consistent with the description of SSA production as being a capital-intensive manufacturing process.¹⁶ Other factory costs reportedly did not change substantially during 2016-18 and were described as primarily representing ***.¹⁷

Table VI-3 shows that the two natural SSA producers, CNR and SVM, were in a *** range with respect to average per short ton other factory costs, while Elementis, the synthetic co-product SSA producer, reported a somewhat *** amount.¹⁸ Of the three producers, *** average per short ton other factory costs moved within the ***.¹⁹

While direct labor as a share of costs was *** for CNR and SVM, the two natural producers, ranging from *** percent of total natural COGS (2017) to *** percent (2018), it was *** for synthetic producer Elementis, whose direct labor cost as a share of its total COGS ranged from *** percent of its total COGS (2016) to *** percent (2018).²⁰ Based on conference testimony, labor costs in general are a fixed component and do not fluctuate with production.²¹

For primary and co-product U.S. producers, both as a whole and on a company-specific basis, average per short ton direct labor costs remained within a relatively narrow range throughout the period.

¹⁵ *** U.S. producer questionnaire, response to III-4.B.

¹⁶ As described by a CNR company official, "Sodium sulfate production is a highly capital intensive business. The equipment we use to produce, store, package, and ship the product is expensive and requires continuous investment or maintenance and repairs. As a result, the fixed cost of production sites and facilities, as well as the cooling facilities are significant. To cover these costs and to remain a viable business, sodium sulfate producers must maintain capital utilization levels, which must, at a minimum, allow for the recoupment of costs." Conference transcript, p. 21 (Kane). As further described by CNR, ***. CNR U.S. producer questionnaire, response to III-15.

¹⁷ Petitioners' postconference brief (Exhibit 1), p. 13.

¹⁸ Elementis' average per short ton other factory costs was *** in 2018 compared to 2017. In general, this confirms an Elementis company official's description of the limited overall impact of the 2018 hurricane-related closure on the company's SSA production. Conference transcript, p. 89 (Cortese). ***.

¹⁹ A CNR company official confirmed that, given the level of fixed costs, average manufacturing costs fluctuate in conjunction with changes in production. Conference transcript, pp. 99-100 (Kane). ***.

²⁰ ***. USITC auditor preliminary-phase notes.

²¹ Conference transcript, p. 100 (Kane).

Cost of goods sold

Table VI-3 shows that *** reported the lowest average per short ton COGS throughout the period, followed by *** and ***.²² In 2017, the difference between the two natural producers' average per short ton COGS ***, reflecting *** SSA production and somewhat lower average conversion costs (combined direct labor and other factory costs). In 2018, the difference widened in conjunction with *** and corresponding higher average per short ton conversion costs (see footnote 19).

Gross profit or loss

On a company-specific basis, table VI-3 shows that the financial performance of primary and co-product U.S. producers was similar in some ways but not uniform.²³ Most notably and in contrast with ***, *** reported *** throughout the period.²⁴ In contrast and while *** reported declines in absolute gross profit and gross profit ratios (total gross profit divided by total revenue), its gross results remained positive throughout the period. ***, which generated gross profit in 2016 and 2017, reported a more rapid decline in its average sales values. In conjunction with higher average per short ton COGS, *** transitioned to a gross loss in 2018.

On an overall basis, primary and co-product gross profit was negative throughout the period. The increasing level of gross losses reflects declines in average per short ton sales values and average per short ton COGS that were essentially static in 2016 and 2017 and then increased in 2018.

SG&A expenses and operating income or loss

Company-specific primary and co-product selling, general, and administrative (SG&A) expense ratios (total SG&A expenses divided by total revenue) were in a similar range for *** and ***, but diverged as the period progressed. *** reported somewhat lower and declining SG&A expense ratios.²⁵ To the extent that *** reported *** throughout the period, assigned SG&A expenses effectively determined the level of its ***.

²² As presented in table VI-4, byproduct manufacturing/processing costs do not reflect COGS; i.e., they instead reflect incremental costs/expenses associated with placing byproduct SSA into a form that can be sold (see footnote 3). Table VI-4 shows that, on an overall basis, average per short ton byproduct manufacturing/processing costs/expenses remained within a relatively narrow range.

²³ As shown in table VI-6, net byproduct revenue (i.e., gross sales value less incremental costs/expenses necessary to sell the product) was not positive for all producers. In part, this may indicate that byproduct producers do not routinely evaluate or measure their byproduct financial results in the manner requested by the Commission and that reported information is largely estimated. Additionally and while byproduct producers presumably do attempt to maximize net SSA byproduct revenue, the considerations and motivations of byproduct producers appear to be somewhat different as compared to those of primary and co-product producers.

²⁴ ***. April 25, 2019 e-mail from *** on behalf of ***.

²⁵ ***.

