

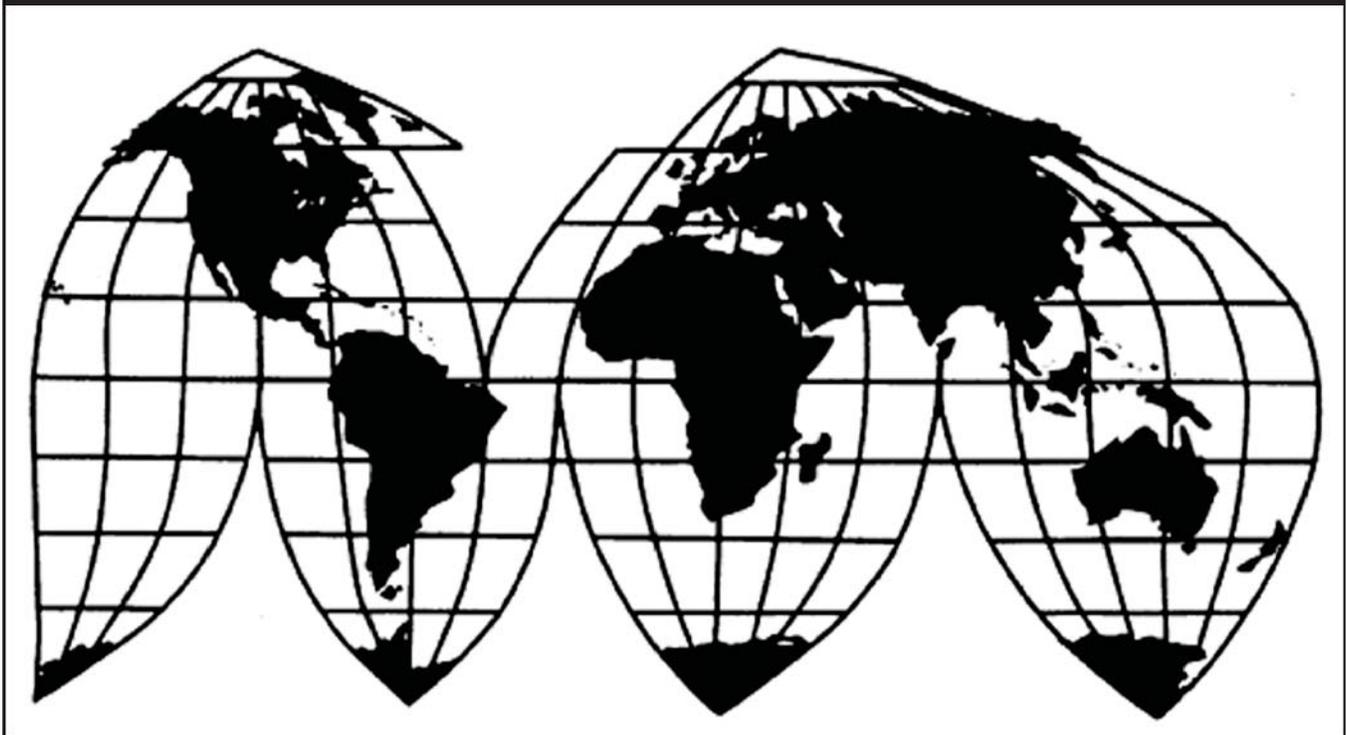
Calcium Hypochlorite from China

Investigation Nos. 701-TA-510 and 731-TA-1245 (Preliminary)

Publication 4452

February 2014

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Note.--Information that would reveal confidential operations of individual concerns may not be published and therefore has been deleted.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

UNITED STATES INTERNATIONAL TRADE COMMISSION
Investigation Nos. 701-TA-510 and 731-TA-1245 (Preliminary)

CALCIUM HYPOCHLORITE FROM CHINA

DETERMINATIONS

On the basis of the record¹ developed in the subject investigations, the United States International Trade Commission (Commission) determines, pursuant to sections 703(a) and 733(a) of the Tariff Act of 1930 (19 U.S.C. §§ 1671b(a) and 1673b(a)) (the Act), that there is a reasonable indication that an industry in the United States is materially injured by reason of imports from China of calcium hypochlorite, provided for in subheadings 2828.10.00, 3808.94.50, and 3808.99.95 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”), and that are allegedly subsidized by the government of China.

COMMENCEMENT OF FINAL PHASE INVESTIGATIONS

Pursuant to section 207.18 of the Commission’s rules, the Commission also gives notice of the commencement of the final phase of its investigations. The Commission will issue a final phase notice of scheduling, which will be published in the *Federal Register* as provided in section 207.21 of the Commission’s rules, upon notice from the Department of Commerce (Commerce) of affirmative preliminary determinations in the investigations under sections 703(b) or 733(b) of the Act, or, if the preliminary determinations are negative, upon notice of affirmative final determinations in those investigations under sections 705(a) or 735(a) of the Act. Parties that filed entries of appearance in the preliminary phase of the investigations need not enter a separate appearance for the final phase of the investigations. Industrial users, and, if the merchandise under investigation is sold at the retail level, representative consumer organizations have the right to appear as parties in Commission antidumping and countervailing duty investigations. The Secretary will prepare a public service list containing the names and addresses of all persons, or their representatives, who are parties to the investigations.

BACKGROUND

On December 18, 2013, a petition was filed with the Commission and Commerce by Arch Chemicals, Inc., a Lonza Company, Atlanta, GA, alleging that an industry in the United States is materially injured or threatened with material injury by reason of LTFV and subsidized imports of calcium hypochlorite from China. Accordingly, effective December 18, 2013, the

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

Commission instituted countervailing duty investigation No. 701-TA-510 and antidumping duty investigation No. 731-TA-1245 (Preliminary).

Notice of the institution of the Commission's investigations 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 December 24, 2013 (78 FR 77712). The conference was held in Washington, DC, on January 8, 2014, and all persons who requested the opportunity were permitted to appear in person or by counsel.

Views of the Commission

Based on the record in the preliminary phase of these investigations, we find that there is a reasonable indication that an industry in the United States is materially injured by reason of imports of calcium hypochlorite (“calhypo”) from China that are allegedly sold in the United States at less than fair value and are allegedly subsidized by the government of China.

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.¹ In applying this standard, the Commission weighs the evidence before it and determines whether “(1) the record as a whole contains clear and convincing evidence that there is no material injury or threat of such injury; and (2) no likelihood exists that contrary evidence will arise in a final investigation.”²

II. Background

The petitions in these investigations were filed on December 18, 2013 by Arch Chemicals, Inc. (“Arch”), a domestic producer of calhypo. Petitioner appeared at the conference and submitted a postconference brief.

Two respondent entities participated in these investigations. F2 Industries, LLC (“F2”), an importer and distributor of subject merchandise, appeared at the conference and submitted a postconference brief. Sinopec Jiangnan Salt & Chemical Complex (“JSCC”), a producer and exporter of subject merchandise, did not appear at the conference, but submitted a postconference brief.

U.S. industry data are based on the questionnaire responses of two producers, accounting for 100 percent of U.S. production of granular calhypo in 2012.³ U.S. import data are based on official Commerce import statistics.⁴ The Commission received usable importer questionnaire responses from eight companies, representing 27.1 percent of total subject imports from China under HTS subheading 2828.10.00 during the period of investigation

¹ 19 U.S.C. §§ 1671b(a), 1673b(a) (2000); see also *American Lamb Co. v. United States*, 785 F.2d 994, 1001-04 (Fed. Cir. 1986); *Aristech Chem. Corp. v. United States*, 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.

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

³ Confidential Report (“CR”) at I-4; Public Report (“PR”) at I-4. The two responding producers, petitioner Arch and Axiall Corporation (“Axiall”), are the sole U.S. producers of granular calhypo.

⁴ CR at I-4; PR at I-4.

“POI”), which entails the period from January 2010 to September 2013.⁵ The Commission additionally received a questionnaire response from one producer of subject merchandise, JSCC, which estimated that its production accounted for approximately *** percent of production of subject merchandise from China in 2012.⁶

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 IV-1; PR at IV-1. The interim periods for 2012 and 2013 are from January through September.

⁶ CR at VII-4 to VII-5; PR at VII-3. The Commission received questionnaire responses from two exporters of subject merchandise (***). These firms’ exports to the United States accounted for the majority of subject imports from 2010 to 2012. JSCC estimated that its exports accounted for *** percent of all Chinese calhyo exports to the United States in 2012. CR at VII-5; PR at VII-3.

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 (Continued...)”

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 The Commission may, where appropriate, include domestic articles in the domestic like product in addition to those described in the scope.¹⁵

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

The product covered by this investigation is calcium hypochlorite, regardless of form (e.g., powder, tablet (compressed), crystalline (granular), or in liquid solution), whether or not blended with other materials, containing at least 10% available chlorine measured by actual weight. The scope also includes bleaching powder and hemibasic calcium hypochlorite.

Calcium hypochlorite has the general chemical formulation $\text{Ca}(\text{OCl})_2$, but may also be sold in a more dilute form as bleaching powder with the chemical formulation, $\text{Ca}(\text{OCl})_2 \cdot \text{CaCl}_2 \cdot \text{Ca}(\text{OH})_2 \cdot 2\text{H}_2\text{O}$ or hemibasic calcium hypochlorite with the chemical formula of $2\text{Ca}(\text{OCl})_2 \cdot \text{Ca}(\text{OH})_2$ or $\text{Ca}(\text{OCl})_2 \cdot 0.5\text{Ca}(\text{OH})_2$. Calcium hypochlorite has a Chemical Abstract Service ("CAS") registry number of 7778-54-3, and a U.S. Environmental Protection Agency ("EPA") Pesticide Code ("PC") Number of 014701.

The subject calcium hypochlorite has an International Maritime Dangerous Goods ("IMDG") code of Class 5.1 UN 1748, 2880, or 2208 or Class 5.1/8 UN 3485, 3486, or 3487. Calcium hypochlorite is currently classifiable under the subheading 2828.10.0000 of the Harmonized Tariff Schedule of the United States ("HTSUS"). The subheading

(...Continued)

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. Appx. 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).

¹⁵ See, e.g., *Pure Magnesium from China and Israel*, Inv. Nos. 701-TA-403 and 731-TA-895-96 (Final), USITC Pub. 3467 at 8 n.34 (Nov. 2001); *Torrington*, 747 F. Supp. at 748-49 (holding that the Commission is not legally required to limit the domestic like product to the product advocated by the petitioner, coextensive with the scope).

covers commercial calcium hypochlorite and other calcium hypochlorite. When tableted or blended with other materials, calcium hypochlorite may be entered under other tariff classifications, such as 3808.94.5000 and 3808.99.9500, which cover disinfectants and similar products. While the HTSUS subheadings, the CAS registry number, the U.S. EPA PC number, and the IMDG codes are provided for convenience and customs purposes, the written description of the scope of this investigation is dispositive.¹⁶

Calhypo is a chemical compound used primarily as a sanitizing agent for swimming pools, spas, and municipal water treatment systems. It is typically sold as a white solid in powder, crystalline, or tablet form, but can also be sold in a liquid solution. The active ingredient is chlorine, which acts as a biocide, killing algae and other microbes. Calhypo can be sold as a pure product, with available chlorine concentrations of 65-80 percent, or as a product blended with other ingredients.¹⁷

Petitioner argues that the Commission should find a single domestic like product that is coextensive with the scope of the investigations: *i.e.*, calcium hypochlorite, regardless of form.¹⁸ F2 argues that the Commission should define the like product to include calhypo and several products not within the scope of the investigations: trichloroisocyanuric acid (“trichlor”), sodium dichlorisocyanurate (“dichlor”) in both anhydrous and dihydrate form, and sodium hypochlorite (liquid bleach).¹⁹ JSCC does not take a position on the definition of the domestic like product for purposes of these preliminary determinations.²⁰

Based on the record, for purposes of these preliminary determinations we define a single domestic like product consisting of calhypo that is coextensive with the scope of the investigations. Our examination of the domestic like product factors is set forth below.

Physical Characteristics and Uses. Calhypo is produced by combining chlorine and calcium hydroxide (lime). The principal applications of calhypo in the United States are in water treatment at commercial and residential pools and spas. Calhypo is used both to maintain

¹⁶ 79 Fed. Reg. 2410, 2415 (January 14, 2014).

¹⁷ CR at I-9; PR at I-7.

¹⁸ Petition at 13-16; Petitioner’s Postconference Brief at 3-6.

¹⁹ F2’s Postconference Brief at 1-5. Dichlor (both in anhydrous form and dihydrate form) and trichlor were both included within the scope and the single domestic like product in the Commission’s recent preliminary phase investigations involving chlorinated isocyanurates (“chlorinated isos”) from China and Japan. *Chlorinated Isocyanurates from China and Japan*, 701-TA-501 and 731-TA-1226 (Preliminary), USITC Pub. 4431 (November 2013) (“*Chlorinated Isos*”), and there is substantial information about trichlor and dichlor in the Commission’s public report from those investigations. F2’s proposed like product in these investigations also includes another chemical compound, sodium hypochlorite, which was not within the scope or domestic like product in the recent chlorinated isos investigations, and there is limited information available about sodium hypochlorite in the record of these investigations.

²⁰ JSCC’s Postconference Brief at 1-2. Instead, JSCC suggested, without elaboration, that there may be several separate like products, given the existence within the scope of different chemical formulations of calhypo with different chlorine content levels. *Id.*

regular chlorine levels and/or to deliver quick, remedial increases in chlorine. Other applications include disinfection of drinking water and waste water, and food and non-food contact surfaces, as well as washing fruits and vegetables.²¹ Calhypo for pool and spa applications typically contains 45, 68, or 75 percent available chlorine.²²

Chlorinated isos are a cyanuric acid derivative, produced from a reaction of cyanuric acid (derived from urea), chlorine, and caustic soda. There are three primary chemical compositions of chlorinated isos: (1) trichlor, which has 90 percent available chlorine; (2) dichlor in anhydrous form, which has 63 percent available chlorine; and (3) dichlor in dihydrate form, which has 56 percent available chlorine. Chlorinated isos are used primarily as sanitizing agents for swimming pools, spas, and industrial water treatments and as bleaching agents for detergents, bleaches and cleansers.²³

Sodium hypochlorite, also called liquid bleach, is typically manufactured by mixing chlorine with caustic soda.²⁴ It has about 15 percent available chlorine content. Commercial strength liquid bleach is generally used for laundry, and industrial and swimming pool sanitation, but it may add too much alkalinity when used for swimming pools.²⁵

Although calhypo, chlorinated isos, and sodium hypochlorite have some degree of overlap in end uses, significant differences exist in their chemical compositions, particularly in the level of available chlorine, as well as the differing non-chlorine inputs involved.²⁶ While calhypo is sold in a wide range of available chlorine, from 45 percent to 75 percent in the most common applications, trichlor is much higher in available chlorine at 90 percent and sodium hypochlorite is much lower at 15 percent.

Manufacturing Facilities, Production Processes and Employees. None of the parties has either argued or presented information that calhypo, chlorinated isos, and sodium hypochlorite are produced in the same facilities with the same employees.²⁷ In fact, the record indicates that putting chlorinated isos and calhypo in close proximity can result in a rapid explosion and fire.²⁸ No U.S. calhypo producer stated that it could switch production from calhypo to other

²¹ CR at I-10; PR at I-8.

²² CR at I-10; PR at I-8. Calhypo may also be produced with a higher chlorine content (78 percent) or a lower chlorine content (approximately 35 percent for bleaching powder). CR at I-11 to I-12; PR at I-8.

²³ *Chlorinated Isos*, USITC Pub. 4431 at 6-8; Petitioner's Postconference Brief, Response to Staff Questions, at 2.

²⁴ The process used to produce all domestic calhypo and the majority of the subject imports also involves combining caustic soda and chlorine, yielding sodium hypochlorite, sodium chloride, and water. However, in the production of calhypo, the sodium hypochlorite is then combined with hydrated lime and chlorine to create calcium hypochlorite paste, which then goes through several additional processing steps. CR at I-11; PR at I-8.

²⁵ Transcript of January 8, 2014 Conference ("Conf. Tr.") at 45 (Walden); Petitioner's Postconference Brief, Response to Staff Questions, at 2.

²⁶ CR at I-15 to I-16; PR at I-11; Conf. Tr. at 32, 87 (Walden).

²⁷ See F2's Postconference Brief at 4-5; Petitioner's Postconference Brief, Response to Staff Questions, at 2-3.

²⁸ Conf. Tr. at 32-33, 100-101 (Walden).

products.²⁹ Similarly, in the chlorinated isos investigations, no responding U.S. producers of chlorinated isos stated that they could switch production to any other products.³⁰ Thus, we do not find that the information available supports the conclusion that these different compounds are manufactured in common facilities with common employees.

Channels of Distribution. Calhypo is sold by manufacturers to end users, repackers, distributors, dealers, and retailers. The retail channel includes large discount or big box stores, specialty stores, and pool service companies.³¹ In the chlorinated isos investigations, the Commission found that chlorinated isos are generally sold to distributors and retailers, including pool retail stores, “big box” stores, and pool service companies,³² so there appears to be some overlap with the channels of distribution for calhypo. There is limited information in the record regarding channels of distribution for sodium hypochlorite.³³

Interchangeability. The record indicates that chlorinated isos and sodium hypochlorite have a degree of interchangeability with calhypo, in that all can be used as sanitizing agents.³⁴ U.S. producers and importers of calhypo identified dichlor, trichlor, chlorinated isos, and sodium hypochlorite as substitutes for calhypo.³⁵ The record also indicates that some of these compounds are not interchangeable for particular uses. For example, while calhypo is used as a sanitizer for drinking water systems, trichlor is not used in such applications because it produces cyanuric acid unsuitable for drinking water.³⁶

Producer and Customer Perceptions. The record contains limited information concerning customer and producer perceptions, and that information is inconclusive.³⁷ On the one hand, neither Arch’s website nor that of a major retailer specifically references calhypo.³⁸ On the other hand, the record also indicates that branding is very important to domestic calhypo producers and some big box retailers.³⁹ Such branding would tend to distinguish

²⁹ CR at II-5; PR at II-3. As previously noted, the production of sodium hypochlorite and the sodium process for production of calhypo both involve combining chlorine and caustic soda, and the resulting sodium hypochlorite is one of the inputs used to produce calhypo. CR at I-11, I-17; PR at I-8, I-11. However, there is no information in the record that producers of calhypo and producers of sodium hypochlorite use common manufacturing facilities or employees.

