

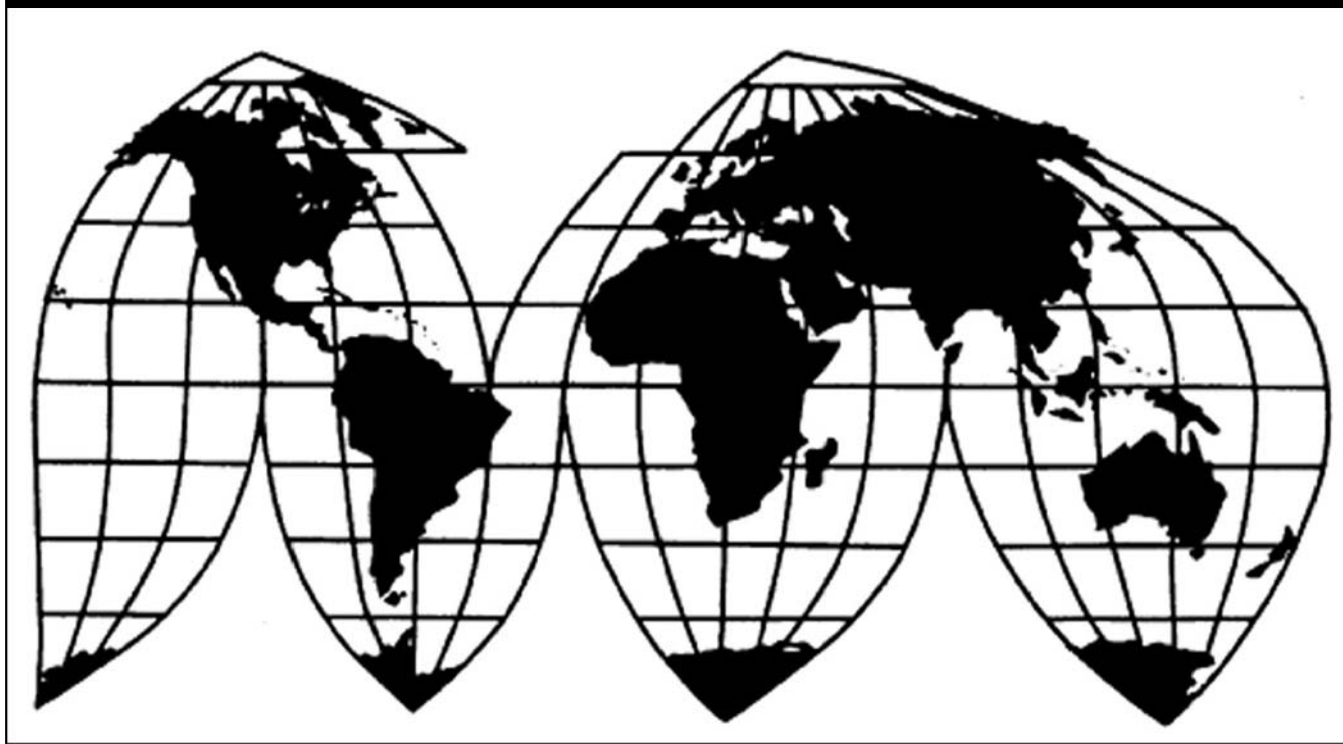
Polyvinyl Alcohol from China, Japan, and Korea

Investigation Nos. 731-TA-1014, 1016, and 1017 (Review)

Publication 4067

March 2009

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Note.—Information that would reveal confidential operations of individual concerns may not be published and therefore has been deleted from this report.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

UNITED STATES INTERNATIONAL TRADE COMMISSION

Investigation Nos. 731-TA-1014, 1016, and 1017 (Review)

POLYVINYL ALCOHOL FROM CHINA, JAPAN, AND KOREA

DETERMINATION

On the basis of the record¹ developed in the subject five-year reviews, the United States International Trade Commission (Commission) determines, pursuant to section 751(c) of the Tariff Act of 1930 (19 U.S.C. § 1675(c)), that revocation of the antidumping duty orders on polyvinyl alcohol from China, Japan, and Korea would be likely to lead to continuation or recurrence of material injury to an industry in the United States within a reasonably foreseeable time.²

BACKGROUND

The Commission instituted these reviews on June 2, 2008 (73 F.R. 31507) and determined on September 5, 2008 that it would conduct full reviews (73 F.R. 53443, September 16, 2008). Notice of the scheduling of the Commission's reviews and of a public hearing 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* on September 22, 2008 (73 F.R. 54619). The hearing was held in Washington, DC, on January 27, 2009, and all persons who requested the opportunity were permitted to appear in person or by counsel.

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

² Vice Chairman Daniel R. Pearson dissenting with respect to Korea.

VIEWS OF THE COMMISSION

Based on the record in these five-year reviews, we determine under section 751(c) of the Tariff Act of 1930, as amended (“the Tariff Act”), that revocation of the antidumping duty orders on imports into the United States of certain polyvinyl alcohol (“PVA”) from the People’s Republic of China (“China”), Japan, and the Republic of Korea (“Korea”) would be likely to lead to continuation or recurrence of material injury to an industry in the United States within a reasonably foreseeable time.¹

I. BACKGROUND

Original Investigations. On September 5, 2002, Celanese Chemicals, Ltd. (“Celanese”) and E.I. DuPont de Nemours & Co. (“DuPont”) filed antidumping duty petitions regarding imports from China, Germany, Japan, Korea, and Singapore. The Commission made affirmative preliminary determinations with respect to imports from four of these countries, but terminated its investigation regarding imports from Singapore after finding these imports negligible.²

Because the schedules became staggered at the U.S. Department of Commerce (“Commerce”), in the final phase of the original investigations the Commission first considered whether the domestic industry was materially injured or threatened with material injury by reason of subject imports from Germany and Japan. In June 2003, the Commission made an affirmative final threat determination with respect to subject imports from Japan but a negative final determination regarding imports from Germany. Imports from Sinopec Sichuan Vinylon Works (“SVW”), a producer of subject merchandise in China, were not eligible for cumulation at that time because Commerce had made a negative preliminary antidumping duty determination regarding imports from SVW.³ Moreover, the Commission did not cumulate other imports from China with imports from Japan, although it did cumulate imports from Japan with imports from Korea for its threat analysis.⁴

By the time of the Commission’s final injury determination regarding imports from China and Korea in September 2003, imports from SVW had become eligible for cumulation because Commerce made an affirmative final antidumping duty determination regarding imports from SVW. For its latter determination, the Commission cumulated subject imports from China, Japan, and Korea and made

¹ Vice Chairman Daniel R. Pearson concurs that revocation of the antidumping duty orders on imports of certain PVA from China and Japan would be likely to lead to continuation or recurrence of material injury to an industry in the United States within a reasonably foreseeable time; he concludes, however, that revocation of the antidumping duty order on imports of certain PVA from Korea would not be likely to lead to continuation or recurrence of material injury to an industry in the United States within a reasonably foreseeable time. See Separate and Dissenting Views of Vice Chairman Pearson Regarding Cumulation and Regarding No Likelihood of Continuation or Recurrence of Material Injury if the Antidumping Duty Order on Certain PVA from Korea is Revoked.

² See, e.g., Polyvinyl Alcohol from China, Germany, Japan, Korea, and Singapore, Invs. Nos. 731-TA-1014 to 1018 (Prelim.), USITC Pub. 3553 (Oct. 2002).

³ The Commission did not cumulate imports of subject merchandise produced in China or exported from China by companies other than SVW with other subject imports because there was very limited information about non-SVW imports into the United States, there was no information concerning the end-use applications of these imports, the quantities involved were very small, and these imports were very sporadic.

⁴ See, e.g., Polyvinyl Alcohol from Germany and Japan, Invs. Nos. 731-TA-1015 and 1016 (Final), USITC Pub. 3604 (June 2003). The Commission majority’s opinion reflected the views of Commissioner Deanna Tanner Okun as well as then-Commissioners Stephen Koplman and Marcia E. Miller. Then-Commissioner Jennifer A. Hillman made a negative final determination regarding imports from Japan.

affirmative present material injury determinations regarding subject imports from China and Korea.⁵ Commerce issued an antidumping duty order on imports from Japan on July 2, 2003, and antidumping duty orders on imports from China and Korea on October 1, 2003.⁶

SVW filed a summons with the U.S. Court of International Trade (“CIT”) to appeal the Commission’s final injury determination but the CIT summarily dismissed the appeal for failure to file a complaint. No other party appealed the Commission’s final original injury determinations.⁷

Current Five-Year Reviews. The Commission instituted these five-year reviews on June 2, 2008.⁸ The Commission received a joint response to the notice of institution filed by domestic producers Celanese and DuPont, the petitioners in the original investigations, in support of continuing the orders. Domestic producer Solutia Inc. (“Solutia”) filed a separate response to the notice of institution in support of revoking the orders. Four additional responses in support of revocation were filed by the following respondent interested parties: DC Chemical Co., Ltd., the only known producer of PVA in Korea; Japan VAM & Poval Co. Ltd. (“JVP”), a producer of subject merchandise in Japan; and Anhui Wanwei Updated High-Tech Material Industry Co. Ltd. (“Anhui Wanwei”) and Hunan Xiang Wei Co., Ltd. (“Hunan Xiangwei”), two producers of subject merchandise in China.

On September 5, 2008, the Commission found that the domestic interested party group response to its notice of institution was adequate, as was the respondent interested party group response of Korea. The Commission found that the respondent interested party group responses of China and Japan were inadequate.⁹ The Commission conducted full reviews of all orders to promote administrative efficiency.¹⁰

Other Investigations and Reviews. The Commission has conducted two other PVA investigations.¹¹ On March 9, 1995, Air Products and Chemicals, Inc. (“Air Products”), Celanese’s

⁵ See, e.g., Polyvinyl Alcohol from China and Korea, Invs. Nos. 731-TA-1014 and 1017 (Final), USITC Pub. 3634 (Sept. 2003). The Commission majority’s opinion reflected the views of Commissioner Okun as well as then-Commissioners Hillman, Koplun, and Miller. Commissioner Charlotte R. Lane did not participate in the investigations.

Because all imports from the three subject countries are eligible for cumulation in these reviews, we have given more weight to the Commission’s findings in the second of the two staggered original investigations wherein imports from all three subject countries were eligible for cumulation, although we have considered the Commission’s findings in both of the original investigations.

⁶ See, e.g., 68 Fed. Reg. 39518 (July 2, 2003) (Japan); 68 Fed. Reg. 56620 (Oct. 1, 2003) (China); 68 Fed. Reg. 56621 (Oct. 1, 2003) (Korea); Confidential Staff Report, Memorandum INV-GG-015 (Feb. 26, 2009) (“CR”) at I-2; Polyvinyl Alcohol from China, Japan, and Korea, Invs. Nos. 731-TA-1014, 1016, and 1017 (Review), USITC Pub. 4067 (Mar. 2009) (“PR”) at I-1.

⁷ See, e.g., CR at I-3; PR at I-2. SVW also appealed Commerce’s final determination in the original investigation to the CIT, and as a result of that appeal, SVW’s amended final antidumping duty margin was recalculated from 6.91 to 5.51 percent *ad valorem*. SVW appealed the CIT’s judgment to the Federal Circuit, but the parties ultimately agreed to dismiss the appeal. ***. See, e.g., CR at I-1 n.5, I-3 to I-4; PR at I-1 n.5, I-2 to I-3; CR/PR at Table I-3. As a result of two administrative reviews of its imports for the periods August 11, 2003 to September 4, 2004 and October 1, 2004 to September 30, 2005, SVW obtained *de minimis* and zero antidumping duty margins, respectively. See, e.g., CR/PR at Table I-3.

⁸ See, e.g., 73 Fed. Reg. 31507 (June 2, 2008).

⁹ Commissioner Lane found that the respondent interested party group responses of China and Japan were adequate, and Commissioner Dean A. Pinkert found that the respondent interested party group response of Japan was adequate. See, e.g., CR/PR at App. A.

¹⁰ See, e.g., CR at I-1 n.4; PR at I-1 n.4; CR/PR at App. A.

¹¹ The scopes of those investigations were broader than the scope of the orders in the instant reviews.

corporate predecessor,¹² filed antidumping duty petitions regarding imports from China, Japan, Korea, and Taiwan. In May 1996, the Commission determined that an industry in the United States was threatened with material injury by reason of less-than-fair-value imports from China, Japan, and Taiwan.¹³ Commerce imposed antidumping duty orders on those imports in May 1996.¹⁴ In April 2001, Commerce initiated five-year reviews, but it revoked the orders in May 2001 due to a lack of participation by domestic producers.¹⁵

Separately, the Commission began an investigation of PVA from Taiwan on September 4, 2004, in response to a petition filed by Celanese that was opposed by DuPont. On October 21, 2004, the Commission determined by a vote of three to two, with one Commissioner not participating, that there was no reasonable indication that an industry in the United States was materially injured or threatened with material injury by reason of imports from Taiwan.¹⁶ On November 24, 2004, Celanese appealed the negative preliminary determination with respect to Taiwan to the CIT. On January 29, 2007, the Court issued a decision affirming the negative preliminary determination in part and remanding it in part.¹⁷ In a remand determination issued on April 30, 2007, the Commission majority consisting of Chairman Shara L. Aranoff, Commissioner Irving A. Williamson, and Commissioner Pinkert found a reasonable indication that an industry in the United States was materially injured by reason of subject imports from Taiwan.¹⁸ Vice Chairman Pearson, Commissioner Okun, and Commissioner Lane again made a negative preliminary determination and filed dissenting remand views.¹⁹ On November 19, 2008, the CIT affirmed the affirmative preliminary determination on remand.²⁰ On January 16, 2009, DuPont and Taiwan producer Chang Chun Petrochemical Co., Ltd. (“Chang Chun”) appealed the CIT’s judgment and order to the Federal Circuit.²¹

¹² Celanese acquired the PVA business of Air Products in September 2000. *See, e.g.*, CR at I-22; PR at I-16.

¹³ *See Polyvinyl Alcohol from China, Japan, and Taiwan*, Invs. Nos. 731-TA-726, 727, and 729 (Final), USITC Pub. 2960 (May 1996). In the preliminary phase of the case, the Commission found that subject imports from Korea were negligible, so the investigation regarding Korea was terminated.

¹⁴ *See, e.g.*, 61 Fed. Reg. 24286 (May 14, 1996).

¹⁵ *See, e.g.*, CR/PR at Table I-2.

¹⁶ *See, e.g., Polyvinyl Alcohol from Taiwan*, Inv. No. 731-TA-1088 (Prelim.), USITC Pub. 3732 (Apr. 2007). The Commission majority’s opinion reflected the views of Vice Chairman Pearson, Commissioner Okun, and Commissioner Lane. Then-Commissioners Koplán and Miller reached an affirmative determination and filed dissenting views. Then-Commissioner Hillman did not participate in the investigations.

¹⁷ *See Celanese v. United States*, Slip Op. 07-16, 29 Int’l Trade Rep. 1328 (Ct. Int’l Trade Jan. 29, 2007).

¹⁸ Not having been Commissioners in the fall of 2004, these Commissioners reviewed the record *de novo*.

¹⁹ *See, e.g., Polyvinyl Alcohol from Taiwan*, Inv. No. 731-TA-1088 (Prelim.) (Remand), USITC Pub. 3920 (Apr. 2007).

²⁰ *See Celanese v. United States*, Slip Op. 08-125 (Ct. Int’l Trade Nov. 19, 2008).

²¹ Briefing before the Federal Circuit will take place in the first half of 2009. *See, e.g.*, CR at I-10; PR at I-7. Because of the procedural posture, the legally operative determination is still the Commission’s original negative preliminary determination. Thus, Commerce has not conducted its investigation, or issued any preliminary determination, and there has been no suspension of liquidation on imports of PVA from Taiwan.

Data Coverage: Celanese, DuPont and Solutia are the only interested parties that submitted briefs and participated in the hearing in these reviews.²² All three submitted questionnaire responses, and they account for all known U.S. production during the original investigations and the current reviews.²³

U.S. import data relied upon in these reviews are based on Commerce's official import statistics and the questionnaire responses or other submissions of thirteen importers of PVA that are believed to have accounted for U.S. imports of subject PVA from China, Japan, and Korea, as well as the majority of PVA corresponding to the scope that was imported from non-subject sources, most notably Taiwan.²⁴ Data on the foreign industries in the subject countries are based on questionnaire responses of three producers: one producer that accounts for *** of PVA production in China and *** exports from China to the United States ***; one of four known producers in Japan that accounts for *** percent of PVA production in that country; and one producer that accounts for all known production in Korea.²⁵

II. DOMESTIC LIKE PRODUCT

In making its determination under section 751(c) of the Tariff Act, the Commission defines “the domestic like product” and the “industry.”²⁶ The Tariff Act defines “domestic like product” as “a product which is like, or in the absence of like, most similar in characteristics and uses with, the article subject to an investigation under this subtitle.”²⁷ The Commission's practice in five-year reviews is to look to the like product definition from the original determination and any previous reviews and consider whether the record indicates any reason to revisit that definition.²⁸

Commerce defined the scope of the orders under review as all PVA “hydrolyzed in excess of 80 percent, whether or not mixed or diluted with commercial levels of defoamer or boric acid.” Commerce also specifically excluded fifteen forms of PVA from the scope of the orders.²⁹

²² The Commission rejected as untimely a request by Solutia to hold a portion of its hearing in these reviews *in camera*. Nonetheless, the Commission decided *sua sponte* to conduct a portion of its hearing *in camera* in order to address certain matters that could not otherwise be discussed in a public forum due to confidentiality of the underlying data. *See, e.g.*, 74 Fed. Reg. 5181 (Jan. 29, 2009). Citations herein to the public portion of the hearing transcript refer to “Hearing Tr. (public)” whereas citations to the confidential portion of the hearing transcript refer to “Hearing Tr. (confidential).”

²³ *See, e.g.*, CR at I-12; PR at I-9.

²⁴ *See, e.g.*, CR at I-12 to I-13; PR at I-9.

²⁵ *See, e.g.*, CR at I-5 at n.15, I-13; PR at I-3 at n.15, I-9.

²⁶ 19 U.S.C. § 1677(4)(A).

²⁷ 19 U.S.C. § 1677(10); *see, e.g.*, Cleo, Inc. v. United States, 501 F.3d 1291, 1299 (Fed. Cir. 2007); NEC Corp. v. Department of Commerce, 36 F. Supp. 2d 380, 383 (Ct. Int'l Trade 1998); Nippon Steel Corp. v. United States, 19 CIT 450, 455 (1995); Timken Co. v. United States, 913 F. Supp. 580, 584 (Ct. Int'l Trade 1996); Torrington Co. v. United States, 747 F. Supp. 744, 748-49 (Ct. Int'l Trade 1990), *aff'd*, 938 F.2d 1278 (Fed. Cir. 1991); *see also* S. Rep. No. 249, 96th Cong., 1st Sess. 90-91 (1979).

²⁸ *See, e.g.*, Internal Combustion Industrial Forklift Trucks From Japan, Inv. No. 731-TA-377 (Second Review), USITC Pub. 3831 at 8-9 (Dec. 2005); Crawfish Tail Meat From China, Inv. No. 731-TA-752 (Review), USITC Pub. 3614 at 4 (Jul. 2003); Steel Concrete Reinforcing Bar From Turkey, Inv. No. 731-TA-745 (Review), USITC Pub. 3577 at 4 (Feb. 2003).

²⁹ *See, e.g.*, CR at I-15 to I-16; PR at I-11. In the original investigations, the domestic industry did not produce any of the fifteen PVA products specifically excluded from the scope, *see, e.g.*, USITC Pub. 3604 at 6 & n.20, and in these reviews, Commission staff verified that the domestic industry continues to produce no commercially significant quantities of the excluded products. *See, e.g.*, CR at I-21 & n.40; PR at I-14 & n.40 (indicating that *** produced *** pounds of PVA products outside the scope *** and that ***).

A. Product Description

PVA is a water-soluble synthetic polymer, usually sold as a white granular solid or in powdered form. PVA can be categorized on the basis of the degree of hydrolysis,³⁰ the viscosity of an aqueous solution,³¹ and the average molecular weight of the finished product.³² For most applications, PVA is dissolved in an aqueous solution. Its solubility behavior in water depends on several factors including degree of polymerization, degree of hydrolysis, drying temperature, particle size, and molecular weight.³³

PVA is generally manufactured by first polymerizing vinyl acetate monomer (“VAM”) into polyvinyl acetate and then hydrolyzing the acetate groups with methanol in the presence of anhydrous sodium methylate or aqueous sodium hydroxide at moderate temperatures and pressures.³⁴ This is a continuous process that produces PVA hydrolyzed in excess of 80 percent.³⁵

In the United States, PVA is captively consumed or sold to end users primarily as an intermediate in the production of PVB, which is a plastic laminate used as an adhesive between panes of automotive safety glass or load-resistant architectural glass.³⁶ PVA is also sold to end users (and occasionally to distributors) for use in the textile and paper industries in sizing formulations; as a binder in adhesive and soil binding formulations; and as an emulsion or polymerization aid in colloidal suspensions, water-

³⁰ The degree of hydrolysis is determined by the percentage of acetate groups in the polyvinyl acetate feedstock that are replaced by hydroxyl groups in the finished PVA. For example, fully hydrolyzed PVA has a replacement percentage in excess of 98 percent. See, e.g., CR at I-16; PR at I-12. The degree of hydrolysis affects a variety of PVA properties, such as solution interfacial tensions, compatibility, reaction kinetics, rheology, and water solubility. See, e.g., CR at I-17; PR at I-12. According to petitioners in the original investigations, the degree of hydrolysis is commonly denoted as “super” (more than 99 percent hydrolyzed), “fully” (98 to 99 percent hydrolyzed), “intermediate” (90 to 98 percent hydrolyzed), and “partial” (85-89 percent hydrolyzed), but these definitions can vary somewhat within the industry. See, e.g., CR at I-18 & n.29; PR at I-12 to I-13 & n.29.

³¹ The viscosity (resistance to shear stress or flow) of an aqueous solution of PVA increases as the molecular weight of the PVA increases. See, e.g., CR at I-16; PR at I-12.