As indicated by its positive operating results in 2016 and 2017, *** SG&A expense ratios were in a range that was compatible with operating income. With its transition to a gross loss in 2018, *** higher SG&A expense ratio magnified the corresponding operating loss in that year.²⁶

While *** SG&A expense ratios increased modestly during the period, reflecting a combination of somewhat higher total SG&A expenses and lower overall revenue, this had a limited impact on the pattern of corresponding operating results; i.e., *** operating results were largely a function of the pattern of its gross results.

For primary and co-product producers as a whole, total SG&A expenses remained within a relatively narrow range, declining and increasing in 2017 and 2018, respectively, in conjunction with sales volume. Corresponding SG&A expense ratios increased throughout the period, reflecting a faster decline in revenue compared to SG&A expenses in 2017 and then a further decline in revenue 2018 and increase in SG&A expenses. While SG&A expenses ratios increased somewhat during the period, the pattern of increasing primary and co-product total operating losses primarily reflects increasing gross losses.

Interest expense, other expenses, other income, and net income or loss

As presented in table VI-1, *** accounts for all interest expense reported by primary and co-product producers, while amounts reported for other expenses and other income were reported by both *** and ***. *** reported no expenses or income below operating results.

The relatively small total amounts reported for interest expense, other expenses, and other income had a limited impact on the level of net losses reported by primary and co-product producers. As such, primary and co-product producers' total net losses were close to the magnitude of corresponding operating losses and followed the same directional pattern.²⁷

CAPITAL EXPENDITURES AND RESEARCH AND DEVELOPMENT EXPENSES

Table VI-7 presents U.S. producers' capital expenditures and research and development (R&D) expenses related to primary, co-product, and byproduct operations.

With the exception of ***, all U.S. producers reported capital expenditures during the period. On an overall basis, *** accounted for the majority (**% percent of total capital expenditures),²⁸ followed by *** (**% percent),²⁹ and *** (**% percent).³⁰ Byproduct producers *** accounted for **% percent and **% percent of total capital expenditures, respectively.³¹

Table VI-7 shows that byproduct producer *** U.S. producer to report R&D expenses during the period.

²⁶ ***.

²⁷ ***. *** U.S. producer questionnaires, response to III-11.

²⁸ ***. *** U.S. producer questionnaire, response to III-15.

²⁹ ***. *** U.S. producer questionnaire, response to III-15.

³⁰ ***. *** U.S. producer questionnaire, response to III-15.

³¹ ***. *** U.S. producer questionnaire, response to III-15. ***.

Table VI-7

SSA: U.S. producers' (primary and co-product and byproduct) capital expenditures and research and development (R&D) expenses, by firm, 2016-18

Item	Calendar year		
	2016	2017	2018
	Capital expenditures (actual dollars)		
CNR	***	***	***
SVM	***	***	***
Natural production capital expenditures	***	***	***
Elementis (synthetic co-product)	***	***	***
Capital expenditures (primary and co-product operations)	***	***	***
East Penn	***	***	***
Eco-Bat	***	***	***
Evonik	***	***	***
GEO	***	***	***
Capital expenditures (byproduct operations)	***	***	***
Total capital expenditures	1,199,566	2,369,193	5,192,703
	Research and development expenses (actual dollars)		
CNR	***	***	***
SVM	***	***	***
Natural production capital expenditures	***	***	***
Elementis (synthetic co-product)	***	***	***
Capital expenditures (primary and co-product operations)	***	***	***
East Penn	***	***	***
Eco-Bat	***	***	***
Evonik	***	***	***
GEO	***	***	***
Capital expenditures (byproduct operations)	***	***	***
Total capital expenditures	***	***	***

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

ASSETS AND RETURN ON ASSETS

Table VI-8 presents data on primary and co-product U.S. producers' total net assets and operating return on net assets.³²

³² With respect to a company's overall operations, staff notes that a total asset value (i.e., the bottom line value on the asset side of a company's balance sheet) reflects an aggregation of a number of current and non-current assets, which, in many instances, are not product specific. Allocation factors were presumably necessary to report total asset values specific to U.S. producers' primary and co-product operations. The ability of U.S. producers to assign total asset values to discrete product lines affects the meaningfulness of operating return on net assets.

Table VI-8

SSA: U.S. producers' (primary and co-product) total net assets and operating return on net assets, 2016-18

Firm	Calendar year		
	2016	2017	2018
	Total net assets (actual dollars)		
CNR	***	***	***
SVM	***	***	***
Natural production total assets	***	***	***
Elementis (synthetic co-product)	***	***	***
Total net assets	25,392,245	26,235,089	28,858,013
	Operating return on assets (percent)		
CNR	***	***	***
SVM	***	***	***
Natural production operating return on assets	***	***	***
Elementis	***	***	***
Total operating return on assets	(14.7)	(28.3)	(33.6)

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

CAPITAL AND INVESTMENT

The Commission requested the U.S. producers of SSA (primary/co-product and byproduct) to describe any actual or potential negative effects on their return on investment or their growth, investment, ability to raise capital, existing development and production efforts (including efforts to develop a derivative or more advanced version of the product), or the scale of capital investments as a result of imports of SSA from Canada. Table VI-9 tabulates the responses on actual negative effects on investment, growth and development, as well as anticipated negative effects. Table VI-10 presents the narrative responses of the U.S. producers regarding actual and anticipated negative effects on investment, growth and development.