³⁰ *Chlorinated Isos*, USITC Pub. 4431 at II-5.

³¹ CR at I-11, II-1 to II-2; PR at I-8; II-1.

³² *Chlorinated Isos*, USITC Pub. 4431 at 8, 24.

³³ See F2’s Postconference Brief at 3-4 and Exh. 1 at 9 (affidavit of Sherman Wang).

³⁴ Conf. Tr. at 44-45 (Walden).

³⁵ CR at II-8; PR at II-5. Similarly, in the recent chlorinated isos investigations, multiple producers, tableters, and importers of chlorinated isos identified calhypo and sodium hypochlorite as substitutes for chlorinated isos. *Chlorinated Isos*, USITC Pub. 4431 at II-11.

³⁶ Conf. Tr. at 45-46 (Walden).

³⁷ Contrary to F2’s contentions, the pertinent customers are retailers and distributors, not end users such as owners of residential swimming pools. See F2’s Postconference Brief at 4; Conf. Tr. at 34, 87, 99 (Walden).

³⁸ See <http://www.archchemicals.com/Fed/Corporate/Products/treatment.htm> and <http://www.homedepot.com/b/Outdoors-Outdoor-Recreation-Pools-Hot-Tubs-Saunas-Pools-Pool-Chemicals/N-5yc1vZc4j8> (EDIS Document No. 526864).

³⁹ Conf. Tr. at 17, 20 (Walden); 117-118 (Ferrell); F2’s Postconference Brief at 33.

domestically produced calhypo not only from other calhypo products, but also from other chemical products such as chlorinated isos.

Price. Petitioner states that there are significant differences in price among the various possible substitutes for calhypo, but does not provide any further information.⁴⁰ Respondents do not address this issue, and there is limited information in the record on the respective prices of these compounds.⁴¹

Conclusion. As previously discussed, the information in the record pertinent to the similarities and differences among calhypo, on the one hand, and chlorinated isocyanurates and sodium hypochlorite, on the other, is limited. Information on pricing is essentially non-existent, and information on producer and customer perceptions is both indirect and inconclusive. The record does indicate some overlap in channels of distribution and end uses, although interchangeability between the types of products is not complete.

The record indicates significant distinctions between the products. In particular, there are significant differences in the chemical compositions of these products, as well as in the production inputs and the effective chlorine content of the different products. The record indicates that calhypo, chlorinated isos, and sodium hypochlorite are not manufactured in the same facilities with the same employees. In addition, it is dangerous to put calhypo and chlorinated isos in close proximity due to their chemical compositions.

Given the differences in chemical composition, chlorine content, and manufacturing facilities and employees, there appears to be a clear dividing line between calhypo, on the one hand, and chlorinated isos and sodium hypochlorite, on the other.⁴² We therefore find for purposes of these preliminary determinations that there is a single domestic like product coextensive with the scope consisting of all calhypo.⁴³

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.”⁴⁴ 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.

⁴⁰ Petitioner’s Postconference Brief, Response to Staff Questions, at 2.

⁴¹ The pricing data collected in the chlorinated isos investigations are proprietary. *Chlorinated Isos*, USITC Pub. 4431 at V-7 to V-8.

⁴² *Cf. Calcium Hypochlorite from Japan*, 731-TA-189 (Preliminary), USITC Pub. 1540 (June 1984), at 4 and n.9 (Commission determined that chlorinated isocyanurates not part of same like product as calcium hypochlorite because as chemical compounds they are “quite distinct”).

⁴³ The parties are reminded that should they desire to make domestic like product arguments in the final phase investigations, they need to request that the Commission collect additional data on the relevant products in written comments on the draft questionnaires, pursuant to 19 C.F.R. § 207.20(b).

⁴⁴ 19 U.S.C. § 1677(4)(A).

A. Sufficient Production-Related Activities

In deciding whether a firm qualifies as a domestic producer of the domestic like product, the Commission generally analyzes the overall nature of a firm's U.S. production-related activities, although production-related activity at minimum levels could be insufficient to constitute domestic production.⁴⁵

None of the parties in these preliminary phase investigations disputes that Arch and Axiall are domestic producers of calhypo. Petitioner argues, however, that the domestic firms that solely tablet or repackage calhypo do not engage in sufficient production-related activity to qualify as domestic producers.⁴⁶ F2 argues that the Commission should include in the domestic industry the repackers and the private label marketers that buy calhypo and repack it under a private label, tablet it, or reformulate it.⁴⁷ JSCC states that the issue as to whether repackers, private label marketers, or tableters should be included in the domestic industry should be considered carefully by the Commission in any final phase investigations.⁴⁸

We do not have sufficient information in the record of these preliminary phase investigations to make a determination as to whether tableting or repacking constitutes domestic production.⁴⁹ The record contains no data for any U.S. firm that solely tablets or repackages calhypo; the only available information on the domestic calhypo industry is from Arch and Axiall. In addition, the issue is essentially moot for these preliminary investigations because there are no data from independent tableters to include or exclude. We intend to seek information on this issue in any final phase investigations.

B. Related Parties

We must determine whether any producer of the domestic like product should be excluded from the domestic industry pursuant to Section 771(4)(B) of the Tariff Act. This provision allows the Commission, if appropriate circumstances exist, to exclude from the domestic industry producers that are related to an exporter or importer of subject merchandise

⁴⁵ The Commission generally considers six factors: (1) source and extent of the firm's capital investment; (2) technical expertise involved in U.S. production activities; (3) value added to the product in the United States; (4) employment levels; (5) quantity and type of parts sourced in the United States; and (6) any other costs and activities in the United States directly leading to production of the like product. No single factor is determinative and the Commission may consider any other factors it deems relevant in light of the specific facts of any investigation. *See, e.g., Diamond Sawblades and Parts Thereof from China and Korea*, Inv. Nos. 731-TA-1092-93 (Final), USITC Pub. 3862 at 8-11 (July 2006).

⁴⁶ Petition at 3, 17; Petitioner's Postconference Brief at 6-8.

⁴⁷ F2's Postconference Brief at 5-8.

⁴⁸ JSCC's Postconference Brief at 2.

⁴⁹ There is information in the record that Arch and Axiall accounted for the vast majority of tableting production. Petition at 3 and n.4; Petition Exh. GEN-2 (affidavit of ***), at Paragraphs 7-8.

or which are themselves importers.⁵⁰ Exclusion of such a producer is within the Commission's discretion based upon the facts presented in each investigation.⁵¹

One U.S. calhypo producer, ***, imported subject merchandise and is therefore a related party. We find that appropriate circumstances do not exist to exclude this firm from the domestic industry.⁵²

Consequently, we define the domestic industry in these preliminary phase investigations to include the two U.S. producers of granular calhypo: Arch and Axiall.

V. 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.⁵³ 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.⁵⁴ The statute defines "material injury" as "harm which is not inconsequential, immaterial, or unimportant."⁵⁵ In assessing whether there is a reasonable indication that the domestic industry is materially injured by reason of subject imports, we consider all relevant

⁵⁰ See *Torrington Co. v. United States*, 790 F. Supp. 1161, 1168 (Ct. Int'l Trade 1992), *aff'd without opinion*, 991 F.2d 809 (Fed. Cir. 1993); *Sandvik AB v. United States*, 721 F. Supp. 1322, 1331-32 (Ct. Int'l Trade 1989), *aff'd mem.*, 904 F.2d 46 (Fed. Cir. 1990); *Empire Plow Co. v. United States*, 675 F. Supp. 1348, 1352 (Ct. Int'l Trade 1987).

⁵¹ The primary factors the Commission has examined in deciding whether appropriate circumstances exist to exclude a related party include the following:

- (1) the percentage of domestic production attributable to the importing producer;
- (2) the reason the U.S. producer has decided to import the product subject to investigation, *i.e.*, whether the firm benefits from the LTFV sales or subsidies or whether the firm must import in order to enable it to continue production and compete in the U.S. market; and
- (3) the position of the related producer vis-à-vis the rest of the industry, *i.e.*, whether inclusion or exclusion of the related party will skew the data for the rest of the industry. See, *e.g.*, *Torrington Co. v. United States*, 790 F. Supp. at 1168.

⁵² *** stated that it ***. CR at III-5; PR at III-3. *** imported *** of subject merchandise during the POI. CR at III-5, n.5; PR at III-3, n.5. By contrast, *** domestic production during the POI was ***. ***. *** is the *** and ***. In light of its extremely limited importation of subject merchandise, *** primary interest is clearly in domestic production and not in the importation of subject merchandise.

⁵³ 19 U.S.C. §§ 1671b(a), 1673b(a).

⁵⁴ 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).

⁵⁵ 19 U.S.C. § 1677(7)(A).

economic factors that bear on the state of the industry in the United States.⁵⁶ 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.”⁵⁷

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,⁵⁸ it does not define the phrase “by reason of,” indicating that this aspect of the injury analysis is left to the Commission’s reasonable exercise of its discretion.⁵⁹ 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.⁶⁰

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.⁶¹ In performing its examination, however, the Commission need not isolate

⁵⁶ 19 U.S.C. § 1677(7)(C)(iii).

⁵⁷ 19 U.S.C. § 1677(7)(C)(iii).

⁵⁸ 19 U.S.C. §§ 1671b(a), 1673b(a).

⁵⁹ *Angus Chemical Co. v. United States*, 140 F.3d 1478, 1484-85 (Fed. Cir. 1998) (“{T}he statute does not ‘compel the commissioners’ to employ {a particular methodology}.”), *aff’g* 944 F. Supp. 943, 951 (Ct. Int’l Trade 1996).

⁶⁰ 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).

⁶¹ SAA, H.R. Rep. 103-316, Vol. I at 851-52 (1994) (“{T}he Commission must examine other factors to ensure that it is not attributing injury from other sources to the subject imports.”); S. Rep. 96-249 at 75 (1979) (the Commission “will consider information which indicates that harm is caused by factors other than less-than-fair-value imports.”); H.R. Rep. 96-317 at 47 (1979) (“in examining the overall injury being experienced by a domestic industry, the ITC will take into account evidence presented to it which demonstrates that the harm attributed by the petitioner to the subsidized or dumped imports is attributable to such other factors;” those factors include “the volume and prices of (Continued...)”

the injury caused by other factors from injury caused by unfairly traded imports.⁶² Nor does the “by reason of” standard require that unfairly traded imports be the “principal” cause of injury or contemplate that injury from unfairly traded imports be weighed against other factors, such as nonsubject imports, which may be contributing to overall injury to an industry.⁶³ It is clear that the existence of injury caused by other factors does not compel a negative determination.⁶⁴

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.”⁶⁵ ⁶⁶ Indeed, the Federal Circuit has examined and affirmed various Commission methodologies and has disavowed “rigid adherence to a specific formula.”⁶⁷

(...Continued)

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.

⁶² SAA at 851-52 (“{T}he Commission need not isolate the injury caused by other factors from injury caused by unfair imports.”); *Taiwan Semiconductor Industry Ass’n*, 266 F.3d at 1345. (“{T}he Commission need not isolate the injury caused by other factors from injury caused by unfair imports Rather, the Commission must examine other factors to ensure that it is not attributing injury from other sources to the subject imports.” (emphasis in original)); *Asociacion de Productores de Salmon y Trucha de Chile AG v. United States*, 180 F. Supp. 2d 1360, 1375 (Ct. Int’l Trade 2002) (“{t}he Commission is not required to isolate the effects of subject imports from other factors contributing to injury” or make “bright-line distinctions” between the effects of subject imports and other causes.); *see also Softwood Lumber from Canada*, Inv. Nos. 701-TA-414 and 731-TA-928 (Remand), USITC Pub. 3658 at 100-01 (Dec. 2003) (Commission recognized that “{i}f an alleged other factor is found not to have or threaten to have injurious effects to the domestic industry, *i.e.*, it is not an ‘other causal factor,’ then there is nothing to further examine regarding attribution to injury”), *citing Gerald Metals*, 132 F.3d at 722 (the statute “does not suggest that an importer of LTFV goods can escape countervailing duties by finding some tangential or minor cause unrelated to the LTFV goods that contributed to the harmful effects on domestic market prices.”).

⁶³ S. Rep. 96-249 at 74-75; H.R. Rep. 96-317 at 47.

⁶⁴ *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.”).

⁶⁵ *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.

⁶⁶ Commissioner Pinkert does not join this paragraph or the following three paragraphs. He points out that the Federal Circuit, in *Bratsk*, 444 F.3d 1369, and *Mittal Steel*, held that the Commission is *required*, in certain circumstances when considering present material injury, to undertake a particular (Continued...)

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.⁶⁸ The additional "replacement/benefit" test looked at whether nonsubject imports might have replaced subject imports without any benefit to the U.S. industry. The Commission applied that specific additional test in subsequent cases, including the *Carbon and Certain Alloy Steel Wire Rod from Trinidad and Tobago* determination that underlies the *Mittal Steel* litigation.

Mittal Steel clarifies that the Commission's interpretation of *Bratsk* was too rigid and makes clear that the Federal Circuit does not require the Commission to apply an additional test nor any one specific methodology; instead, the court requires the Commission to have "evidence in the record 'to show that the harm occurred 'by reason of' the LTFV imports,'" and requires that the Commission not attribute injury from nonsubject imports or other factors to subject imports.⁶⁹ 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.⁷⁰

(...Continued)

kind of analysis of non-subject imports, albeit without reliance upon presumptions or rigid formulas.

Mittal Steel explains as follows:

What *Bratsk* held is that "where commodity products are at issue and fairly traded, price competitive, non-subject imports are in the market," the Commission would not fulfill its obligation to consider an important aspect of the problem if it failed to consider whether non-subject or non-LTFV imports would have replaced LTFV subject imports during the period of investigation without a continuing benefit to the domestic industry. 444 F.3d at 1369. Under those circumstances, *Bratsk* requires the Commission to consider whether replacement of the LTFV subject imports might have occurred during the period of investigation, and it requires the Commission to provide an explanation of its conclusion with respect to that factor.

542 F.3d at 878.

⁶⁷ *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.").

⁶⁸ *Mittal Steel*, 542 F.3d at 875-79.

⁶⁹ *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).

⁷⁰ 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 final phase investigations to producers in nonsubject countries that accounted for substantial shares of U.S. imports of subject (Continued...)

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.⁷¹ Congress has delegated this factual finding to the Commission because of the agency's institutional expertise in resolving injury issues.⁷²

B. Conditions of Competition and the Business Cycle⁷³

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

1. Demand Conditions

The principal use for calhypo in the United States is the chlorination of water in residential and commercial swimming pools. Other uses include the disinfection of water and waste water, as well as various cleaning and sanitizing applications.⁷⁴ Other chemicals, including chlorinated isos, may also be used in some of these applications.⁷⁵

Apparent U.S. consumption of calhypo fluctuated within a narrow range during the POI, declining from *** pounds in 2010 to *** pounds in 2011, and then increasing *** to *** pounds in 2012. It was *** pounds in interim 2012 and *** pounds in interim 2013.⁷⁶ Market participants reported that U.S. demand had fluctuated, but did not report any major changes in

(...Continued)

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

⁷¹ We provide in our respective discussions of volume, price effects, and impact a full analysis of other factors alleged to have caused any material injury experienced by the domestic industry.

⁷² *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.").

⁷³ Pursuant to Section 771(24) of the Tariff Act, imports from a subject country of merchandise corresponding to a domestic like product that account for less than 3 percent of all such merchandise imported into the United States during the most recent 12 months for which data are available preceding the filing of the petition shall be deemed negligible. 19 U.S.C. §§ 1671b(a), 1673b(a), 1677(24)(A)(i), 1677(24)(B); see also 15 C.F.R. § 2013.1 (developing countries for purposes of 19 U.S.C. § 1677(36)). The subject imports in these investigations are not negligible. The data indicate that subject imports from China exceed the requisite 3 percent statutory negligibility threshold for the most recent 12-month period prior to the filing of the petition for which data are available. During the period December 2012 – November 2013, subject imports from China accounted for 93.3 percent of total U.S. imports of calhypo by quantity. CR at IV-5; PR at IV-4.

⁷⁴ CR at II-7; PR at II-4 to II-5; Conf. Tr. at 15 (Walden).

⁷⁵ CR at II-8 to II-9; PR at II-5.

⁷⁶ CR/PR at Tables IV-4, C-1.

demand during the POI.⁷⁷ The U.S. market for calhypo is seasonal, reflecting the demand for use in swimming pools, with U.S. producers' sales much higher in the first half of the year.⁷⁸ Demand can also be affected by the weather, in that cold and rainy weather during the swimming pool season can reduce demand for calhypo.⁷⁹

2. Supply Conditions

During the POI, the domestic industry was the predominant supplier of calhypo to the U.S. market. The domestic industry's share of apparent U.S. consumption was *** percent in 2010, *** percent in both 2011 and 2012, *** percent in interim 2012, and *** percent in interim 2013.⁸⁰

The domestic calhypo industry is relatively concentrated, with only two domestic producers of granular product, Arch and Axiall.⁸¹ Arch was formed when Olin Corp. sold its specialty chemicals division in 1999 and it was acquired by the Lonza Group in 2011. Axiall was formed in January 2013 when PPG Industries Inc.'s commodity chemicals division merged with Georgia Gulf Corp.⁸²

*** experienced *** supply disruptions in 2012, involving ***.⁸³ *** , resulting in an increase in capacity from 2011 to 2012, but also contributing to a decrease in production.⁸⁴ Arch has affiliated calhypo production facilities in Brazil and South Africa.⁸⁵ U.S. producers export *** quantities of calhypo, with exports accounting for *** percent of shipments by U.S. producers during the POI.⁸⁶

The volume of subject imports increased by *** percent during the POI,⁸⁷ and their share of apparent U.S. consumption increased from *** percent in 2010 to *** percent in 2011 and *** percent in 2012; it was *** percent in interim 2012 and *** percent in interim 2013.⁸⁸ A majority of Chinese calhypo exports to the United States were produced by one producer, JSCC, but ***.⁸⁹

Nonsubject imports have a very small presence in the market, ranging between *** percent and *** percent of apparent U.S. consumption during the POI.⁹⁰ The leading sources of nonsubject imports are India and Japan.⁹¹

⁷⁷ CR at II-8; PR at II-5.