³² The molecular weight is determined by the average length of the polymer chain in the finished product in terms of the monomer units. Low-viscosity grades tend to have PVA chain lengths as low as 300 monomer units, with average molecular weights around 45,000 to 55,000 unified atomic mass units (u), whereas high-viscosity, fully hydrolyzed grades have PVA chain lengths up to 3,500 monomer units and average molecular weights around 200,000 to 225,000 u. See, e.g., CR at I-16 to I-17; PR at I-12.

³³ For example, PVA of 88 percent hydrolysis is soluble in both cold and hot water, whereas 98 percent hydrolyzed PVA may be soluble only in hot water. All other characteristics being equal, the higher the hydrolysis, the lower the solubility. By altering certain product characteristics, however, solubility can be changed. All standard grades of PVA, regardless of hydrolysis, must be “cooked” or put through a “saponification” process (in which an ester is heated with aqueous alkali to form an alcohol and the sodium salt of the acid corresponding to the ester) to achieve complete solubility. At the end of the saponification process, PVA is a hard solid suitable for grinding into granular or powdered form. See, e.g., CR at I-17; PR at I-12.

³⁴ Acetic acid produced as a by-product of the process can either be recycled to produce VAM or sold in the acetic acid market. Given the need for a high volume of acetic acid in the production of VAM, producers generally return the by-product to their own production process rather than sell it on the market. See, e.g., CR at I-19; PR at I-13.

³⁵ See, e.g., CR at I-19; PR at I-13.

³⁶ See, e.g., CR at I-17; PR at I-12.

soluble films, cosmetics, and joint compounds.³⁷ PVA is sold in a variety of standard and specialty grades that vary according to molecular weight, hydrolysis, and viscosity.³⁸

More than one grade of PVA may be sold to specific end-use markets.³⁹ For example, fully hydrolyzed PVA can be used in many of the same end uses in which intermediate or partially hydrolyzed PVA can be used, such as textiles, paper, and adhesives.⁴⁰ The same grade of PVA is frequently sold for different commercial uses, and many end users are able to use a wide range of grades.⁴¹ Many applications, however, have evolved using particular grades such that substitution, although possible, could involve some cost and time to reformulate.⁴² End users tend to avoid changing the grade of PVA that they use in their applications because their formulas and process parameters might have to be adjusted.⁴³

B. Original Determinations

In the original investigations, the Commission considered and rejected an argument that PVA formulated for use in the production of PVB (“PVB-grade PVA”) should be defined as a separate domestic like product from the other types of PVA within Commerce’s scope definition.⁴⁴ Consequently, the Commission defined one domestic like product, encompassing all domestically produced PVA meeting the specifications stated in Commerce’s scope definition.⁴⁵

C. Analysis and Conclusion

Domestic producers/petitioners Celanese and DuPont agree with the Commission’s domestic like product definition in the original investigations.⁴⁶ No party takes a different position.

We define the domestic like product in the same manner as the Commission did in the original investigations. The record in these reviews indicates no material changes in pertinent facts from the

³⁷ See, e.g., CR at I-17; PR at I-12; CR/PR at Table II-1.

³⁸ See, e.g., CR at I-17 to I-18; PR at I-12. For example, in adhesive applications that require water-resistance, a fully hydrolyzed grade of PVA is used since higher hydrolysis levels are more water-resistant. In adhesive applications that do not require water-resistance, however, a partially hydrolyzed PVA may be used. Similarly, paper manufacturers select a specific grade of PVA depending on the property required for the paper. Grease and water resistance, ink receptivity, and other components of the sizing solution determine grade selection. In the textile market, where PVA is used as warp sizing for yarns to prevent breakage during weaving, various grades of PVA are selected for use depending on the yarn, machine type, other components of the sizing solution (e.g., starch), required viscosity, abrasion resistance, and ease of solution removal after fabric weaving. See, e.g., CR at I-18; PR at I-13.

³⁹ See, e.g., CR at I-18; PR at I-13.

⁴⁰ See, e.g., CR at I-18; PR at I-13.

⁴¹ See, e.g., CR at I-18; PR at I-13.

⁴² See, e.g., CR at I-18; PR at I-13.

⁴³ See, e.g., CR at I-18; PR at I-13.

⁴⁴ See, e.g., USITC Pub. 3604 at 5; USITC Pub. 3634 at 6.

⁴⁵ See, e.g., USITC Pub. 3604 at 5-6; USITC Pub. 3634 at 6.

⁴⁶ See, e.g., Celanese/DuPont’s Response to the Notice of Institution at 4; Celanese/DuPont’s Prehearing Br. at 22.

original investigations.⁴⁷ Consequently, we define the domestic like product to encompass all PVA regardless of grade and coextensive with the scope.

III. DOMESTIC INDUSTRY

Section 771(4)(A) of the Act defines the relevant industry as the domestic “producers as a whole of a domestic like product, or those producers whose collective output of a domestic like product constitutes a major proportion of the total domestic production of the product.”⁴⁸

In the original investigations and during the period of review, three producers accounted for all U.S. PVA production: Celanese, DuPont, and Solutia.⁴⁹ In the original investigations, based on its finding of a single domestic like product, the Commission found that the domestic industry consisted of all domestic PVA producers. In these reviews, based on our definition of the domestic like product, we define the domestic industry as all U.S. producers of PVA, whether captively consumed or produced for the commercial market (i.e., Celanese, DuPont, and Solutia).⁵⁰

⁴⁷ See, e.g., CR at I-16 to I-21; PR at I-12 to I-14.

⁴⁸ 19 U.S.C. § 1677(4)(A). The definitions in 19 U.S.C. § 1677 are applicable to the entire subtitle containing the antidumping and countervailing duty laws, including 19 U.S.C. §§ 1675 and 1675a. See 19 U.S.C. § 1677.

⁴⁹ See, e.g., CR at I-21; PR at I-15.

⁵⁰ The Commission also determines whether any producer of the domestic like product should be excluded from the domestic industry pursuant to section 771(4)(B) of the Act. That provision of the statute allows the Commission, if appropriate circumstances exist, to exclude from the domestic industry producers that are related to an exporter or importer of subject merchandise or which are themselves importers. 19 U.S.C. § 1677(4)(B). In its original determinations, the Commission determined that Solutia was a related party but found that appropriate circumstances did not exist to exclude it given that its subject imports and purchases of subject imports were minuscule in relation to its domestic production. See, e.g., USITC Pub. 3604 at 7; USITC Pub. 3634 at 6 & n.24.

In the current reviews, Solutia reported that it did not import subject merchandise from any of the subject countries during the period of review and did not have any corporate affiliations with subject foreign producers, exporters, or importers of subject merchandise. Given these circumstances, there is no basis to find that Solutia is a related party.

IV. CUMULATION⁵¹

A. Overview

In the original investigations, for purposes of its affirmative present material injury determinations regarding imports from China and Korea, the Commission cumulated subject imports from China, Japan, and Korea.⁵² Celanese and DuPont ask the Commission to exercise its discretion to cumulate imports from all three subject countries,⁵³ whereas Solutia asks the Commission not to exercise its discretion to cumulate subject imports from China with other subject imports. Solutia makes no arguments concerning cumulation of subject imports from Japan and Korea.⁵⁴

With respect to five-year reviews, section 752(a) of the Tariff Act provides as follows:

the Commission may cumulatively assess the volume and effect of imports of the subject merchandise from all countries with respect to which reviews under section 1675(b) or (c) of this title were initiated on the same day, if such imports would be likely to compete with each other and with domestic like products in the United States market. The Commission shall not cumulatively assess the volume and effects of imports of the subject merchandise in a case in which it determines that such imports are likely to have no discernible adverse impact on the domestic industry.⁵⁵

⁵¹ Vice Chairman Pearson and Commissioner Okun note that while they consider the same issues discussed in this section in determining whether to exercise their discretion to cumulate the subject imports, their analytical framework begins with whether imports from the subject countries are likely to face similar conditions of competition. For those subject imports which are likely to compete under similar conditions of competition, they next proceed to consider whether those imports are likely to compete with each other and with the domestic like product. Finally, if based on that analysis they intend to exercise their discretion to cumulate one or more subject countries, they analyze whether they are precluded from cumulating such imports because the imports from one or more subject countries, assessed individually, are likely to have no discernible adverse impact on the domestic industry. See Steel Concrete Reinforcing Bar From Belarus, China, Indonesia, Korea, Latvia, Moldova, Poland, and Ukraine, Invs. Nos. 731-TA-873 to 875, 877 to 880, and 882 (Review), USITC Pub. 3933 (Jul. 2007) (Separate and Dissenting Views of Chairman Daniel R. Pearson and Commissioner Deanna Tanner Okun Regarding Cumulation). Accord Nucor Corp. v. United States, Slip Op. 09-16 at 23-25 (Ct. Int'l Trade Mar. 9, 2009); Nucor Corp. v. United States, Slip Op. 08-141 at 39-43 (Ct. Int'l Trade Dec. 23, 2008).

⁵² As discussed above, in the preliminary phase of the original investigations, Commerce found a *de minimis* antidumping duty margin for imports from SVW. Thus, for purposes of its negative material injury determination regarding imports from Japan in the final phase of the original investigations, the Commission cumulated subject imports from Japan and Korea but did not cumulate these imports with any imports from China because imports from SVW were not eligible for cumulation at that time and there was insufficient evidence of overlap with the other (very limited) imports from China. For purposes of its affirmative threat determination regarding imports from Japan in the final phase of the original investigations, the Commission exercised its discretion to cumulate imports from Japan and Korea. See, e.g., USITC Pub. 3604 at 8-13, 31-32. By the time of its final determinations concerning imports from China and Korea, imports from SVW were eligible for cumulation since Commerce had issued an affirmative final antidumping duty determination for those imports in the intervening time. See, e.g., USITC Pub. 3634 at 6-8.

⁵³ See, e.g., Celanese/DuPont's Prehearing Br. at 33-34; Celanese/DuPont's Posthearing Br. at 7-9.

⁵⁴ See, e.g., Solutia's Prehearing Br. at 10-24.

⁵⁵ 19 U.S.C. § 1675a(a)(7).

Cumulation therefore is discretionary in five-year reviews, unlike original investigations, which are governed by section 771(7)(G)(i) of the Act.⁵⁶ The Commission may exercise its discretion to cumulate, however, only if the reviews are initiated on the same day, the Commission determines that the subject imports are likely to compete with each other and the domestic like product in the U.S. market, and imports from each such subject country are not likely to have no discernible adverse impact on the domestic industry in the event of revocation. The statutory threshold for cumulation is satisfied in these reviews, because the reviews were initiated on the same day: June 2, 2008.⁵⁷

B. Likelihood of No Discernible Adverse Impact

The statute precludes cumulation if the Commission finds that subject imports from a country are likely to have no discernible adverse impact on the domestic industry.⁵⁸ Neither the statute nor the Uruguay Round Agreements Act (“URAA”) Statement of Administrative Action (“SAA”) provides specific guidance on what factors the Commission is to consider in determining that imports “are likely to have no discernible adverse impact” on the domestic industry.⁵⁹ With respect to this provision, the Commission generally considers the likely volume of subject imports and the likely impact of those imports on the domestic industry within a reasonably foreseeable time if the orders are revoked.

Solutia contends that subject imports from China are likely to have no discernible adverse impact upon revocation of the antidumping duty order on those imports.⁶⁰ Based on the record, we do not find that subject imports from China, Japan, or Korea are likely to have no discernible adverse impact on the domestic industry in the event of revocation of the orders covering those imports.⁶¹

⁵⁶ 19 U.S.C. § 1677(7)(G)(i); see also, e.g., Allegheny Ludlum Corp. v. United States, 475 F. Supp. 2d 1370, 1378 (Ct. Int’l Trade 2006) (recognizing the wide latitude the Commission has in selecting the types of factors it considers relevant in deciding whether to exercise discretion to cumulate subject imports in five-year reviews); Nucor v. United States, 569 F. Supp. 2d 1328, 1337-38 (Ct. Int’l Trade 2008); United States Steel Corp. v. United States, Slip Op. 08-82 (Aug. 5, 2008).

⁵⁷ See 73 Fed. Reg. 31974 (June 5, 2008).

⁵⁸ 19 U.S.C. § 1675a(a)(7).

⁵⁹ SAA, H.R. Rep. No. 103-316, vol. I at 887 (1994).

⁶⁰ Solutia argues that subject imports from China currently are low, began declining well before the antidumping duty order was put into place, and dropped from low and stable levels in 2003 to 2006 to even lower levels in 2007 after the Government of China reduced the VAT rebate applicable to PVA exports from 13 to 5 percent. Solutia further contends that Chinese producers have little to no excess capacity and are focused on their huge and fast-growing domestic market, the European market where demand far outstrips production, and attractive markets elsewhere in Asia. Solutia argues that producers in China have little incentive to increase exports to the United States, and even if they do increase exports, pricing data indicate that it will not be at prices that create an adverse impact. Solutia points to ***, “Celanese and DuPont cannot credibly argue now that an injurious volume of imports from China is likely if the orders are terminated.” See, e.g., Solutia’s Prehearing Br. at 12-22; Solutia’s Posthearing Br. at A-14 to A-22.

Under the terms of ***. See, e.g., Celanese/DuPont’s Posthearing Br. at Exh. A.

⁶¹ Vice Chairman Pearson finds that subject imports from Korea are likely to have no discernible adverse impact on the domestic industry in the event of revocation of the order on imports from Korea. As such, he does not join the subsection herein on Korea. See Separate and Dissenting Views of Vice Chairman Pearson Regarding Cumulation and Regarding No Likelihood of Continuation or Recurrence of Material Injury if the Antidumping Duty Order on Certain PVA from Korea is Revoked.

China: Given the large PVA production and large unused capacity in China,⁶² the *** for SVW (the only producer in China that submitted a complete questionnaire response in these reviews),⁶³ the large quantity of PVA exported from China during the review period,⁶⁴ the consistent presence in the U.S. market of subject imports from China in the original investigations and during the period of review,⁶⁵ the prevalence of underselling by subject imports of the domestic like product in the original investigations,⁶⁶ and evidence of additional underselling by subject imports from China after imposition of the antidumping duty order on these imports,⁶⁷ we do not find that imports from China would likely have no discernible adverse impact on the domestic industry if the antidumping duty order on PVA from China were revoked.

Japan: The volume of subject imports from Japan rose rapidly during the original investigations.⁶⁸ As discussed below, the PVA industry in Japan has a large production capacity,⁶⁹ its

⁶² In 2006 (the most recent year for which estimates are available), the industry in China had a capacity of *** pounds, and total production of PVA in China reached *** pounds. See, e.g., CR at IV-14 to IV-15; PR at IV-8.

⁶³ In the original investigations the Commission received a questionnaire response from only one Chinese producer, SVW. See, e.g., CR at IV-14; PR at IV-8. SVW accounted for *** exports to the United States from China. See, e.g., CR at IV-14 nn.22-23; PR at IV-8 nn.22-23. In these reviews, only SVW responded to the Commission's questionnaire. See, e.g., CR at IV-14; PR at IV-8. As one of approximately 14 PVA producers in China, SVW accounts for approximately *** of Chinese PVA production. The four major producers in China reportedly consist of ***. See, e.g., CR at I-13, IV-14, IV-15; PR at I-9, IV-8, IV-9. SVW's capacity *** during the period *** pounds, though its production *** from *** pounds in 2003 to *** pounds in 2007. See, e.g., CR/PR at Table IV-8. During the period examined in these reviews, SVW's production peaked in *** pounds. See, e.g., CR/PR at Table IV-8. SVW's capacity utilization ***. See, e.g., CR/PR at Table IV-8.

⁶⁴ According to industry publications, China became a net exporter of PVA during the period examined in these reviews. See, e.g., CR at IV-15; PR at IV-8 to IV-9 (citing Chemical Economics Handbook and Global Trade Atlas). China's status as a net importer/exporter of PVA fluctuated in recent years, consistent with China's need for imports of PVB-grade PVA. See, e.g., CR at IV-15, n.26; PR at IV-9, n.26.

⁶⁵ During the period examined in the original investigations, imports of subject merchandise from China dropped from a high in 2000 of 19.6 million pounds to 13.3 million pounds in 2001 and 13.4 million pounds in 2002. See, e.g., CR/PR at Table I-1. *** of these imports were produced by SVW. See, e.g., CR at IV-14; PR at IV-8. Subsequent to imposition of the order, Commerce determined that SVW was importing at fair value in two successive administrative reviews, but Commerce has not conducted a third administrative review of SVW's imports. SVW otherwise remains subject to the antidumping duty order on imports of PVA from China. See, e.g., CR/PR at Table I-3. During the period examined in these reviews, subject imports from China began at 5.9 million pounds in 2003, peaked at 6.7 million pounds in 2006, and fell to 4.5 million pounds in 2007. See, e.g., CR/PR at Table I-1. Data for interim 2008 shows a drop to 1.3 million pounds as compared to 4.3 million pounds for the same period in 2007. See, e.g., CR/PR at Table IV-1.

⁶⁶ In 45 price comparisons during the original investigations, imports from China undersold the U.S. product in all but 4 comparisons. See, e.g., CR/PR at Table V-10.

⁶⁷ During the period examined in these reviews, subject imports from China undersold the U.S. product in 40 out of 90 comparisons. See, e.g., CR/PR at Table V-9.

⁶⁸ In the period examined in the original investigations, imports of subject merchandise from Japan into the United States rose from *** pounds in 2000 to *** pounds in 2002. See, e.g., CR/PR at Table I-1. After imposition of the antidumping duty order on imports from Japan in July 2003, imports from Japan declined irregularly from *** pounds in 2003 to *** pounds in 2007. See, e.g., CR/PR at Table I-1. For the interim period of 2008, imports were *** pounds compared to *** for the same period in 2007. See, e.g., CR/PR at Table I-8.

⁶⁹ See, e.g., CR/PR at Table IV-11; CR at IV-22 to IV-23; PR at IV-12.

production has grown since the antidumping duty order was imposed,⁷⁰ and it is export-oriented.⁷¹ After imposition of the antidumping duty order, imports from Japan continued to supply the U.S. market, with importers either paying large antidumping duties or importing products that were specifically excluded from the scope of the orders.⁷² In both the original investigations and in these reviews there are limited pricing comparisons for PVA from Japan on the record, but there was some evidence of underselling in both time periods.⁷³ For these reasons, we do not find that revocation of the order on imports from Japan would likely have no discernible adverse impact on the domestic industry.

Korea: During the period examined in the original investigations, the volume of subject imports from Korea rose rapidly, but after imposition of the antidumping duty order on imports from Korea in October 2003, such imports largely disappeared from the U.S. market.⁷⁴ DC Chemical, the only known producer of PVA in Korea, provided data to the Commission in the original investigations and in these reviews.⁷⁵ DC Chemical's reported PVA capacity *** the period of review at *** pounds,⁷⁶ but its capacity utilization fluctuated from a period low of *** percent in 2005 to a period high of *** percent in interim 2008.⁷⁷ An industry publication reports that Korea is a net exporter of PVA,⁷⁸ and exports have *** accounted for *** percent of DC Chemical's total shipments since 2003.⁷⁹ Subject imports from Korea generally undersold the domestic like product in the U.S. market.⁸⁰ For these reasons, we do not find that PVA imports from Korea would likely have no discernible adverse impact on the domestic industry.

⁷⁰ Between 2003 and 2006 total Japanese production of PVA increased from *** pounds to *** pounds. See, e.g., CR at IV-23; PR at IV-12.

⁷¹ CR at IV-22 to IV-23; PR at IV-12.

⁷² See, e.g., CR at I-14 to I-15; PR at I-10 (regarding antidumping duties distributed under the Continued Dumping and Subsidy Offset Act of 2000 ("CDSOA")); CR/PR at Table IV-3 (imports from Japan of products excluded from the scope of the orders).

⁷³ See, e.g., CR at Table V-10. During the original investigations, imports from Japan split evenly with 3 instances of overselling and 3 instances of underselling. During the period examined in these reviews, 2 instances of underselling and no instances of overselling were reported. See, e.g., CR at Table V-9.

⁷⁴ Subject imports from Korea increased from 2.6 million pounds in 2000 to 3.8 million pounds in 2001 and 4.1 million pounds in 2002. See, e.g., CR/PR at Table I-1. This represented an increase in Korea's share of total U.S. imports (based on quantity) from *** percent to *** percent. See, e.g., CR/PR at Table I-1. In ***, DC Chemical reported exporting *** pounds of PVA from Korea to the United States, but since then its reported exports were ***. See, e.g., CR/PR at Table IV-16.

⁷⁵ See, e.g., CR at IV-30 to IV-31; PR at IV-15.

⁷⁶ See, e.g., CR/PR at Table IV-16. As recently as 2002, however, DC Chemical reported producing *** pounds. See, e.g., CR/PR at Table IV-15.

⁷⁷ See, e.g., CR/PR at Table IV-16.

⁷⁸ See, e.g., CR at IV-30 & n.53; PR at IV-15 & n.53 (also citing Global Trade Atlas).

⁷⁹ See, e.g., CR/PR at Table IV-16.

⁸⁰ During the original investigations, there were 10 instances of underselling and 4 instances of overselling by subject imports from Korea. See, e.g., CR/PR at Table V-10. There are no price comparisons for imports from Korea during the period examined in these reviews. See, e.g., CR/PR at Table V-9.