Table VI-9

SSA: Negative effects of imports from subject sources on investment, growth, and development since January 1, 2016

* * * * *

Table VI-10

SSA: Narrative responses of U.S. producers regarding actual and anticipated negative effects of imports from subject sources on investment, growth, and development since January 1, 2016

* * * * *

Byproduct producers' reported asset information generally appeared to be overly broad and not limited, as requested in the U.S. producer questionnaire, to assets specific to further byproduct processing. Byproduct asset information is therefore not presented in table VI-8. USITC auditor preliminary-phase notes.

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 factors¹--

- (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.

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."

THE INDUSTRY IN CANADA

The Commission issued foreign producers' or exporters' questionnaires to two firms believed to produce and/or export SSA from Canada.³ Usable responses to the Commission's questionnaire were received from both firms: SMMI, a natural SSA producer, and TODA Advanced Chemicals ("TODA"), a synthetic SSA producer. SMMI is the sole exporter of SSA to the United States from Canada, and accounted for all exports to the United States between 2016 and 2018.⁴ The production of SSA in Canada reported in questionnaires accounts for all known production of SSA in Canada. Table VII-1 presents information on the SSA operations of the responding producers and exporters in Canada.

Table VII-1
SSA: Summary data for producers in Canada, 2018

* * * * *

Changes in operations

As presented in table VII-2, producers in Canada reported several operational and organizational changes since January 1, 2016. In addition, SMMI reported that it is "****."⁵

Table VII-2
SSA: Canadian producers' reported changes in operations, since January 1, 2016

* * * * *

Operations on SSA

Table VII-3 presents information on the SSA operations of the responding producers and exporters in Canada. Capacity increased by *** percent during 2016-18; this increase is due to ***. Production similarly increased by *** percent during the same period. Reported production in 2016 was lower compared to 2017 and 2018 because SMMI experienced poor harvests of its naturally-occurring raw material (glauber salt), during 2014 and 2015, which affected its production levels in 2015 and 2016.⁶ SMMI attributed this to abnormal weather conditions, that together with already depleted sodium sulfate reserves as a result of a caustic soda production feasibility study, dramatically reduced the amount of sodium sulfate that

³ These firms were identified through a review of information submitted in the petition and contained in *** records.

⁴ Conference transcript, p. 9 (Bird); and Respondent's postconference brief, p. 2.

⁵ SMMI's foreign producer questionnaire response at II-2b.

⁶ SMMI's production volume each year is directly tied to the weather conditions during harvest (or brining) season for that year. Conference transcript (McCann), pp. 132-134.

SMMI could produce in 2015 and 2016.⁷ Capacity is projected to remain the same in 2019 and 2020, while production is projected to increase by *** percent from 2018 levels. The projected increase in production is also due to ***. Home market shipments and exports to the United States both increased during 2016-18, by *** and *** percent, respectively. Home market shipments as a share of total shipments increased from *** percent to *** percent between 2016 and 2018 and are projected to increase in 2019 and 2020. SSMI reported that it acquired a new Canadian customer in 2018, which resulted in a significant increase in SMMI's home market shipments from 2017-18; SMMI also noted that its forecasted growth in home market shipments is mostly due to the growth in sales from this new Canadian customer.⁸ Exports to the United States as a share of total shipments decreased from *** percent to *** percent during the same period and are projected to decrease slightly from 2018 levels.

Table VII-3
SSA: Data on industry in Canada, 2016-18 and projected 2019 and 2020

* * * * *

Firms were asked about their constraints on capacity and their ability to switch production from SSA to other products. SMMI testified that its capacity is limited by the amount of lake brine it can withdraw on an annual basis during its harvest season (or brining season), typically in November to February, and is dependent on weather conditions. SMMI also noted that there has been a slow decline in the average harvest volumes, which has limited its overall production capacity.⁹ TODA reported that its production of SSA, as a by-product, is constrained by ***.

Alternative products

As mentioned previously, SSA, whether naturally or synthetically produced, is the only product produced on the same equipment and machinery.

Exports

According to GTA, the United States accounted for virtually all exports from Canada of disodium sulfate, a category which contains predominantly in-scope SSA (table VII-4).

⁷ Conference transcript (McCann), pp. 132-136. Because of its depleted production levels, SMMI purchased SSA from U.S. producer SVM in 2015 and 2016 so that it could continue to supply its U.S. customers. Most of this purchased SSA was delivered directly from SVM's plant to SMMI's customers. Conference transcript (McCann), p. 135.

⁸ Respondent's postconference brief, "Answers to the Commission's staff questions," p. 14.

⁹ Conference transcript, pp. 133-134 (McCann).