⁷⁸ CR at II-8; PR at II-5; Conf. Tr. at 15 (Walden).

⁷⁹ CR at II-8; PR at II-5; Conf. Tr. at 65 (Walden).

⁸⁰ CR/PR at Tables IV-5, C-1.

⁸¹ CR at I-3; PR at I-3; Conf. Tr. at 86 (Walden).

⁸² CR at III-1; PR at III-1.

⁸³ CR at III-2; PR at III-2.

⁸⁴ CR at III-2; PR at III-2.

⁸⁵ CR at I-3; PR at I-3; Conf. Tr. at 102-103 (Walden).

⁸⁶ CR/PR at Table III-3.

⁸⁷ CR/PR at Table C-1.

⁸⁸ CR/PR at Tables IV-5, C-1.

⁸⁹ CR at VII-4 to VII-5; PR at VII-3.

⁹⁰ CR/PR at Tables IV-6, C-1.

3. Substitutability

All responding U.S. producers and importers indicated that calhypo from China is either always or frequently interchangeable with U.S.-produced calhypo.⁹² The record indicates that there is a moderate to high degree of substitutability between subject imports and domestic product with the same chlorine content.⁹³

Particular segments of the calhypo market may prefer product with different chlorine content levels. Calhypo with chlorine content of over 70 percent is used to provide quick, remedial increases in chlorine for swimming pool “shock treatment.”⁹⁴ Some large retailers may require calhypo with a lower chlorine content of 47 percent to 56 percent, because of fire and warehouse safety concerns.⁹⁵ The vast majority of subject imports have a chlorine content of 65 to 68 percent, and JSCC may only hold U.S. Environmental Protection Agency (“EPA”) registrations that permit importation of calhypo with 65 percent and 67 percent available chlorine content.⁹⁶

The parties have raised a number of issues that they assert either affect competition in the U.S. market or serve to limit the substitutability of the domestic like product and the subject imports. We intend to explore these issues, listed below, further in any final phase investigations.

- The significance of branding.⁹⁷
- Whether subject imports are restricted in gaining access to the municipal public pool and water treatment segments of the market by certification requirements restricting which calhypo tablets can be used in tablet feeders designed by domestic calhypo producers.⁹⁸
- Whether the domestic industry is or has been willing to supply small calhypo purchasers.⁹⁹
- The importance of service obligations, including round-the-clock customer service and “takebacks,” to big box stores and other large calhypo customers.¹⁰⁰

(...Continued)

⁹¹ CR/PR at Table IV-3.

⁹² CR/PR at Table II-4.

⁹³ CR at II-9 to II-12; PR at II-6 to II-8.

⁹⁴ Conf. Tr. at 59 (Walden); CR at I-10; PR at I-7; JSCC’s Postconference Brief at 4.

⁹⁵ JSCC’s Postconference Brief at 5, 8; F2’s Postconference Brief at 33; Conf. Tr. at 140-141

(Ferrell).

⁹⁶ JSCC’s Postconference Brief at 4-6 and Exh. 6. JSCC states that it may also have an EPA registration for 70 percent chlorine content. *Id.* at 5; Conf. Tr. at 131-132 (Ferrell).

⁹⁷ See Conf. Tr. at 17, 37-38 (Walden); Conf. Tr. at 138 (Chen); F2’s Postconference Brief at 14; Petitioner’s Postconference Brief at 15.

⁹⁸ See JSCC’s Postconference Brief at 7-8; F2’s Postconference Brief at 34; Petitioner’s Postconference Brief at 13-14; Conf. Tr. at 115-116, 159, 164-166 (Ferrell).

⁹⁹ See JSCC’s Postconference Brief at 11-14; Conf. Tr. at 54 (Walden); 144-145 (Ferrell).

- The extent to which subject imports differ from the domestic like product in terms of color quality and solubility, and the extent to which this affects purchaser decisions.¹⁰¹

We also intend to explore possible differences in product range between the subject imports and the domestic like product in any final phase investigations. These include:

- The extent to which subject imports are limited in the chlorine content of the calhypo they can supply to the U.S. market.
- The extent to which big box retailers and other purchasers require calhypo with chlorine content that subject imports cannot supply.
- The extent to which products with different chlorine content can be substituted for each other.
- Whether the domestic industry competes with the subject imports at the high and low ranges of chlorine content.¹⁰²

4. Other Conditions

The principal raw materials used to produce calhypo are chlorine, caustic soda, and lime.¹⁰³ Raw materials accounted for just over *** percent of domestic producers' cost of goods sold (COGS) during 2010 to 2012.¹⁰⁴

U.S. producers reported selling the majority of their calhypo under short term contracts. These contracts typically require the producer to commit to a fixed price for a year, but contain no purchase obligation and no "meet or release" clause. Customers can and do request reductions in prices when offered a lower price from another supplier.¹⁰⁵ Some large retailers require calhypo suppliers to take back unsold product at the end of the season.¹⁰⁶

Calhypo is subject to regulation by the EPA under the Federal Insecticide, Fungicide and Rodenticide Act. The EPA's regulations apply to specific concentrations of active chlorine so that a producer selling calhypo at multiple concentration levels requires multiple EPA registrations.¹⁰⁷ Calhypo's oxidizing properties can cause combustion of other materials, posing

(...Continued)

¹⁰⁰ See JSCC's Postconference Brief at 8-9; F2's Postconference Brief at 33-34; Conf. Tr. at 60-61 (Walden); 145 (Ferrell).

¹⁰¹ See CR at II-11; PR at II-7; Conf. Tr. at 113-114, 160-163 (Ferrell); Petitioner' Postconference Brief at 3 and Exh. 1.

¹⁰² See JSCC's Postconference Brief at 4-6, 8; F2's Postconference Brief at 33; Petitioner's Postconference Brief at 11-15; Conf. Tr. at 131-132, 140-141 (Ferrell).

¹⁰³ CR at V-1; PR at V-1. Electricity is also important to the production process. *Id.*; Conf. Tr. at 82 (Walden).

¹⁰⁴ CR at V-1; PR at V-1.

¹⁰⁵ CR at V-4; PR at V-3; Conf. Tr. at 16-17 (Walden).

¹⁰⁶ Petitioner's Postconference Brief at 15.

¹⁰⁷ CR at I-10; PR at I-7.

fire hazards in transportation and storage. The U.S. Department of Transportation classifies calhypo containing more than 39 percent available chlorine content by weight as hazardous material whose transportation requires special handling. The National Fire Protection Association has issued guidelines addressing storage of calhypo at retail facilities, including requirements for sprinklers and recommended maximum quantities.¹⁰⁸

Calhypo has a relatively low value to weight ratio, so freight costs can be an appreciable share of total delivered costs.¹⁰⁹ Transportation costs to the U.S. market from China ranged between 9 percent and 13 percent of the customs value of imports.¹¹⁰ U.S. producers reported that their inland transportation costs ranged from *** percent to *** percent, while importers reported inland transportation costs of 8 percent to 10 percent.¹¹¹

C. 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.”¹¹²

The quantity of subject imports increased from 6.7 million pounds in 2010 to 9.5 million pounds in 2011 and 10.6 million pounds in 2012. It was 9.5 million pounds in interim 2012 and 12.0 million pounds in interim 2013.¹¹³ Thus, the volume of subject imports increased by 58.4 percent from 2010 to 2012, while apparent U.S. consumption declined by *** percent during the same period.¹¹⁴ Subject imports’ share of apparent U.S. consumption increased from *** percent in 2010 to *** percent in 2011 and *** percent in 2012; it was *** percent in interim 2012 and *** percent in interim 2013.¹¹⁵

The record indicates that subject imports took market share from the domestic industry. The subject imports gained *** percentage points of market share from 2010 to 2012, and the domestic industry’s market share declined by *** percentage points during this period.¹¹⁶ Consequently, we find, for purposes of these preliminary determinations, that the volume of subject imports, and the increase in that volume, are significant both in absolute terms and relative to consumption in the United States.

¹⁰⁸ CR at I-10; PR at I-7; Conf. Tr. at 35-36 (Walden).

¹⁰⁹ CR at V-1; PR at V-1; Conf. Tr. at 17-18 (Walden).

¹¹⁰ CR at V-1; PR at V-1.

¹¹¹ CR at V-3; PR at V-1. One importer reported inland shipment costs of 70 percent. *Id.* at V-3, n.3; PR at V-1, n.3.

¹¹² 19 U.S.C. § 1677(7)(C)(i).

¹¹³ CR/PR at Tables IV-2, C-1.

¹¹⁴ CR/PR at Table C-1.

¹¹⁵ CR/PR at Tables IV-5, C-1.

¹¹⁶ CR/PR at Tables IV-5, C-1. The market share of subject imports was *** percentage points higher in interim 2013 than in interim 2012, while the domestic industry’s market share was *** percentage points lower. *Id.*

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.¹¹⁷

As previously stated, subject imports and the domestic like product are moderately to highly substitutable for product with a similar chlorine content. Accordingly, we find that price is an important factor in purchasing decisions for calhypo between subject imports and domestically produced product with similar chlorine content.¹¹⁸

In these preliminary phase investigations, the Commission collected pricing data on two products.¹¹⁹ The reported pricing data accounted for approximately 16 percent of U.S. shipments of subject imports and approximately *** percent of U.S. producers' U.S. shipments from January 2010 to September 2013.¹²⁰ The subject imports undersold the domestic like product in all 15 quarterly price comparisons during this period by margins ranging from *** percent to *** percent.¹²¹ In light of the importance of price to purchasing decisions, we find underselling by the subject imports to be significant for purposes of our preliminary determinations.

Prices for the domestic like product fluctuated during the POI, declining from the first quarter of 2010 through the third quarter of 2013 by *** percent for product 1 and by *** percent for product 2.¹²² For product 1, prices for domestically produced product peaked during the fourth quarter of 2011 and the first quarter of 2012 and were at period lows during

¹¹⁷ 19 U.S.C. § 1677(7)(C)(ii).

¹¹⁸ CR at II-9 to II-12; PR at II-6 to II-8.

¹¹⁹ Both of the products consist of calcium hypochlorite, 65 to 68 percent available chlorine, granular, 100 lbs, however packaged. Separate pricing data were collected for product sold into the repacker/private label channel and for product sold directly to dealers that serve the private residential or commercial swimming pool channels. CR at V-6, PR at V-4. We invite the parties to identify additional pricing products in their comments on the draft final phase questionnaires that would enhance the Commission's pricing analysis in the final phase investigations.

¹²⁰ CR at V-6; PR at V-4.

¹²¹ CR at V-12; PR at V-6. We reject F2's argument that we should combine the pricing data for products 1 and 2 into one pricing data set for purposes of our underselling analysis. F2's Postconference Brief at 8-9. For its pricing analysis, the Commission endeavors to collect data on similar products at the same level of trade, and it is consequently appropriate to report separately the pricing data from different types of purchasers in these investigations.

¹²² CR/PR at Table V-4.

interim 2013.¹²³ For product 2, prices for domestically produced product peaked during the second and third quarters of 2011 and reached a period low during the first quarter of 2012.¹²⁴ Reported prices of subject imports, which were for product 2, increased overall by *** percent from the first quarter of 2010 through the third quarter of 2013.¹²⁵ Four of six responding purchasers stated that U.S. producers had reduced their prices to compete with the prices of subject imports over the POI.¹²⁶

The record indicates that the domestic industry's costs, in particular raw material costs, rose during the POI and that the domestic industry was not able to raise prices accordingly.¹²⁷ The domestic industry's ratio of COGS to net sales increased from *** percent in 2010 to *** percent in 2011. While it declined to *** percent in 2012 (still a higher level than in 2010), it was higher in interim 2013 (*** percent) than in interim 2012 (*** percent).¹²⁸ In light of these data, we find for purposes of these preliminary determinations that there is evidence of price suppression.

The Commission was able to confirm lost sales allegations by the petitioner totaling \$*** and involving *** pounds of calhypo¹²⁹ and lost revenue allegations totaling \$*** involving *** pounds of calhypo.¹³⁰ Five of six responding purchasers reported that they shifted purchases of calhypo from U.S. producers to subject imports during the POI; all five purchasers reported that price was the reason for their shift in purchasing.¹³¹ This provides further indication that through underselling, the subject imports increased market penetration during the POI at the expense of the domestic industry.

In light of the significant underselling, which accompanied gains in subject import volume and market share, and evidence that the effect of the subject imports was to prevent price increases which otherwise would have occurred, to a significant degree, we find for purposes of these preliminary determinations that subject imports had significant adverse price effects.

E. Impact of the Subject Imports¹³²

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,

¹²³ CR/PR at Table V-2.

¹²⁴ CR/PR at Table V-3.

¹²⁵ CR/PR at Table V-4.

¹²⁶ CR at V-13; PR at V-7.

¹²⁷ CR at V-1, VI-9 to VI-10; VI-11 to VI-12; PR at V-1; VI-2 to VI-3; VI-3 to VI-4.

¹²⁸ CR/PR at Tables VI-1, C-1.

¹²⁹ CR/PR at Table V-6.

¹³⁰ CR/PR at Table V-7.

¹³¹ CR at V-13; PR at V-7.

¹³² In its notice initiating the antidumping duty investigation on Calcium Hypochlorite from China, Commerce reported estimated dumping margins ranging from 182.51 to 210.52 percent. 79 Fed. Reg. 2410, 2413 (January 14, 2014).

inventories, capacity utilization, market share, employment, wages, productivity, profits, cash flow, return on investment, ability to raise capital, 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.”

Based on the record of the preliminary phase of these investigations, we find that subject imports had a significant impact on the domestic industry. Many indicators of the domestic industry’s performance, such as production, capacity utilization, U.S. shipments, market share, employment, and operating income, declined between 2010 and 2012 and were lower in interim 2013 than they were in interim 2012. These declines in domestic industry performance occurred during a period when demand was relatively unchanged, while subject imports increased their volume and market share and undersold the domestic like product.

U.S. producers’ capacity increased by *** percent overall from 2010 to 2012, remaining unchanged at *** pounds in 2010 and 2011 and then increasing to *** pounds in 2012, when, as previously discussed, ***. It was *** pounds in interim 2012 and *** in interim 2013.¹³³ Production declined by *** percent overall from 2010 to 2012, declining from *** pounds in 2010 to *** pounds in 2011 and then increasing to *** pounds in 2012; it was *** pounds in interim 2012 and *** pounds in interim 2013.¹³⁴ Capacity utilization declined from *** percent in 2010 to *** percent in 2011 and *** percent in 2012; it was *** percent in interim 2012 and *** percent in interim 2013.¹³⁵ The domestic industry’s share of apparent U.S. consumption declined from *** percent in 2010 to *** percent in both 2011 and 2012. It was *** percent in interim 2012 and *** percent in interim 2013.¹³⁶

Net sales declined by *** percent overall from 2010 to 2012, declining from *** pounds in 2010 to *** pounds in 2011 and *** pounds in 2012. Net sales were *** pounds in interim 2012 and *** pounds in interim 2013.¹³⁷ U.S. shipments declined by *** percent overall from 2010 to 2012, declining from *** pounds in 2010 to *** pounds in 2011 and then increasing slightly to *** pounds in 2012. U.S. shipments were *** pounds in interim 2012 and *** pounds in interim 2013.¹³⁸ U.S. producers’ ending inventories increased by *** overall from 2010 to 2012, declining from *** pounds in 2010 to *** pounds in 2011 and then increasing to *** pounds in 2012; they were *** pounds in interim 2012 and *** pounds in interim 2013.¹³⁹

Employment declined by *** percent overall from 2010 to 2012, decreasing from *** production-related workers (PRWs) in 2010 to *** PRWs in 2011 and *** PRWs in 2012. The number of PRWs was *** in interim 2012 and *** in interim 2013.¹⁴⁰ Hours worked declined by *** percent overall from 2010 to 2012, declining from *** hours in 2010 to *** hours in

¹³³ CR/PR at Tables III-2, C-1; CR at III-2; PR at III-2.

¹³⁴ CR/PR at Tables III-2, C-1.

¹³⁵ CR/PR at Tables III-2, C-1.

¹³⁶ CR/PR at Tables IV-5, C-1.

¹³⁷ CR/PR at Tables VI-1, C-1.

¹³⁸ CR/PR at Tables IV-4, C-1.

¹³⁹ CR/PR at Tables III-5, C-1.

¹⁴⁰ CR/PR at Tables III-5, C-1.

2011 and *** hours in 2012; they were *** hours in interim 2012 and *** hours in interim 2013.¹⁴¹ Wages paid increased by *** percent overall from 2010 to 2012, declining from \$*** in 2010 to \$*** in 2011 and then increasing to \$*** in 2012. They were \$*** in interim 2012 and \$*** in interim 2013.¹⁴² Productivity (in pounds per hour) declined from *** in 2010 to *** in 2011, and then increased to *** in 2012; it was *** in interim 2012 and *** in interim 2013.¹⁴³

Reflecting declining sales quantities and shipments, net sales value declined by *** percent overall from 2010 to 2012, and were lower in interim 2013 than in interim 2012. Net sales value declined from \$*** in 2010 to \$*** in 2011, and then increased slightly to \$*** in 2012. Net sales value was \$*** in interim 2012 and \$*** in interim 2013.¹⁴⁴ Both COGS and selling, general and administrative (SG&A) expenses showed some fluctuations from 2010 to 2012 and were higher in interim 2013 than in interim 2012.¹⁴⁵

In light of the flat to increasing costs and expenses, the declines in revenues resulted in operating performance declines. Operating income declined by *** percent from 2010 to 2012, falling from \$*** in 2010 to \$*** in 2011, and then increasing to \$*** in 2012. It was \$*** in interim 2012 and \$*** in interim 2013.¹⁴⁶ The industry's operating income margin declined from *** percent in 2010 to *** percent in 2011 and then increased to *** percent in 2012; it was *** percent in interim 2012 and *** percent in interim 2013.¹⁴⁷

Based on the record of the preliminary phase of these investigations, we find that subject imports are having an adverse impact on the domestic industry. Increasing volumes of subject imports that significantly undersold the domestic like product resulted in the subject imports taking market share from the domestic industry. These market share declines led to declines in the domestic industry's production, capacity utilization, and U.S. shipments. Reflecting declining revenues, operating income and ratios declined as well. These trade and performance indicators were also lower in interim 2013 than in interim 2012.¹⁴⁸

¹⁴¹ CR/PR at Tables III-5, C-1.