C. Likelihood of a Reasonable Overlap of Competition

The Commission generally has considered four factors intended to provide a framework for determining whether the imports compete with each other and with the domestic like product.⁸¹ Only a “reasonable overlap” of competition is required.⁸² In five-year reviews, the relevant inquiry is whether there would likely be competition even if none currently exists because the subject imports are absent from the U.S. market.⁸³

In the original investigations, the Commission found a reasonable overlap of competition between subject imports from Japan and Korea and between those imports and the domestic like product for purposes of its final determinations concerning subject imports from Japan, and it found a reasonable overlap of competition among subject imports from China, Japan, and Korea and between those imports and the domestic like product for purposes of its final determinations concerning subject imports from China and Korea.⁸⁴

Celanese and Dupont support cumulation of all subject imports for purposes of these reviews.⁸⁵ Solutia argues that although there are no differences with respect to three of the four factors, “differences in end-use applications, and other factors, including quality and product consistency, limit the fungibility between Chinese PVA ... and U.S. domestic or imported Japanese or Korean PVA.”⁸⁶

*Fungibility.*⁸⁷ In the original investigations, a majority of producers and importers found that U.S.-produced product was at least “sometimes” interchangeable with the subject imports from China,

⁸¹ The four factors generally considered by the Commission in assessing whether imports compete with each other and with the domestic like product are as follows: (1) the degree of fungibility between the imports from different countries and between imports and the domestic like product, including consideration of specific customer requirements and other quality related questions; (2) the presence of sales or offers to sell in the same geographical markets of imports from different countries and the domestic like product; (3) the existence of common or similar channels of distribution for imports from different countries and the domestic like product; and (4) whether the imports are simultaneously present in the market. *See, e.g., Wieland Werke, AG v. United States*, 718 F. Supp. 50 (Ct. Int’l Trade 1989).

⁸² *See Mukand Ltd. v. United States*, 937 F. Supp. 910, 916 (Ct. Int’l Trade 1996); *Wieland Werke*, 718 F. Supp. at 52 (“Completely overlapping markets are not required.”); *United States Steel Group v. United States*, 873 F. Supp. 673, 685 (Ct. Int’l Trade 1994), *aff’d*, 96 F.3d 1352 (Fed. Cir. 1996). We note, however, that there have been investigations where the Commission has found an insufficient overlap in competition and has declined to cumulate subject imports. *See, e.g., Live Cattle From Canada and Mexico*, Invs. Nos. 701-TA-386 and 731-TA-812 to 813 (Prelim.), USITC Pub. 3155 at 15 (Feb. 1999), *aff’d sub nom, Ranchers-Cattlemen Action Legal Foundation v. United States*, 74 F. Supp. 2d 1353 (Ct. Int’l Trade 1999); *Static Random Access Memory Semiconductors from the Republic of Korea and Taiwan*, Invs. Nos. 731-TA-761 to 762 (Final), USITC Pub. 3098 at 13-15 (Apr. 1998).

⁸³ *See generally Cheflin Corp. v. United States*, 219 F. Supp. 2d 1313, 1314 (Ct. Int’l Trade 2002).

⁸⁴ *Compare, e.g.,* USITC Pub. 3604 at 8-13 *with, e.g.,* USITC Pub. 3634 at 6-8. As noted above, imports from SVW (which accounted for the bulk of imports from China at the time of the original investigations) were not eligible for cumulation at the time of the Japan determination but were by the time of the later determinations concerning subject imports from China and Korea.

⁸⁵ *See, e.g.,* Celanese/Dupont Prehearing Br. at 33.

⁸⁶ Solutia Prehearing Br. at 12.

⁸⁷ Commissioner Lane notes that, with respect to fungibility, her analysis does not require such similarity of products that a perfectly symmetrical fungibility is required and that this factor would be better described as an analysis of whether subject imports from each country and the domestic like product could be substituted for each other. *See Separate Views of Commissioner Charlotte R. Lane, Certain Lightweight Thermal Paper from China, Germany, and Korea*, Invs. Nos. 701-TA-451 and 731-TA-1126-1128 (Prelim.), USITC Pub. 3964 at 32-33 (Nov. 2007).

Japan, and Korea and that imports from each of these countries were at least sometimes interchangeable with each other. The Commission found that data on end uses are particularly pertinent to an analysis of competition in this industry and that prices for PVA in the U.S. market were a function of the intended end use of the product, rather than its grade.⁸⁸ In the original investigations, there was considerable overlap among subject imports from China, Japan, and Korea, particularly for sales to the textile industry and for adhesives end uses.⁸⁹

In these reviews, two of three domestic producers reported that PVA from all four sources (China, Japan, Korea, and the United States) is always interchangeable, but the third domestic producer (***) reported that PVA from these sources is never interchangeable with one another.⁹⁰ U.S. importers generally reported that PVA from all four sources can be used interchangeably.⁹¹ Purchaser responses were more mixed, although they generally reported imports from all sources as being at least “sometimes” interchangeable with one another.⁹² Pre-qualification plays an important role in PVA purchasing.⁹³ Nevertheless, it appears that producers in all subject countries have become qualified for a large range of products.⁹⁴

The record continues to reflect the importance of end use in the PVA industry.⁹⁵ In 2007 and interim 2008, the domestic industry reported manufacturing PVA for *** end uses.⁹⁶ In the same period, subject imports from China were sold *** end-use applications.⁹⁷ At the same time, producers in the subject countries produced a wide variety of PVA products for sale to their home and global markets during the period of review.⁹⁸ There was also overlap in terms of hydrolysis levels both at the time of the original investigations and during the period examined in the current reviews.⁹⁹

⁸⁸ See, e.g., USITC Pub. 3604 at 10; USITC Pub. 3634 at 8-9.

⁸⁹ See, e.g., USITC Pub. 3634 at 9.

⁹⁰ See, e.g., CR/PR at Table II-4.

⁹¹ See, e.g., CR/PR at Table II-4.

⁹² Three purchasers reported that subject imports from China could frequently or sometimes be used interchangeably and one reported never. Two purchasers reported that subject imports from China are sometimes interchangeable with subject imports from Korea. Two purchasers reported that subject imports from Japan are sometimes interchangeable with subject imports from Korea. See, e.g., CR/PR at Table II-4.

⁹³ Of the 13 purchasers that reported that they require suppliers to be certified for at least some of their purchases, 11 stated that they require pre-qualification for all the PVA they purchase. See, e.g., CR at II-32 to II-34; PR at II-16 to II-17. Among purchasers, *** reported that foreign producers failed to qualify to supply its U.S. plants. See, e.g., CR at II-34; PR at II-17. ***, but it has ***. See, e.g., Solutia’s Posthearing Br. at A30 to A31, A33, A55; Solutia’s Prehearing Br. at 6-7. ***. See, e.g., Solutia’s Posthearing Br. at A30 to A31, A53.

⁹⁴ See, e.g., Celanese/DuPont’s Posthearing Br. at II-26 to II-27; CR/PR at Tables IV-8 to IV-10, Tables IV-12 to IV-14, and Tables IV-16 to IV-18.

⁹⁵ See, e.g., CR at IV-8; PR at IV-6; see, e.g., Celanese/DuPont’s Prehearing Br. at 29.

⁹⁶ See, e.g., CR/PR at Table IV-4 (showing total shipments by domestic producers of PVA during the period examined in these reviews of PVA for use in ***).

⁹⁷ Subject imports from Japan were minuscule, and none were reported from Korea. See, e.g., CR/PR at Table IV-4.

⁹⁸ See, e.g., CR/PR at Tables IV-8 and IV-10 (SVW’s production, home-market sales, exports, and production by end use), Table IV-9 (exports from China), Tables IV-12 and IV-14 (JVP’s production, home-market sales, exports, and production by end use), Table IV-13 (exports from Japan), Table IV-16 and IV-18 (DC Chemical’s production, home-market sales, exports, and production by end use), Table IV-17 (exports from Korea).

⁹⁹ See, e.g., CR/PR at Table IV-5.

Geographic Overlap. In the original investigations, imports from China and Korea entered principally through eastern and western ports, and imports from Japan entered through ports in all geographic areas.¹⁰⁰ During the original investigations, Celanese and DuPont made nationwide sales,¹⁰¹ and they still make nationwide sales.¹⁰² When in the market during the period of review, subject imports entered through ports in the South and Southwest. Imports from China were primarily through Charleston, SC, imports from Japan were concentrated in Houston-Galveston, TX, and imports from Korea came through Los Angeles, CA, Charleston, SC, and Savannah, GA.¹⁰³

Channels of Distribution. In the original investigations, a large majority of the PVA sold in the United States, whether imported or domestically produced, was sold to end users, although a large portion of domestically produced PVA (**% percent in 2002) was internally transferred.¹⁰⁴ At that time, subject imports (regardless of source) were generally sold directly to end users.¹⁰⁵ At the beginning of the period of review, imports from Japan were mostly sold through distributors, but by 2005, all or nearly all imports from Japan were sold to end users.¹⁰⁶ *** imports from China during the period of review were to end users, as were *** of U.S. shipments during the period of review.¹⁰⁷

Simultaneous Presence in Market. During the original investigations, imports from all three subject countries and the domestic like product were in the U.S. market in all three years for which data were collected.¹⁰⁸ After imposition of the orders, subject imports from Japan and Korea were limited.¹⁰⁹ Imports from China did not leave the market, however, with shipments in 66 of the 69 months between January 2003 and September 2008.¹¹⁰

Analysis. The record indicates that the criteria for determining a likely reasonable overlap in competition are satisfied. U.S.-produced PVA and subject imports from all countries generally are fungible, are primarily shipped through the same channels of distribution, and overlap geographically. Though imports from Korea and Japan were not simultaneously present in the U.S. market throughout much of the period of review, imports from all three countries were present in significant volumes during the original investigations, were sold for overlapping end-use applications at that time, and would likely all be present in the market for overlapping end-use applications if the orders were revoked. We therefore find that there would likely be a reasonable overlap in competition between subject imports from each country and the domestic like product as well as between subject imports should the orders under review be revoked.

¹⁰⁰ See, e.g., USITC Pub. 3634 at 9.

¹⁰¹ See, e.g., USITC Pub. 3634 at 9.

¹⁰² See, e.g., CR at IV-11; PR at IV-7.

¹⁰³ See, e.g., CR at IV-11; PR at IV-7.

¹⁰⁴ See, e.g., USITC Pub. 3634 at 10; Original Views (Japan) at 16.

¹⁰⁵ See, e.g., USITC Pub. 3634 at 10.

¹⁰⁶ See, e.g., CR/PR at Table II-1.

¹⁰⁷ See, e.g., CR/PR at Table II-1.

¹⁰⁸ See, e.g., CR/PR at Table I-1.

¹⁰⁹ See, e.g., CR/PR at Table I-1.

¹¹⁰ See, e.g., CR at IV-12; PR at IV-7.

D. Other Considerations¹¹¹

In determining whether to exercise our discretion to cumulate the subject imports, we assess whether the subject imports from China, Japan, and Korea are likely to compete under similar or different conditions in the U.S. market after revocation of the orders.¹¹² No party has asserted and we do not find any significant differences in likely conditions of competition among imports from China, Japan, and Korea. We accordingly exercise our discretion to cumulate subject imports from China, Japan, and Korea.¹¹³

V. LIKELIHOOD OF CONTINUATION OR RECURRENCE OF MATERIAL INJURY IF THE ANTIDUMPING DUTY ORDERS ON CERTAIN PVA FROM CHINA, JAPAN, AND KOREA ARE REVOKED

For the reasons stated below, we determine that revocation of the antidumping duty orders on imports of subject merchandise from China, Japan, and Korea would be likely to lead to continuation or recurrence of material injury to the domestic industry producing PVA within a reasonably foreseeable time.¹¹⁴

A. Legal Standards

In five-year reviews conducted under section 751(c) of the Act, Commerce will revoke an antidumping or countervailing duty order unless (1) it makes a determination that dumping or subsidization is likely to continue or recur and (2) the Commission makes a determination that revocation of the antidumping or countervailing duty order “would be likely to lead to continuation or recurrence of material injury within a reasonably foreseeable time.”¹¹⁵ The SAA states that “under the likelihood standard, the Commission will engage in a counterfactual analysis; it must decide the likely impact in the

¹¹¹ Commissioners Lane and Pinkert explain their analysis of other considerations as follows. Where, in a five-year review, they do not find that the subject imports would be likely to have no discernible adverse impact on the domestic industry if the orders were revoked, and find that such imports would be likely to compete with each other and with the domestic like product in the U.S. market, they cumulate such imports unless there is a condition or propensity – not merely a trend – that is likely to persist for a reasonably foreseeable time and that significantly limits competition such that cumulation is not warranted.

Based on the record in these reviews, they find that there is no such condition or propensity with respect to the subject imports. Therefore, they see no basis for exercising their discretion not to cumulate subject imports from China, Korea, and Japan, and they have cumulated them in these reviews.

¹¹² See, e.g., Allegheny Ludlum Corp., 475 F. Supp. 2d at 1378 (recognizing the wide latitude the Commission has in selecting the type of factors it considers relevant in deciding whether to exercise discretion to cumulate subject imports in five-year reviews); Nucor v. United States, 569 F. Supp. 2d at 1337-38; United States Steel, Slip Op. 08-82.

¹¹³ Vice Chairman Pearson finds that subject imports from Korea are likely to have no discernible adverse impact on the domestic industry in the event of revocation of the order on imports from Korea. As such, he does not exercise his discretion to cumulate imports from Korea with other subject imports, although he does exercise his discretion to cumulate subject imports from China with subject imports from Japan. See Separate and Dissenting Views of Vice Chairman Pearson Regarding Cumulation and Regarding No Likelihood of Continuation or Recurrence of Material Injury if the Antidumping Duty Order on Certain PVA from Korea is Revoked.

¹¹⁴ Except as otherwise noted, Vice Chairman Pearson joins in the following discussion, although in his analysis he only cumulates subject imports from China and Japan.

¹¹⁵ 19 U.S.C. § 1675a(a).

reasonably foreseeable future of an important change in the *status quo* – the revocation or termination of a proceeding and the elimination of its restraining effects on volumes and prices of imports.”¹¹⁶ Thus, the likelihood standard is prospective in nature.¹¹⁷ The CIT has found that “likely,” as used in the five-year review provisions of the Act, means “probable,” and the Commission applies that standard in five-year reviews.^{118 119 120}

The statute states that “the Commission shall consider that the effects of revocation or termination may not be imminent, but may manifest themselves only over a longer period of time.”¹²¹ According to the SAA, a “‘reasonably foreseeable time’ will vary from case-to-case, but normally will exceed the ‘imminent’ timeframe applicable in a threat of injury analysis in original investigations.”¹²²

Although the standard in a five-year review is not the same as the standard applied in original antidumping and countervailing duty investigations, it contains some of the same fundamental elements. The statute provides that the Commission is to “consider the likely volume, price effect, and impact of imports of the subject merchandise on the industry if the orders are revoked or the suspended investigation is terminated.”¹²³ It directs the Commission to take into account its prior injury determination, whether any improvement in the state of the industry is related to the order or the suspension agreement under review, whether the industry is vulnerable to material injury if the orders are

¹¹⁶ SAA at 883-84. The SAA states that “[t]he likelihood of injury standard applies regardless of the nature of the Commission’s original determination (material injury, threat of material injury, or material retardation of an industry). Likewise, the standard applies to suspended investigations that were never completed.” *Id.* at 883.

¹¹⁷ While the SAA states that “a separate determination regarding current material injury is not necessary,” it indicates that “the Commission may consider relevant factors such as current and likely continued depressed shipment levels and current and likely continued {sic} prices for the domestic like product in the U.S. market in making its determination of the likelihood of continuation or recurrence of material injury if the order is revoked.” SAA at 884.

¹¹⁸ See *NMB Singapore Ltd. v. United States*, 288 F. Supp. 2d 1306, 1352 (Ct. Int’l Trade 2003) (“‘likely’ means probable within the context of 19 U.S.C. § 1675(c) and 19 U.S.C. § 1675a(a)”), *aff’d mem.*, 140 Fed. Appx. 268 (Fed. Cir. 2005); *Nippon Steel Corp. v. United States*, 26 CIT 1416, 1419 (2002) (same); *Usinor Industeel, S.A. v. United States*, 26 CIT 1402, 1404 nn.3, 6 (2002) (“more likely than not” standard is “consistent with the court’s opinion”; “the court has not interpreted ‘likely’ to imply any particular degree of ‘certainty’”); *Indorama Chemicals (Thailand) Ltd. v. United States*, Slip Op. 02-105 at 20 (Ct. Int’l Trade Sept. 4, 2002) (“standard is based on a likelihood of continuation or recurrence of injury, not a certainty”); *Usinor v. United States*, 26 CIT 767, 794 (2002) (“‘likely’ is tantamount to ‘probable,’ not merely ‘possible’”).

¹¹⁹ For a complete statement of Commissioner Okun’s interpretation of the likely standard, see Additional Views of Vice Chairman Deanna Tanner Okun Concerning the “Likely” Standard in Certain Seamless Carbon and Alloy Steel Standard, Line and Pressure Pipe From Argentina, Brazil, Germany, and Italy, Invs. Nos. 701-TA-362 (Review) and 731-TA-707 to 710 (Review) (Remand), USITC Pub. 3754 (Feb. 2005).

¹²⁰ Commissioner Lane notes that, consistent with her views in Pressure Sensitive Plastic Tape From Italy, Inv. No. AA1921-167 (Second Review), USITC Pub. 3698 (June 2004), she does not concur with the U.S. Court of International Trade’s interpretation of “likely,” but she will apply the Court’s standard in these reviews and all subsequent reviews until either Congress clarifies the meaning or the U.S. Court of Appeals for the Federal Circuit addresses this issue.

¹²¹ 19 U.S.C. § 1675a(a)(5).

¹²² SAA at 887. Among the factors that the Commission should consider in this regard are “the fungibility or differentiation within the product in question, the level of substitutability between the imported and domestic products, the channels of distribution used, the methods of contracting (such as spot sales or long-term contracts), and lead times for delivery of goods, as well as other factors that may only manifest themselves in the longer term, such as planned investment and the shifting of production facilities.” *Id.*

¹²³ 19 U.S.C. § 1675a(a)(1).

revoked or the suspension agreement is terminated, and any findings by Commerce regarding duty absorption pursuant to 19 U.S.C. § 1675(a)(4).¹²⁴ The statute further provides that the presence or absence of any factor that the Commission is required to consider shall not necessarily give decisive guidance with respect to the Commission's determination.¹²⁵

As stated above, the Commission has relatively complete data coverage for the domestic industry and received a complete foreign producer questionnaire response from the only known subject producer in Korea. U.S. import data are based on Commerce's official import statistics and the questionnaire responses or other submissions of thirteen importers of PVA that are believed to have accounted for U.S. imports of subject PVA from China, Japan, and Korea, as well as the large majority of PVA corresponding to the scope that was imported from non-subject sources, most notably Taiwan.¹²⁶ On the other hand, the Commission received a complete foreign producer questionnaire response from only one of the subject producers in China and only one of four subject producers in Japan.¹²⁷ We have relied on the facts otherwise available when appropriate in these reviews, which consist primarily of information from the original investigations, information submitted in these reviews, and information available from published sources.^{128 129}

B. Conditions of Competition and the Business Cycle

In evaluating the likely impact of the subject imports on the domestic industry, the statute directs the Commission to consider all relevant economic factors "within the context of the business cycle and conditions of competition that are distinctive to the affected industry."¹³⁰

¹²⁴ 19 U.S.C. § 1675a(a)(1). Commerce has not made duty absorption findings with respect to any of the orders under review. See, e.g., CR at I-13 at n.20; PR at I-9 at n.20.

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

¹²⁶ See, e.g., CR at I-12 to I-13; PR at I-9.

¹²⁷ See, e.g., CR at I-13, IV-14, and IV-22; PR at I-9, IV-8, IV-12.

¹²⁸ 19 U.S.C. § 1677e(a) authorizes the Commission to "use the facts otherwise available" in reaching a determination when (1) necessary information is not available on the record or (2) an interested party or any other person withholds information requested by the agency, fails to provide such information in the time or in the form or manner requested, significantly impedes a proceeding, or provides information that cannot be verified pursuant to 19 U.S.C. § 1677m(i). The verification requirements in 19 U.S.C. § 1677m(i) are applicable only to Commerce. See Titanium Metals Corp. v. United States, 155 F. Supp. 2d 750, 765 (Ct. Int'l Trade 2002) ("the ITC correctly responds that Congress has not required the Commission to conduct verification procedures for the evidence before it, or provided a minimum standard by which to measure the thoroughness of Commission investigations.").

¹²⁹ Commissioner Okun notes that the statute authorizes the Commission to take adverse inferences in five-year reviews, but such authorization does not relieve the Commission of its obligation to consider the record evidence as a whole in making its determination. See 19 U.S.C. § 1677e. She generally gives credence to the facts supplied by the participating parties and certified by them as true, but bases her decision on the evidence as a whole, and does not automatically accept participating parties' suggested interpretations of the record evidence. Regardless of the level of participation, the Commission is obligated to consider all evidence relating to each of the statutory factors and may not draw adverse inferences that render such analysis superfluous. "In general, the Commission makes determinations by weighing all of the available evidence regarding a multiplicity of factors relating to the domestic industry as a whole and by drawing reasonable inferences from the evidence it finds most persuasive." SAA at 869.

¹³⁰ 19 U.S.C. § 1675a(a)(4).

1. Original Determinations

The Commission found several conditions of competition relevant to its inquiry in its original determinations. First, market participants commonly perceived the PVA market by reference to the different applications for which it is sold.¹³¹ PVB was the highest-volume application in the United States at that time, and this application was then supplied primarily by captive consumption.¹³² The two next largest applications in the United States in 2002, which were supplied exclusively by sales in the commercial market, were textiles and adhesives/emulsifiers.¹³³

Apparent U.S. consumption of PVA, whether measured in terms of the commercial market or the total market, declined from 2000 to 2001 and increased from 2001 to 2002, although the 2002 level was below that of 2000.¹³⁴ Between 2000 and 2002, there was a significant decline in demand in the U.S. market for PVA for textile uses because of contraction within the U.S. textile industry, but demand for PVB-grade PVA remained strong.¹³⁵

At the time of the original investigations, only two of the three domestic producers (DuPont and Celanese) produced PVA for the commercial market.¹³⁶ The Commission concluded that all elements of the statutory captive production provision (19 U.S.C. § 1677(7)(C)(iv)) were met.¹³⁷ Therefore, the Commission focused primarily on the commercial market for the domestic like product in determining

¹³¹ See, e.g., USITC Pub. 3604 at 15; USITC Pub. 3634 at 10.

¹³² See, e.g., USITC Pub. 3604 at 15; USITC Pub. 3634 at 10.