Table VII-4
SSA: Exports from Canada, 2016-18

Destination market	Calendar year		
	2016	2017	2018
	Quantity (short tons)		
Canada exports to the United States	40,051	55,254	55,429
Canada exports to other major destination markets.--			
Algeria	38	12	12
Hungary	---	---	1
Hong Kong	---	---	0
Turkey	---	0	0
Poland	0	---	---
All other destination markets	---	---	---
Total Canada exports	40,090	55,266	55,442
	Value (1,000 dollars)		
Canada exports to the United States	4,811	6,358	5,781
Canada exports to other major destination markets.--			
Algeria	4	3	3
Hungary	---	---	0
Hong Kong	---	---	0
Turkey	---	0	0
Poland	0	---	---
All other destination markets	---	---	---
Total Canada exports	4,815	6,360	5,784
	Unit value (dollars per short ton)		
Canada exports to the United States	120	115	104
Canada exports to other major destination markets.--			
Algeria	109	227	230
Hungary	---	---	232
Hong Kong	---	---	225
Turkey	---	235	232
Poland	105	---	---
All other destination markets	---	---	---
Total Canada exports	120	115	104
	Share of quantity (percent)		
Canada exports to the United States	99.9	100.0	100.0
Canada exports to other major destination markets.--			
Algeria	0.1	0.0	0.0
Hungary	---	---	0.0
Hong Kong	---	---	0.0
Turkey	---	0.0	0.0
Poland	0.0	---	---
All other destination markets	---	---	---
Total Canada exports	100.0	100.0	100.0

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 2833.11 as reported by Statistics Canada in the Global Trade Atlas database, accessed April 19, 2019.

U.S. INVENTORIES OF IMPORTED MERCHANDISE

Table VII-5 presents data on U.S. importers' reported inventories of SSA. ***. Inventories of subject imports increased by *** percent between 2016 and 2018. The ratio of subject importers' inventories to shipments of imports ranged from *** percent and *** percent during 2016-18, while the ratio of inventories to shipments of imports from nonsubject sources ranged from *** percent to *** percent during the same period.

Table VII-5
SSA: U.S. importers' inventories, 2016-18 and projected 2019 and 2020

* * * * *

U.S. IMPORTERS' OUTSTANDING ORDERS

The Commission requested importers to indicate whether they imported or arranged for the importation of SSA after December 31, 2018. Five of seven responding firms indicated that they had arranged such imports; *** accounted for all arranged imports from Canada. These data are presented in table VII-6.

Table VII-6
SSA: Arranged imports, January 2019 through December 2019

* * * * *

ANTIDUMPING OR COUNTERVAILING DUTY ORDERS IN THIRD-COUNTRY MARKETS

Both the petitioners and respondents state that they are unaware of any antidumping or countervailing duty orders in third-country markets.¹⁰ There are no known third-country orders.

INFORMATION ON NONSUBJECT COUNTRIES

Table VII-7 presents the leading exports of disodium sulfate (HS 2833.11), a category that consists predominantly of in-scope SSA. Total world exports of disodium sulfate increased by 31.8 percent between 2016 and 2018. The leading exporters of disodium sulfate were China, Spain, and the United States, accounting for 61.4 percent, 25.1 percent, and 5.0 percent in 2018, respectively. Canada was the seventh largest exporter and accounted for less than one percent of global exports in 2018.

¹⁰ Conference transcript, p. 62 (Trendl), p. 173 (Heffner).

Table VII-7

SSA: Global exports by exporter, 2016-18

Exporter	Calendar year		
	2016	2017	2018
	Quantity (short tons)		
United States	156,218	234,915	313,694
Canada	40,090	55,266	55,442
All other major reporting exporters.--			
China	4,005,347	3,547,441	3,858,928
Spain	1,403,204	1,559,109	1,578,467
India	112,635	116,678	111,719
Turkey	15,268	49,693	92,623
France	62,645	67,252	87,724
Indonesia	56,746	44,520	44,299
Sweden	35,203	46,645	39,193
Mexico	18,245	17,295	26,950
Taiwan	36,829	18,924	19,038
Slovenia	8,510	11,072	8,173
All other exporters	77,555	76,770	53,146
Total global exports	6,028,496	5,845,579	6,289,397
	Value (1,000 dollars)		
United States	15,468	22,371	21,491
Canada	4,815	6,360	5,784
All other major reporting exporters.--			
China	228,896	239,468	330,625
Spain	129,139	130,928	137,828
India	9,163	9,649	11,650
Turkey	1,516	4,589	9,488
France	7,606	7,268	9,209
Indonesia	2,669	2,762	3,295
Sweden	2,312	2,704	3,110
Mexico	3,108	2,527	3,574
Taiwan	3,315	2,374	2,507
Slovenia	1,074	1,291	935
All other exporters	14,749	17,392	19,024
Total global exports	423,831	449,683	558,522

Table continued on next page.