¹⁴² CR/PR at Tables III-5, C-1.

¹⁴³ CR/PR at Tables III-5, C-1.

¹⁴⁴ CR/PR at Tables VI-1, C-1.

¹⁴⁵ CR/PR at Tables VI-1, C-1.

¹⁴⁶ CR/PR at Tables VI-1, C-1.

¹⁴⁷ CR/PR at Tables VI-1, C-1. Capital expenditures increased from \$*** in 2010 to \$*** in 2011 and then declined to \$*** in 2012. Capital expenditures were \$*** in interim 2012 and \$*** in interim 2013. CR/PR at Tables VI-4, C-1. Research and development (R&D) expenses declined from \$*** in 2010 to \$*** in 2011 and then declined further to \$*** in 2012. R&D expenses were \$*** in both interim 2012 and interim 2013. CR/PR at Table VI-4.

¹⁴⁸ JSCC argues that competition between subject imports and the domestic like product is limited and that subject imports therefore could not be the cause of any injury to the domestic industry. JSCC's Postconference Brief at 14, 22. The current record does not contain clear and convincing evidence of this proposition. As previously discussed, there will be further examination of the nature and extent of competition between the domestic like product and the subject imports in any final phase investigations. We will also further consider raw material costs and their impact on the industry's performance. See F2's Postconference Brief at 19-23.

In our analysis of the impact of subject imports on the domestic industry, we have taken into account whether there are other factors that may have had an adverse impact on the domestic industry during the POI to ensure that we are not attributing injury from other factors to the subject imports. There was a *** decline in demand from 2010 to 2012,¹⁴⁹ which respondents contend was caused in part by weather conditions and in part by competition from other products.¹⁵⁰ However, the domestic industry's loss in market share and its overall declines in production and shipments were larger than the *** decline in demand.

Nonsubject imports had only a small presence in the U.S. market during the POI, with a share of apparent U.S. consumption ranging between a low of *** percent in 2010 and a high of *** percent in 2011.¹⁵¹ Accordingly, we find that nonsubject imports cannot explain the declines in the domestic industry's market share during the POI.¹⁵²

We therefore conclude, for purposes of these preliminary determinations, that subject imports have had a significant impact on the domestic industry.

VI. 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 calhypo from China that are allegedly sold in the United States at less than fair value and are allegedly subsidized by the government of China.

¹⁴⁹ Apparent consumption declined from *** pounds in 2010 to *** pounds in 2011, then increased *** to *** pounds in 2012. It was *** pounds in interim 2012 and *** pounds in interim 2013. CR/PR at Tables IV-4, C-1.

¹⁵⁰ JSCC's Postconference Brief at 21-22; F2's Postconference Brief at 26-28. We note that any decline in demand for calhypo due to weather conditions or competition from other products did not prevent subject imports from increasing in volume by 58.4 percent during the POI. CR/PR at Table C-1.

¹⁵¹ Nonsubject imports as a share of apparent U.S. consumption by quantity increased from *** percent in 2010 to *** percent in 2011, but then declined to *** percent in 2012; they were *** percent in interim 2012 and *** percent in interim 2013. CR/PR at Tables IV-6, C-1.

¹⁵² Based on the record evidence in the preliminary phase of these investigations, Commissioner Pinkert finds that price competitive, nonsubject imports were not a significant factor in the U.S. market during the period of investigation and therefore does not conduct an analysis of whether nonsubject imports would have replaced subject imports during the period of investigation without benefit to the domestic industry. Such imports never exceeded *** percent of the U.S. market in any year of the period of investigation. CR/PR at Table C-1.

PART I: INTRODUCTION

BACKGROUND

These investigations result from a petition filed with the U.S. Department of Commerce (“Commerce”) and the U.S. International Trade Commission (“USITC” or “Commission”) by Arch Chemicals, Inc. (“Arch”), a Lonza Company, Atlanta, GA, on December 18, 2013, alleging that an industry in the United States is materially injured and threatened with material injury by reason of subsidized and less-than-fair-value (“LTFV”) imports of calcium hypochlorite (“calhypo”):¹ from China. The following tabulation provides information relating to the background of these investigations.²³

Effective date	Action
December 18, 2013	Petition filed with Commerce and the Commission; institution of Commission investigations (78 FR 77712, December 24, 2013)
January 8, 2014	Commission’s conference
January 14, 2014	Commerce’s notice of AD initiation (79 FR 2410); Commerce’s notice of CVD initiation (79 FR 2417)
January 31, 2014	Commission’s vote
February 3, 2014	Commission’s determinations
February 10, 2014	Commission’s views

¹ See the section entitled “The Subject Merchandise” in *Part I* of this report for a complete description of the merchandise subject to this/these investigation(s).

² Pertinent *Federal Register* notices are referenced in app. 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 app. B of this report.

STATUTORY CRITERIA AND ORGANIZATION OF THE REPORT

Statutory criteria

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

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

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, profits, productivity, return on investments, 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.

Organization of report

Part I of this report presents information on the subject merchandise, alleged subsidy/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

Calhypo is generally used as a sanitizing agent for swimming pools, spas, and municipal water treatment systems. The only two known U.S. producers of calhypo are Arch and Axiall Corporation ("Axiall"), while leading producers of calhypo outside the United States include Arch affiliates in Brazil (Arch Quimica Brasil Ltda.) and South Africa (Arch Water Products of South Africa PTY). India and Japan are also known to have production of calhypo.⁴ The top U.S. importers of calhypo from China are: ***. Calhypo is also imported from nonsubject countries, primarily India and Japan, but imports from China account for the vast majority (***) percent of imported calhypo from 2010 to September 2013.

Apparent U.S. consumption of calhypo totaled approximately *** in 2012. U.S. producers' U.S. shipments of calhypo totaled *** in 2012, and accounted for *** percent of apparent U.S. consumption by quantity and *** percent by value. U.S. imports from subject sources totaled 10.6 million pounds (\$7.8 million) in 2012 and accounted for *** percent of apparent U.S. consumption by quantity and *** percent by value. U.S. imports from nonsubject sources totaled 741 thousand pounds (\$1.2 million) in 2012 and accounted for *** percent of apparent U.S. consumption by quantity and *** percent by value.

⁴ Conference transcript, p. 90-91 (Walden).

SUMMARY DATA AND DATA SOURCES

A summary of data collected in these investigations is presented in appendix C, table C-1. Except as noted, U.S. industry data are based on questionnaire responses of two firms that accounted for all U.S. production of calhypo during 2012. U.S. imports are based on official Commerce statistics. Data for producers in China are based on questionnaire responses of one producer and one exporter in China.

PREVIOUS AND RELATED INVESTIGATIONS

Calhypo has been the subject of one prior antidumping duty investigation in the United States. On April 25, 1984, Olin Corp., Stamford, CT filed a petition with the Commission and Commerce, alleging that an industry in the United States was being materially injured or threatened with injury by reason of LTFV imports of calcium hypochlorite from Japan. In April 1985, the Commission made an affirmative final determination,⁵ and Commerce issued an antidumping duty order on calhypo from Japan.⁶ Commerce initiated a sunset review of the order on December 2, 1998, but no domestic interested party responded to the notice of initiation by the applicable deadline, and Commerce accordingly revoked the order, effective January 1, 2000.⁷

A related product, chlorinated isocyanurates (“chlorinated isos”), also used primarily for swimming pool sanitation, has been the subject of several antidumping and countervailing duty investigations. On May 14, 2004, a petition was filed by Clearon Corp. (“Clearon”), South Charleston, WV, and Occidental Chemical Corporation (“Oxy”), Dallas, TX with Commerce and the Commission alleging that an industry in the United States was materially injured by reason of LTFV imports of chlorinated isocyanurates from China and Spain. On June 3, 2005, the Commission made affirmative final determinations,⁸ and Commerce subsequently issued antidumping duty orders on chlorinated isos from China and Spain.⁹ In 2010, the Commission made affirmative determinations in its five-year reviews regarding imports of chlorinated isos from China and Spain¹⁰ and Commerce issued continuation of antidumping orders of

⁵ *Calcium Hypochlorite from Japan*, 731-TA-189 (Final), USITC Publication 1672 (April 1985) (Vice Chairman Liebel and Commissioner Lodwick dissenting).

⁶ 50 FR 15470, April 18, 1985.

⁷ *December 1998 Sunset Reviews: Final Results and Revocations*, 64 FR 9473, February 26, 1999.

⁸ *Chlorinated Isocyanurates From China and Spain: Investigation Nos. 731-TA-1082 and 1083 (Final)*, USITC Publication 3782, June 2005 and *Chlorinated Isocyanurates From China and Spain: Determinations*, 70 FR 36205, June 22, 2005.

⁹ *Notice of Antidumping Duty Order: Chlorinated Isocyanurates from the People’s Republic of China*, 70 FR 36561, June 24, 2005 and *Notice of Antidumping Duty Order: Chlorinated Isocyanurates from Spain*, 70 FR 36562, June 24, 2005.

¹⁰ *Chlorinated Isocyanurates From China and Spain: Determinations*, 75 FR 61772, October 6, 2010.

chlorinated isos from China and Spain.¹¹ On August 29, 2013, Clearon and Oxy filed another petition alleging that an industry in the United States is materially injured and threatened with material injury by reason of subsidized imports of chlorinated isos from China and LTFV imports of chlorinated isos from Japan. The Commission preliminarily determined that an industry in the United States is materially injured by reason of subsidized imports from China and LTFV imports from Japan of chlorinated isos.¹² Commerce is scheduled to issue its preliminary determinations on the countervailing duty of chlorinated isos from China and the antidumping duty of chlorinated isos from Japan in February 2014.

NATURE AND EXTENT OF ALLEGED SUBSIDIES AND SALES AT LTFV

Alleged subsidies

On January 14, 2014, Commerce published a notice in the *Federal Register* of the initiation of its countervailing duty investigation on calhypo from China.¹³ Commerce found that there is sufficient information to initiate a CVD investigation of 21 alleged programs.¹⁴

Alleged sales at LTFV

On January 14, 2014, Commerce published a notice in the *Federal Register* of the initiation of its antidumping duty investigation on calhypo from China.¹⁵ Commerce has initiated an antidumping duty investigation based on estimated dumping margins of 182.51 to 210.52 percent for calhypo from China.¹⁶

¹¹ *Chlorinated Isocyanurates from Spain and the People's Republic of China: Final Results of the Expedited Sunset Reviews of the Antidumping Duty Orders*, 75 FR 49464, August 13, 2010.

¹² *Chlorinated Isocyanurates From China and Japan: Determinations*, 78 F.R. 66767, Nov. 6, 2013.

¹³ *Calcium Hypochlorite From the People's Republic of China: Initiation of Countervailing Duty Investigation*, 79 FR 2417, January 14, 2014.

¹⁴ *Ibid* and *Department of Commerce, CVD Initiation Checklist, Inv. No. C-570-991*, January 7, 2014.

¹⁵ *Calcium Hypochlorite From the People's Republic of China: Initiation of Antidumping Duty Investigation*, 79 FR 2410, January 14, 2014.

¹⁶ *Ibid*.

THE SUBJECT MERCHANDISE

Commerce's scope

Commerce has defined the scope of these investigations as follows:

Calcium hypochlorite, regardless of form (e.g., powder, tablet (compressed), crystalline (granular), or in liquid solution), whether or not blended with other materials, containing at least 10% available chlorine measured by actual weight. The scope also includes bleaching powder and hemibasic calcium hypochlorite.

Calcium hypochlorite has the general chemical formulation $\text{Ca}(\text{OCl})_2$, but may also be sold in a more dilute form as bleaching powder with the chemical formulation, $\text{Ca}(\text{OCl})_2 \cdot \text{CaCl}_2 \cdot \text{Ca}(\text{OH})_2 \cdot 2\text{H}_2\text{O}$ or hemibasic calcium hypochlorite with the chemical formula of $2\text{Ca}(\text{OCl})_2 \cdot \text{Ca}(\text{OH})_2$ or $\text{Ca}(\text{OCl})_2 \cdot 0.5\text{Ca}(\text{OH})_2$. Calcium hypochlorite has a Chemical Abstract Service ("CAS") registry number of 7778-54-3, and a U.S. Environmental Protection Agency ("EPA") Pesticide Code ("PC") Number of 014701. The subject calcium hypochlorite has an International Maritime Dangerous Goods ("IMDG") code of Class 5.1 UN 1748, 2880, or 2208 or Class 5.1/8 UN 3485, 3486, or 3487.¹⁷

Tariff treatment

Based upon the scope set forth by the Department of Commerce, information available to the Commission indicates that the merchandise subject to these investigations is classified under subheadings 2828.10.00, 3808.94.50, or 3808.99.95 of the Harmonized Tariff Schedule of the United States (2013). These subheadings have general rates of duty of 2.4 percent ad valorem (for the separate chemically identifiable compound of chapter 28) and 5 percent ad valorem (for disinfectants containing the compound).

¹⁷ *Calcium Hypochlorite From The People's Republic of China: Initiation of Countervailing Duty Investigation*, 79 FR 2417, January 14, 2014.

THE PRODUCT

Description and applications

Calhypo is a chemical compound used primarily as a sanitizing agent for swimming pools, spas, and municipal water treatment systems. It is typically sold as a white solid in powder, crystalline, or tablet¹⁸ form,¹⁹ although the solid may have a tint. Calhypo can also be sold in a liquid solution.²⁰ The active ingredient is chlorine, which acts as a biocide, killing algae and other microbes. Calhypo can be sold as a pure product, with available chlorine concentrations of 65-80 percent²¹ or as a product blended with other ingredients. Blended products typically include aglaecides and/or flocculants to clarify water and are most commonly sold with available chlorine content of 45-60 percent. Included in the scope for these investigations are bleaching powder and hemibasic calcium hypochlorite which are calhypo mixtures with lower percentages of available chlorine. The petitioner states that there are no differences between domestic and subject imports. Respondents note that there are differences in solubility and color.²²

Calhypo's effectiveness in sanitizing water is due to chlorine's properties as a strong oxidizing agent, disrupting the cellular activity of a broad range of microorganisms.²³ For these biocidal applications, calhypo is subject to regulation by the U.S. Environmental Protection Agency (EPA) under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA). EPA registrations apply to specific concentrations of active chlorine so that a producer selling multiple concentrations requires multiple EPA registrations.

Calhypo's oxidizing properties also make it effective in degrading non-living material, a desirable quality in applications such as pool and spa maintenance. However, oxidizers can enhance or cause the combustion of other materials, posing fire hazards in transportation and storage. Domestically, the transportation of calhypo is regulated by the U.S. Department of Transportation, which classifies products containing more than 39 percent chlorine content by weight as a hazardous material whose transportation requires special handling. The National Fire Protection Association (NFPA) classifies calhypo as a class I, II, or III oxidizer depending on concentration. NFPA's guidelines for storage at retail facilities include requirements for sprinklers and recommended maximum quantities.

The principal application of calhypo in the United States is in water treatment at commercial and residential pools and spas. Calhypo is used both to maintain regular chlorine

¹⁸ Tablets are used often industrial applications that involve specialized feeding systems (Walden p. 43).

¹⁹ Petition, p. 10.

²⁰ Conference transcript, p. 43 (Clarke).

²¹ Petition. P. 5.

²² Conference transcript, pp. 113-115 (Ferrell).

²³ McDonnell and Russell, "Antiseptics and Disinfectants: Activity, Action, and Resistance" *American Society for Microbiology. Clinical Microbiology Reviews* retrieved at <http://cmr.asm.org/content/12/1/147.full> on December 9, 2013.

levels and/or to deliver quick, remedial increases in chlorine. Calhypo for pool and spa applications typically contains 45, 68, or 75 percent available chlorine. Other applications as a biocide include disinfection of drinking water and waste water, laundry, food and non-food contact surfaces, as well as washing fruits and vegetables. Calhypo also has applications other than as a biocide, including treating cyanide in wastewater.²⁴

Calhypo is sold by manufacturers to end users, repackers, distributors, dealers, and other retailers. Manufacturers may also engage contract and toll packagers to formulate, tablet, or package products. In the retail market, repackers transfer bulk chemical into smaller packages, in some cases with a private brand, and may tablet calhypo and/or blend it with other components. Wholesale distributors market to commercial pools, retailers, and pool-service companies. Both specialty stores and large discount stores sell to retail consumers. Providers of pool maintenance services and commercial pools and spas themselves are also part of the retail distribution channel. In the institutional and industrial channel of distribution, manufacturers may sell directly to end-users or product may move through distributors and repackers.

Manufacturing processes

Calhypo is produced by combining chlorine and calcium hydroxide (lime). There are two main production processes: one using sodium, and the other using calcium. The sodium process yields higher available chlorine content and, with some variations, is used for all domestic product and the majority of imported Chinese product. In the sodium process, caustic (NaOH) and chlorine (Cl₂) are combined in a reactor, yielding sodium hypochlorite (NaOCl), sodium chloride (NaCl) and water. The sodium hypochlorite is then combined with hydrated lime and chlorine to create calcium hypochlorite paste (Ca(OCl)₂). Calcium hypochlorite paste is filtered to produce a cake which is dried to a granular or powder form. This material is cooled, compacted, and crushed, then screened for size. Under- and over-sized material is recycled. The resulting product typically has an available chlorine content of approximately 68 percent and can be packaged for sale, blended with other materials, and/or tableted. Variations in the sodium process include approaches that yield calhypo with different percentages of available chlorine, both higher purity product (with 78 percent available chlorine) and lower purity products, including bleaching powder (approximately 35 percent chlorine).