¹³³ See, e.g., USITC Pub. 3604 at 15-16; USITC Pub. 3634 at 10.

¹³⁴ See, e.g., USITC Pub. 3604 at 16; USITC Pub. 3634 at 10; Original Views (Japan) at 24.

¹³⁵ See, e.g., USITC Pub. 3604 at 16; USITC Pub. 3634 at 10; Original Views (Japan) at 24-25.

¹³⁶ See, e.g., USITC Pub. 3604 at 16; USITC Pub. 3634 at 10. Celanese acquired the PVA business – including U.S. production facilities – of former producer Air Products in September 2000. See, e.g., USITC Pub. 3604 at 16; USITC Pub. 3634 at 10.

¹³⁷ Specifically, the Commission determined that the threshold criterion was met because domestic producers internally transferred significant production of the domestic like product for captive consumption and sold significant production of the domestic like product in the commercial market. Internal transfers accounted for *** percent of the reported volume of U.S. producers' domestic shipments of PVA in 2002 and commercial market sales accounted for the remaining *** percent. See, e.g., USITC Pub. 3604 at 14; Original Views (Japan) at 21.

The Commission also determined that the first statutory criterion, whether any of the domestic like product that is transferred internally for further processing is in fact sold on the commercial market, was met. The record indicated that *** internal transfers by *** were used in the production of PVB and that *** entered the commercial market. See, e.g., USITC Pub. 3604 at 14; Original Views (Japan) at 21.

In applying the second statutory criterion, the Commission considered whether the domestic like product was the predominant material input into a downstream product by reference to its share of the raw material cost of the downstream product. The record indicated that *** of the PVA *** was used to produce PVB products and that PVA accounted for *** of the total raw material costs for PVB, an amount that was unquestionably larger than any other individual input. In those circumstances, the Commission concluded that the second criterion was satisfied. See, e.g., USITC Pub. 3604 at 14-15; Original Views (Japan) at 21-22.

In applying the third statutory criterion, the Commission considered whether the commercial market purchaser was generally using the domestic like product to produce the same downstream article or articles as the integrated domestic producer. The record indicated that *** percent of U.S. commercial shipments of PVA in 2002 were used to produce PVB. The Commission accordingly concluded that the third statutory criterion was satisfied. See, e.g., USITC Pub. 3604 at 15; Original Views (Japan) at 23.

market share and the factors affecting financial performance, although it also analyzed these factors with respect to the whole market.¹³⁸

At the time of the original investigations, the U.S. PVA market was supplied principally by the domestic industry.¹³⁹ In 2002, domestic producers accounted for *** percent of U.S. commercial market consumption and *** percent of total apparent U.S. consumption, measured by quantity.¹⁴⁰ The next largest source of supply to the U.S. market in 2002 was subject imports from China, Japan, and Korea, which accounted for *** percent of apparent U.S. commercial market consumption and *** percent of total apparent U.S. consumption that year.¹⁴¹ The Commission noted that the domestic industry's capacity in 2002 was *** greater than the largest amount of apparent U.S. consumption observed at any point between 2000 and 2002.¹⁴²

2. Current Reviews

In these reviews, we have considered a number of likely conditions of competition in the event the antidumping duty orders regarding imports of PVA from China, Japan, and Korea are revoked.

a. Demand in the U.S. Market

PVA is used in a wide variety of end-use applications, and participants still view the PVA market by reference to the applications for which PVA is sold.¹⁴³ PVB continues to be by far the largest end-use application.¹⁴⁴ Other high-volume end-use applications for PVA include textiles, paper (coated paperboard), adhesives, and emulsion polymerization (adhesives, coatings, and engineered fabrics).¹⁴⁵ PVA is also used in the manufacture of a variety of other products including building materials, pharmaceuticals, ceramics, and film.¹⁴⁶ PVA accounts for a small to moderate percentage of the final cost of the variety of end-use products in which it is an input, although it accounts for a larger share of the cost to produce certain intermediate products such as textile finishing or adhesive compounds.¹⁴⁷ Questionnaire respondents reported few or no substitutes for PVA, and those reporting substitutes generally identified products that could substitute for PVA only in particular end-use applications.¹⁴⁸

Solutia and DuPont both internally consume PVA for the production of PVB, and Solutia also purchases PVB-grade PVA.¹⁴⁹ Although there is only one commercial-market purchaser of PVB-grade

¹³⁸ See, e.g., USITC Pub. 3604 at 15; USITC Pub. 3634 at 10.

¹³⁹ See, e.g., USITC Pub. 3604 at 17; USITC Pub. 3634 at 10.

¹⁴⁰ See, e.g., USITC Pub. 3604 at 17; Original Views (China/Korea) at 16.

¹⁴¹ See, e.g., USITC Pub. 3634 at 10; Original Views (China/Korea) at 16-17.

¹⁴² The Commission observed that manufacturers of subject PVA in subject countries likewise maintained capacity *** in excess of the sum of their internal consumption and home market shipments. See, e.g., USITC Pub. 3604 at n.83.

¹⁴³ See, e.g., Celanese/DuPont's Prehearing Br. at 29.

¹⁴⁴ See, e.g., CR at II-1; PR at II-1; CR/PR at Table IV-4.

¹⁴⁵ See, e.g., CR at II-1; PR at II-1; CR/PR at Table IV-4.

¹⁴⁶ See, e.g., CR at II-1; PR at II-1; CR/PR at Table IV-4.

¹⁴⁷ See, e.g., CR at II-26 to II-27; PR at II-13 to II-14; Celanese/DuPont's Prehearing Br. at 30-31.

¹⁴⁸ See, e.g., CR at II-24 to II-25; PR at II-12 to II-13.

¹⁴⁹ See, e.g., CR at II-1; PR at II-1.

PVA,¹⁵⁰ the record indicates that the rest of the U.S. PVA market is more fragmented, with most customers purchasing on average between 100 and 150 tons (200,000 to 300,000 pounds) per year.¹⁵¹

Consistent with the variety of applications in which PVA is used, questionnaire respondents' characterizations of demand trends since the original investigations varied widely.¹⁵² Data on U.S. consumption of PVB resin indicate an increase from *** pounds in 2003 to *** pounds in 2006.¹⁵³ In contrast, the slowing of the general economy and weakness in broad market sectors, such as automobiles, construction, and textiles, reduced demand for PVA in other end-use applications.¹⁵⁴

During the period of review, demand as measured by apparent U.S. consumption (the sum of the domestic industry's U.S. shipments and imports from subject and non-subject sources) increased from *** pounds in 2003 to *** pounds in 2004 and *** pounds in 2005, but then declined to *** pounds in 2006 before increasing somewhat to *** pounds in 2007.¹⁵⁵ Apparent U.S. consumption in interim 2008 (*** pounds) was *** percent lower than in interim 2007 (*** pounds).¹⁵⁶

Solutia argues that, notwithstanding a "slight drop" in demand in interim 2008 related to the recession, U.S. demand will increase in the reasonably foreseeable future due to growth in existing applications and the development of new applications.¹⁵⁷ In terms of the PVB segment of the market, Solutia contends that the use of PVB film in the manufacture of photovoltaic panels is a new and fast-growing application and that growth in PVB for use in photovoltaic panels will help offset current declines in demand for PVB used in automotive and architectural applications.¹⁵⁸ Celanese and DuPont claim that the weight of industry opinion refutes Solutia's ***.¹⁵⁹ Consistent with several questionnaire responses submitted in these reviews, we find that demand for PVA in the United States is likely to slow

¹⁵⁰ Of those purchasers providing questionnaire responses in these reviews, *** was the largest, accounting for *** percent of total reported purchases for 2007. See, e.g., CR at II-3; PR at II-3. Other responding purchasers included *** (*** percent); *** (*** percent); *** (*** percent); and *** (*** percent). See, e.g., CR at II-3 to II-4; PR at II-3.

¹⁵¹ See, e.g., CR at II-1; PR at II-1.

¹⁵² *** reported that demand in the United States had declined, while *** reported that it had increased. See, e.g., CR at II-21; PR at II-11; Celanese/DuPont's Prehearing Br. at 29-30. Four of the eight responding importers reported that demand had increased, and one indicated that it had fluctuated. See, e.g., CR at II-22; PR at II-12. All but one of 13 responding purchasers reported that the demand for their final products that incorporate PVA had changed since January 2003. Of those reporting changes, six reported that demand had increased, four reported that it had decreased, and two reported that it fluctuated. See, e.g., CR at II-23; PR at II-12.

¹⁵³ See, e.g., CR at II-19; PR at II-10.

¹⁵⁴ See, e.g., CR at II-19 to II-20; PR at II-10. In particular, the annual shipment value of U.S. textile production fell continuously from \$22.6 billion in 2003 to \$9.3 billion in 2007, or by a total of 58.9 percent. See, e.g., CR at II-20; PR at II-10 to II-11; CR/PR at Figure II-1. DuPont reported that since 2003, the U.S. textile industry's production declined as major textile manufacturers such as Dan River, West Point Stevens, and Springs either declared bankruptcy, were sold, or relocated offshore. DuPont also noted similar declines in the U.S. automotive market in the last five years, and more recently in 2008 the construction and housing industry experienced a downturn. See, e.g., CR at II-20 at n.35; PR at II-10 to II-11 at n.35. Solutia asserts that demand in the segments of the U.S. market traditionally served by subject imports is shrinking (i.e., textiles) *** (i.e., adhesives and paper). See, e.g., Solutia's Prehearing Br. at 34-35.

¹⁵⁵ See, e.g., CR/PR at Table I-8.

¹⁵⁶ See, e.g., CR/PR at Tables I-8, C-1.

¹⁵⁷ See, e.g., Solutia's Prehearing Br. at 32-33.

¹⁵⁸ See, e.g., Solutia's Prehearing Br. at 33; Solutia's Posthearing Br. at A-1 to A-2, A-11 to A-13.

¹⁵⁹ See, e.g., Celanese/DuPont's Prehearing Br. at 32-33; Celanese/DuPont's Posthearing Br. at II-3 to II-4, II-20 to II-21.

or decline in the reasonably foreseeable future in light of current economic conditions and slowing or declining demand for specific end-use applications.¹⁶⁰

b. Supply in the U.S. Market

Since January 1, 2003, the U.S. market has been supplied by imports from the three subject countries, non-subject imports, and the domestic industry.

Subject Imports. As discussed above, there are a number of PVA producers in China, and SVW was ***. There are four known producers of subject merchandise in Japan¹⁶¹ and only one known producer of subject merchandise in Korea.

Non-subject Imports. Taiwan was the largest source of non-subject imports throughout the period of review, with non-subject imports from Germany, Singapore, and Spain accounting for considerably smaller shares.¹⁶²

Domestic Industry. As discussed above, the domestic industry is comprised of three producers. Due to ***. As a result, DuPont ***.¹⁶³

Solutia internally consumes all of its PVA to produce PVB, and DuPont internally consumed *** of its production in each year of the period of review to produce PVB.¹⁶⁴ Celanese ***.¹⁶⁵ Although the Commission does not apply the captive production provision in five-year reviews, we have considered significant captive production to be a pertinent condition of competition in other reviews,¹⁶⁶ and we do so here. Although we acknowledge the size of the captive market, we nevertheless focus our analysis in these reviews on the market as a whole.

Overall, domestic internal consumption of PVA accounted for *** percent of the domestic industry's total shipments, by quantity, in interim 2008.¹⁶⁷ In interim 2008, *** percent of the domestic industry's shipments was exported for commercial sale, and *** percent was exported to related firms.¹⁶⁸ The remainder of the domestic industry's shipments in interim 2008 (*** percent) was to the commercial

¹⁶⁰ See, e.g., CR at II-19 to II-24; PR at II-10 to II-12; Celanese/DuPont's Prehearing Br. at 32-33; Celanese/DuPont's Posthearing Br. at II-3 to II-4, II-20 to II-21; Hearing Tr. (Open Sess.) at 7-8, 9-10 (Greenwald), 17-19, 25-26 (Purvis), 27-33, 36-37, 38-40, 83-84 (Korte), 84-85 (Greenwald).

¹⁶¹ In the original investigations, three Japanese producers submitted data (Denki Kagaku Kogyo Kabushiki Kaisha ("Denki"), JVP, and Kuraray Co., Ltd. ("Kuraray Japan")). See, e.g., CR/PR at Table IV-11. In these reviews, only JVP responded to the Commission's questionnaires. See, e.g., CR at IV-22; PR at IV-12. Japan has a fourth producer, The Nippon Synthetic Chemical Industry Co., Ltd. ("Nippon"), that did not provide data either in the original investigations or in these reviews. See, e.g., CR at IV-22 to IV-23. JVP accounts for *** percent of PVA production in Japan, while Kuraray is reported to be the *** PVA producer in the world, with affiliates in Germany and Singapore (although the facility in Singapore is a collaborative project with Nippon). See, e.g., CR at IV-22 to IV-23; PR at IV-12.

¹⁶² See, e.g., CR/PR at Table IV-2.

¹⁶³ See, e.g., Solutia's Prehearing Br. at 27; CR at III-6 to III-7; PR at III-3.

¹⁶⁴ See, e.g., CR at I-19; PR at I-13.

¹⁶⁵ ***. See, e.g., CR at I-19; PR at I-13. In interim 2008, the domestic industry's internal consumption of PVA for use in PVB accounted for *** percent of its total internal consumption, and the remainder of the domestic industry's internal consumption of PVA was for ***. See, e.g., CR at III-8 at n.29; PR at III-4 at n.29.

¹⁶⁶ See, e.g., Polyethylene Terephthalate Film, Sheet, and Strip from India and Taiwan, Invs. Nos. 701-TA-415 (Review), USITC Pub. 3994 at 18 & n.123 (Apr. 2008).

¹⁶⁷ See, e.g., CR/PR at Table III-4.

¹⁶⁸ See, e.g., CR/PR at Table III-4.

market.¹⁶⁹ As a share of the domestic industry’s total U.S. shipments in interim 2008, *** percent was for PVB end-use applications, *** percent was for textiles, *** percent was for paper, *** percent was for adhesives, *** percent was for emulsion-polymerization, *** percent was for building materials, *** percent was for pharmaceuticals, *** percent was for “other” end-use applications, and *** percent was for unknown end-use applications.¹⁷⁰

Solutia is the only purchaser of PVB-grade PVA in the U.S. merchant market and it is ***.¹⁷¹ Thus, its market experience may not be typical of other U.S. purchasers of PVA. Solutia asserts that major U.S. purchasers of PVA (including itself) had difficulty obtaining adequate supply of PVA from the domestic industry during the period of review, and Solutia contends that alternate supply sources are needed, ***.¹⁷² In 2005, 2007, and interim 2008, Celanese and DuPont reported prolonged shutdowns and/or production curtailments as a result of equipment breakdowns.¹⁷³ At the hearing, Celanese and DuPont indicated that their production facilities produced all the PVA they could during the periods in which they experienced the unusual disruptions.¹⁷⁴

c. Other Considerations

As was the case during the original investigations, PVA manufacturing is a capital-intensive business that entails high fixed costs. As a result, producers must maintain relatively high production rates and achieve profit margins high enough to cover the substantial costs of maintaining plants and equipment.¹⁷⁵

C. Revocation of the Antidumping Duty Orders on Cumulated Subject Imports Is Likely to Lead to Continuation or Recurrence of Material Injury

1. Likely Volume of Cumulated Subject Imports

In evaluating the likely volume of imports of subject merchandise if the orders under review are revoked, the Commission is directed to consider whether the likely volume of imports would be significant either in absolute terms or relative to production or consumption in the United States.¹⁷⁶ In doing so, the Commission must consider “all relevant economic factors,” including four enumerated factors: (1) any likely increase in production capacity or existing unused production capacity in the exporting country; (2) existing inventories of the subject merchandise, or likely increases in inventories; (3) the existence of barriers to the importation of the subject merchandise into countries other than the

¹⁶⁹ See, e.g., CR/PR at Table III-4.

¹⁷⁰ See, e.g., CR/PR at Table IV-4.

¹⁷¹ See, e.g., CR at II-1, II-3; PR at II-1, II-3.

¹⁷² See, e.g., Solutia’s Prehearing Br. at 36-37.

¹⁷³ See, e.g., CR/PR at Table III-1, Table III-3.

¹⁷⁴ See, e.g., CR at III-5; PR at III-2. In 2007, a reactor failed at Celanese’s acetic acid production unit, which disrupted supply of acetic acid to its PVA production facility and resulted in a *force majeure* declaration between ***. Nevertheless, Celanese contends that it was able to recycle its acetic acid back into its VAM and PVA operations, ***. See, e.g., CR at III-1 to III-2 & n.6; PR at III-1 & n.6. DuPont experienced a *force majeure* event in 2008 when Hurricane Ike forced it to idle its La Porte, TX facility for three weeks. See, e.g., CR at III-2; PR at III-1. Celanese ***. See, e.g., CR/PR at Table III-1.

¹⁷⁵ See, e.g., Celanese/DuPont’s Prehearing Br. at 27.

¹⁷⁶ 19 U.S.C. § 1675a(a)(2).

United States; and (4) the potential for product shifting if production facilities in the foreign country, which can be used to produce the subject merchandise, are currently being used to produce other products.¹⁷⁷

In its final determinations concerning subject imports from China and Korea, the Commission found that, even absent an overall increase, cumulated subject imports from China, Korea, and Japan maintained a significant share of the U.S. market, including during the period after demand declined. It found the volume of cumulated subject imports both absolutely and relative to production and consumption in the United States to be significant.¹⁷⁸

The cumulated quantity of subject imports declined sharply after the antidumping duty orders were imposed in July 2003 (Japan) and October 2003 (China and Korea). During the original investigations, cumulated subject imports were *** pounds in 2000, *** pounds in 2001, and *** pounds in 2002. The imports declined dramatically to *** pounds in 2003 and *** pounds in 2004, and then increased somewhat to *** pounds in 2005 and *** pounds in 2006. The cumulated volume of subject imports was *** pounds in 2007 and *** in interim 2008 as compared to *** in interim 2007.¹⁷⁹ The share of total apparent U.S. consumption held by cumulated subject imports followed similar trends.¹⁸⁰

¹⁷⁷ 19 U.S.C. § 1675a(a)(2)(A) to (D).

¹⁷⁸ See, e.g., USITC Pub. 3634 at 11-12. In its final determinations concerning subject imports from Japan, the Commission found that the absolute quantity of cumulated subject imports from Japan and Korea increased rapidly between 2000 and 2001 and between 2001 and 2002 as did their share of the U.S. market. Notwithstanding this rapid growth, it found that the presence in the U.S. market of these imports remained small, and their volume relative to production or consumption in the United States was not at a level that the Commission deemed significant. See, e.g., USITC Pub. 3404 at 20. The Commission, however, made an affirmative threat determination concerning subject imports from Japan that it cumulated with imports from Korea. See, e.g., USITC Pub. 3604 at 32-34.

¹⁷⁹ See, e.g., CR/PR at Tables I-1, C-1. Vice Chairman Pearson notes that during the original investigations, cumulated subject imports from China and Japan were *** pounds in 2000, *** pounds in 2001, and *** pounds in 2002. Cumulated subject imports from China and Japan declined to *** pounds in 2003 and *** pounds in 2004 before increasing somewhat to *** pounds in 2005 and *** pounds in 2006. Because there were no subject imports from Korea after 2006, there is no difference in the figures calculated for 2007 and the interim periods.

¹⁸⁰ From a period high of *** percent in 2000, these imports' share of apparent U.S. consumption dropped to *** percent of total apparent U.S. consumption in 2003 and was never higher than *** percent in every subsequent period as measured by the data available in these reviews. See, e.g., CR/PR at Tables I-1, C-1. In terms of the U.S. commercial market, cumulated subject imports had a higher share of the market during these periods. See, e.g., CR/PR at Table C-2 (indicating that from a period high of *** percent in 2003, these imports' share of the U.S. commercial market was never higher than *** percent in every subsequent period as measured by the data in these reviews). The domestic industry increased its share of the total U.S. market during the original investigations from *** percent in 2000 to *** percent in 2001 and *** percent in 2002 and was generally able to increase or maintain its share of total apparent U.S. consumption after the orders were put into place. As a share of total apparent U.S. consumption, U.S. shipments of the domestic like product increased from *** percent in 2003 and 2004 to *** percent in 2005, before leveling off at *** and *** percent in 2006 and 2007, and its share of total apparent U.S. consumption was *** percent in interim 2008 as compared to *** percent in interim 2007. See, e.g., CR/PR at Tables I-1, C-1. In terms of the U.S. commercial market, U.S. shipments of the domestic like product held a relatively stable market share of *** percent in 2003, *** percent in 2004, and *** percent in 2005, before declining to *** percent in 2006 and *** percent in 2007, and its share was *** percent in interim 2008 as compared to *** in interim 2007. See, e.g., CR/PR at Table C-2.

Vice Chairman Pearson finds that cumulated subject imports from China and Japan were at a period high of *** percent in 2000 before declining to *** percent in 2003. With respect to the U.S. open market, cumulated subject imports from China and Japan were at a period high of *** percent in 2003 and were never higher than *** percent in every subsequent period.

Thus, the evidence indicates that the orders have had a restraining effect on subject imports from China, Japan, and Korea.