Table VII-7--Continued

SSA: Global exports by exporter, 2016-18

Exporter	Calendar year		
	2016	2017	2018
	Unit value (dollars per short ton)		
United States	99	95	69
Canada	120	115	104
All other major reporting exporters.--			
China	57	68	86
Spain	92	84	87
India	81	83	104
Turkey	99	92	102
France	121	108	105
Indonesia	47	62	74
Sweden	66	58	79
Mexico	170	146	133
Taiwan	90	125	132
Slovenia	126	117	114
All other exporters	190	227	358
Total global exports	70	77	89
	Share of quantity (percent)		
United States	2.6	4.0	5.0
Canada	0.7	0.9	0.9
All other major reporting exporters.--			
China	66.4	60.7	61.4
Spain	23.3	26.7	25.1
India	1.9	2.0	1.8
Turkey	0.3	0.9	1.5
France	1.0	1.2	1.4
Indonesia	0.9	0.8	0.7
Sweden	0.6	0.8	0.6
Mexico	0.3	0.3	0.4
Taiwan	0.6	0.3	0.3
Slovenia	0.1	0.2	0.1
All other exporters	1.3	1.3	0.8
Total global exports	100.0	100.0	100.0

Table continued on next page.

Table VII-7--Continued

SSA: Global exports by exporter, 2016-18

Exporter	Calendar year		
	2016	2017	2018
	Share of value (percent)		
United States	3.6	5.0	3.8
Canada	1.1	1.4	1.0
All other major reporting exporters.--			
China	54.0	53.3	59.2
Spain	30.5	29.1	24.7
India	2.2	2.1	2.1
Turkey	0.4	1.0	1.7
France	1.8	1.6	1.6
Indonesia	0.6	0.6	0.6
Sweden	0.5	0.6	0.6
Mexico	0.7	0.6	0.6
Taiwan	0.8	0.5	0.4
Slovenia	0.3	0.3	0.2
All other exporters	3.5	3.9	3.4
Total global exports	100.0	100.0	100.0

Source: Official exports statistics under HS subheading 2833.11 reported by various national statistical authorities in the Global Trade Atlas database, accessed April 19, 2019.

According to published sources, global capacity of SSA in 2016 was ***, global production was ***, and global apparent consumption was ***, shown in table VII-8.¹¹ The average annual growth rate from 2016–21 is forecast to be *** percent.¹² Capacity in 2016 was *** for China, *** for Europe, *** for Mexico, and *** for Japan.¹³ Consumption of SSA in 2016 was *** for China, *** for Europe, *** for Mexico, and *** for Japan, as shown in table VII-8. Globally, SSA is consumed primarily in detergents ***, sodium sulfide manufacturing ***, glass production ***, kraft pulp ***, and textile dyeing and printing ***, as shown in table VII-9.¹⁴

Table VII-8

SSA: Supply/demand for SSA by Major Regions, 2016 (thousands of metric tons)

* * * * *

Table VII-9

SSA: World consumption of sodium sulfate by end use, 2016

* * * * *

¹¹ *Chemical Economics Handbook: Sodium Sulfate*, IHS, November 2016, p. 5.

¹² *Chemical Economics Handbook: Sodium Sulfate*, IHS, November 2016, p. 5.

¹³ *Chemical Economics Handbook: Sodium Sulfate*, IHS, November 2016, p. 5.

¹⁴ *Chemical Economics Handbook: Sodium Sulfate*, IHS, November 2016, p. 6.

APPENDIX A

***FEDERAL REGISTER* NOTICES**

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

Citation	Title	Link
84 FR 13066, April 3, 2019	<i>Sodium Sulfate Anhydrous From Canada; Institution of Antidumping Duty Investigation and Scheduling of Preliminary Phase Investigation</i>	https://www.govinfo.gov/content/pkg/FR-2019-04-03/pdf/2019-06453.pdf
84 FR 17138, April 24, 2019	<i>Sodium Sulfate Anhydrous From Canada: Initiation of Less-Than-Fair-Value Investigation</i>	https://www.govinfo.gov/content/pkg/FR-2019-04-24/pdf/2019-08272.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: Sodium Sulfate Anhydrous from Canada
Inv. No.: 731-TA-1446 (Preliminary)
Date and Time: April 18, 2019 - 9:30 a.m.

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

EMBASSY APPEARANCE:

**Embassy of Canada
Washington, DC**

The Honorable Colin Bird, Minister-Counsellor, Economic and Trade

OPENING REMARKS:

In Support of Imposition (**Thomas J. Trendl**, Steptoe & Johnson LLP)
In Opposition to Imposition (**Douglas J. Heffner**, Drinker Biddle & Reath LLP)

In Support of the Imposition of Antidumping Duty Order:

Steptoe & Johnson LLP
Washington, DC
on behalf of

Cooper Natural Resources, Inc. ("CNR")
Elementis Global LLC ("Elementis")
Searles Valley Minerals, Inc. ("SVM")
(collectively, "Petitioners")

Joe Kane, President, CNR

Michael Cortese, Director-National Sales, Elementis

Frank Murphy, General Manager-Americas, Elementis Chromium

**In Support of the Imposition of
Antidumping Duty Order (continued):**

Pamela Ford, Vice President, Sales & Marketing, SVM

Guy Wrenn, President, Giles Chemical Industries, Inc.

Thomas Rogers, Principal, Capital Trade Inc.