In the calcium process, lime is blended with chlorine to produce hemibasic calcium hypochlorite crystals. After removal of calcium chloride by filtering or centrifuging, the crystals are dried to make a final product with approximately 60 percent available chloride content. The calcium process is believed to be used by some manufacturers in China, although not for export to the United States.

²⁴ Petition, pp. 11-12.

THE DOMESTIC INDUSTRY

The petitioner proposes that the domestic industry should include the two producers of calhypo, Arch and Axiall, but not companies who are solely repackers and tableters of calhypo.²⁵ The petitioner asserts that tableters and repackers should not be considered as part of the U.S. industry, stating that tableting requires a “small” investment²⁶ and a “minimal” technical expertise.²⁷ It also states that the value-added from tableting calhypo is about *** percent.²⁸ Respondent F2 believes that repackers and tableters should be considered as part of the domestic industry given that they perform some of the same production activities as the petitioner.²⁹ Respondent F2 urges the Commission to consider firms that repack and private label market calhypo (whether repacking it under a private label, tableting it, or reformulating it) as part of the domestic industry.³⁰ Respondent JSCC proposes that the Commission consider including repackers and tableters as part of the domestic industry should these preliminary investigations proceed to a final phase.³¹

DOMESTIC LIKE PRODUCT ISSUES

The petitioner proposes a single domestic like product of all calcium hypochlorite regardless of the method of manufacture, including any blended product containing available chlorine of 10 percent or more, coterminous with the scope.³² Importer F2 asserts that the Commission should define the domestic like product to include also trichloroisocyanuric acid (trichlor), sodium dichloroisocyanuric in both its anhydrous and dihydrate forms (dichlor), and sodium hypochlorite, commonly known as liquid bleach.³³ Subject producer Sinopec Jiangnan Salt & Chemical Company (JSSC) notes that the proposed scope includes products with a lower than typical concentration of available chlorine, such as bleaching powder and hemibasic

²⁵ Petition, p. 3 and petitioners’ postconference brief, p. 6.

²⁶ The petitioners added that establishing a single line calhypo production facility costs *** while a tableting press costs ***. Petition, p. 3 and petitioner’s postconference brief, p. 7.

²⁷ Petitioner’s postconference brief, pp. 7-8.

²⁸ The petitioner asserts that the vast majority (more than 95 percent) of tableted calhypo sold in the United States are produced by the two domestic producers, Arch and Axiall. Petition, p. 3. Arch notes that at least two other companies, ***, may be toll processing calhypo. Conference transcript, p. 50 (Clarke) and E-mail from Peggy Clarke, counsel for Arch, December 20, 2013.

²⁹ F2 notes that the petitioner “has its own tableting operations (either in-house or through a tolling arrangement) and that the petitioner competes with the same repackers to which it has sold granular calhypo. Respondent F2’s postconference brief, p. 6. The petitioner notes that the two U.S. producers, *** E-mail from Peggy Clarke, counsel to petitioner, December 19, 2013.

³⁰ F2’s postconference brief, pp. 5-6.

³¹ JSCC’s postconference brief, pp. 1-2.

³² Petition, pp. 5-6.

³³ F2 post conference brief, p.1.

calcium hypochlorite, and high purity products, with at least 70 percent available chlorine. JSSC goes on to suggest these two classes of products raise separate like product issues under the Commission's traditional six-factor analysis.³⁴

Physical Characteristics and Uses

The petitioner states that all calhypo has similar physical characteristics, with all forms of calhypo, including bleaching powder and hemibasic calcium hypochlorite based on the same reaction, lime with chlorine, and having similar chemical composition.³⁵ The petitioner states that sodium hypochlorite differs from calhypo in that it ships with a relatively high quantity of water, generally has a relatively low level of available chlorine, requires a relatively large quantity in application, and degrades quickly, producing perchlorates.³⁶ At the molecular level, calhypo features two hypochlorite ions (OCl^-) bound to a single calcium ion (Ca^{2+}). Sodium hypochlorite has a related, but distinct, structure, with a single hypochlorite ion bound to a single sodium ion (Na^+).³⁷ In contrast, trichlor ($\text{Cl}_3(\text{NCO})_3$), dichlor dihydrate ($\text{NaCl}_2(\text{NCO})_3 \cdot 2\text{H}_2\text{O}$), and anhydrous dichlor ($\text{NaCl}_2(\text{NCO})_3$) do not contain hypochlorite ions and are instead characterized by the presence of cyanuric acid (CNOH_3)³⁸ a cyclic compound, bound with either chlorine or sodium chloride.³⁹ The petitioner asserts that cyanuric acid can, over time, build up and reduce the effectiveness of chlorine as a biocide.⁴⁰

F2 states that calhypo, dichlor, trichlor, and sodium hypochlorite share similar physical characteristics and uses with all of these compounds used primarily for sanitation of swimming pools, spas, and industrial water treatment. F2 notes similar ranges of available chlorine among these compounds, with calhypo having available chlorine ranging from 10-78 percent, sodium hypochlorite at least 12.5 percent, trichlor 90 percent, anhydrous dichlor 56 percent, and dihydrate dichlor 63 percent. F2 further notes similarity in the physical form and swimming pool application among several of these compounds. Trichlor, typically used to maintain routine chlorine levels, is commonly sold in a tablet form, while dichlor, typically used as shock treatment to raise the chlorine concentration in pool water quickly, is commonly sold in a granular form. Calhypo is sold in tablet or granular powder form, and can be used for shock treatment or maintenance of chlorine level. In addition to the above uses, calhypo can also, F2 states, be used to disinfect water and waste water as well as cleaning and sanitizing applications.⁴¹

³⁴ JSSC post conference brief, p.2.

³⁵ Petitioner post conference brief, p. 4.

³⁶ Conference transcript, p. 45 (Walden).

³⁷ Kirk-Othmer, *Encyclopedia of Chemical Technology*, vol 4, pp. 682.

³⁸ *Chlorinated Isocyanurates From China and Japan*, Investigation Nos. 701-TA-501 and 1226 (Preliminary), USITC Publication 4431, November 2013, p I-5.

³⁹ Kirk-Othmer, *Encyclopedia of Chemical Technology*, vol 4, pp. 681-682.

⁴⁰ Conference transcript, p. 45 (Walden).

⁴¹ F2 post conference brief, pp. 2-3.

JSSC notes that diluted products such as bleaching powder and hemibasic calcium hypochlorite have different chemical formulations from calhypo.⁴² The empirical formula for bleaching powder ($\text{Ca}(\text{OCl})_2 \cdot \text{CaCl}_2 \cdot \text{Ca}(\text{OH})_2 \cdot 2\text{H}_2\text{O}$) represents a crystalline structure with calhypo bonded to calcium chloride, slaked lime, and water.⁴³ The empirical formula for hemibasic calcium hypochlorite ($\text{Ca}(\text{OCl})_2 \cdot 0.5\text{Ca}(\text{OH})_2$) represents a crystalline structures with calhypo bonded to slaked lime.⁴⁴ After further processing to purer forms of calhypo, water, calcium chloride, and slaked lime remain present in the product, although at lower concentrations.⁴⁵

Interchangeability

The petitioner asserts that calhypo is preferred over sodium hypochlorite, dichlor, and trichlor as a backup sanitizer for drinking water. The petitioner asserts that, due to build-up of perchlorates, sodium hypochlorite poses issues in sanitizing drinking water that calhypo does not, while dichlor and trichlor cannot be used due to the presence of cyanuric acid.⁴⁶

F2 states that trichlor and dichlor are interchangeable with calhypo in most common applications: sanitation of pools and water. F2 further states that customers may prefer one over the other due to differences in solubility, available chlorine, degree of storage hazard, and residue. F2 asserts that trichlor and dichlor have been taking market share from calhypo, noting this as a sign of interchangeability. F2 quotes the petitioner witness at the conference stating that they are “good alternate substitutes to sanitized water.”⁴⁷

Bleaching powder is generally used in sanitation activities that are not sensitive to the volume of insoluble chemicals, including disinfecting seawater and drainage ditches.⁴⁸ Hemibasic calcium hypochlorite has limited use in sanitation and is generally used as an alternative to bleaching powder.⁴⁹

Manufacturing Processes

The petitioner states that all calhypo shares common manufacturing facilities with differentiation between calcium hypochlorite, bleaching powder, and hemibasic calcium hypochlorite depending on the point at which one takes product from the production line. The petitioner further states that both the calcium and sodium calhypo production processes use the same reaction.⁵⁰

⁴² JSSC post conference brief, p. 2.

⁴³ Petition, Exhibit GEN-5, p. 958

⁴⁴ Petition, Exhibit GEN-5, p. 957.

⁴⁵ Petition, Exhibit GEN-5, p. 956.

⁴⁶ Conference transcript, p. 46 (Walden).

⁴⁷ F2 post conference brief, p. 3.

⁴⁸ Petition, Exhibit GEN-5, p. 958.

⁴⁹ Petition, Exhibit GEN-5, p. 957.

⁵⁰ Petitioner post conference brief, p. 4.

However, the petitioner characterizes the calhypo production processes as different from those of sodium hypochlorite, dichlor, and trichlor.⁵¹ The petitioner states that the sodium hypochlorite production process is simpler than that of calhypo and notes that dichlor and trichlor cannot be produced in the same facilities as calhypo for safety reasons.⁵²

F2 asserts that calhypo, sodium hypochlorite, dichlor, and trichlor use common manufacturing facilities, production processes, and production employees. F2 finds common features in the feedstocks used in the production processes of calhypo (either chlorine, caustic soda, and lime; or chloride and lime), sodium hypochlorite (caustic soda and liquid or gaseous chlorine), and trichlor and dichlor (caustic soda, chlorine gas, and cyanuric acid).⁵³ While all three processes include caustic soda and chlorine, there are differences in the feedstocks, most notably the usage of cyanuric acid in production of trichlor and dichlor. During production, nitrogen present in cyanuric acid forms nitrogen gas and other nitrogen-containing compounds that require further processing before disposal to comply with environmental regulations.⁵⁴

Channels of Distribution

The petitioner asserts that in the United States all calhypo is sold through the same channels of distribution.

F2 states that sodium hypochlorite, dichlor, trichlor, and calhypo are all sold through the same channels of distribution. F2 states that trichlor is generally tableted and repackaged whereas dichlor is generally repackaged without tableting before they, like sodium hypochlorite, are sold directly to retailers (mass market retailers, pool supply stores, pool maintenance services, pool service companies and smaller retailers) or to distributors who then sell to retailers. F2 notes that calhypo is similarly sold to retailers and distributors and is also sold to repackers/private label marketers and manufacturers of bulk chemicals.⁵⁵

Customer and Producer Perceptions

The petitioner states that all calhypo share similar customer and producer perceptions. The petitioners note that all calhypo is used as a sanitizer (swimming pool, drinking water, wastewater, or other industrial uses). Municipal water supplies typically use calhypo tablets, swimming pools use the granular form, and industrial applications use hemibasic calcium hypochlorite.⁵⁶

⁵¹ Conference transcript, p. 45 (Walden).

⁵² Petitioner post conference brief at “Staff Questions Not Answered Elsewhere.” Responding to Henderson, conference transcript pp. 43-44.

⁵³ F2 post conference brief, pp. 4-5.

⁵⁴ *Chlorinated Isocyanurates From China and Spain*, Investigation Nos. 731-TA-1082 and 1083 (Final), USITC Publication 4184, April 20, 2005, p I-7.

⁵⁵ F2 post conference brief, pp. 3-4.

⁵⁶ Petitioner post conference brief, p. 5.

F2 states that there is overlap in customer perceptions of dichlor, trichlor sodium hypochlorite and calhypo due to common applications in pool and water sanitation. To support this statement, F2 cites conference witness Walden who stated, “The average pool user is not going to know one from the other.”⁵⁷ However the context of this quote appears to suggest that users would not know the difference between calhypo produced via sodium process versus calhypo produced via calcium process, rather than between calhypo and other products. F2 also cites the same witness for petitioners who identified only “convenience factors” differentiating consumer perceptions of calhypo and trichlor. However, the context of this comment appears to indicate a difference in consumer perception, suggesting that using quick-dissolving calhypo in feeder systems designed for trichlor creates “a mess” and has a negative impact on consumer perceptions.⁵⁸

Price

The petitioner states that calhypo pricing is consistent with a single like product, varying on the level of available chlorine and the amount of processing. As an example, petitioners note that tablets are likely to be priced higher than granular calhypo.⁵⁹ JSSC asserts that calhypo products with at least 70 percent available chlorine content are sold with price premiums and branded separately by domestic producers.⁶⁰

⁵⁷ Conference transcript, p. 34 (Walden).

⁵⁸ Conference transcript, pp. 47-48 (Walden).

⁵⁹ Petitioner post conference brief, p. 5.

⁶⁰ JSSC post conference brief, p. 2.

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

U.S. MARKET CHARACTERISTICS

The Petitioner indicated that in the retail segment of the market, calhypo is largely used in swimming pool and spa applications as well as for home septic/wastewater treatment. Industrial applications, such as industrial water treatment, and use in cleansers, detergents, etc. account for most of the rest of the end uses for the product.¹

The Petitioner reports that Chinese imports first competed in the repacker/private label channel of the U.S. market and in the past few years. They have begun to compete in the branded channels of the market. It indicates that suppliers typically sell granular or powder calhypo in bulk 100-pound packages in the repacker/private label channel and granular or tablet form in 1- to 100-pound packages in the remainder of the pool and spa market.²

According to U.S. producer and importer questionnaire responses, the largest purchasers of calhypo are *** which together purchase more than 40 percent of U.S. apparent consumption of calhypo.

CHANNELS OF DISTRIBUTION

U.S. producers sold both to distributors and end users while importers sold almost exclusively to distributors, as shown in table II-1. Since 2010, just over *** of U.S. producers' sales were to distributors. According to the Petitioner, calhypo is sold directly to end users, as well as to repackers/private label marketers, distributors, dealers, and other retailers. It also indicates that contract and toll packagers may be used to formulate, tablet and/or package end-use products.³

GEOGRAPHIC DISTRIBUTION

U.S. producers reported selling calhypo to all regions in the contiguous United States (table II-2). At least three importers reported selling calhypo imported from China to each region and two of seven importers reported selling imports from China to all regions. For U.S. producers, just under *** of sales were over 1,000 miles from their production facility, about *** were between 101 and 1,000 miles, and a *** of sales were within 100 miles. The Petitioner indicates that both domestic and imported calhypo compete on a national basis.⁴ The vast majority of sales of imports of calhypo from China were shipped between 101 and 1,000

¹ Petition, p. 15.

² Petition, pp. 15-16.

³ Petition, pp. 12 and 25.

⁴ Petition, p. 16.

Table II-1

Calhypo: U.S. producers' and importers' U.S. shipments, by sources and channels of distribution, 2010-12, January-September 2012, and January-September 2013

* * * * *

Table II-2

Calhypo: Geographic market areas in the United States served by U.S. producers and importers

Region	Number of firms	
	U.S. producers	Importers of product from:
		China
Northeast	2	4
Midwest	2	4
Southeast	2	7
Central Southwest	2	6
Mountain	2	3
Pacific Coast	2	3
Other ⁱ	2	1
All regions (except Other)	2	2
Reporting firms	2	7

ⁱ All other U.S. markets, including AK, HI, PR, and VI, among others.

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

miles of the U.S. point of shipment, although two importers (***) reported making the bulk of their sales within 100 miles of their U.S. point of shipment.

SUPPLY AND DEMAND CONSIDERATIONS

U.S. supply

Domestic production

Based on available information, U.S. producers of calhypo have the ability to respond to changes in demand with moderate changes in the quantity of shipments of U.S.-produced calhypo to the U.S. market. The main contributing factors to this degree of responsiveness of supply are the existence of alternate markets and inventories, some availability of unused capacity, and an inability to produce alternative products.

Industry capacity

Domestic capacity utilization decreased to just over *** percent in 2012. This level of capacity utilization suggests that U.S. producers may have some available capacity to increase production of product in response to an increase in prices.

Alternative markets

U.S. producers' exports, as a percentage of total shipments, fluctuated between *** and *** percent since 2010, indicating that U.S. producers may have an ability to shift shipments between the U.S. market and other markets in response to price changes. However, the Petitioner indicates that it faces a substantially higher international freight rates than Chinese producers.⁵

Inventory levels

U.S. producers' inventories, as a share of total shipments, fluctuated since 2010 between *** and *** percent of total shipments. This level of inventories suggests that U.S. producers may have an ability to respond to changes in demand with changes in the quantity shipped from inventories.

Production alternatives

No U.S. producer stated that it could switch production from calhypo to other products.

Supply constraints

No U.S. producer reported it had refused, declined, or was unable to supply calhypo since 2010.

Subject imports from China

Based on available information, producers of calhypo from China have the ability to respond to changes in demand with large changes in the quantity of shipments of calhypo to the U.S. market. The main contributing factors to this degree of responsiveness of supply are the existence of alternative markets and inventories.

Industry capacity

Chinese producers' capacity utilization was greater than *** percent during the period of investigation. This relatively high level of capacity utilization suggests that Chinese producers may have limited available capacity to increase production of calhypo in response to an increase in prices.

Alternative markets

Chinese producers' exports to markets other than the United States, as a percentage of total shipments, were greater than *** percent during the period of investigation. This

⁵ Petition, pp. 21-22.

indicates that Chinese producers may have an ability to shift shipments between the U.S. market and other markets in response to price changes.

Inventory levels

Chinese producers' inventories, as a share of total shipments, increased from about *** percent of total shipments in 2010 to *** percent of total shipments in 2012. These inventory levels suggest that Chinese producers may have some ability to respond to changes in demand with changes in the quantity shipped from inventories.

Production alternatives

No Chinese producer stated that it could switch production from calhypo to other products.