Collectively, the PVA industries in the subject countries are large and have substantial unused capacity available.¹⁸¹ Although there are as many as 14 producers in China, only one submitted a questionnaire response in these reviews. According to its questionnaire response, SVW alone has the capacity to produce *** pounds of PVA.¹⁸² Moreover, SVW produced *** pounds of PVA in 2007 and reported ***.¹⁸³ SVW accounted for *** of the imports of subject merchandise from China since 2000.¹⁸⁴ Total PVA capacity in China was estimated to be nearly *** pounds in 2006, the most recent year for which estimates are available, whereas production in that year was estimated to be approximately *** pounds.¹⁸⁵

Only one producer in Japan (JVP) submitted a questionnaire response in these reviews, but there are reportedly three other PVA producers in Japan, including Kuraray, which is reportedly the largest PVA producer in the world.¹⁸⁶ JVP reported *** production capacity during the period of review from *** pounds in 2003 to *** pounds in 2007, although it also reported *** its capacity utilization from *** percent in 2003 to *** percent in 2007.¹⁸⁷ Industry publications report that total PVA production in Japan increased from *** in 2003 to *** in 2006 (the most recent period for which data are available), whereas total production capacity was estimated to be an even higher *** pounds in 2006.¹⁸⁸

Finally, the only known producer in Korea has reported *** a capacity of *** pounds during the period of review, *** capacity utilization fluctuated from a low of *** percent in *** to a high of *** percent in ***, which indicates that the company ***.¹⁸⁹

*** subject producers also reported end-of-period inventories of PVA that individually exceeded *** pounds throughout the period of review.¹⁹⁰ In contrast, end-of-period inventories of subject PVA in the United States were more limited.¹⁹¹

Although cumulated imports of subject merchandise declined significantly after imposition of the antidumping duty orders, producers in these countries would likely be able to increase exports to the United States, particularly given that producers in China and Japan continued to maintain a presence in the U.S. market after imposition of the orders. SVW has continued to export and, through its strong

¹⁸¹ We note that the collective excess capacity in the subject countries occurred during a period of higher global demand than what is likely in the reasonably foreseeable future.

¹⁸² See, e.g., CR/PR at Table IV-8.

¹⁸³ See, e.g., CR/PR at Table IV-8.

¹⁸⁴ See, e.g., CR at IV-14 to IV-15; PR at IV-8.

¹⁸⁵ See, e.g., CR at IV-15; PR at IV-8.

¹⁸⁶ See, e.g., CR at IV-22 to IV-23; PR at IV-12. Although Kuraray has production facilities in other countries, imports from Japan supplied the U.S. market alongside imports from Germany and Singapore during the original investigations and during the period captured by our data in these reviews. See, e.g., CR/PR at Table IV-2. Thus, the fact that Kuraray can supply the U.S. market via its affiliates in Germany and Singapore does not make it unlikely that it will also choose to supply the U.S. market from its facilities in Japan.

¹⁸⁷ See, e.g., CR/PR at Table IV-12.

¹⁸⁸ See, e.g., CR at IV-23; PR at IV-13.

¹⁸⁹ See, e.g., CR/PR at Table IV-16; see also CR/PR at Table IV-15 (indicating that DC Chemical produced *** pounds as recently as 2002).

¹⁹⁰ See, e.g., CR/PR at Tables IV-8, IV-12, IV-16.

¹⁹¹ See, e.g., CR/PR at Table IV-6.

relationship with ***.¹⁹² Imports from Japan continued to supply the U.S. market either despite the antidumping duties or by means of products that were specifically excluded from the scope of the orders,¹⁹³ so producers in Japan also have a ready distribution network in the United States to increase exports in the event of revocation.

Given their substantial and unused production capacity, *** end-of-period inventories, and (at least for two of the subject countries) current contacts in the U.S. market, we find that producers in the subject countries have the ability to direct substantial quantities of PVA to the U.S. market should the antidumping duty orders on PVA from China, Japan, and Korea be revoked.

The Commission's affirmative determinations in the original investigations were predicated on an overlap of competition among subject imports and the domestic like product in the U.S. commercial market, primarily for sales of PVA to the textiles, adhesives, and paper industries, although there were no imports of PVB-grade PVA.¹⁹⁴ Producers in the subject countries produced a wide variety of PVA products for sale to their home and global markets during the period of review.¹⁹⁵ In 2007, the domestic industry reported manufacturing PVA for *** end uses.¹⁹⁶ Chinese producers manufacture PVA for *** end uses, even though they ***.¹⁹⁷ Likewise, although there were *** subject imports from Japan during the period examined in these reviews, Japanese producers make PVA for ***.¹⁹⁸ The Korean producer makes PVA for *** applications, but it ***.¹⁹⁹ In 2007, the domestic industry and producers in all three subject countries reported producing PVA of a hydrolysis level ***.²⁰⁰ As a result, we find that there will likely be competition in the U.S. commercial market among subject imports and the domestic like product in the event the antidumping duty orders are revoked, as there was during the original investigations. Furthermore, although the domestic industry's sales of PVB-grade PVA may have been largely sheltered from import competition in the original investigations, we do not find that that will likely be the case in the reasonably foreseeable future.

¹⁹² See, e.g., CR/PR at Table I-6.

¹⁹³ See, e.g., CR at I-14 to I-15; PR at I-10 to I-11 (regarding distributions under CDSOA); CR/PR at Table IV-3 (imports from Japan of products excluded from the scope of the orders).

¹⁹⁴ In the original investigations, there was considerable overlap among subject imports from China, Japan, and Korea, particularly for sales to the textile industry and for adhesives end uses based on shipment data and overlaps in the pricing data. See, e.g., USITC Pub. 3634 at 9. There was also overlap in terms of hydrolysis levels at the time of the original investigations, with U.S. products and imports from China consisting primarily of PVA with hydrolysis levels *** percent, imports from Korea and Japan being focused on levels ***, and ***. See, e.g., CR/PR at Table IV-5.

¹⁹⁵ See, e.g., CR/PR at Tables IV-8 and IV-10 (SVW's production, home-market sales, exports, and production by end use), Table IV-9 (exports from China), Tables IV-12 and IV-14 (JVP's production, home-market sales, exports, and production by end use), Table IV-13 (exports from Japan), Table IV-16 and IV-18 (DC Chemical's production, home-market sales, exports, and production by end use), Table IV-17 (exports from Korea).

¹⁹⁶ See, e.g., CR/PR at Table IV-4 (showing total shipments by domestic producers of PVA during the period examined in these reviews for use in ***).

¹⁹⁷ Compare, e.g., CR/PR at Table IV-10 (showing production of PVA for use in ***) with, e.g., CR/PR at Table IV-4 (showing imports of subject merchandise from China during the period examined in these reviews for use in ***).

¹⁹⁸ Compare, e.g., CR/PR at Table IV-4 (showing *** during the period examined in these reviews) with, e.g., Table IV-14 (showing production of PVA for use in ***).

¹⁹⁹ Compare, e.g., CR/PR at Table IV-4 with, e.g., Table IV-18. As noted in Table IV-18, DC Chemical *** In its foreign producer questionnaire response, DC Chemical explained that ***.

²⁰⁰ See, e.g., CR/PR at Table IV-5.

Consistent with the need of PVA producers to maintain high levels of capacity utilization, producers in China, Japan, and Korea are significant worldwide exporters of PVA, ***.²⁰¹ The U.S. PVA market is relatively large compared to other regional markets,²⁰² and its prices are at least comparable with other global markets.²⁰³ Furthermore, questionnaire respondents representing a wide range of PVA end uses reported their intention to seek imports from the subject countries in the event the orders are revoked.²⁰⁴ Subject producers have the capacity to and will likely compete against the domestic industry for sales to customers purchasing the significant percentage of the domestic industry's production that is not exported, captively consumed, or sold for PVB end-use applications.²⁰⁵ In addition, ***.²⁰⁶

In light of the above discussion, we conclude that there will likely be a significant increase in cumulated imports of PVA from the subject countries to the United States, both in absolute terms and relative to U.S. consumption and production, upon revocation.²⁰⁷ Cumulated subject imports continued to maintain a significant presence in the U.S. market during the original investigations even at a time of declining apparent U.S. consumption. The record in these reviews indicates that the current declines in apparent U.S. consumption would not deter the subject countries from again supplying significant volumes to the U.S. market.

2. Likely Price Effects of Subject Imports

In evaluating the likely price effects of subject imports if the orders under review were revoked, the Commission is directed to consider whether there is likely to be significant underselling by the subject

²⁰¹ See, e.g., CR/PR at Table IV-8 (SVW's exports as a share of its total shipments ranged from *** percent in interim 2008 to *** percent in 2004), Table IV-9 (exports from China ranged from *** pounds in 2003 to *** pounds in 2006), Table IV-12 (JVP's exports as a share of its total shipments ranged from *** percent in 2005 to *** percent in interim 2007), Table IV-13 (exports from Japan ranged from *** pounds in 2005 to *** pounds in 2007), Table IV-16 (DC Chemical's exports as a share of its total shipments ranged from *** percent in 2006 to *** percent in 2003, and as noted above, ***)

²⁰² See, e.g., CR/PR at Table IV-19 (indicating that U.S. PVA consumption is similar in size to consumption in Western Europe and Japan but about a third of the size of consumption in China).

²⁰³ See, e.g., CR at IV-42 & n.60; PR at IV-22 & n.60; CR/PR at Tables IV-8 and IV-9 (showing average unit values for exports from China to various regions); CR/PR at Tables IV-12 and IV-13 (showing average unit values for exports from Japan to various regions); CR/PR at Tables IV-16 and IV-17 (showing average unit values for exports from Korea to various regions). Although we are cautious about the use of average unit values, particularly where there may be differences in product mix, we find that the average unit values of exports from individual countries to other regions indicate that U.S. prices are at least comparable to those in other markets.

²⁰⁴ See, e.g., CR at I-26, II-24; CR/PR at App. D.

²⁰⁵ In 2007, the portion of the U.S. commercial market that was not sold for PVB end-use applications was equivalent to *** pounds (or *** percent of the U.S. commercial market in 2007). (derived from CR/PR at Table I-10; CR at II-3 at n.4). The portion of the domestic industry's U.S. commercial shipments in 2007 that was not sold for PVB end-use applications was equivalent to *** pounds (or *** percent of the domestic industry's U.S. commercial shipments in 2007). (derived from CR/PR at Table III-4 and CR at II-3 at n.4).

²⁰⁶ See, e.g., Solutia's Posthearing Br. at A30 to A31, A33, A53, A55; Solutia's Prehearing Br. at 6-7; see generally Celanese/DuPont's Prehearing Br. at 44-45.

²⁰⁷ Vice Chairman Pearson does not exercise his discretion to cumulate subject imports from Korea in his assessment and instead finds that subject import volumes from Korea are not likely to increase to such a volume as to be significant within a reasonably foreseeable time, were the order against subject imports from Korea to be revoked. See Separate and Dissenting Views of Vice Chairman Pearson Regarding Cumulation and Regarding No Likelihood of Continuation or Recurrence of Material Injury if the Antidumping Duty Order on Certain PVA from Korea is Revoked.

imports as compared to the domestic like product and whether the subject imports are likely to enter the United States at prices that otherwise would have a significant depressing or suppressing effect on the price of the domestic like product.²⁰⁸

In the original investigations, the Commission found that “price is an important factor purchasers used in selecting suppliers.”²⁰⁹ It further noted that prices in the U.S. market were based on end-use application and not grade or physical characteristics.²¹⁰ Prices for paper applications were the highest, followed by construction, adhesives/emulsions, and PVB. Textile applications had the lowest prices.²¹¹ Based on purchasers’ questionnaires, the Commission found that cumulated subject imports from China, Japan, and Korea were reasonably good substitutes for the domestic like product.²¹²

Price comparisons in the original investigations focused on four products. Though underselling was not uniform, it was prevalent across all four pricing products and in each of the three main end-use applications for which there were data (paper, textiles, and adhesives).²¹³ The Commission concluded that underselling was widespread and that the underselling margins were significant in each year.²¹⁴ Further, it found that by the end of the period domestic producers’ prices for all four products had fallen.²¹⁵

The Commission examined possible reasons for the price decline. First, there were confirmed allegations of lost sales that indicated that direct competition from subject imports was a factor. Second, demand fell over the period examined, which forced domestic producers to reduce prices. Non-subject imports from Germany and Taiwan may have had an effect, but the Commission found that instances of underselling by non-subject imports were less frequent and at smaller margins than for imports from subject countries. The Commission also found that “in 2002 when domestic prices were declining, cumulated subject import volume was increasing both absolutely and relative to commercial market consumption and total U.S. consumption, but the volume of non-subject imports was declining.”²¹⁶

In the original investigations, we found that “cumulated imports from China, Japan, and Korea are reasonably good substitutes for the domestic like product in applications in which these subject

²⁰⁸ See 19 U.S.C. § 1675a(a)(3). The SAA states that “[c]onsistent with its practice in investigations, in considering the likely price effects of imports in the event of revocation and termination, the Commission may rely on circumstantial, as well as direct, evidence of the adverse effects of unfairly traded imports on domestic prices.” SAA at 886.

²⁰⁹ See, e.g., USITC Pub. 3634 at 20.

²¹⁰ See, e.g., USITC Pub. 3634 at 21.

²¹¹ See, e.g., USITC Pub. 3634 at 21.

²¹² See, e.g., USITC Pub. 3634 at 22.

²¹³ See, e.g., USITC Pub. 3634 at 22-24. In its final determinations concerning subject imports from Japan, the Commission found that cumulated subject imports from Japan and Korea undersold the domestic like product in 16 of 23 possible comparisons but did not find this underselling significant because the majority of it did not occur until 2002 and most occurred in the last two quarters of 2002. The Commission did not find that the limited volume of cumulated imports from Japan and Korea had significant depressing or suppressing effects on prices for the domestic like product. See, e.g., USITC Pub. 3404 at 20-23. The Commission, however, made an affirmative threat determination concerning subject imports from Japan that it cumulated with imports from Korea. See, e.g., USITC Pub. 3604 at 32-34.

²¹⁴ See, e.g., USITC Pub. 3634 at 24.

²¹⁵ See, e.g., USITC Pub. 3634 at 25.

²¹⁶ See, e.g., USITC Pub. 3634 at 27.

imports and the domestic like product are used.²¹⁷ Consistent with that finding, the record evidence in these reviews supports a finding of at least moderate substitutability.²¹⁸

As discussed above, most sales of PVA are made to end users. A substantial portion of PVA sales in the U.S. market consists of spot sales or short-term contracts,²¹⁹ and “meet-or-release clauses” are relatively common in this industry.²²⁰

In these reviews, the Commission collected pricing data on six different products that accounted for *** percent of total reported U.S. commercial PVA shipments between January 1, 2004 and September 2008.²²¹ The pricing data reflect a high degree of coverage of the limited subject imports during the period of review.²²² These data indicate that despite the discipline of the orders, there was still a large amount of underselling by subject imports (*** of *** possible comparisons between subject imports and the domestic like product involving margins that ranged from *** to *** percent).²²³

The underselling during the period of review under the discipline of the orders indicates, together with the significant underselling during the original investigations, that underselling is likely to be significant if the orders are revoked. In the original investigations we found that the significant underselling by the cumulated imports depressed prices to a significant degree.²²⁴ With flat or declining PVA demand in the reasonably foreseeable future, subject producers have the incentive to export to fill their capacity and to price aggressively to increase their market share, resulting in more prevalent underselling. Given the proportion of PVA sales made on the spot market or through short-term contracts and the prevalence of meet-or-release clauses, we find that, in the event of revocation of the orders, unfairly traded subject imports would affect U.S. prices relatively quickly in the non-PVB-grade segments that constitute a large portion of the U.S. market.

Prices of the domestic like product increased during the period of review as PVA production costs increased.²²⁵ We find that the likely significant quantities of low-priced cumulated subject imports also would likely limit the domestic industry’s ability to raise or maintain prices commensurately with costs in the event of revocation of the orders. Thus, we find based on the current record and the nature of the U.S. PVA market that the domestic industry will likely face significant price depression and price

²¹⁷ See, e.g., USITC Pub. 3634 at 22.

²¹⁸ See, e.g., CR at II-29; PR at II-15.

²¹⁹ See, e.g., CR at V-10 to V-11 & n.22; PR at V-6 to V-7 & n.22 (DuPont reported that ***. Celanese reported that during the review period approximately *** percent of its sales were covered by long-term contracts, but it anticipated that this percentage ***. *** reported that short-term contract sales accounted for *** percent of its shipments and the remainder consisted of spot sales. *** reported that *** percent of their sales of PVA from *** and ***, respectively, were on a spot basis).

²²⁰ See, e.g., CR at V-11 and V-12; V-6 to V-7; Celanese/DuPont’s Posthearing Br. at II-24 to II-25, II-40 to II-41, II-48.

²²¹ See, e.g., CR at V-14 to V-15; PR at V-8 (identifying six pricing products: product 1 (textiles), products 2, 4, and 5 (adhesive applications), product 3 (paper applications), and product 6 (PVB applications)).

²²² See, e.g., CR at V-15; PR at V-8.

²²³ See, e.g., CR/PR at Table V-9. For product 1, where comparisons are available only for the beginning of the period, subject imports ***. The product imported from Japan ***, whereas the product imported from China was ***. For product 2, subject imports ***. See, e.g., CR/PR at Table V-3. For product 3, subject imports ***. See, e.g., CR/PR at Table V-4. For product 4, there were ***, and subject imports generally *** the domestic industry for this product. See, e.g., CR/PR at Table V-5. For product 5, subject imports undersold the domestic like product in *** of *** possible comparisons. See, e.g., CR/PR at Table V-6. For product 6, ***. See, e.g., CR/PR at Table V-7.

²²⁴ See, e.g., USITC Pub. 3634 at 27-28.

²²⁵ See, e.g., CR/PR at Tables V-2 to V-7.

suppression from the likely significant additional imports of low-priced subject merchandise in the event of revocation, particularly given that subject imports will likely be competing with the domestic industry for sales in a diminished U.S. market.

We note that at the time of the original investigations, ***,²²⁶ but there were no meaningful imports of PVB-grade PVA into the U.S. market. If the antidumping duty orders on subject imports were revoked, however, we find that unfairly traded subject imports would likely also affect PVB-grade prices. ***,²²⁷ Solutia will ***. In addition, because these contracts are for ***, it would be relatively easy for unfairly traded subject imports to affect prices for this end-use application in the event of revocation. Furthermore, if the orders were revoked, ***,²²⁸ ***,²²⁹ and having ***,²³⁰ In the event the orders are revoked, Solutia would likely ***.²³¹

For all of the foregoing reasons, we conclude that cumulated subject imports from China, Japan and Korea are likely to have significant adverse price effects in the event that the antidumping duty orders on these imports are revoked.²³²

3. Likely Impact of Subject Imports

In evaluating the likely impact of imports of subject merchandise if the orders under review are revoked, the Commission is directed to consider all relevant economic factors that are likely to have a bearing on the state of the industry in the United States, including but not limited to the following: (1) likely declines in output, sales, market share, profits, productivity, return on investments, and utilization of capacity; (2) likely negative effects on cash flow, inventories, employment, wages, growth, ability to raise capital, and investment; and (3) likely negative effects on the existing development and production efforts of the industry, including efforts to develop a derivative or more advanced version of the domestic like product.²³³ All relevant economic factors are to be considered within the context of the

²²⁶ See, e.g., Original Views (Japan) at 53 at n.185; Original Views (China/Korea) at 9 at n.24, 13 at n.35, 21 (“a representative of respondent Solutia testified that it attempts to pit suppliers for the PVA it purchases against each other in an attempt to obtain the best prices”).

²²⁷ See, e.g., CR at V-11 to V-12; PR at V-6 to V-7.

²²⁸ See, e.g., Solutia’s Prehearing Br. at 36.

²²⁹ See, e.g., Solutia’s Posthearing Br. at A30, A33, A55; Solutia’s Prehearing Br. at 6-7.

²³⁰ See, e.g., CR at V-11 to V-12; PR at V-6 to V-7 (discussing the ***); CR/PR at Tables V-2 to V-7 (showing that ***); Celanese/DuPont’s Posthearing Br. at II-6 to II-8.

²³¹ Chairman Aranoff finds that the record does not support the conclusion that any Chinese producer is currently qualified, or likely to be qualified within the reasonably foreseeable future, to supply more than a small portion of Solutia’s U.S. demand for PVB-grade PVA. See, e.g., Solutia’s Posthearing Br. at A-30 to A-31, A-53, and A-55. She joins the Commission’s conclusion that, ***, revocation of the orders is likely to have adverse price effects on the price of PVB-grade PVA in the U.S. market. Nevertheless, she would have found the likely volume and price effects of subject imports solely of non-PVB-grade PVA sufficient to support her affirmative determinations in these reviews, even in the absence of any effects on the portion of the market using PVB-grade PVA.

²³² Vice Chairman Pearson does not exercise his discretion to cumulate subject imports from Korea in his assessment and instead finds that subject imports from Korea are not likely to have significant adverse price effects on the domestic industry within a reasonably foreseeable time were the order against imports from Korea to be revoked. See Separate and Dissenting Views of Vice Chairman Pearson Regarding Cumulation and Regarding No Likelihood of Continuation or Recurrence of Material Injury if the Antidumping Duty Order on Certain PVA from Korea is Revoked.

²³³ 19 U.S.C. § 1675a(a)(4).

business cycle and the conditions of competition that are distinctive to the industry.²³⁴ As instructed by the statute, we have considered the extent to which any improvement in the state of the domestic industry is related to the orders at issue and whether the industry is vulnerable to material injury if the orders were revoked.²³⁵

Given its findings in the original investigations about the significant volume of cumulated subject imports both absolutely and as a share of apparent U.S. consumption and production, evidence of significant underselling and price depression by subject imports, and corresponding declines in many of the domestic industry's performance indicators, the Commission concluded for purposes of its final determinations concerning imports from China and Korea that cumulated subject imports were having a significant adverse impact on the domestic PVA industry.²³⁶

The domestic industry experienced some improvements in its condition after the antidumping duty orders were imposed on subject imports from China, Japan, and Korea. Its capacity, production, U.S. shipments, productivity, end-of-period inventories, and financial performance generally improved.

Since imposition of the orders, the domestic industry's capacity increased somewhat from *** pounds in 2003 to *** pounds in 2007, and capacity in interim 2008 was *** pounds compared to *** pounds in interim 2007.²³⁷ The domestic industry's production fluctuated during the period of review but increased overall, increasing from *** pounds in 2003 to *** pounds in 2004 and *** pounds in 2005. Production declined to *** pounds in 2006, but increased to *** pounds in 2007, and was *** pounds in

²³⁴ 19 U.S.C. § 1675a(a)(4). Section 752(a)(6) of the Act states that “the Commission may consider the magnitude of the margin of dumping or the magnitude of the net countervailable subsidy” in making its determination in a five-year review. 19 U.S.C. § 1675a(a)(6). The statute defines the “magnitude of the margin of dumping” to be used by the Commission in five-year reviews as “the dumping margin or margins determined by the administering authority under section 1675a(c)(3) of this title.” 19 U.S.C. § 1677(35)(C)(iv). See also SAA at 887.