Travis Pope, Associate, Capital Trade Inc.

Thomas J. Trendl)
) – OF COUNSEL
St. Lutheran Tillman)

**In Opposition to the Imposition of
Antidumping Duty Order:**

Drinker Biddle & Reath LLP
Washington, DC
on behalf of

Saskatchewan Mining and Minerals Inc. (“SMMI”)

Rodney J. McCann, President, SMMI

John F. Kearney, Director, SMMI

Brent Hironaka, Chief Financial Officer, SMMI

Brent Avery, General Manager, SMMI

Ruby Cozart, Regional Accounts and Logistics Manager, SMMI

Douglas J. Heffner)
) – OF COUNSEL
Richard P. Ferrin)

REBUTTAL/CLOSING REMARKS:

In Support of Imposition (**Thomas J. Trendl**, Steptoe & Johnson LLP)

In Opposition to Imposition ((**Richard P. Ferrin**, Drinker Biddle & Reath LLP)

-END-

APPENDIX C
SUMMARY DATA

Table C-1: SSA: Summary data concerning the U.S. market.....	C-3
Table C-2: Natural SSA: Summary data concerning U.S. producers	C-5
Table C-3: Synthetic SSA: Summary data concerning U.S. producers	C-6

All SSA

Table C-1

SSA: Summary data concerning the U.S. market, 2016-18

(Quantity=short tons; Value=1,000 dollars; Unit values, unit labor costs, and unit expenses=dollars per short ton; Period changes=percent--exceptions noted)

	Reported data			Period changes		
	2016	2017	2018	Calendar year		
				2016-18	2016-17	2017-18
U.S. consumption quantity:						
Amount.....	366,542	378,666	375,760	2.5	3.3	(0.8)
Producers' share (fn1).....	86.8	83.6	82.6	(4.2)	(3.2)	(1.0)
Importers' share (fn1):						
Canada.....	10.6	14.4	14.7	4.1	3.8	0.4
Nonsubject sources.....	2.5	2.0	2.6	0.1	(0.5)	0.6
All import sources.....	13.2	16.4	17.4	4.2	3.2	1.0
U.S. consumption value:						
Amount.....	38,514	37,819	35,778	(7.1)	(1.8)	(5.4)
Producers' share (fn1).....	83.6	80.7	79.0	(4.5)	(2.8)	(1.7)
Importers' share (fn1):						
Canada.....	12.2	15.6	16.1	4.0	3.4	0.6
Nonsubject sources.....	4.3	3.7	4.8	0.6	(0.6)	1.2
All import sources.....	16.4	19.3	21.0	4.5	2.8	1.7
U.S. imports from:						
Canada:						
Quantity.....	38,883	54,381	55,387	42.4	39.9	1.8
Value.....	4,683	5,895	5,775	23.3	25.9	(2.0)
Unit value.....	\$120	\$108	\$104	(13.4)	(10.0)	(3.8)
Ending inventory quantity.....	***	***	***	***	***	***
Nonsubject sources:						
Quantity.....	9,335	7,676	9,929	6.4	(17.8)	29.3
Value.....	1,648	1,391	1,734	5.2	(15.6)	24.7
Unit value.....	\$177	\$181	\$175	(1.1)	2.6	(3.6)
Ending inventory quantity.....	***	***	***	***	***	***
All import sources:						
Quantity.....	48,218	62,058	65,315	35.5	28.7	5.2
Value.....	6,332	7,285	7,509	18.6	15.1	3.1
Unit value.....	\$131	\$117	\$115	(12.5)	(10.6)	(2.1)
Ending inventory quantity.....	***	***	***	***	***	***
U.S. producers':						
Average capacity quantity.....	590,182	590,182	591,182	0.2	---	0.2
Production quantity.....	529,857	542,506	522,915	(1.3)	2.4	(3.6)
Capacity utilization (fn1).....	89.8	91.9	88.5	(1.3)	2.1	(3.5)
U.S. shipments:						
Quantity.....	318,324	316,608	310,445	(2.5)	(0.5)	(1.9)
Value.....	32,182	30,534	28,269	(12.2)	(5.1)	(7.4)
Unit value.....	\$101	\$96	\$91	(9.9)	(4.6)	(5.6)
Export shipments:						
Quantity.....	***	***	***	***	***	***
Value.....	***	***	***	***	***	***
Unit value.....	***	***	***	***	***	***
Ending inventory quantity.....	***	***	***	***	***	***
Inventories/total shipments (fn1).....	***	***	***	***	***	***
Production workers.....	131	131	132	0.8	---	0.8
Hours worked (1,000s).....	286	282	277	(3.2)	(1.5)	(1.7)
Wages paid (\$1,000).....	10,453	10,582	10,561	1.0	1.2	(0.2)
Hourly wages (dollars per hour).....	\$36.54	\$37.56	\$38.13	4.3	2.8	1.5
Productivity (short tons per 1,000 hours).....	1,852	1,925	1,888	1.9	4.0	(2.0)
Unit labor costs.....	\$19.73	\$19.51	\$20.20	2.4	(1.1)	3.5

Table continued on next page.