Supply constraints

Only one of seven responding importers of Chinese product reported that it had refused, declined, or was unable to supply calhypo since January 1, 2010. *** reported that from time to time it was unable to meet shipment commitments due to a lack of inventory.

Nonsubject imports

The largest source of nonsubject imports during 2010 to 2012 was India, which accounted for 78 percent of nonsubject imports in 2012. The Petitioner indicates that nonsubject imports are commercially insignificant, except for imports from India which are becoming increasingly significant and may be improving in quality.⁶ The Petitioner indicates that the next two largest nonsubject suppliers are their production facilities in Brazil and South Africa.⁷

U.S. demand

Based on available information, the overall demand for calhypo is likely to experience moderate to high changes in response to changes in price. The main contributing factors are the existence of substitute products and the large cost share of product in most of its end-use products.

End uses

U.S. demand for calhypo depends on the demand for U.S.-produced downstream products. A significant application for calhypo is the chlorination of water in residential and

⁶ Petition, p. 18. Conference transcript pp. 52-53 (Walden).

⁷ Conference transcript, p. 53 (Clarke).

commercial swimming pools. In swimming pools, calcium hypochlorite is used to kill pathogens and algae, as well as oxidize other non-living contaminants. Other EPA-registered uses for calhypo included the disinfection of water and waste water, as well as cleaning and sanitizing applications, including laundry, food-and-non-food contact surfaces, and the washing of fruits and vegetables. Because it is a strong oxidizer, it may also be used in a variety of other applications not registered with the EPA such as treating cyanide in wastewater.⁸

Business cycles

Both responding U.S. producers and three of six responding importers indicated that the market was subject to business cycles or conditions of competition. Specifically, producers and importers indicated that the market for calhypo is seasonal with demand lower in the winter months. This seasonal demand is dictated by demand for use in swimming pools. Several firms also indicated that demand for calhypo depends on the weather.

Two changes in conditions of competition in the calhypo industry mentioned by importers were the strong cost position of Axiall being fully integrated in raw materials and the entrance of Axiall into the wastewater calhypo market.

Demand trends

All firms reported either that U.S. demand for calhypo has fluctuated or not changed since 2010 (table II-3). *** reported that demand was relatively stable with about *** percent annual growth. Two importers indicated that demand depends on the weather. Questionnaire data for U.S. producer shipments and official U.S. import statistics show a decline in both the quantity and average unit value of apparent consumption.

Substitute products

U.S. producers and importers reported that substitutes for calhypo include dichlor, trichlor, liquid bleach, liquid and gaseous chlorine, chlorinated isocyanurates, lithium, potassium monopersulfate, sodium hypochlorite, and ultraviolet disinfection. In addition, the Petitioner indicated that products such as enzymes, sodium percarbonate, bromine, biguanide, salt generators, and polyhexamethylene biguanide (PHMB) can be used for the same end uses as calhypo.⁹ Some firms indicated that changes in prices of gaseous chlorine, dichlor, tricolor, sodium hypochlorite, and ultraviolet disinfection will affect the price of calhypo.

Cost share

Calhypo typically accounts for a large share of the cost of pool water disinfection and water treatment. Almost all U.S. producers and importers reported cost shares of 70 percent or greater for these applications.

⁸ Petition, pp. 11-12.

⁹ Petition, p. 14.

Table II-3

Calhypo: Firms' responses regarding U.S. demand, by number of responding firms

Item	Number of firms reporting			
	Increase	No change	Decrease	Fluctuate
Demand in the United States				
U.S. producers	0	2	0	0
Importers	0	2	0	4
Demand outside the United States				
U.S. producers	2	0	0	0
Importers	0	2	0	2

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

SUBSTITUTABILITY ISSUES

The degree of substitution between domestic and imported calhypo depends upon such factors as relative prices, quality (*e.g.*, grade standards, reliability of supply, defect rates, etc.), and conditions of sale (*e.g.*, price discounts/rebates, lead times between order and delivery dates, payment terms, product services, etc.). Based on available data, staff believes that there is a high degree of substitutability between domestically produced calhypo and calhypo imported from China.

Lead times

Calhypo is primarily sold from inventory. Both U.S. producers reported that at least *** percent of their commercial shipments were from inventory, with lead times averaging ***. The remaining commercial shipments were produced to order, with lead times averaging 14 to 21 days. Three of six importers reported that all of their shipments were sold from U.S. inventory; one (***) reported that two-thirds of its sales were from its U.S. inventory and the rest were from foreign inventory. Reported lead times from U.S. inventory ranging from three to 10 days and the one importer reporting making sales from foreign inventory with a lead time of *** days. The remaining two importers reported making at least 65 percent of their shipments on a produced-to-order basis with lead times of 30 to 150 days.

Factors affecting purchasing decisions

The Petitioner indicates that because calhypo is viewed as a commodity product, all calhypo competes primarily on the basis of price. It also indicates that while prices vary somewhat depending on the package size, brand awareness, and amount of available chlorine content, these variations do not change the properties or uses of the product.¹⁰

¹⁰ Petition, p. 16.

Comparison of U.S.-produced and imported calhypo

All responding U.S. producers and importers indicated that calhypo imported from China is either “always” or “frequently” interchangeable with U.S.-produced calhypo (table II-4). U.S. importer F2 Industries indicated that U.S. produced product has better color quality because it is whiter, and better solubility characteristics because it dissolves faster.¹¹ However, the Petitioner indicates that U.S.-produced calhypo is not whiter nor does it dissolve faster than calhypo imported from China.¹² Both Petitioner and respondents characterize calhypo as a commodity product.¹³

The Petitioner indicated that imported and domestically produced calhypo is generally comparable in quality and that customers can use them interchangeably. They reported that generally both domestically produced and imported calhypo must meet customer specifications and must be registered with the EPA.¹⁴ The Petitioner also indicated that the only distinction between the like product and subject imports is that Petitioner's sales occur mostly under brand names, such as HTH and Poolife, while imports from China were unbranded through the end of 2013.¹⁵

U.S. producers indicated that differences other than price between U.S. and Chinese calhypo were *** significant while U.S. importers indicated that these differences were at least “sometimes” significant (see table II-5).

***. U.S. importer *** responded that it cannot purchase domestic product. U.S. importer *** indicated that quality and availability are important for its customers and that it sells a ***.

¹¹ Conference transcript, pp. 160-63 (Ferrell).

¹² Petitioner’s postconference brief, p. 3 and exhibit 1.

¹³ Conference transcript, p. 19 (Walden) and p. 110 (Chen).

¹⁴ Petition, p. 15.

¹⁵ Petition, p. 18.

Table II-4

Calhypo: Interchangeability between calhypo produced in the United States and in other countries, by country pairs

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. China	***	***	***	***	3	2	0	0
U.S. vs. other countries	***	***	***	***	2	1	0	0
China vs. other countries	***	***	***	***	2	1	0	0

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

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

Table II-5

Calhypo: Significance of differences other than price between calhypo produced in the United States and in other countries, by country pairs

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. China	***	***	***	***	1	2	2	0
U.S. vs. other countries	***	***	***	***	1	1	1	0
China vs. other countries	***	***	***	***	1	1	0	0

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 subsidies 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 two firms that accounted for the all U.S. production of calhypo from 2010 to September 2013.

U.S. PRODUCERS

The Commission sent U.S. producer questionnaires to two firms, Arch and Axiall, based on information contained in the petition. Both firms provided usable data on their productive operations. Staff believes that these responses represent all U.S. production of calhypo. The petitioner, Arch, was formed in 1999 when Olin¹ sold its specialty chemicals division. In 2011, Arch was acquired by the Lonza Group. The other U.S. producer of calhypo is Axiall. Axiall was formed on January 28, 2013 when PPG Industries, Inc.'s commodity chemicals division merged with Georgia Gulf Corp.

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

Table III-1
Calhypo: U.S. producers of calhypo, their positions on the petition, headquarters, production, and shares of reported production, 2012

Firm	Position on the petition	Headquarters	U.S. production (1,000 pounds)	Share of U.S. production (percent)
Arch Chemicals, Inc. ¹	***	Atlanta, GA	***	***
Axiall Corp.	***	Pittsburgh, PA	***	***
Total			***	100.0

¹ Arch is wholly owned by LG Acquisition Parent Corp., Allendale, NJ and is affiliated with ***.

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

¹ Olin filed the 1984 antidumping petition with respect to calhypo from Japan. See Part I for more details.

U.S. PRODUCTION, CAPACITY, AND CAPACITY UTILIZATION

Table III-2 presents U.S. producers' production, capacity, and capacity utilization. U.S. capacity increased from 2011 to 2012 due to ***.² Actual production declined from 2010 to 2012, reflecting ***.³ Capacity utilization declined from *** percent in 2010 to *** percent in 2012.

Table III-2

Calhypo: U.S. producers' production, capacity, and capacity utilization, 2010-12, January to September 2012, and January to September 2013

* * * * *

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

Table III-3 presents U.S. producers' U.S. shipments, export shipments, and total shipments. ***.

* * * * *

U.S. PRODUCERS' INVENTORIES

Table III-4 presents U.S. producers' end-of-period inventories and the ratio of these inventories to U.S. producers' production, U.S. shipments, and total shipments from January 2010 to September 2013. Both U.S. producers ***. It is typical in this industry for U.S. producers to carry inventory as part of a "take-back" program with certain big box stores such as ***, requiring that unsold calhypo be shipped back to the supplier at the end of each season.⁴

Table III-4

Calhypo: U.S. producers' inventories, 2010-12, January to September 2012, and January to September 2013

* * * * *

² Arch reported that ***.

³ These ***.

⁴ Conference transcript, p. 146 (Ferrell) and petitioner's postconference brief, p. 15.

U.S. PRODUCERS' IMPORTS AND PURCHASES

U.S. producer, Arch, ***.⁵ Arch ***. U.S. producer, Axiall, reported that it ***." Axiall ***.

U.S. EMPLOYMENT, WAGES, AND PRODUCTIVITY

Table III-5 shows U.S. producers' employment-related data during the period examined. From 2010 to 2012, the number of production and related workers (PRWs) and hours worked by PRWs declined while wages paid to PRWs and hourly wages increased slightly.

Table III-5

Calhypo: Average number of production and related workers, hours worked, wages paid to such employees, hourly wages, productivity, and unit labor costs, 2010-12, January to September 2012, and January to September 2013

* * * * *

⁵ Arch reported that "***."

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

U.S. IMPORTERS

The Commission issued importer questionnaires to eleven firms believed to be importers of calhypo, as well as to all U.S. producers of calhypo.¹ Usable questionnaire responses were received from eight companies,² representing 27.1 percent of total imports from China between 2010 to September 2013 under HTS subheading 2828.10.00. Table IV-1 lists all responding U.S. importers of calhypo from China and other sources, their locations, and their shares of U.S. imports, from January 2010 to September 2013.

The top ***,³ neither firm provided the Commission with questionnaire responses. Of the responding firms, *** are the two largest importers of calhypo from China.

Table IV-1
Calhypo: U.S. importers by source from January 2010 to September 2013

Firm	Headquarters	U.S. Imports (1,000 pounds)		Share of U.S. imports (percent)	
		China	Other	China	Other
Arch Chemicals, Inc. ¹	Atlanta, GA	***	***	***	***
Allchem Performance Products, Inc. ²	Gainesville, FL	***	***	***	***
F2	Smyrna, TN	***	***	***	***
GWTC	Weatherford, TX	***	***	***	***
Haviland Consumer Products Inc.	Grand Rapids, MI	***	***	***	***
Norweco, Inc. ³	Norwalk, OH	***	***	***	***
Ponda International	Palo Alto, CA	***	***	***	***
Qualco, Inc. ⁴	Passaic, NJ	***	***	***	***
Total		10,542	***	***	***

¹ Arch, also a U.S. producer, ***

² AllChem is ***.

³ Norweco ***.

⁴ Qualco ***.

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 ***, may have accounted for the majority of total imports under HTS subheading 2828.10.00 from January 2010 to September 2013.

² ***.

³ ***. E-mail from Matthew McConkey, Counsel to JSCC, January 22, 2014.

U.S. IMPORTS

Table IV-2 presents data for U.S. imports of calhypo from China and all other sources. Table IV-3 presents data for U.S. imports of calhypo from nonsubject countries. India and Japan were the top sources of U.S. imports of calhypo from nonsubject countries from January 2010 to September 2013.

Table IV-2

Calhypo: U.S. imports by source, 2010-2012 and January-September 2012 and January-September 2013

Item	Calendar year			January - September	
	2010	2011	2012	2012	2013
Quantity (1,000 pounds)					
China	6,707	9,481	10,626	9,509	12,038
All other	341	1,790	741	548	631
Total	7,048	11,271	11,367	10,056	12,669
Value (1,000 dollars)					
China	4,440	6,532	7,798	6,913	8,424
All other	264	1,223	559	415	471
Total	4,704	7,754	8,357	7,328	8,895
Unit value (dollars per pound)					
China	0.66	0.69	0.73	0.73	0.70
All other	0.77	0.68	0.76	0.76	0.75
Total	0.67	0.69	0.74	0.73	0.70
Share of quantity (percent)					
China	95.2	84.1	93.5	94.6	95.0
All other	4.8	15.9	6.5	5.4	5.0
Total	100.0	100.0	100.0	100.0	100.0
Share of value (percent)					
China	94.4	84.2	93.3	94.3	94.7
All other	5.6	15.8	6.7	5.7	5.3
Total	100.0	100.0	100.0	100.0	100.0

Source: Compiled from data provided by Department of Commerce.

Table IV-3

Calhypo: Nonsubject U.S. imports by source, 2010-2012 and January-September 2012 and January-September 2013

Item	Calendar year			January - September	
	2010	2011	2012	2012	2013
	Quantity (1,000 pounds)				
India	107	838	578	392	631
Japan	215	308	123	123	0
Hong Kong	0	640	0	0	0
Canada	0	0	40	32	0
Finland	14	0	0	0	0
Thailand	0	4	0	0	0
other sources	4	0	0	0	0
Total	341	1,790	741	548	631
	Value (1,000 dollars)				
India	85	673	409	277	471
Japan	160	240	100	100	0
Hong Kong	0	307	0	0	0
Canada	0	0	50	38	0
Finland	6	0	0	0	0
Thailand	0	3	0	0	0
other sources	13	0	0	0	0
Total	264	1,223	559	415	471
	Unit value (dollars per pound)				
India	0.79	0.80	0.71	0.71	0.75
Japan	0.74	0.78	0.81	0.81	-
Hong Kong	-	0.48	-	-	-
Canada	-	-	1.26	1.18	-
Finland	0.40	-	-	-	-
Thailand	-	0.58	-	-	-
other sources	3.12	-	-	-	-
Total	0.77	0.68	0.76	0.76	0.75

Source: Compiled from data provided by Department of Commerce.

NEGLIGENCE

The statute requires that investigations be terminated without an injury determination if imports of the subject merchandise are found to be negligible.⁴ Negligible imports are generally defined in the Tariff Act of 1930, 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 investigations. 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.⁵ From December 2012 to November 2013, imports from China accounted for 93.3 percent of total imports of calhypo by quantity.⁶

Fungibility

All calhypo, whether domestically or foreign produced, is primarily used as a water sanitizer in residential and commercial pools and in municipal water treatment facilities. See Part II of this report for more details.

Presence in the market

Official Commerce data for U.S. imports were used to evaluate subject import presence in the market. Imports from China were present in every month during January 2010 to September 2013 and were the largest source for calhypo imports that time.

Geographical markets

Official Commerce statistics show that subject imports entered the United States in most geographical regions. The majority of U.S. imports from China entered through the ports of (in order of quantity in 2012) New York, NY; Houston-Galveston, TX; Dallas-Fort Worth, TX; Los Angeles, CA; Savannah, GA.

⁴ 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)).

⁵ Section 771 (24) of the Act (19 U.S.C § 1677(24)).

⁶ Monthly official Commerce statistics from HTS 2828.10.0000.

APPARENT U.S. CONSUMPTION

Table IV-4 presents data on apparent U.S. consumption and U.S. market shares for calhypo from January 2010 to September 2013. Imports from China were less than seven percent of apparent consumption from 2010 to 2012, but increased from 2010 to 2012.

Table IV-4

Calhypo: U.S. shipments of domestic product, U.S. shipments of imports, and apparent U.S. consumption, 2010-2012 and January-September 2012 and January-September 2013

Item	Calendar year			January - September	
	2010	2011	2012	2012	2013
Quantity (1,000 pounds)					
U.S. producer's U.S. shipments	***	***	***	***	***
Imports from--					
China	6,707	9,481	10,626	9,509	12,038
All other sources	341	1,790	741	548	631
Total imports	7,048	11,271	11,367	10,056	12,669
Apparent consumption	***	***	***	***	***
Value (1,000 dollars)					
U.S. producer's U.S. shipments	***	***	***	***	***
Imports from--					
China	***	***	***	***	***
All other sources	***	***	***	***	***
Total imports	***	***	***	***	***
Apparent consumption	***	***	***	***	***

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

U.S. MARKET SHARES

U.S. market share data are presented in table IV-5.

Table IV-5

Calhypo: U.S. consumption and market shares, 2010-2012 and January-September 2012 and January-September 2013

* * * * *

RATIO OF IMPORTS TO U.S. PRODUCTION

Table IV-6 presents data on the ratio of U.S. imports to U.S. production.

Table IV-6

Calhypo: Ratio of U.S. imports to U.S. production, 2010-2012 and January-September 2012 and January-September 2013

Item	Calendar year			January - September	
	2010	2011	2012	2012	2013
	Quantity (1,000 pounds)				
U.S. producer's U.S. shipments	***	***	***	***	***
U.S. imports from--					
China	6,707	9,481	10,626	9,509	12,038
All other sources	341	1,790	741	548	631
Total imports	7,048	11,271	11,367	10,056	12,669
	Ratio of imports to production				
U.S. imports from--					
China	***	***	***	***	***
All other sources	***	***	***	***	***
Total imports	***	***	***	***	***

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

PART V: PRICING DATA

FACTORS AFFECTING PRICES

Raw material costs

The major raw materials used to produce calhypo are chlorine and lime. Additionally, electricity is an important input. Raw materials accounted for just over *** percent of the cost of goods sold during 2010 to 2012. Petitioner indicates that unit costs of the key material inputs of *** have increased *** percent over the period of investigation. According to publicly available data, the price of lime increased by about 10 percent between January 2010 and December 2013 (figure V-1). Also, aside from seasonal fluctuations, the industrial price of electricity generally remained at the same level since January 2010.