Commerce conducted expedited sunset reviews of each of the antidumping duty orders. See, e.g., CR/PR at Table I-4. With respect to any revocation of the antidumping duty order on subject imports from China, Commerce found likely margins of 5.51 percent *ad valorem* for SVW and 97.86 percent *ad valorem* for all others. See, e.g., CR/PR at Table I-4. With respect to any revocation of the antidumping duty order on subject imports from Japan, Commerce found likely margins of 144.16 percent *ad valorem* for Denki Kagaku Kogyo Kabushiki Kaisha, JVP, Kuraray Japan, and Nippon, and 76.78 percent *ad valorem* for all others. See, e.g., CR/PR at Table I-4. With respect to revocation of the antidumping duty order on subject imports from Korea, Commerce found likely margins of 38.74 percent *ad valorem* for DC Chemical and 32.08 percent *ad valorem* for all others. See, e.g., CR/PR at Table I-4.

²³⁵ The SAA states that in assessing whether the domestic industry is vulnerable to injury if the order is revoked, the Commission “considers, in addition to imports, other factors that may be contributing to overall injury. While these factors, in some cases, may account for the injury to the domestic industry, they may also demonstrate that an industry is facing difficulties from a variety of sources and is vulnerable to dumped or subsidized imports.” SAA at 885.

²³⁶ See, e.g., USITC Pub. 3604 at 17-20. The Commission did not find that cumulated subject imports from Japan and Korea had a significant impact on the domestic PVA industry, and it consequently made a negative determination regarding present material injury with respect to subject imports from Japan. See, e.g., USITC Pub. 3604 at 23-27. The Commission, however, made an affirmative threat determination concerning subject imports from Japan which were cumulated with imports from Korea. See, e.g., USITC Pub. 3604 at 32-34.

²³⁷ See, e.g., CR/PR at Table III-3. Although the domestic industry provided data concerning its performance in the fourth quarter of 2008, we have relied only on data reported in questionnaire responses through the third quarter of 2008 that were subject to audit and verification by Commission staff and that corresponded to the time periods for which other data (such as regarding imports and production operations in the subject countries) were collected in these reviews.

interim 2008 compared to *** pounds in interim 2007.²³⁸ The domestic industry's reported capacity utilization remained fairly constant throughout the period examined in these reviews, fluctuating between *** percent and *** percent except in 2005, when capacity utilization reached a period high of *** percent.²³⁹ *** reported plans to increase total PVA production capacity in the United States, and none anticipated changes to their U.S. operations.²⁴⁰

U.S. shipments of the domestic like product fluctuated during the period of review. U.S. shipments increased from *** pounds in 2003 to *** pounds in 2004 and *** pounds in 2005. Shipments then declined to *** pounds in 2006 before increasing to *** pounds in 2007. U.S. shipments were lower in interim 2008 than in interim 2007.²⁴¹

After the antidumping duty orders were imposed on subject imports from China, Japan, and Korea, the domestic industry was able to roughly maintain its share of total apparent U.S. consumption. Its share was *** percent in 2003 *** 2004 and increased to *** percent in 2005 before declining to *** percent in 2006 and *** percent in 2007.²⁴²

The industry's end-of-period inventories declined from a period peak of *** pounds in 2003 to a period low of *** pounds in 2007. Inventories in interim 2008 were *** lower than in interim 2007.²⁴³ Employment levels generally declined over the period of review. Hourly wages fluctuated, but were lower at the end of the period of review than at the inception. Productivity fluctuated on an annual basis, but was higher in 2007 than in 2003.²⁴⁴

In contrast to the period examined in the original investigations, the domestic industry operated profitably by the end of the period of review, although its financial performance was still not strong.²⁴⁵ The domestic industry had a *** percent operating margin in 2003, a *** percent operating margin in 2004, a *** percent operating margin in 2005, and a period high *** percent operating margin in 2006.

²³⁸ See, e.g., CR/PR at Tables III-3, C-1.

²³⁹ See, e.g., CR at III-5; PR at III-2. Notwithstanding these reported capacity utilization levels, the domestic industry confirmed that it was producing as much as it could during periods where it experienced various production disruptions discussed earlier.

²⁴⁰ See, e.g., CR at III-4; PR at III-2; CR/PR at Table III-2.

²⁴¹ See, e.g., CR/PR at Table III-4, Table C-1.

²⁴² Market share was lower in interim 2008 (*** percent) than in interim 2007 (*** percent). See, e.g., CR/PR at Table C-1. In terms of the U.S. commercial market, the domestic industry's market share increased from *** percent in 2003 to *** percent in 2004 and *** percent in 2005, although its market share declined to *** percent in 2006 and *** percent in 2007 and was *** percent in interim 2008 compared to *** percent in interim 2007. See, e.g., CR/PR at Table C-2.

²⁴³ See, e.g., CR/PR at Tables III-5, C-1.

²⁴⁴ See, e.g., CR/PR at Tables III-7, C-1.

²⁴⁵ Commissioner Lane finds that the domestic industry is currently in a vulnerable state. Although the performance of the domestic industry improved following the imposition of the antidumping duty orders in the original investigations, the domestic industry experienced declines in production, shipments, and financial performance between interim 2007 and interim 2008. Demand for PVA in the U.S. market also declined between interim periods, in part due to decreased demand in the automotive and textile markets. Raw material and energy costs increased substantially over the period of review. Furthermore, the current U.S. recession, coupled with the global economic downturn and financial crisis, is presenting the PVA industry with unprecedented difficulties which make it particularly vulnerable. See, e.g., Commissioner Lane's dissent in Steel Concrete Reinforcing Bar from Turkey, Inv. No. 731-TA-745 (Review), USITC Pub. 4052 at 39 n.55 (Dec. 2008). For these reasons, Commissioner Lane finds that the domestic industry is currently in a weakened state and is vulnerable to unfair competition from dumped imports. See also Polyvinyl Alcohol from Taiwan, Inv. No. 731-TA-1088 (Prelim.) (Remand), USITC Pub. 3920 at 60 (Separate and Dissenting Remand Views of Chairman Pearson, Commissioner Okun, and Commissioner Lane).

In 2007, the industry had a *** percent operating margin.²⁴⁶ The domestic industry's capital expenditures fluctuated widely during the period of review, reaching a period high of \$*** in 2007 and a period low of \$*** in 2003.²⁴⁷

As discussed above, the antidumping duty orders have restrained the volume of cumulated subject imports shipped to the U.S. market. By restraining the volume of such imports, the orders contributed to the industry's improved financial performance during the period of review, and the domestic industry was able to increase or maintain its market share and increase its production capacity, production, and U.S. shipments notwithstanding unusual production disruptions. The domestic industry was able to raise its prices during the period of review as its production costs increased. Nevertheless, as discussed above, the domestic industry's overall performance during the period of review was weak, and apparent U.S. consumption was lower in interim 2008 than in interim 2007 consistent with current macroeconomic conditions.

Solutia asserts that any increase in subject imports is likely to replace non-subject imports, especially from Taiwan, which would thereby act as a "buffer" between subject imports and injury to the domestic industry.²⁴⁸ We do not agree. Non-subject imports from Taiwan ***,²⁴⁹ there is no indication on this record that these firms would switch to purchasing subject imports from China, Japan, or Korea if the orders were revoked. Moreover, during the original investigations, non-subject imports, including from Taiwan, held a meaningful share of the domestic PVA market and this did not prevent subject imports from entering in injurious quantities and prices.²⁵⁰

Thus, in conclusion, we find that, in the event of revocation, low-priced cumulated subject imports would likely increase in absolute terms and in their market share at the expense of the domestic industry, significantly undersell the domestic like product, and depress and suppress prices of the domestic like product. We find that revocation of the antidumping duty orders on the cumulated subject imports would likely materially impact the domestic industry, including the domestic industry's output, sales, market share, employment, profits, and return on investment, particularly given current demand conditions and because cumulated subject imports will likely compete with the domestic like product for an even broader range of end-use applications than during the original investigations.²⁵¹

²⁴⁶ See, e.g., CR/PR at Tables III-8, C-1; CR at III-15 to III-27; PR at III-6 to III-9. Its operating margin was *** percent in interim 2008 compared to *** percent in interim 2007. See, e.g., *id.* In terms of the U.S. commercial market, the domestic industry had a *** percent operating margin in 2003, a *** percent operating margin in 2004, a *** percent operating margin in 2005 and a period high *** percent operating margin in 2006. In 2007, the industry had a *** percent operating margin. Its operating margin was *** percent in interim 2008 compared to *** percent in interim 2007. See, e.g., CR/PR at Tables III-10, C-2; CR at III-27 to III-30; PR at III-9; see also, e.g., Celanese/DuPont's Posthearing Br. at II-9 to II-11.

²⁴⁷ See, e.g., CR/PR at Tables III-13, Table C-1. Research and development expenses were ***. See, e.g., CR/PR at Table III-13.

²⁴⁸ See, e.g., Solutia's Posthearing Br. at 13-14.

²⁴⁹ See, e.g., CR/PR at Tables I-6, I-7, III-6; CR at II-4, III-12; PR at II-3, III-5. ***. See, e.g., CR at III-6, III-12; PR at III-3, III-5.

²⁵⁰ During the original investigations, non-subject imports' share of the total U.S. market increased from *** percent in 2000 to *** percent in 2001 but then declined to *** percent in 2002. See, e.g., CR/PR at Table I-1.

²⁵¹ Vice Chairman Pearson does not exercise his discretion to cumulate subject imports from Korea in his assessment and instead finds that subject import volumes from Korea are not likely to increase to such a point as to be significant, that subject imports from Korea are not likely to have significant adverse price effects on the domestic industry, and that subject imports from Korea are therefore not likely to have a material impact on the domestic industry, within a reasonably foreseeable time, were the order against imports of PVA from Korea to be revoked. See Separate and Dissenting Views of Vice Chairman Pearson Regarding Cumulation and Regarding No Likelihood
(continued...)

CONCLUSION

For the foregoing reasons, we determine that revocation of the antidumping duty orders on PVA from China, Japan, and Korea would be likely to lead to continuation or recurrence of material injury to the domestic industry within a reasonably foreseeable time.²⁵²

²⁵¹ (...continued)
of Continuation or Recurrence of Material Injury if the Antidumping Duty Orders on Certain PVA from Korea is Revoked.

²⁵² Vice Chairman Pearson dissents with respect to Korea.

**SEPARATE AND DISSENTING VIEWS OF VICE CHAIRMAN DANIEL R. PEARSON
REGARDING CUMULATION AND REGARDING NO LIKELIHOOD OF CONTINUATION OR
RECURRENCE OF MATERIAL INJURY IF THE ANTIDUMPING DUTY ORDER ON
CERTAIN PVA FROM KOREA IS REVOKED**

Section 751(d)(2) of the Tariff Act of 1930, as amended (“the Act”), requires that the U.S. Department of Commerce (“Commerce”) revoke a countervailing duty or antidumping duty order in a five-year (“sunset”) review unless Commerce determines that dumping or a countervailable subsidy would be likely to continue or recur in the event of revocation and the Commission determines that material injury to a U.S. industry would be likely to continue or recur within a reasonably foreseeable time in the event of revocation.¹ While I concur with my colleagues in determining that, based on the record in these five-year reviews, material injury would be likely to continue or recur within a reasonably foreseeable time if the antidumping duty orders on polyvinyl alcohol (“PVA”) from China and Japan were to be revoked, I dissent from my colleagues and determine that material injury would not be likely to continue or recur within a reasonably foreseeable time if the antidumping duty order on PVA from Korea were to be revoked.

**I. IMPORTS FROM KOREA WOULD LIKELY HAVE NO DISCERNIBLE
ADVERSE IMPACT ON THE DOMESTIC INDUSTRY PRODUCING PVA²**

In making these determinations, I do not exercise my discretion to cumulate imports from Korea with imports from China and Japan. I decline to exercise my discretion to cumulate imports from Korea with other subject imports because I conclude that, if the antidumping duty order on imports of PVA from Korea were to be revoked, imports from Korea would be likely to have no discernible adverse impact on the domestic industry producing PVA.^{3 4}

In performing my analysis with respect to subject imports from Korea, I have considered the following: (1) the likelihood of significant production of the subject merchandise in the foreign country;

¹ 19 U.S.C. § 1675(d)(2).

² I adopt as my own the discussion of background, domestic like product, domestic industry, and conditions of competition as laid out in sections I–III of the Views of the majority. I also join my colleagues’ analysis in sections IV and V, except as otherwise noted therein.

³ Because I have determined not to cumulate subject imports from Korea with other subject countries based on the fact that imports from Korea are likely to have no discernible adverse impact on the domestic industry, I have not considered whether imports from Korea would be likely to compete with other subject imports and with domestic like products in the U.S. market, as provided in 19 U.S.C. § 1675a(a)(7).

⁴ For my views concerning the appropriate legal standard to be used in analyzing the issue of “no discernible adverse impact,” see, e.g., Stainless Steel Wire Rod from Brazil, France, and India, USITC Pub. 3866 (July 2006) (Additional Views of Chairman Daniel R. Pearson Regarding Cumulation).

(2) the degree of competition between the imported product and the domestic like product; and (3) pre-order and likely post-order subject import volumes.^{5 6}

Taking these factors in order, I first determine that there is little likelihood of significant production of the subject merchandise in Korea. DC Chemical Co., Ltd. (“DC Chemical”) is the only Korean PVA producer, accounting for 100 percent of PVA produced in Korea in the period reviewed. DC Chemical also accounted for 100 percent of Korean production capacity, reporting *** pounds of capacity throughout the period 2003 to 2007.⁷ This is less than *** percent of the reported 2006 capacity of the Chinese PVA industry of *** pounds,⁸ about *** percent of the reported 2006 capacity of the Japanese PVA industry of *** pounds,⁹ and *** percent the 2007 capacity of the U.S. PVA industry of *** pounds.¹⁰ Even though DC Chemical’s PVA facilities operated at *** percent of full production capacity in 2007,¹¹ its production level of *** pounds¹² was only *** percent of the 2007 production level of the one (of the 14 known) Chinese producer, SVW, that responded to Commission’s questionnaire¹³ and only *** percent of the 2007 production level of the one (of the 4 known) Japanese producer, JVP, that responded to the Commission’s questionnaire.¹⁴ The production capacity of DC Chemical represents *** percent of total global production capacity of *** pounds in 2006.¹⁵

In addressing the second consideration, the degree of competition between the imported product and the domestic like product, I further find that, were the order to be revoked, DC Chemical’s exports to the U.S. market are not likely to compete directly with the domestic like product. I note that, during period examined in the original investigations, the two U.S. sectors into which a majority of Korean

⁵ Cf. Titanium Sponge from Japan, Kazakhstan, Russia, and Ukraine, Inv. Nos. 751-TA-17-20, USITC Pub. 3119 at 7 (August 1998), aff’d, Titanium Metals Corp. v. United States, 155 F. Supp. 2d 750 (Ct. Int’l Trade 2001); Solid Urea from Armenia, Belarus, Estonia, Lithuania, Russia, Tajikistan, Turkmenistan, Ukraine and Uzbekistan, Inv. Nos. 731-TA-339 and 340-A-1 (Review), USITC Pub. 3248 (October 1999) at 9 (discussion of Armenia); Cheflene Corp. v. United States, 170 F. Supp. 2d 1320, 1331 (Ct. Int’l Trade 2001).

⁶ Thus, although I take likely volume into account, it is my view that the “no discernible adverse impact” standard concerns likely impact, not likely volume.

⁷ CR/PR at Table IV-16. The Commission’s staff report points out that this reported production capacity is somewhat *** pound capacity reported by DC Chemical in the original investigations. CR/PR at Table IV-15. This change was not explained by DC Chemical. The Commission’s staff report also notes that an independent source, SRI, reported that Korean production capacity was *** pounds in both 2003 and 2007. CR at IV-31 n.54; PR at IV-15 n.54. These *** are not significant for my analysis. I note that Celanese/DuPont cited the *** in their post-hearing brief for the proposition that *** Celanese/DuPont’s Post-Hearing Brief at 12 & n.23 (citing Japanese foreign producer questionnaire response at Exhibit H). This assertion was challenged by Solutia in its Final Comments. Solutia’s Final Comments at 9. The *** states that Korean production capacity was *** throughout the period, but does not provide a conversion into pounds. *** Using a standard metric conversion, I calculate that *** is about *** pounds. This figure is not significantly different from the *** pound capacity reported in DC Chemical’s foreign producer questionnaire response in the original investigations.

⁸ CR at IV-15; PR at IV-8.

⁹ CR at IV-23; PR at IV-12.

¹⁰ CR/PR at Table III-3.

¹¹ CR/PR at Tables IV-15 & -16.

¹² CR/PR at Tables IV-15 & -16.

¹³ CR/PR at Tables IV-7 & -8.

¹⁴ CR/PR at Tables IV-11 & -12.

¹⁵ CR/PR at Table IV-19. With a capacity of *** pounds, DC Chemical’s facility is *** cited by a representative of Solutia as “the economic scale for a PVA plant,” that being approximately 90 million pounds. Hearing Tr. (public) at 133 (Mr. Feast); CR at III-7; PR at III-3.

imports were sold were *** percent of imports from Korea in 2002, and *** percent of imports from Korea in 2002.¹⁶ Neither of these uses are areas of strong competition with the PVA produced by domestic industry. The *** sector was ranked *** among the specified sectors served by the domestic industry's PVA output in 2007 and interim 2008, holding *** percent share of domestic production in interim 2008;¹⁷ it is also not a sector that is likely to be a source of significant import demand in the immediate future given that the "slowing of the general economy, and weakness in broad market sectors, such as . . . construction, . . . have reduced PVA demand."¹⁸ DuPont also noted that overall demand for PVA in the United States will continue to decline in the short-term due to the global economic crisis and the overall downturn especially in the housing and construction industry.¹⁹ Likewise, the *** sector was ranked *** among the sectors served by the domestic industry's PVA output in interim 2008, holding a *** percent share of domestic production; *** are also an unlikely source of import demand for either the immediate future, or in the longer term, as ***.²⁰

By far the largest market sector served by the domestic industry's PVA output was the *** sector, holding a *** percent share of domestic production in interim 2008; this was a sector into which the Korean industry imported *** pounds in 2002.²¹ The second largest sector served by the domestic PVA industry was the *** sector, holding a *** percent share of domestic production in interim 2008; this was also a sector into which the Korean industry imported *** pounds in 2002.²² Additionally, I note that because of the prolonged absence of the Korean product from the U.S. market, DC Chemical expects that it would ***.²³ Finally, I note that a majority of U.S. purchasers who responded to the Commission's questionnaire (4 of 5) stated that subject imports from Korea were either only "sometimes" or "never" interchangeable with the domestic like product.²⁴

¹⁶ CR/PR at Table IV-4. The Korean industry's focus on the *** sector was confirmed in questionnaire responses during the original investigations by ***. Commission Staff Memorandum INV-AA-056 (May 27, 2003) (Confidential Version) ("2003 Staff Report") at Table IV-1. *** stated that its Korean imports were "sold to specialty niches, namely to the packing materials market and to manufacturers of specialized construction materials." 2003 Staff Report at II-11 n.8 (citing *** postconference brief). *** further stated that "there is no reasonable overlap between the Korean product and the domestic and other imported PVA except for nonsubject imports from Spain and Taiwan. Id.

¹⁷ CR/PR at Table IV-4.

¹⁸ CR at II-19 to II-20; PR at II-10 to II-11.

¹⁹ CR at II-21; PR at II-10 to II-11.

²⁰ CR/PR at Figure II-1; CR at II-20; PR at II-11.

²¹ CR/PR at Table IV-4. I do note that *** percent of DC Chemical's production in 2007, and *** percent of its production in interim 2008, went into the *** sector outside of the United States. CR/PR at Table IV-18.

²² CR/PR at Table IV-4. I note that although it appears that *** percent of DC Chemical's production in 2007 and interim 2008 went into the *** sector, this was one of three sectors that were consolidated into the "other" column by the Korean producer. CR/PR at Table IV-18 & first note in table.

²³ CR at II-17; PR at II-9. It is notable in this regard that in the original investigations there were *** importers who handled imports from DC Chemical, ***. 2003 Staff Report at Table IV-1. *** importers reported any PVA imports for this sunset investigation. CR at I-24 n.63; PR at I-17 n.63 (showing that *** did not respond to questionnaire); CR/PR at Table I-6 (showing that *** reported *** imports).

²⁴ CR/PR at Table II-4; CR at II-36; PR at II-20. I acknowledge that the results from the purchaser questionnaires in the original investigations reveal a different view of interchangeability with the domestic like product. In all but two of the 22 categories, the majority of responding purchasers rated the U.S. and Korean PVA as "comparable." The two exceptions were "price," in which the Korean product was rated better than the U.S. product, and "technical support/service," in which only a plurality rated the two as "comparable." 2003 Staff Report at Table II-6. This

(continued...)

As for the third consideration, I note that pre-order subject import volumes were small and that likely post-order subject import volumes would likely be even smaller. Because DC Chemical has reported exports of *** pounds to the United States in every year of the period 2004 to 2007 and in interim 2008,²⁵ I have relied on its pre-order shipment volumes to the United States in assessing likely post-order import volumes.²⁶ During the period of the original investigation, imports from Korea were *** pounds in 2000, *** pounds in 2001, and *** pounds in 2002. The Korean share of the U.S. market, by quantity, was *** percent in 2000, *** percent in 2001, and *** percent in 2002.²⁷ In all three years, this was a *** share than held by Japan, but a *** share than held by China.²⁸ In 2002, imports from Korea, by quantity, were *** percent as large as imports from China.²⁹ In the first part of the original investigations, the Commission, in finding no material injury by reason of LTFV imports from Japan, found that despite the “rapid growth” of cumulated subject imports from Japan and Korea, that in 2002, “the presence of these imports in the U.S. market was still small and their share relative to production or consumption in the United States was not a level we deem significant.”³⁰ If, in 2002, the cumulated subject imports from Japan and Korea were not significant, then certainly the portion of subject imports coming from only Korea were, by themselves, also not significant.³¹

DC Chemical has regularly exported between *** percent of its production.³² While Korea was a net exporter during the period being examined in this sunset review,³³ a representative of the Korean industry stated during the original investigations that Korea had been a net importer during that earlier period.³⁴ While DC Chemical has been a significant exporter, its pre-order exports to the United States

²⁴ (...continued)

apparent shift in perceptions by purchasers between 2003 and 2008 is perhaps a measure of the effect that the long absence from the U.S. market has had on customer beliefs regarding Korean PVA.