Table C-1--Continued

SSA: Summary data concerning the U.S. market, 2016-18

(Quantity=short tons; Value=1,000 dollars; Unit values, unit labor costs, and unit expenses=dollars per short ton; Period changes=percent--exceptions noted)

	Reported data			Period changes		
	Calendar year			Calendar year		
	2016	2017	2018	2016-18	2016-17	2017-18
Primary and co-product U.S. producers':						
Net sales:						
Quantity (fn3).....	430,415	417,411	429,232	(0.3)	(3.0)	2.8
Value (fn3).....	34,313	29,305	29,084	(15.2)	(14.6)	(0.8)
Unit value (fn3).....	80	70	68	(15.0)	(11.9)	(3.5)
Cost of goods sold (COGS) (fn3).....	35,646	34,469	36,438	2.2	(3.3)	5.7
Gross profit or (loss) (fn3).....	(1,332)	(5,163)	(7,355)	451.9	287.5	42.4
SG&A expenses (fn3).....	2,395	2,268	2,333	(2.6)	(5.3)	2.9
Operating income or (loss) (fn3).....	(3,727)	(7,431)	(9,688)	159.9	99.4	30.4
Net income or (loss)(fn3).....	(3,570)	(7,594)	(9,615)	169.4	112.7	26.6
Capital expenditures (fn3).....	***	***	***	***	***	***
Unit COGS (fn3).....	\$83	\$83	\$85	2.5	(0.3)	2.8
Unit SG&A expenses (fn3).....	\$6	\$5	\$5	(2.3)	(2.3)	0.1
Unit operating income or (loss) (fn3).....	\$(9)	\$(18)	\$(23)	160.7	105.6	26.8
Unit net income or (loss) (fn3).....	\$(8)	\$(18)	\$(22)	(14.1)	(9.9)	(4.2)
COGS/sales (fn1) (fn3).....	103.9	117.6	125.3	21.4	13.7	7.7
Operating income or (loss)/sales (fn1) (fn3).....	(10.9)	(25.4)	(33.3)	(22.4)	(14.5)	(8.0)
Net income or (loss)/sales (fn3).....	(10.4)	(25.9)	(33.1)	(22.7)	(15.5)	(7.1)

Notes:

fn1.--Reported data are in percent and period changes are in percentage points.

fn2.--Undefined.

fn3.--Data includes primary and co-product producers CNR, Elementis, and SVM.

Source: Compiled from data submitted in response to Commission questionnaires and official U.S. imports statistics using HTS statistical reporting number 2833.11.5010, accessed April 19, 2019.

Natural SSA

Table C-2

Natural SSA: Summary data concerning U.S. producers, 2016-18

(Quantity=short tons; Value=1,000 dollars; Unit values, unit labor costs, and unit expenses=dollars per short ton; Period changes=percent--exceptions noted)

	Reported data			Period changes		
	Calendar year			Calendar year		
	2016	2017	2018	2016-18	2016-17	2017-18
U.S. producers':						
Average capacity quantity.....	***	***	***	***	***	***
Production quantity.....	***	***	***	***	***	***
Capacity utilization (fn1).....	***	***	***	***	***	***
U.S. shipments:						
Quantity.....	***	***	***	***	***	***
Value.....	***	***	***	***	***	***
Unit value.....	***	***	***	***	***	***
Export shipments:						
Quantity.....	***	***	***	***	***	***
Value.....	***	***	***	***	***	***
Unit value.....	***	***	***	***	***	***
Ending inventory quantity.....	***	***	***	***	***	***
Inventories/total shipments (fn1).....	***	***	***	***	***	***
Production workers.....	***	***	***	***	***	***
Hours worked (1,000s).....	***	***	***	***	***	***
Wages paid (\$1,000).....	***	***	***	***	***	***
Hourly wages (dollars per hour).....	***	***	***	***	***	***
Productivity (short tons per 1,000 hours).....	***	***	***	***	***	***
Unit labor costs.....	***	***	***	***	***	***
Net sales:						
Quantity (fn3).....	***	***	***	***	***	***
Value (fn3).....	***	***	***	***	***	***
Unit value (fn3).....	***	***	***	***	***	***
Cost of goods sold (COGS) (fn3).....	***	***	***	***	***	***
Gross profit or (loss) (fn3).....	***	***	***	***	***	***
SG&A expenses (fn3).....	***	***	***	***	***	***
Operating income or (loss) (fn3).....	***	***	***	***	***	***
Net income or (loss) (fn3).....	***	***	***	***	***	***
Capital expenditures (fn3).....	***	***	***	***	***	***
Unit COGS (fn3).....	***	***	***	***	***	***
Unit SG&A expenses (fn3).....	***	***	***	***	***	***
Unit operating income or (loss) (fn3).....	***	***	***	***	***	***
Unit net income/(loss).....	***	***	***	***	***	***
COGS/sales (fn1) (fn3).....	***	***	***	***	***	***
Operating income or (loss)/sales (fn1) (fn3).....	***	***	***	***	***	***
Net income or (loss)/sales.....	***	***	***	***	***	***

Notes:

fn1.--Reported data are in percent and period changes are in percentage points.

fn2.--Undefined.

fn3.--Financial results information presented in this table is limited to primary and co-product producers CNR and SVM.