Transportation costs to the U.S. market

Transportation costs to the U.S. market from China ranged between 9 percent and 13 percent of the customs value of imports.¹ The Petitioner indicates that the relatively low value to weight ratio of calhypo means that international freight costs are a significant share of total delivered costs. It also alleges that Chinese producers have access to subsidized shipping from COSCO, a Chinese state-owned shipping line.²

U.S. inland transportation costs

All responding U.S. producers and importers reported that they typically arrange transportation to their customers. U.S. producers reported that their U.S. inland transportation costs ranged from *** to *** percent while importers reported costs of 8 to 10 percent.³

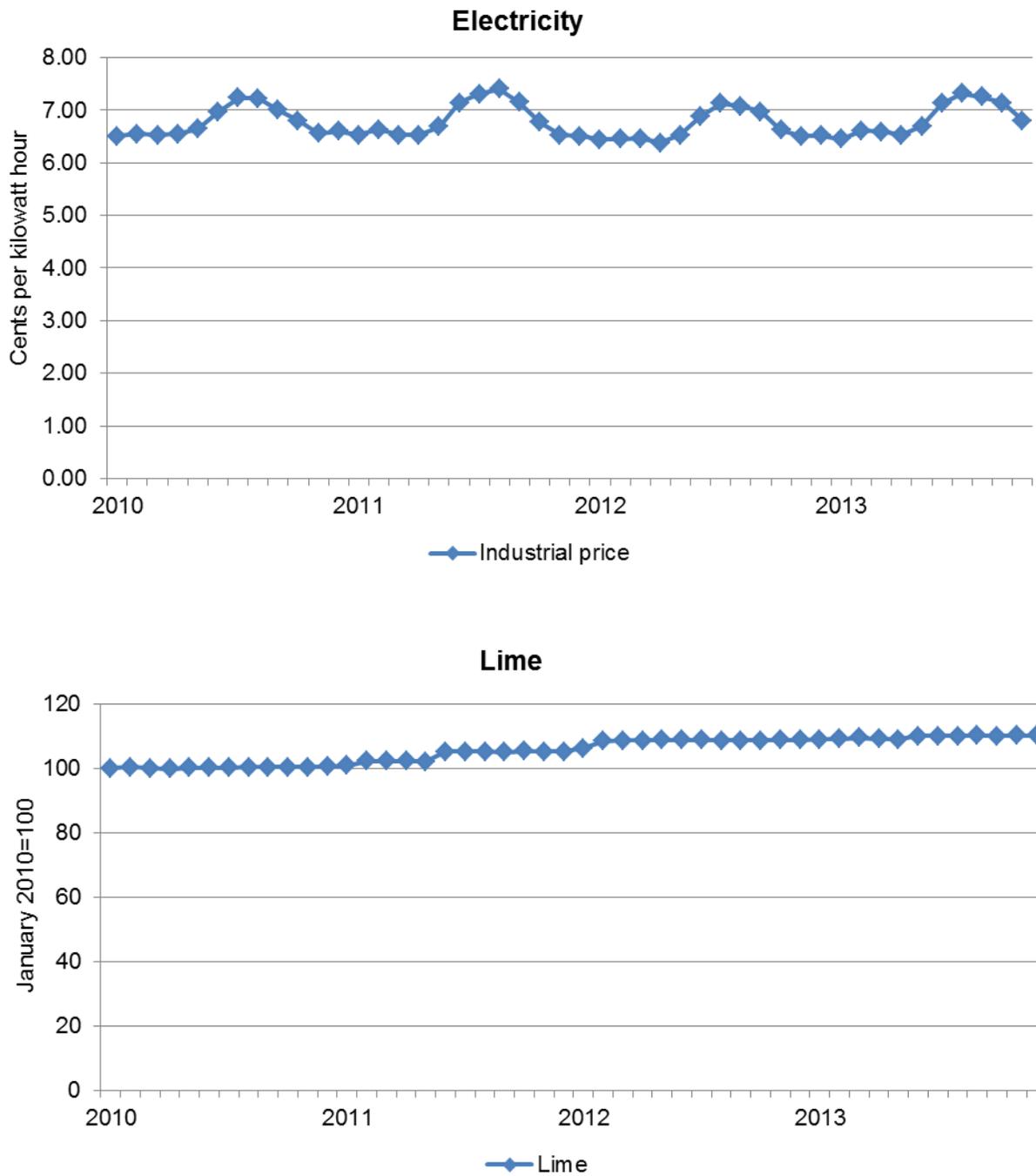
¹ This is measured as import charges as a share of the customs value of imports for HTS 2828.10.0000. USITC Dataweb, retrieved, December 30th 2013.

² Conference transcript, pp. 17-18 (Walden). Petition pp. 21-22.

³ An exception is importer *** which reported inland shipment costs of 70 percent.

Figure V-1

Input prices: Average price of electricity and price index for lime, by month, January 2010-December 2013



Sources: Average retail price of electricity, industrial from EIA, downloaded January 22, 2013 and Bureau of Labor Statistics, Producer Price Index, Lime, PCU PCU3274103274100, downloaded January 22, 2013.

PRICING PRACTICES

Pricing methods

All responding U.S. producers and importers reported using transaction-by-transaction negotiations and some producers and importers also reported using contracts, price lists, and other methods (table V-1). ***.⁴ The Petitioner indicated that calhypo is generally sold on a transaction-by-transaction basis, often tied to an evergreen contract.⁵ It indicated that many big retailers and customers seek price quotes for the coming year in the third or fourth quarter of the year.⁶

U.S. producers reported selling the majority of their calhypo using short term contracts. Importers reported using the spot market for about half of their overall sales and short term contracts for about one-third of their sales, although this varied widely by importer. Three of six responding importers (***) reported making at least 93 percent of their sales on the spot market and one importer (***) reported making one-half of its sales on the spot market. Three importers (***) reported making at least one-half of their sales using short term contracts.

The Petitioner indicated that contracts generally fix prices for 12 months and either automatically renew or require consent of the parties to renew. However, the contracts have no purchase obligations with regard to quantity. It indicates that there are generally no “meet or release” clauses, but that customers can and do request Petitioner to reduce prices when offered a lower price from a supplier.⁷

Sales terms and discounts

U.S. producers and importers quote prices on both f.o.b. and delivered bases. Both U.S. producers and five of seven importers reported selling on an f.o.b. basis, while *** and three importers reported making at least some of their sales on a delivered basis.

Both U.S. producers offer quantity, total volume, and other discounts, while no importer reported offering quantity or total volume discounts. However, importer (***) reported offering transaction-by-transaction discounts and importer (***) reported making early buy discounts. In addition to quantity and volume discounts, U.S. producer ***. **.

***. Arch indicates that all pricing information was provided net of discounts and rebates. However, Arch did not net out the cost of a customer rewards program for purchases of a variety of pool and spa products that includes calhypo. Arch estimates that in 2012, the

⁴ Email from ***, January 21, 2014. ***.

⁵ An evergreen contract is automatically renewed at the completion of the contract unless it is cancelled by one of the parties to the contract.

⁶ Petition, p. 16.

⁷ Petition, p. 21.

Table V-1

Calhypo: U.S. producers and importers reported price setting methods, by number of responding firms¹

Method	U.S. producers	Importers
Transaction-by-transaction	2	6
Contract	2	2
Set price list	***	1
Other	***	0

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.

total cost of one possible reward in the program (a leisure trip that was cited by respondents at the preliminary conference) that could be attributed to sales of calhypo is approximately \$*** (less than *** percent of commercial sales).⁸

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 calhypo products shipped to unrelated U.S. customers between the first quarter of 2010 to the third quarter of 2013.

Product 1. -- Calcium hypochlorite, 65%-68% available chlorine, granular, 100 lbs., however packaged, sold into the repacker/private label channel.

Product 2.-- Calcium hypochlorite, 65%-68% available chlorine, granular, 100 lbs., however packaged, sold directly to dealers that serve the private residential or commercial swimming pool channels.

Two U.S. producers and four importers provided usable pricing data for sales of the requested products, although not all firms reported pricing for all products for all quarters no importers reported selling product 1.⁹ Pricing data reported by these firms accounted for approximately *** percent of U.S. producers' commercial shipments of calhypo and 16 percent of subject imports from China during 2010 to the third quarter of 2013.

Price data for products 1 and 2 are presented in tables V-2 to V-3 and figure V-2.

⁸ Petitioner's postconference brief, "Staff Questions Not Answered Elsewhere," conference transcript, p. 107 (Chen), p. 157 (Lehnardt), and staff calculations.

⁹ U.S. producer ***. Staff interview with *** of ***, January 22, 2014 and email from *** of ***, January 22, 2014.

Table V-2

Calhypo: Weighted-average f.o.b. prices and quantities of domestic and imported product 1¹ and margins of underselling/(overselling), by quarters, January 2010-September 2013

* * * * *

Table V-3

Calhypo: Weighted-average f.o.b. prices and quantities of domestic and imported product 2¹ and margins of underselling/(overselling), by quarters, January 2010-September 2013

Period	United States		China		
	Price (dollar per pound)	Quantity (thousands of pounds)	Price (dollar per pound)	Quantity (thousands of pounds)	Margin (percent)
2010:					
Jan.-Mar.	***	***	***	***	***
Apr.-June	***	***	***	***	***
July-Sept.	***	***	***	***	***
Oct.-Dec.	***	***	0.94	262	***
2011:					
Jan.-Mar.	***	***	0.98	226	***
Apr.-June	***	***	0.95	440	***
July-Sept.	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***
2012:					
Jan.-Mar.	***	***	***	***	***
Apr.-June	***	***	***	***	***
July-Sept.	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***
2013:					
Jan.-Mar.	***	***	1.03	472	***
Apr.-June	***	***	***	***	***
July-Sept.	***	***	***	***	***

¹ Product 2: Calcium hypochlorite, 65%-68% available chlorine, granular, 100 lbs., however packaged, sold directly to dealers that serve the private residential or commercial swimming pool channels.

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

Figure V-2

Calhypo: Weighted-average prices and quantities of domestic and imported product, by quarters, January 2010-September 2013

* * * * *

Price trends

Prices for U.S.-produced calhypo decreased between 2010 to the third quarter of 2013, while the price of calhypo imported from China increased. Table V-4 summarizes the price trends, by country and by product. As shown in the table, domestic price decreases for the two products were *** percent and ***percent between 2010 to the third quarter of 2013 while the import price increase for product 2 was ***percent.

Table V-4

Calhypo: Summary of weighted-average f.o.b. prices for products 1-4 from the United States and China

* * * * *

Price comparisons

As shown in table V-5, prices for calhypo imported from China were below those for U.S.-produced product in all 15 instances; margins of underselling ranged from *** to *** percent. F2 respondents indicate that the Commission should combine the data collected for products 1 and 2 into one product because calhypo is a commodity product sold on the basis of price that there should be no differentiation in the product sold to repacker/private label and pool dealer channels.¹⁰ When all data collected for products 1 and 2 are combined, there is underselling in 8 of 15 instances with margins of underselling ranging from 0.4 to 21.5 percent. The 7 instances of overselling range from 3.0 to 9.4 percent.

Table V-5

Calhypo: Instances of underselling/overselling and the range and average of margins, by product, January 2010-September 2013

Source	Underselling			Overselling		
	Number of instances	Range (percent)	Average margin (percent)	Number of instances	Range (percent)	Average margin (percent)
Product 2	15	***	16.3	0	-	-
Total	15	***	16.3	0	-	-

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

¹⁰ Respondent F2's postconference brief, pp. 8-9.

LOST SALES AND LOST REVENUE

The Commission requested U.S. producers of calhypo to report any instances of lost sales or revenue they experienced due to competition from imports of calhypo from China since 2010. Both responding U.S. producers reported that they had to reduce prices and one of two producers reported rolling back announced price increases. The seven lost sales allegations totaled \$*** million and involved *** million pounds of calhypo and the five lost revenue allegations totaled \$*** million and involved *** million pounds of calhypo. Staff contacted eight purchasers and a summary of the information obtained follows.

Five of six responding purchasers reported that they had shifted purchases of calhypo from U.S. producers to subject imports since 2010; all five of these purchasers reported that price was the reason for the shift. Four of six responding purchasers reported that the U.S. producers had reduced their prices in order to compete with the prices of subject imports since 2010. One of these purchasers (***) indicated that suppliers raised prices in 2012 and reduced prices in 2013. It also indicated that another scheduled price increase in 2012 did not occur. However, this purchaser wasn't sure if this was because of imports of calhypo from China. Purchaser *** indicated that ***.

Table V-6

Calhypo: U.S. producers' lost sales allegations

* * * * *

Table V-7

Calhypo: U.S. producers' lost revenue allegations

* * * * *

PART VI: FINANCIAL EXPERIENCE OF U.S. PRODUCERS

BACKGROUND

Part VI of this report presents the calhypo financial results of the two primary U.S. producers of calhypo: Arch (***) percent of total sales volume) and Axiall (***) percent of total sales volume).¹ Both companies reported their financial results for calendar-year periods and on the basis of generally accepted accounting principles (GAAP).

In addition to its commercial sales, ***,² while Axiall *** commercial sales of calhypo.³ As noted in Part I of this report, both companies appear to use the same basic calhypo production process. At least one distinguishing characteristic, however, as discussed below with respect to the pattern of company-specific raw material costs, is that ***.⁴

As noted in Part III of this report, several notable events occurred during the period with regard to U.S. calhypo operations: ***; and the merger of PPG Industries Inc. Commodity Chemicals (PPG) and Georgica Gulf Corporation (GGC) to form Axiall in late January 2013. With respect to the merger, Axiall stated that ***.⁵ The extent to which the other above-referenced events affected calhypo operations and corresponding financial results is discussed below.

OPERATIONS ON CALHYPO

Income-and-loss data for the U.S. industry's calhypo operations are presented in table VI-1. A variance analysis of these financial results is presented in table VI-2.⁶ Selected company-specific financial information is presented in table VI-3.

¹ ***.

² *** (see also footnote 7). Petitioner's postconference brief, p. 49.

³ ***. January 13, 2014 e-mail with attachment from counsel to Axiall to USITC auditor.

⁴ In Arch's case the supplier of chlorine and caustic sold ***. Petitioner's postconference brief, p. 24. Axiall's chlorine and caustic soda is produced at its Natrium, West Virginia facility where the company's calhypo is produced. Axiall 2012 10-K, p. 7.

⁵ January 13, 2014 e-mail with attachment from counsel to Axiall to USITC auditor. ***. Ibid. Axiall's overall operations reflect three reportable business segments: Chlorvinyls (which includes calhypo operations), Building Products, and Aromatics. Axiall's interim 2013 calhypo revenue, as reported to the Commission, was approximately *** percent of the Chlorvinyl segment's interim 2013 revenue. Axial 2013 Q3 10-Q, pp. 30-31. USITC auditor preliminary-phase notes.

⁶ The Commission's variance analysis is calculated in three parts: sales variance, COGS variance, and SG&A expenses variance. Each part consists of a price variance (in the case of the sales variance) or a cost variance (in the case of the COGS and SG&A expenses variances) and a volume (quantity) variance. The sales or cost variance is calculated as the change in unit price/cost times the new volume, while the volume variance is calculated as the change in volume times the old unit price/cost. Summarized at the bottom of table VI-2, the price variance is from sales, the cost/expense variance is the sum of those items from COGS and SG&A, respectively, and the net volume variance is the sum of the price, COGS, and SG&A volume variances.

Table VI-1

Calhypo: Results of operations of U.S. firms, 2010-12, January-September 2012, and January-September 2013

* * * * *

Table VI-2

Calhypo: Variance analysis of U.S. firms' operations, 2010-12, January-September 2012, and January-September 2013

* * * * *

Table VI-3

Calhypo: Results of operations of U.S. firms, by firm, 2010-12, January-September 2012, and January-September

* * * * *

Revenue

On an overall basis, the revenue section of the table VI-3 variance analysis shows that the industry experienced negative sales volume variances of varying magnitudes throughout the period. Although *** in sales volume between 2010 and 2011, their *** with *** increases after 2011 and *** declines for the rest of the period. According to Arch, the ***.⁷ At the end of the period, Arch's ***.⁸

With regard to the pattern of its sales volume, Axiall stated that ***.⁹ ***.¹⁰

In contrast with sales volume, overall price variances *** throughout the period: between 2010 and 2011 there was a small positive price variance, followed by a larger positive price variance between 2011 and 2012, and then a large negative price variance between interim 2012 and interim 2013. The decline in the industry's overall average sales value between interim 2012 and interim 2013 (i.e., which in turn yields the large negative price variance for that period shown in table VI-2) was generated *** percentage declines in average sales value. Table VI-3 shows that, while company-specific average sales values were generally ***.¹¹

A stable overall product mix generally enhances the utility of the Commission's variance analysis. Both Arch and Axiall generally indicated that product/customer mix did not change substantially during the period. Conference transcript, pp. 81-82 (Walden). Petitioner's postconference brief, p. 47. January 13, 2014 e-mail with attachment from counsel to Axiall to USITC auditor.

⁷ Petitioner's postconference brief, p. 49. ***.

⁸ Petitioner's postconference brief, p. 50.

⁹ January 13, 2014 e-mail with attachment from counsel to Axiall to USITC auditor. ***. Axiall U.S. producer questionnaire, note to table II-8.

¹⁰ *PPG declares caustic soda force majeure*, Metal Bulletin Daily, April 15, 2011, Issue 258, p. 296.

***. January 16, 2014 e-mail with attachment from counsel to Axiall to USITC auditor.

¹¹ ***.