²⁵ CR/PR at Table IV-16. I note that official Commerce statistics show imports from Korea of *** that were not explained. CR/PR at Table I-8. No CDSOA disbursements were made on imports from Korea during the period of review. CR at I-15; PR at I-10.

²⁶ Because the order against Korea went into effect on October 1, 2003, this makes the 2003 import volumes unreliable as an indicator of potential post-order volumes. CR/PR at Table I-2; CR at I-2; PR at I-1.

²⁷ CR/PR at Table I-1.

²⁸ CR/PR at Table I-1.

²⁹ CR/PR at Table I-1.

³⁰ Polyvinyl Alcohol from Germany and Japan, Invs. Nos. 731-TA-1015 and -1016 (Final), USITC Pub. 3604 (June 2003) (“Views of the Commission (Germany and Japan)”) at 20 (Public Version); at 30 (Confidential Version).

³¹ The volume of imports from Korea was only found to be significant when later cumulated with imports from China and Japan in the second part of the original investigations. Polyvinyl Alcohol from China and Korea, Invs. Nos. 731-TA-1014 and -1017 (Final), USITC Pub. 3634 (September 2003) at 7-10 (Public Version); at 18-20 (Confidential Version). In 1995, the Commission terminated an investigation into imports of PVA from Korea in the preliminary phase, finding that imports from Korea did not exceed the negligibility threshold. CR/PR at Table I-2.

³² 2003 Staff Report at Table VII-4; CR/PR at Table IV-16.

³³ CR at IV-30 n.53; PR at IV-13 n.53. In 2007, Korea’s trade balance in PVA was a positive 13.9 million pounds. *Id.* Because DC Chemical’s total exports in that year were *** pounds, CR/PR at Table IV-16, imports of PVA into Korea in 2007 can be computed to be about *** pounds. This estimate is consistent with reported exports of Japan to South Korea of 5.6 million pounds. CR/PR at Table IV-13.

³⁴ 2003 Staff Report at VII-8 n.18. Korea’s switch from being a net importer to being a net exporter is likely due, at least in part, to antidumping duties that Korea instituted in late-2006. At that time, Korea instituted antidumping duties of 33.39 percent against U.S.-produced PVA. CR at II-7 n.15; PR at II-5 n.15. Duties of between 11.1 and
(continued...)

were modest, making up *** percent of its total exports to the world in 2000, *** percent of its total exports in 2001, and *** percent of its total exports in 2002.³⁵ By 2003, during the pendency of the order, the percentage of DC Chemical's exports coming to the United States had declined to *** percent.³⁶ When expressed as a share of its total shipments, DC Chemical's pre-order exports to the United States appear less significant; DC Chemical sent *** percent of its total shipments to the United States in 2000, *** percent of its total shipments in 2001, and *** percent of its total shipments in 2002.³⁷ Since the imposition of the 2003 order, DC Chemical has regularly exported quantities of PVA to Italy, India, and Indonesia within the range of, and sometimes exceeding, those quantities sent to the United States in the pre-order period.³⁸ Thus, the record indicates that, even pre-order, DC Chemical did not focus on sending its exports to the U.S. market, and that since the imposition of the order, it has developed established markets outside of the United States to which it sends a large and stable proportion of its exports. Therefore, I conclude that, were the order against subject Korean PVA revoked, DC Chemical would likely not focus, for the reasonably foreseeable future, on the U.S. market.

The production of subject PVA is a *** segment of DC Chemical's business, accounting for *** percent of its total sales,³⁹ but there appears to be little potential for product shifting by DC Chemical as it reported that, during the period examined, it produced *** alternative products utilizing the same equipment or labor used to produce PVA.⁴⁰ DC Chemical's PVA facilities operated at *** of capacity in 2007 and *** in interim 2008.⁴¹ DC Chemical stated in both the original investigations and in these reviews that it has ***.⁴² Also, as stated above, I find it significant that DC Chemical believes that, due to its extended absence from the U.S. market, ***.⁴³

There is nothing in the record to indicate that DC Chemical's volumes are likely to vary materially from pre-order levels in the reasonably foreseeable future. In sum, if the antidumping order on Korea were to be revoked, I find it likely that DC Chemical would not increase its exports to the United States beyond 2000-2002 levels, which at their peak did not exceed *** pounds, or *** percent of total U.S. consumption, a volume that I find to be not large enough to create a discernible adverse impact, and that DC Chemical would likely only produce niche products that are not likely to compete with a significant portion of the market for U.S.-produced PVA. Consequently, I conclude that, in the event the

³⁴ (...continued)

³⁵ 35.17 percent were also levied on Chinese PVA at that time. CR at IV-16 & n.34; PR at IV-9 & n.34. Duties of 37.75 percent were also levied on Japanese PVA imports. CR at IV-23 to IV-24 & n.48; PR at IV-13 & n.48.

³⁶ 2003 Staff Report at Table VII-4.

³⁷ CR/PR at Table IV-16.

³⁸ 2003 Staff Report at Table VII-4.

³⁹ CR/PR at Tables I-1 & IV-17. Whereas U.S. imports from Korea ranged from 2.6 million pounds to 4.1 million pounds in the pre-order period, over the period examined in these sunset reviews, Indian imports from Korea ranged from 2.7 million pounds to 4.5 million pounds, Indonesian imports from Korea ranged from 2.2 million pounds to 3.8 million pounds, and Italian imports from Korea ranged from 0.2 million pounds to 6.9 million pounds. Id. Italy, India, and Indonesia were quite stable as the top three export destinations for Korean PVA throughout the period examined in these review; the only exception was that Italy did not appear among the top three export destinations for Korea in 2005 (replaced that year by Malaysia). Id.

⁴⁰ DC Chemical's foreign producer questionnaire response, section II-11.

⁴¹ CR at IV-31; PR at IV-15 to IV-16. DC Chemical also stated that it ***. DC Chemical's foreign producer questionnaire response, section II-18a; CR/PR at Table IV-3; 2003 Staff Report at IV-2.

⁴² CR/PR at Table IV-16.

⁴³ CR at IV-31 n.54; PR at IV-15 n.54; DC Chemical's foreign producer questionnaire response, section II-5.

⁴⁴ CR at II-17; PR at II-9.

antidumping order on PVA from Korea were to be revoked, imports of PVA from Korea would be likely to have no discernible adverse impact on the domestic PVA industry.

II. REVOCATION OF THE ORDER ON SUBJECT IMPORTS OF PVA FROM KOREA IS NOT LIKELY TO LEAD TO CONTINUATION OR RECURRENCE OF MATERIAL INJURY WITHIN A REASONABLY FORESEEABLE TIME⁴⁴

A. Likely Volume of Subject Imports⁴⁵

In evaluating the likely volume of imports of subject merchandise if the antidumping order is revoked, the Commission is directed to consider whether the likely volume of imports would be significant either in absolute terms or relative to production or consumption in the United States.⁴⁶ In doing so, the Commission must consider “all relevant economic factors,” including four enumerated factors: (1) any likely increase in production capacity or existing unused production capacity in the exporting country; (2) existing inventories of the subject merchandise, or likely increases in inventories; (3) the existence of barriers to the importation of the subject merchandise into countries other than the United States; and (4) the potential for product shifting if production facilities in the foreign country, which can be used to produce the subject merchandise, are currently being used to produce other products.⁴⁷

In this review, information on the PVA industry in Korea was provided by DC Chemical, which was the only producer of PVA in Korea during the period examined in these reviews, as well as during the period examined in the original investigations.⁴⁸ DC Chemical submitted foreign producer questionnaires in both the original investigations and in these reviews.⁴⁹ During the original investigations, DC Chemical reported production capacity of *** pounds in all three years examined⁵⁰ and during these sunset reviews it reported a production capacity of *** pounds in all five years examined.⁵¹ While no explanation for the *** in production capacity was offered by DC Chemical, a third-party source has reported DC Chemical’s capacity as *** pounds in ***. Regardless of these minor discrepancies, the production capacity reported by DC Chemical in 2007 is relatively small, less than *** percent of the reported current capacity of the Chinese PVA industry of *** pounds,⁵² about *** percent of the reported current capacity of the Japanese PVA industry of *** pounds,⁵³ and only *** percent the current capacity of the U.S. PVA industry of *** pounds.⁵⁴ DC Chemical reported in the original

⁴⁴ With regard to the legal standards for conditions of competition, I join my colleagues’ discussion in the majority views.

⁴⁵ A discussion of the Commission’s findings in the original determinations is contained in the majority views.

⁴⁶ 19 U.S.C. § 1675a(a)(2).

⁴⁷ 19 U.S.C. §§ 1675a(a)(2)(A)-(D).

⁴⁸ CR at II-16 & IV-30; PR at II-9 & IV-15.

⁴⁹ CR at IV-31 n.54; PR at IV-15 n.54.

⁵⁰ 2003 Staff Report at Table VII-4.

⁵¹ CR/PR at Tables IV-15 & -16; CR at II-16; PR at II-9.

⁵² CR at IV-15; PR at IV-8.

⁵³ CR at IV-23; PR at IV-12.

⁵⁴ CR/PR at Table III-3.

investigations that it had no plans to expand production,⁵⁵ and in these sunset reviews, DC Chemical again states that it ***.⁵⁶

The production capacity in Korea, in addition to being comparatively small, is also ***. Between 2000 and 2004, capacity utilization in Korea ranged from *** percent to *** percent.⁵⁷ After declining to *** percent in 2005, capacity utilization again rose steadily to *** percent in 2007 and in interim 2008 was at *** percent.⁵⁸

Inventories in Korea as a percentage of total Korean shipments, after increasing from *** percent in 2000 to *** percent in 2003, declined irregularly to *** percent in 2007.⁵⁹ In interim 2008, Korean inventories as a percentage of Korean total shipments increased to *** percent, as compared to *** percent in interim 2007. Despite having increased somewhat in interim 2008, Korean inventories, at *** pounds, were equivalent to *** percent of U.S. consumption of PVA in 2007, the last calendar year for which complete data are available.⁶⁰ U.S. importers held *** of Korean PVA at the end of each year of the period examined in these sunset reviews.⁶¹

Korea exported PVA to at least 15 countries in 2007, several of which (e.g., China, India, Indonesia, Malaysia, and Vietnam) are much closer geographically to Korea than is the United States.⁶² DC Chemical reported that, apart from the United States, its PVA does not face any trade barriers in its global markets.⁶³

DC Chemical stated that it had exported *** any PVA to the United States since the imposition of the antidumping order against Korea on October 1, 2003.⁶⁴ Because of the absence of Korean imports during the vast majority of the period being examined, I will use the pre-order volumes of imports from Korea recorded during the original investigations to evaluate likely post-order import volumes. Korean imports, by quantity, in the original investigations were *** pounds in 2000, *** pounds in 2001, and *** pounds in 2002.⁶⁵ As a share of total U.S. consumption, Korean imports were *** percent in 2000, *** percent in 2001, and *** percent in 2002.⁶⁶ As a percentage of total U.S. imports, Korean imports held shares of *** percent in 2000, *** percent in 2001, and *** percent in 2002.⁶⁷ As noted in my views on cumulation, the Commission found in the first part of the original investigations that the presence of Japanese and Korean PVA imports in the U.S. market “was still small and their share relative to

⁵⁵ 2003 Staff Report at VII-8.

⁵⁶ CR at IV-31 n.54; PR at IV-15 n.54; DC Chemical’s foreign producer questionnaire, section II-5.

⁵⁷ 2003 Staff Report at Table VII-4; CR/PR at Table IV-16.

⁵⁸ CR/PR at Table IV-16.

⁵⁹ 2003 Staff Report at Table VII-4; CR/PR at Table IV-16.

⁶⁰ CR/PR at Tables I-1 & IV-16.

⁶¹ CR/PR at Table IV-6.

⁶² CR/PR at Table IV-17.

⁶³ CR at IV-31; PR at IV-15.

⁶⁴ CR/PR at Table IV-16; DC Chemical’s foreign producer questionnaire response, sections II-17a & III-2. Although some PVA imports from Korea do appear in the official import statistics in 2004, 2005, and 2006, these imports are of no commercial consequence, totaling to only *** pounds. CR/PR at Table I-1. No CDSOA disbursements were made in connection with imports from Korea during the period examined. CR at I-15; PR at I-10 to I-11.

⁶⁵ CR/PR at Table I-1.

⁶⁶ CR/PR at Table I-1.

⁶⁷ 2003 Staff Report at Table IV-2.

production or consumption in the United States was not a level we deem significant.”⁶⁸ In essence, I agree with the Commission’s 2003 assessment of Korean import volumes and I find that, were the orders to be revoked and were Korean imports to reappear in quantities similar to those observed during 2002, this would not represent significant import volumes in either absolute or relative terms.

Moreover, I believe that, were the order revoked, the volume of U.S. imports from Korea would likely be, for a reasonably foreseeable time, even less than the volume observed in 2002. As detailed in my cumulation views above, DC Chemical believes that, due to its extended absence from the U.S. market, ***.⁶⁹ Additionally, the two sectors which used the majority of imports from Korea in 2002, *** percent of imports from Korea and *** percent of imports from Korea,⁷⁰ are sectors that have been impacted adversely by the current recession and are not likely to be the source of significant import demand within a reasonably foreseeable time.⁷¹

I conclude that subject imports from Korea are unlikely to enter the United States in significant volumes within a reasonably foreseeable time should the order be revoked.

B. Likely Price Effects of Subject Imports⁷²

In evaluating the likely price effects of subject imports if the antidumping order is revoked, the Commission is directed to consider whether there is likely to be significant underselling by the subject imports as compared to the domestic like product and whether the subject imports are likely to enter the United States at prices that otherwise would have a significant depressing or suppressing effect on the price of the domestic like product.⁷³

In the original investigations, the Commission collected quarterly pricing data on seven products, but pricing data for Korea was available for only three of those products, 1, 2, and 4.⁷⁴ For product 1, pricing data for the Korean product was only available for 5 quarters in the last part of the period; there was underselling in all five quarters with underselling margins ranging from *** percent to *** percent.⁷⁵ For product 2, there was only one quarter of pricing data in the middle of the period, with a small associated volume, in which the Korean product undersold the U.S.-produced product by *** percent.⁷⁶ For product 4, there were eight quarters of pricing data, four of which showed underselling and four of which, including the last three quarters, showed overselling. The margins of underselling ranged from *** percent to *** percent, and the margins of overselling ranged from *** percent to *** percent.⁷⁷

⁶⁸ Views of the Commission (Germany and Japan) at 20 (Public Version); at 30 (Confidential Version). In 1995, the Commission terminated an investigation into imports of PVA from Korea in the preliminary phase, finding that imports from Korea did not exceed the negligibility threshold. CR/PR at Table I-2.

⁶⁹ CR at II-17; PR at II-9.

⁷⁰ CR/PR at Table IV-4.

⁷¹ Regarding these sectors, see, e.g., comments by ***. CR/PR at Figure II-1; CR at II-20; PR at II-11.

⁷² A discussion of the Commission’s findings in the original determinations is contained in the majority views.

⁷³ 19 U.S.C. § 1675a(a)(3). The SAA states that “[c]onsistent with its practice in investigations, in considering the likely price effects of imports in the event of revocation and termination, the Commission may rely on circumstantial, as well as direct, evidence of the adverse effects of unfairly traded imports on domestic prices.” SAA at 886.

⁷⁴ 2003 Staff Report at Table V-8.

⁷⁵ 2003 Staff Report at Table V-1.

⁷⁶ 2003 Staff Report at Table V-2.

⁷⁷ 2003 Staff Report at Table V-4

The quantities involved were significant only for product 1. I note that prior to the entry of the Korean product in the fourth quarter of 2001, the price for the domestic product fluctuated between *** to *** and that after the Korean product entered—in the last 5 quarters of the period—domestic prices for product 1, although there was a declining trend, moved in a similar range of *** to ***.⁷⁸ That these ranges are almost identical leads me to agree with the Commission’s views stated in the first part of the original investigations that “cumulated subject imports from Japan and Korea do not currently have significant effects on prices for the domestic like product.”⁷⁹

It is true that, for product 1, the domestic industry’s shipments ***, but this *** was prior to the entry of the Korean imports of product 1, and the domestic industry’s quarterly shipment volumes remained fairly steady at the *** for the remainder of the period, fluctuating between *** pounds and *** pounds.⁸⁰ Product 1 is primarily used in textile applications,⁸¹ and the staff report noted that “much of the reduction in demand {for PVA} is reported to be the result of declines in the U.S. textile market, although the slowdown in the general economy is also reported to have reduced demand.”⁸² I agree with the Commission’s assessment in the first part of the original investigations that the underselling by subject imports—in that case, cumulated imports from both Japan and Korea—“did not cause significant declines in sales volumes for the competing U.S.-produced products during the period”⁸³

Addressing briefly the pricing of product 4 in the pre-order period, I note that the volume of Korean imports was concentrated in 2002, but that Korean volume in 2002 was *** percent of U.S. shipments of product 4 in 2002. I further note that although there was *** in domestic prices for product 4 in 2002, from *** to ***, Korean imports during 2002 were generally overselling the U.S. product in 2002, with margins ranging from *** to *** percent in the final three quarters of 2002. In 2002, Korean imports undersold the U.S. product only in the first quarter and by a margin of *** percent.⁸⁴ I see no causal link between the *** volumes of *** imports from Korea and any *** in prices of domestically produced product 4.

There was *** lost sale allegation—out of a total of ***—in the original investigations that involved Korean imports and the purchaser disputed the amount involved, an amount that ***.⁸⁵ Korea was mentioned in *** lost revenue allegations, *** of which were agreed to by the purchaser, and *** of which involved only imports from Korea.⁸⁶ The relatively small numbers of confirmed lost sales and lost revenue allegations involving Korea confirm that Korean imports were not a significant source of price pressure on the domestic industry during the period examined in the original investigations.

⁷⁸ 2003 Staff Report at Table V-1.

⁷⁹ Views of the Commission (Germany and Japan) at 23 (Public Version); at 36-37 (Confidential Version).

⁸⁰ 2003 Staff Report at Table V-1.

⁸¹ 2003 Staff Report at V-6.

⁸² 2003 Staff Report at II-7.

⁸³ Views of the Commission (Germany and Japan) at 22 (Public Version); at 35 (Confidential Version).

⁸⁴ 2003 Staff Report at Table V-4.

⁸⁵ 2003 Staff Report at V-24 & Table V-10. Even if the amount alleged by the Celanese/DuPont were correct, and even if the entire quantity had been sourced from Korea, and not also from Taiwan as claimed by the purchaser or from China as claimed by Celanese/DuPont, this purchaser, ***, would have been responsible for less than *** percent of imports from Korea in 2001. The quoted price difference was about *** percent.

⁸⁶ 2003 Staff Report at Table V-11. Purchaser *** agreed that it used a quote on Korean PVA to receive a *** percent discount.

With little contemporary pricing data on Korean PVA available on this review record,⁸⁷ I look to unit values of global exports for a comparison, of an illustrative nature, of the average unit values (AUVs) of U.S. exports with those of Korean exports. Fully realizing that product mix issues are frequently present in AUV data, I note that these data show that the AUVs for the exports of both countries were close throughout the period 2003-2006, with U.S. export AUVs being between 1.3 and 6.7 percent higher than Korean AUVs, but that in 2007 and interim 2008, Korean export AUVs exceeded U.S. export AUVs by 9.5 and 19.8 percent, respectively.⁸⁸

After evaluating the likely price effects of subject imports from Korea should the antidumping order be revoked, I find that there is not likely to be significant underselling by subject imports from Korea and that subject imports from Korea are not likely to have a significant depressing or suppressing effect on the price of the domestic like product. This conclusion is in agreement with the Commission's views stated in the first part of the original investigations that found "that cumulated subject imports from Japan and Korea do not currently have significant effects on prices for the domestic like product."⁸⁹

C. Likely Impact of Subject Imports⁹⁰

In evaluating the likely impact of imports of subject merchandise if the antidumping duty order is revoked, the Commission is directed to consider all relevant economic factors that are likely to have a bearing on the state of the industry in the United States, including, but not limited to the following: (1) likely declines in output, sales, market share, profits, productivity, return on investments, and utilization of capacity; (2) likely negative effects on cash flow, inventories, employment, wages, growth, ability to raise capital, and investment; and (3) likely negative effects on the existing development and production efforts of the industry, including efforts to develop a derivative or more advanced version of the domestic like product.⁹¹ All relevant economic factors are to be considered within the context of the business cycle and the conditions of competition that are distinctive to the industry.⁹² As instructed by the statute, I have considered the extent to which any improvement in the state of the domestic industry is related to the orders at issue and whether the industry is vulnerable to material injury if the order is revoked.

In the first part of the original investigations, the Commission found that "[t]he record does not indicate that there is a causal nexus between the industry's declines in financial performance in 2001 and 2002 relative to 2000 and the cumulated subject imports from Japan and Korea."⁹³ In supporting this conclusion, the Commission first recited its conclusions regarding a lack of significant subject import volumes from Japan and Korea and regarding a lack of significant underselling by subject imports from

⁸⁷ There was one purchaser, in this current sunset review, that compared the pricing of Korean and U.S. PVA, finding that U.S. prices were "superior," meaning that U.S. prices were lower. CR/PR at Table II-5.

⁸⁸ CR/PR at Table IV-20.

⁸⁹ Views of the Commission (Germany and Japan) at 23 (Public Version); at 36-37 (Confidential Version).

⁹⁰ A discussion of the Commission's findings in the original determinations is contained in the majority views.