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

Synthetic SSA

Table C-3

Synthetic SSA: Summary data concerning U.S. producers, 2016-18

(Quantity=short tons; Value=1,000 dollars; Unit values, unit labor costs, and unit expenses=dollars per short ton; Period changes=percent--exceptions noted)

	Reported data			Period changes		
	2016	Calendar year		Calendar year		
		2017	2018	2016-18	2016-17	2017-18
U.S. producers':						
Average capacity quantity.....	***	***	***	***	***	***
Production quantity.....	***	***	***	***	***	***
Capacity utilization (fn1).....	***	***	***	***	***	***
U.S. shipments:						
Quantity.....	***	***	***	***	***	***
Value.....	***	***	***	***	***	***
Unit value.....	***	***	***	***	***	***
Export shipments:						
Quantity.....	***	***	***	***	***	***
Value.....	***	***	***	***	***	***
Unit value.....	***	***	***	***	***	***
Ending inventory quantity.....	***	***	***	***	***	***
Inventories/total shipments (fn1).....	***	***	***	***	***	***
Production workers.....	***	***	***	***	***	***
Hours worked (1,000s).....	***	***	***	***	***	***
Wages paid (\$1,000).....	***	***	***	***	***	***
Hourly wages (dollars per hour).....	***	***	***	***	***	***
Productivity (short tons per 1,000 hours).....	***	***	***	***	***	***
Unit labor costs.....	***	***	***	***	***	***
Co-product producers':						
Net sales:						
Quantity (fn3).....	***	***	***	***	***	***
Value (fn3).....	***	***	***	***	***	***
Unit value (fn3).....	***	***	***	***	***	***
Cost of goods sold (COGS) (fn3).....	***	***	***	***	***	***
Gross profit or (loss) (fn3).....	***	***	***	***	***	***
SG&A expenses (fn3).....	***	***	***	***	***	***
Operating income or (loss) (fn3).....	***	***	***	***	***	***
Net income or (loss) (fn3).....	***	***	***	***	***	***
Capital expenditures (fn3).....	***	***	***	***	***	***
Unit COGS (fn3).....	***	***	***	***	***	***
Unit SG&A expenses (fn3).....	***	***	***	***	***	***
Unit operating income or (loss) (fn3).....	***	***	***	***	***	***
Unit net income/(loss).....	***	***	***	***	***	***
COGS/sales (fn1) (fn3).....	***	***	***	***	***	***
Operating income or (loss)/sales (fn1) (fn3).....	***	***	***	***	***	***
Net income or (loss)/sales.....	***	***	***	***	***	***

Notes:

fn1.--Reported data are in percent and period changes are in percentage points.

fn2.--Undefined.

fn3.--Information presented is limited to co-product producer Elementis.

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

APPENDIX D

DATA PROVIDED BY GILES/SALTEX

Table D-1

SSA: Giles and Saltex's U.S. shipments, export shipments, and total shipments, 2016-18

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Table D-2

SSA: Giles and Saltex's U.S. shipments, by channels of distribution, 2016-18

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Table D-3

SSA: Giles and Saltex's inventories, 2016-18

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Table D-4

SSA: Weighted-average f.o.b. prices and quantities of domestic, imported, and Giles and Saltex's product 1, by quarter, January 2016 through December 2018

* * * * *

Table D-5

SSA: Weighted-average f.o.b. prices and quantities of domestic, imported, and Giles and Saltex's product 2, by quarter, January 2016 through December 2018

* * * * *

Table D-6

SSA: Weighted-average f.o.b. prices and quantities of domestic, imported, Giles and Saltex's product 3, by quarter, January 2016 through December 2018

* * * * *

Table D-7

SSA: Weighted-average f.o.b. prices and quantities of domestic, imported, and Giles and Saltex's product 4, by quarter, January 2016 through December 2018

* * * * *

Figure D-1

SSA: Weighted-average f.o.b. prices and quantities of domestic, imported, and Giles and Saltex's product 1, by quarter, January 2016 through December 2018

* * * * *

Figure D-2

SSA: Weighted-average f.o.b. prices and quantities of domestic, imported, and Giles and Saltex's product 2, by quarter, January 2016 through December 2018

* * * * *

Figure D-3

SSA: Weighted-average f.o.b. prices and quantities of domestic, imported, Giles and Saltex's product 3, by quarter, January 2016 through December 2018

* * * * *

Figure D-4

SSA: Weighted-average f.o.b. prices and quantities of domestic, imported, and Giles and Saltex's product 4, by quarter, January 2016 through December 2018

* * * * *

Table D-8

SSA: Summary of higher/(lower) unit values for Giles and Saltex's price data, by source, January 2016 through December 2018

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