At the staff conference, an Arch company official stated that calhypo sales do not include an index and/or other mechanism for passing through increases in primary raw material costs.¹² ***.¹³

With regard to the pattern of average sales value, it is notable that the industry's large negative interim 2012-13 price variance coincided with the period's largest percentage increase in average raw material cost; i.e., while average sales value was *** percent lower in interim 2013 compared to interim 2012, average raw material cost was *** percent higher. As indicated below, the industry's higher average raw material cost in interim 2013 compared to interim 2012 was ***. Note: These percentage changes are based on unrounded unit values.

Cost of goods sold and gross profit

Table VI-1 shows that raw material cost (ranging from *** percent to *** percent of total COGS) was the largest share of calhypo COGS only at the end of the period; i.e., when it was marginally higher than other factory costs. With regard to the relative importance of specific inputs, Arch reported that chlorine represents approximately *** percent of total raw material costs, followed by caustic soda (*** percent), and lime (*** percent).¹⁴ Axiall reported that the share of these items were as follows: chlorine *** percent, caustic soda (*** percent), and lime (*** percent).¹⁵

In addition to somewhat different period-to-period directional trends, table VI-3 also indicates that *** (see footnote 16).¹⁶ Notwithstanding the above-referenced difference in company-specific *** higher level of other factory costs (as a share of COGS and on an average basis) (see footnote 20).

While fluctuating somewhat during the full-year period, total raw material cost reached its highest share of COGS (*** percent) in interim 2013 which in turn reflects the *** percent increase ***.¹⁷ ***.¹⁸

Other factory costs, which generally accounted for the largest share of COGS, ranged from *** percent to *** percent of total COGS, while direct labor, the smallest component of COGS, ranged from *** percent to *** percent of total COGS. The large share of COGS accounted for by other factory costs is consistent with the capital intensive nature of the

¹² Conference transcript p. 84 (Walden).

¹³ January 13, 2014 e-mail with attachment from counsel to Axiall to USITC auditor.

¹⁴ Petitioner's postconference brief, p. 50.

¹⁵ January 16, 2014 e-mail with attachment from counsel to Axiall to USITC auditor. ***. USITC auditor preliminary-phase notes.

¹⁶ The Commission's standard practice is to require the elimination of any profit or (loss) on inputs purchased from related suppliers; i.e., such that only the related supplier's cost is recognized in the COGS reported to the Commission. ***. January 16, 2014 e-mail with attachment from counsel to Axiall to USITC auditor.

¹⁷ Petitioner's postconference brief, p. 50.

¹⁸ January 13, 2014 e-mail with attachment from counsel to Axiall to USITC auditor. ***.

calhypo production process, as confirmed by both Arch and Axiall.¹⁹ While the underlying calhypo production process of both companies is presumed to be similar and/or essentially the same, Arch and Axiall appear to be ***.²⁰

As shown in table VI-3, *** reported increases in average other factory costs between 2010 and 2011 ***,²¹ ***,²² ***, as noted above (see footnote 10).

To some extent, average other factory costs were also impacted by ***.²³

Table VI-1 shows that the industry's total gross profit fluctuated during the period: declining on an absolute basis and as a percent of sales in 2011, increasing somewhat in 2012 (recovering on an absolute basis part of the decline in 2011 and also reflecting a somewhat higher gross margin), and then was lower in interim 2013 compared to interim 2012 (on both an absolute and relative basis).

As indicated in the table VI-2 variance analysis, period-to-period changes in revenue and cost varied in terms of their impact (positive and negative) on gross profit. Between 2010 and 2011 average sales value remained essentially unchanged, while average raw material cost increased *** percent and average other factory costs increased by *** percent. Notwithstanding the absence of a corresponding increase in average sales value to offset higher raw material costs, higher average other factory costs appears to be the more important factor in terms of explaining the decline in gross profit between 2010 and 2011.²⁴ In contrast, between 2011 and 2012 the factors explaining the relative improvement in gross profit (on an absolute and relative basis) included both a modest increase in average sales value (***) percent), a modest decline in average raw material cost (***) percent), and a decline in average other factory costs (***) percent). With respect to the lower absolute and relative gross profit in interim 2013 compared to interim 2012, the primary cause was the combination of a decline in average sales value and corresponding increase in average raw material costs. As indicated previously, while *** in interim 2013 compared to interim 2012, the directional trend in average raw material costs was ***.

¹⁹ Conference transcript, p. 86 (Walden). January 13, 2014 e-mail with attachment from counsel to Axiall to USITC auditor. ***. Petitioner's postconference brief, p. 50. January 13, 2014 e-mail with attachment from counsel to Axiall to USITC auditor.

²⁰ Conference transcript, p. 85 (Walden). ***. January 13, 2014 e-mail with attachment from counsel to Axiall to USITC auditor.

***.

²¹ ***.

²² As described by the company, ***. Petitioner's postconference brief, p. 51.

***. Ibid.

²³ January 13, 2014 e-mail with attachment from counsel to Axiall to USITC auditor.

²⁴ As indicated above, and in addition to other items noted specifically, it is important to note that the level of average other factory costs indirectly reflects changes in throughput due to changes in sales/production volumes. In general, throughput impacts the level of average other factory costs as fixed cost absorption increases or decreases; e.g., *** (see footnote 22). While the level of fixed cost absorption is important, activity which is nominally variable in nature can also become more or less efficient depending on the level of throughput and can therefore also impact the level of average other factory costs.

SG&A expenses and operating income or (loss)

As shown in table VI-3, ***.²⁵ In its postconference brief, Arch described features of its calhypo sales and marketing which ***.²⁶ With regard to its calhypo sales and marketing, Axiall stated that ***.²⁷

On an overall basis, total SG&A expenses were at about the same level in 2010 and 2012, having declined in 2011 to their lowest full-year level. Corresponding full-year SG&A expense ratios moved within a relatively narrow range from a low of *** percent of sales in 2011 to a high of *** percent of sales in 2012.²⁸ Interim period SG&A ratios could also be characterized as relatively stable at *** percent of sales in interim 2012 compared to *** percent of sales in interim 2013. While higher period-to-period SG&A expense ratios in 2012 and interim 2013 did have a modest negative impact, the more important factors, in terms of explaining the industry's operating results, appear to be generally those discussed above with regard to the pattern of gross profitability.

CAPITAL EXPENDITURES AND RESEARCH AND DEVELOPMENT EXPENSES

Table VI-4 presents company-specific capital expenditures and research and development (R&D) expenses related to U.S. calhypo operations.²⁹

Table VI-4
Calhypo: Capital expenditures and research and development expenses, by firm, 2010-12, January-September 2012, January-September 2013

* * * * *

²⁵ Selling expenses and G&A expenses, respectively, represent *** percent of the industry's total SG&A expenses. While the absolute amount of Arch's SG&A expenses were ***, both companies reported *** SG&A expense profiles: Arch (*** percent and *** percent, respectively, representing selling and G&A expenses) and Axiall (*** percent and *** percent, respectively, representing selling and G&A expenses).

²⁶ Petitioner's postconference brief at p. 24. As described by Arch, ***. Petitioner's postconference brief at p. 52.

²⁷ As indicated in the trade information submitted by Arch and Axiall, ***.

²⁸ In 2012 the SG&A expense numerator increased at a faster rate than the sales denominator: between 2011 and 2012 total SG&A expenses increased by *** percent, to an amount just below the total amount reported in 2010, while corresponding total sales increased by only *** percent.

²⁹ As reported by the U.S. industry, total assets were \$*** in 2010, \$*** in 2011, and \$*** in 2012. 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 different current and long-term assets. In this case and with respect to each company's calhypo operations, the above-referenced asset values may generally be considered product specific inasmuch as both Arch and Axiall reported that ***.

The industry's total capital expenditures reached their highest level in 2011 which in large part reflects ***.³⁰ Axiall's capital expenditures ***.³¹ R&D expenses were reported by both Arch and Axiall with the ***.^{32 33}

CAPITAL AND INVESTMENT

The Commission requested that U.S. producers describe any actual or potential negative effects of imports of calhypo from China on their firms' growth, investment, ability to raise capital, development and production efforts, or the scale of capital investments. The responses of U.S. producers are presented below.

Actual negative effects

Arch	***.
Axiall	***.

Anticipated negative effects

Arch	***
Axiall	***.

³⁰ ***. Petitioner's postconference brief at p. 52.

³¹ January 13, 2014 e-mail with attachment from counsel to Axiall to USITC auditor.

³² ***. Petitioner's postconference brief at p. 52.

³³ ***. January 13, 2014 e-mail with attachment from counsel to Axiall to USITC auditor.

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 nature of the alleged subsidies was presented earlier in this report; 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 CHINA

The Commission issued foreign producers' or exporters' questionnaires to 20 firms believed to produce and/or export calhypo from China.³ Usable responses to the Commission's questionnaire were received from two firms: Sinopec Jiangnan Salt & Chemical Complex ("JSCC") and Tianjin Jinbin International Trade Co., Ltd. ("Tianjin Jinbin").

JSCC reported that its production of calhypo accounted for *** percent of all calhypo production in China during 2012. JSCC's *** and that it reported that its ***.⁴ JSCC's ***. The *** of JSCC's ***. JSCC reported that it is ***.

Tianjin Jinbin reported that ***. Tianjin Jinbin ***. Tianjin Jinbin reported that its supply of calhypo is ***.⁵ Tianjin Jinbin has ***.

These firms' exports to the United States accounted for the majority of U.S. imports of calhypo from China from 2010 to 2012. According to the estimate provided by the only responding Chinese producer, JSCC, the production of calhypo in China reported in this part of the report accounts for approximately *** percent of overall production of calhypo in China and ***⁶ percent of all calhypo exports to the United States from China in 2012. Table VII-1 presents information on the calhypo operations of the responding producer and exporter in China.

Table VII-1

Calhypo: Data for producers in China, 2010-12, January-September 2012, and January-September 2013, and projected 2013 and 2014

* * * * *

U.S. INVENTORIES OF IMPORTED MERCHANDISE

Table VII-2 presents data on U.S. importers' reported inventories of calhypo.

Table VII-2

Calhypo: U.S. importers' end-of-period inventories of imports, by source, 2010-12, January-September 2012, and January-September 2013

* * * * *

³ ***.

⁴ JSCC reported ***.

⁵ Tianjin Jinbin reported that it ***

⁶ Tianjin Jinbin ***.

U.S. IMPORTERS' OUTSTANDING ORDERS

The Commission requested U.S. importers to indicate whether they imported or arranged for the importation of calhypo after September 30, 2013. *** U.S. importers stated that they had arranged for importation from China after September 30, 2013.

Table VII-3

Calhypo: U.S. importers' orders for delivery subsequent to September 30, 2013, by period

* * * * *

ANTIDUMPING OR COUNTERVAILING DUTY ORDERS IN THIRD-COUNTRY MARKETS

No producer, importer, or foreign producer reported any countervailing or antidumping duty orders on calhypo from China in third-country markets.

INFORMATION ON NONSUBJECT COUNTRIES

In assessing whether the domestic industry is materially injured or threatened with material injury "by reason of subject imports," the legislative history states "that the Commission must examine all relevant evidence, including any known factors, other than the dumped or subsidized imports, that may be injuring the domestic industry, and that the Commission must examine those other factors (including non-subject imports) 'to ensure that it is not attributing injury from other sources to the subject imports.'"⁷

Nonsubject imports accounted for less than 16 percent of the quantity of total U.S. imports of calhypo under subheading 2828.10.00 in each year during the period of investigation. In 2010 and 2012, non-subject imports were less than 10 percent of total imports (4.8 percent and 6.5 percent, respectively), while in 2011 non-subject imports were 15.9 percent of total imports. India and Japan were the major sources of non-subject imports for all three years 2010-12.

⁷ *Mittal Steel Point Lisas Ltd. v. United States*, Slip Op. 2007-1552 at 17 (Fed. Cir., Sept. 18, 2008), quoting from Statement of Administrative Action on Uruguay Round Agreements Act, H.R. Rep. 103-316, Vol. I at 851-52; see also *Bratsk Aluminum Smelter v. United States*, 444 F.3d 1369 (Fed. Cir. 2006).

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
78 FR 77712, December 24, 2013	<i>Petition filed with Commerce and the Commission; institution of Commission investigation</i>	http://www.gpo.gov/fdsys/pkg/FR-2013-09-10/pdf/2013-21903.pdf
79 FR 2410, January 14, 2014	<i>Commerce's notice of AD initiation on China</i>	http://www.gpo.gov/fdsys/pkg/FR-2014-01-14/pdf/2014-00522.pdf
79 FR 2417, January 14, 2014	<i>Commerce's notice of CVD initiation on China</i>	http://www.gpo.gov/fdsys/pkg/FR-2014-01-14/pdf/2014-00527.pdf

APPENDIX B

CALENDAR OF THE PUBLIC STAFF CONFERENCE

CALENDAR OF PUBLIC PRELIMINARY CONFERENCE

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

Subject: Calcium Hypochlorite from China
Inv. Nos.: 701-TA-510 and 731-TA-1245 (Preliminary)
Date and Time: January 8, 2013 - 9:30 a.m.

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

<u>OPENING REMARKS:</u>	<u>TIME ALLOCATION:</u>
Petitioner (Peggy A. Clarke , Law Offices of Peggy A. Clarke)	5 minutes
Respondents (Irene H. Chen , Chen Law Group)	5 minutes

<u>In Support of the Imposition of Antidumping and Countervailing Duty Orders:</u>	<u>TIME ALLOCATION:</u>
Law Offices of Peggy A. Clarke Washington, DC <u>on behalf of</u>	60 minutes

Arch Chemicals, Inc.

Rick Walden, Senior Vice President, Arch Chemicals, Inc.

Bruce Malashevich, President, Economic Consulting Services

Peggy A. Clarke) – OF COUNSEL

**In Opposition to the Imposition of
Antidumping and Countervailing Duty Orders:**

**TIME
ALLOCATION:**

Lehnardt & Lehnardt, LLC
Liberty, MO

60 minutes

and

Chen Law Group
Rockville, MD

on behalf of

F2 Industries, LLC

William (Reb) Ferrell, Owner, F2 Industries, Inc.

Erik Warga, Economic Consultant, Erik Warga
Consulting Services

Mark B. Lehnardt)
) – OF COUNSEL
Irene H. Chen)

REBUTTAL/CLOSING REMARKS:

Petitioner (**Peggy A. Clarke**, Law Offices of Peggy A. Clarke)
Respondents (**Irene H. Chen**, Chen Law Group)

10 minutes
10 minutes

APPENDIX C
SUMMARY DATA

Table C-1

Calhypo: Summary data concerning the U.S. market, 2010-12, January to September 2012, and January to September 2013

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

	Report data					Period changes			
	2010	Calendar year 2011	2012	January to September 2012	2013	2010-12	Calendar year 2010-11	2011-12	Jan-Sept 2012-13
U.S. consumption quantity:									
Amount.....	***	***	***	***	***	***	***	***	***
Producers' share (fn1).....	***	***	***	***	***	***	***	***	***
Importers' share (fn1):									
China.....	***	***	***	***	***	***	***	***	***
All others sources, nonsubject.....	***	***	***	***	***	***	***	***	***
Total imports.....	***	***	***	***	***	***	***	***	***
U.S. consumption value:									
Amount.....	***	***	***	***	***	***	***	***	***
Producers' share (fn1).....	***	***	***	***	***	***	***	***	***
Importers' share (fn1):									
China.....	***	***	***	***	***	***	***	***	***
All others sources, nonsubject.....	***	***	***	***	***	***	***	***	***
Total imports.....	***	***	***	***	***	***	***	***	***
U.S. imports from:									
China:									
Quantity.....	6,707	9,481	10,626	9,509	12,038	58.4	41.4	12.1	26.6
Value.....	4,440	6,532	7,798	6,913	8,424	75.6	47.1	19.4	21.9
Unit value.....	\$0.66	\$0.69	\$0.73	\$0.73	\$0.70	10.9	4.1	6.5	(3.7)
Ending inventory quantity.....	***	***	***	***	***	***	***	***	***
All other sources:									
Quantity.....	341	1,790	741	548	631	117.5	425.5	(58.6)	15.3
Value.....	264	1,223	559	415	471	112.1	363.5	(54.2)	13.3
Unit value.....	\$0.77	\$0.68	\$0.76	\$0.76	\$0.75	(2.5)	(11.8)	10.6	(1.7)
Ending inventory quantity.....	***	***	***	***	***	***	***	***	***
Total imports:									
Quantity.....	7,048	11,271	11,367	10,056	12,669	61.3	59.9	0.9	26.0
Value.....	4,704	7,754	8,357	7,328	8,895	77.7	64.9	7.8	21.4
Unit value.....	\$0.67	\$0.69	\$0.74	\$0.73	\$0.70	10.2	3.1	6.9	(3.7)
Ending inventory quantity.....	***	***	***	***	***	***	***	***	***
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).....	***	***	***	***	***	***	***	***	***
Productivity (pounds per hour).....	***	***	***	***	***	***	***	***	***
Unit labor costs (dollars per pound).....	***	***	***	***	***	***	***	***	***
Net Sales:									
Quantity.....	***	***	***	***	***	***	***	***	***
Value.....	***	***	***	***	***	***	***	***	***
Unit value.....	***	***	***	***	***	***	***	***	***
Cost of goods sold (COGS).....	***	***	***	***	***	***	***	***	***
Gross profit or (loss).....	***	***	***	***	***	***	***	***	***
SG&A expenses.....	***	***	***	***	***	***	***	***	***
Operating income or (loss).....	***	***	***	***	***	***	***	***	***
Capital expenditures.....	***	***	***	***	***	***	***	***	***
Unit COGS.....	***	***	***	***	***	***	***	***	***
Unit SG&A expenses.....	***	***	***	***	***	***	***	***	***
Unit operating income or (loss).....	***	***	***	***	***	***	***	***	***
COGS/sales (fn1).....	***	***	***	***	***	***	***	***	***
Operating income or (loss)/sales (fn1).....	***	***	***	***	***	***	***	***	***

Notes:

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

Source: Compiled from data submitted in response to Commission questionnaires and official Commerce statistics.