⁹¹ 19 U.S.C. § 1675a(a)(4).

⁹² 19 U.S.C. § 1675a(a)(4). Section 752(a)(6) of the Act states that "the Commission may consider the magnitude of the margin of dumping" in making its determination in a five-year review. 19 U.S.C. § 1675a(a)(6). The statute defines the "magnitude of the margin of dumping" to be used by the Commission in five-year reviews as "the dumping margin or margins determined by the administering authority under section 1675a(c)(3) of this title." 19 U.S.C. § 1677(35)(C)(iv). See also SAA at 887. Commerce found that revocation of the antidumping duty order on Korea would be likely to lead to continuation or recurrence of dumping at the following margins: 38.74 percent for DC Chemical and 32.08 for all others. Note that these are exactly the same margins as were imposed after the original investigations. CR/PR at Table I-4.

⁹³ Views of the Commission (Germany and Japan) at 26 (Public Version); at 41 (Confidential Version).

Japan and Korea or price suppression/depression resulting from subject imports from Japan and Korea.⁹⁴ The Commission then stated that it believed that “there were several factors entirely unrelated to subject import competition” that adversely affected the domestic industry, principally a “decline in U.S. demand for PVA, particularly between 2000 and 2001”⁹⁵ I agree with the Commission’s analysis that factors unrelated to subject imports from Japan and Korea were responsible for the degraded financial performance of the domestic industry during the period examined in the original investigations.

In the period examined in these reviews, the domestic industry’s net sales, by quantity, fluctuated over the period, ranging from *** pounds to *** pounds.⁹⁶ Were the antidumping order against Korean PVA to be revoked, I would expect, as discussed in detail in my cumulation section, that imports from Korea would be at most *** pounds, the amount imported from Korea in 2002.⁹⁷ Because I project Korean import volumes to be, *** of the domestic industry’s net sales, and because I have already determined that such Korean imports would not be significantly underselling the PVA sold by domestic producers, I find that such Korean imports would not likely cause any significant decline in output,⁹⁸ sales, market share,⁹⁹ profits,¹⁰⁰ productivity,¹⁰¹ return on investments,¹⁰² or utilization of capacity¹⁰³ by the domestic industry. Such a small relative volume of Korean imports is also not likely to have any

⁹⁴ Views of the Commission (Germany and Japan) at 26-27 (Public Version); at 41-42 (Confidential Version).

⁹⁵ Views of the Commission (Germany and Japan) at 26 (Public Version); at 42 (Confidential Version).

⁹⁶ CR/PR at Table I-1. Net sales by the domestic industry in interim 2008 were *** pounds, compared with *** pounds in interim 2007. CR/PR at Table III-8.

⁹⁷ CR/PR at Table I-1.

⁹⁸ Domestic PVA production fluctuated over the period examined, ranging from *** pounds to *** pounds. CR/PR at Table I-1. Domestic PVA production in interim 2008 was *** pounds compared to *** pounds in interim 2007. CR/PR at Table III-3.

⁹⁹ The domestic industry’s market share, by quantity, in U.S. consumption fluctuated during the period examined, ranging from *** percent to *** percent. The domestic industry’s market share, by quantity, in interim 2008 was *** percent as compared with *** percent in interim 2007. CR/PR at Table I-9. As stated above, the largest share in U.S. consumption held pre-order by Korea was *** percent, a share that is *** of the U.S. industry’s post-order fluctuations in market share.

¹⁰⁰ The domestic industry’s gross profit as a share of net sales fluctuated over the period examined, ranging from *** percent to *** percent. The domestic industry’s gross profit as a share of net sales was *** percent in interim 2008 as compared to *** percent in interim 2007. CR/PR at Table III-8. The domestic industry’s operating income as a share of net sales fluctuated over the period examined, ranging from *** percent to *** percent. The domestic industry’s operating income as a share of net sales was *** percent in interim 2008 as compared to *** percent in interim 2007. CR/PR at Table III-8.

¹⁰¹ The domestic industry’s productivity fluctuated over the period examined, ranging from *** pounds per hour to *** pounds per hour. The domestic industry’s productivity in interim 2008 was *** pounds per hour as compared to *** pounds per hour in interim 2007. CR/PR at Table III-7.

¹⁰² The domestic industry’s return on investment fluctuated over the period examined, ranging from *** percent to *** percent. CR/PR at Table III-12.

¹⁰³ The domestic industry’s capacity utilization fluctuated over the period examined, ranging from *** percent to *** percent. Capacity utilization in interim 2008 was *** percent compared to *** percent in interim 2007. CR/PR at Table III-3.

significant negative effects on the domestic industry's cash flow,¹⁰⁴ inventories,¹⁰⁵ employment,¹⁰⁶ wages,¹⁰⁷ growth, ability to raise capital,¹⁰⁸ investment, or on the existing development and production efforts of the domestic industry.¹⁰⁹

Although I note that there has been a "slowing of the general economy, and weakness in broad market sectors,"¹¹⁰ it does not follow that subject imports are any more likely to enter in greater volumes within a reasonably foreseeable time or that such subject imports are more likely to injure the domestic industry. Indeed, during the last "slowdown in the general economy"¹¹¹ in 2001, the share of both subject and total imports in total U.S. PVA consumption declined; between 2000 and 2001, the share of subject imports of PVA in total U.S. consumption declined from *** percent to *** percent, and the share of total imports of PVA in total U.S. consumption declined from *** percent to *** percent.¹¹² Although the share of Korean subject imports of PVA in total U.S. consumption rose *** between 2000 and 2001, from *** percent to *** percent,¹¹³ there is no reason to expect that Korean imports would increase in the current economic conditions because, as described above, the sectors in which the Korean imports were used during 2002 have been among the hardest-hit sectors in the current recession.¹¹⁴

III. CONCLUSION

Accordingly, I determine that, in the event that the antidumping duty order on imports of PVA from Korea were revoked, material injury to a U.S. industry would not be likely to continue or recur within a reasonably foreseeable time.

¹⁰⁴ The domestic industry's cash flow fluctuated over the period examined, ranging from *** to ***. The domestic industry's cash flow in interim 2008 was *** as compared to *** in interim 2007. CR/PR at Table III-8.

¹⁰⁵ The domestic industry's inventories fluctuated over the period examined, ranging from *** pounds to *** pounds. The domestic industry's inventories were *** at the end of interim 2008 as compared to *** at the end of interim 2007. CR/PR at Table III-5.

¹⁰⁶ The domestic industry's production and related workers (PRWs) fluctuated over the period examined, ranging from *** to *** production related workers. There were *** PRWs in interim 2008 as compared to *** PRWs in interim 2007. CR/PR at Table III-7.

¹⁰⁷ The domestic industry's hourly wage fluctuated over the period examined, ranging from *** per hour to *** per hour. The domestic industry's hourly wage was *** per hour in interim 2008 as compared to *** per hour in interim 2007. CR/PR at Table III-7.

¹⁰⁸ The domestic industry's capital expenditures fluctuated over the period examined, ranging from *** to ***. The domestic industry's capital expenditures were *** in interim 2008 as compared to *** in interim 2007. CR/PR at Table III-13.

¹⁰⁹ The domestic industry's R&D expenditures fluctuated over the period examined, ranging from *** to ***. The domestic industry's R&D expenditures were *** in interim 2008 as compared to *** in interim 2007. CR/PR at Table III-13.

¹¹⁰ CR at II-19; PR at II-10.

¹¹¹ 2003 Staff Report at II-7.

¹¹² CR/PR at Table I-1. The shares of both subject and total imports in total U.S. consumption in 2002 remained lower than the 2000 shares.

¹¹³ CR/PR at Table I-1.

¹¹⁴ CR/PR at Figure II-1; CR at II-19 to II-20; PR at II-10 to II-11 (discussion of decline in textile sector); CR at II-21; PR at II-11 to II-12 (discussion of decline in housing and construction).

PART I: INTRODUCTION AND OVERVIEW

BACKGROUND

On June 2, 2008, the U.S. International Trade Commission (“Commission” or “USITC”) gave notice, pursuant to section 751(c) of the Tariff Act of 1930, as amended (“the Act”),¹ that it had instituted reviews to determine whether revocation of the antidumping duty orders on polyvinyl alcohol (“PVA”) from China, Japan, and Korea would likely lead to the continuation or recurrence of material injury to a domestic industry.^{2 3} On September 5, 2008, the Commission determined that it would conduct full reviews pursuant to section 751(c)(5) of the Act.^{4 5} Selected information relating to the schedule of the current five-year reviews appears in the following tabulation:⁶

Effective date	Action
July 2, 2003	Commerce’s antidumping duty order on PVA from Japan (68 FR 39518)
October 1, 2003	Commerce’s antidumping duty orders on PVA from China and Korea (68 FR 56620 and 56621)
June 2, 2008	Commission’s institution of five-year reviews (73 FR 31507)
June 2, 2008	Commerce’s initiation of five-year reviews (73 FR 31974; June 5, 2008)
September 5, 2008	Commission’s determination to conduct full five-year reviews (73 FR 53443; September 16, 2008)
September 11, 2008	Commission’s scheduling of the reviews (73 FR 54619; September 22, 2008)
October 3, 2008	Commerce’s final results of the expedited reviews (73 FR 57596)
January 27, 2009	Commission’s hearing
March 12, 2009	Commission’s vote
March 27, 2009	Commission’s determinations transmitted to Commerce

Source: Cited *Federal Register* notices.

¹ 19 U.S.C. 1675(c).

² 73 FR 31507, June 2, 2008. All interested parties were requested to respond to this notice by submitting the information requested by the Commission.

³ In accordance with section 751(c) of the Act, the U.S. Department of Commerce (“Commerce”) published a notice of initiation of five-year reviews of the subject antidumping duty orders concurrently with the Commission’s notice of institution. 73 FR 31974, June 5, 2008.

⁴ 73 FR 53443, September 16, 2008. The Commission found that the domestic interested party group response to its notice of institution was adequate, as was the respondent interested party group response of Korea. The Commission found that the respondent interested party group responses of China and Japan were inadequate (with Commissioner Lane dissenting with respect to China and Japan and Commissioner Pinkert dissenting with respect to Japan). The Commission concluded that it would conduct full reviews pursuant to section 751(c)(5) of the Act to promote administrative efficiency.

⁵ On October 20, 2008, the Commission issued a letter requesting comments about an allegation made by domestic producer, Solutia, Inc., ***. Letter from Robert Carpenter, Director of the Office of Investigations, USITC, October 20, 2008. On October 31, 2008, Celanese Chemicals, Ltd. and E.I. DuPont de Nemours & Co., filed a joint response to the Commission’s October 20th letter. Letter from Patrick J. McLain, Attorney for Celanese and DuPont, WilmerHale, October 31, 2008. In it they explained that ***. Letter from Patrick J. McLain, Attorney for Celanese and DuPont, WilmerHale, October 31, 2008. *See also* Celanese/DuPont’s posthearing brief, Exhibit A.

⁶ The Commission’s notice of institution, notice of its decision to conduct full reviews, scheduling notice, and statement on adequacy appear in app. A and may also be found at the Commission’s web site (Internet address www.usitc.gov). Commissioners’ votes on whether to conduct expedited or full reviews may also be found at the web site.

THE ORIGINAL INVESTIGATIONS

The Commission's Investigations

The original investigations resulted from petitions filed on September 5, 2002, by Celanese Chemicals, Ltd. ("Celanese") and E.I. DuPont de Nemours & Co. ("DuPont"). The only other U.S. producer, Solutia, Inc. ("Solutia"), opposed the petition. The countries named in the petition were China, Germany, Japan, Korea, and Singapore. In the preliminary phase of the original investigations, the Commission made affirmative determinations on PVA from China, Germany, Japan, and Korea, but found imports of PVA from Singapore to be negligible (thereby terminating the investigation on the latter country).^{7 8}

In 2003, Commerce made preliminary affirmative determinations regarding imports of PVA from China, Germany, Japan, and Korea,⁹ and subsequently made final affirmative determinations with respect to these same four countries.¹⁰ Because the schedules became staggered at Commerce, the Commission first considered whether the domestic industry was materially injured or threatened with material injury by reason of subject imports from Germany and Japan. In June 2003, the Commission made a negative final determination with respect to imports from Germany but an affirmative threat determination with respect to subject imports from Japan. Imports from Chinese producer Sinopec Sichuan Vinylon Works ("SVW") were not eligible for cumulation at that time, and the Commission did not cumulate other imports from China with imports from Japan, although it did cumulate imports from Japan with imports from Korea for its threat analysis.¹¹

By the time of the Commission's injury determination regarding imports from China and Korea in September 2003, imports from SVW were eligible for cumulation. The Commission made an affirmative present material injury determination regarding imports from China and Korea.¹²

Subsequent Proceedings

Chinese producer SVW filed a summons with the U.S. Court of International Trade ("CIT") to appeal the Commission's final affirmative injury determination but did not perfect the appeal by filing a complaint, so the Court summarily dismissed the appeal. No other party appealed the Commission's final original injury determinations.

Chinese producer SVW also appealed Commerce's final determination in the original investigation to the CIT, and as a result of that appeal, SVW's antidumping margin was recalculated from

⁷ Commissioner Bragg found that subject imports from Singapore would imminently exceed the statutory negligibility threshold, and made a threat determination on PVA from Singapore.

⁸ Commission's preliminary determinations, 67 FR 65597, October 25, 2002.

⁹ Commerce preliminarily made a negative antidumping duty determination with respect to Chinese producer Sinopec Sichuan Vinylon Works but an affirmative determination with respect to other imports from China. Commerce's preliminary determinations, 68 FR 7980, February 19, 2003; 68 FR 8203, February 20, 2003; 68 FR 13674, March 20, 2003; and 68 FR 13681, March 20, 2003.

¹⁰ Commerce's final determinations, 68 FR 19509, April 21, 2003; 68 FR 19510, April 21, 2003; 68 FR 47538, August 11, 2003; and 68 FR 47540, August 11, 2003.

¹¹ *Polyvinyl Alcohol from Germany and Japan, Invs. Nos. 731-TA-1015 and 1016 (Final)*, USITC Publication 3604, June 2003.

¹² *Polyvinyl Alcohol from China and Korea, Invs. Nos. 731-TA-1014 and 1017 (Final)*, USITC Publication 3634, September 2003.

an amended final determination rate of 6.91 percent *ad valorem* to 5.51 percent *ad valorem*.¹³ SVW then appealed the CIT's judgment to the U.S. Court of Appeals for the Federal Circuit ("Federal Circuit"), but the parties ultimately agreed to dismiss the appeal. As discussed below, Commerce subsequently conducted administrative reviews of SVW's antidumping duty margins for the 2003/2004 and 2004/2005 periods, and calculated *de minimis* and 0 antidumping duties, respectively.

SUMMARY DATA

Table I-1 presents summary data from the original investigations and the current reviews.¹⁴ As shown below, Japanese and Korean import shares diminished below *** percent of the total U.S. market after imposition of the orders. The Chinese import share has continued to decline from its high of *** percent in 2000 to its low of *** percent in 2007.¹⁵ The largest source of nonsubject imports is Taiwan, with *** percent share of the total U.S. market in 2007.

¹³ See *Polyvinyl Alcohol from the People's Republic of China: Notice of Court Decision Not In Harmony with Final Determination*, 72 FR 36960, July 6, 2007; *Sinopec Sichuan Vinylon Works v. United States*, Slip Op. 07-88 (Ct. Int'l Trade May 30, 2007); *Sinopec Sichuan Vinylon Works v. United States*, Slip Op. 06-191 (Ct. Int'l Trade December 28, 2006).

¹⁴ In the original determinations, because the Commission concluded that all elements of the statutory captive production provision were met, it focused primarily on the merchant market for the domestic like product in determining market share and the factors affecting financial performance, although it analyzed these factors with respect to the whole market as well. The captive production provision, 19 U.S.C. § 1677(7)(C)(iv), which was added to the statute by the URAA, provides:

- (iv) CAPTIVE PRODUCTION -- If domestic producers internally transfer significant production of the domestic like product for the production of a downstream article and sell significant production of the domestic like product in the merchant market, and the Commission finds that –
- (I) the domestic like product produced that is internally transferred for processing into that downstream article does not enter the merchant market for the domestic like product,
 - (II) the domestic like product is the predominant material input in the production of that downstream article, and
 - (III) the production of the domestic like product sold in the merchant market is not generally used in the production of that downstream article,

then the Commission, in determining market share and the factors affecting financial performance set forth in clause (iii), shall focus primarily on the merchant market for the domestic like product.

The Commission has stated that the statutory captive production provision does not apply to five-year reviews. See, e.g., *Polyethylene Terephthalate Film, Sheet and Strip from India and Taiwan, Inv. Nos. 701-TA-415 (Review) and 731-TA-933-934 (Review)*, USITC Publication 3994 April 2008, p. 18, n. 123.

¹⁵ SVW was and is the primary Chinese exporter of PVA into the United States in both the original investigations and the current reviews. However, in 2002, three PVA shipments were made by firms other than SVW amounting to *** pounds. The three shipping firms were ***. In addition, Customs records showed an *** of *** pounds manufactured by ***. *** stated that it was a provider of logistical services and did not submit a questionnaire response. Lastly, Customs documents showed *** possibly erroneous entries totaling *** pounds manufactured by ***. *** informed Commerce that it did not show any exports of Chinese produced PVA to the United States. Staff Report, INV-AA-056 (May 27, 2003), pp. IV-2 and IV-3 n. 8.

Table I-1

PVA: Summary data from the original investigations and the current five-year reviews, 2000-07

(Quantity=1,000 pounds; value=1,000 dollars; unit values, unit labor costs, and unit financial data are *per pound*)

Item	2000	2001	2002	2003	2004	2005	2006	2007
U.S. consumption quantity:								
Amount	***	***	***	***	***	***	***	***
Producers' share: ¹	***	***	***	***	***	***	***	***
Importers' share: ¹								
China	***	***	***	***	***	***	***	***
Japan	***	***	***	***	***	***	***	***
Korea	***	***	***	***	***	***	***	***
Subject subtotal	***	***	***	***	***	***	***	***
Taiwan	***	***	***	***	***	***	***	***
All other countries	***	***	***	***	***	***	***	***
Nonsubject subtotal	***	***	***	***	***	***	***	***
Total imports	***	***	***	***	***	***	***	***
U.S. consumption value:								
Amount	***	***	***	***	***	***	***	***
Producers' share: ¹	***	***	***	***	***	***	***	***
Importers' share: ¹								
China	***	***	***	***	***	***	***	***
Japan	***	***	***	***	***	***	***	***
Korea	***	***	***	***	***	***	***	***
Subject subtotal	***	***	***	***	***	***	***	***
Taiwan	***	***	***	***	***	***	***	***
All other countries	***	***	***	***	***	***	***	***
Nonsubject subtotal	***	***	***	***	***	***	***	***
Total imports	***	***	***	***	***	***	***	***
U.S. imports from-								
China:								
Quantity	19,588	13,287	13,400	5,869	5,519	6,155	6,662	4,539
Value	11,968	10,227	8,375	4,011	3,795	4,521	4,973	3,813
Unit value	\$0.61	\$0.77	\$0.63	\$0.68	\$0.69	\$0.73	\$0.75	\$0.84
Ending inventory quantity	***	***	***	***	***	***	***	***
Japan:								
Quantity	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***
Unit value	***	***	***	***	***	***	***	***
Ending inventory quantity	***	***	***	***	***	***	***	***

Table continued on next page.

Table I-1 – *Continued*

PVA: Summary data from the original investigations and the current five-year reviews, 2000-07

(Quantity= 1,000 pounds; value= 1,000 dollars; unit values, unit labor costs, and unit financial data are *per pound*)

Item	2000	2001	2002	2003	2004	2005	2006	2007
Korea:								
Quantity	2,584	3,789	4,122	2,014	126	4	44	0
Value	1,986	3,215	3,116	1,500	114	44	85	0
Unit value	\$0.77	\$0.85	\$0.76	\$0.74	\$0.90	\$10.17	\$1.93	⁽³⁾
Ending inventory quantity	***	***	***	***	***	***	***	***
Subtotal, subject countries								
Quantity	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***
Unit value	***	***	***	***	***	***	***	***
Ending inventory quantity	***	***	***	***	***	***	***	***
Taiwan								
Quantity	21,410	15,640	14,076	23,539	28,117	20,777	23,354	26,127
Value	16,318	13,359	9,988	16,402	19,048	16,654	19,340	24,012
Unit value	\$0.76	\$0.85	\$0.71	\$0.70	\$0.68	\$0.80	\$0.83	\$0.92
Ending inventory quantity	***	***	***	***	***	***	***	***
All other countries:								
Quantity	4,482	7,151	5,542	4,871	5,120	7,780	10,413	11,346
Value	4,701	6,804	5,100	4,481	5,009	7,795	9,876	11,807
Unit value	\$1.06	\$0.95	\$0.93	\$0.92	\$0.98	\$1.00	\$0.95	\$1.04
Ending inventory quantity	***	***	***	***	***	***	***	***
All countries:								
Quantity	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***
Unit value	***	***	***	***	***	***	***	***
Ending inventory quantity	***	***	***	***	***	***	***	***
U.S. producers':								
		*	*	*	*	*	*	*

¹ In percent.² Inventories of PVA from Taiwan for 2000-02 are included in the totals shown for "all other countries."³ Not defined.

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

Note.-- During the preliminary phase of the original investigations, the Commission determined that PVA imports from Singapore were negligible and terminated its investigation. In the final phase of the investigations, the Commission made a negative determination with respect to PVA from Germany. Both Singapore and Germany are included in "all other countries."

Source: Staff Report, May 27, 2003 (INV-AA-156), table C-1 (2000-02); data submitted in response to Commission questionnaires and from official Commerce statistics (2003-07).

RELATED TITLE VII INVESTIGATIONS

The Commission's Investigations

The Commission has conducted several previous import relief investigations on PVA. Table I-2 presents data on previous and related title VII investigations for PVA.

Table I-2

PVA: Previous and related investigations, 1995-2008

Date ¹	Number	Petitioner(s)	Country	Outcome	Status
1995	731-TA-726 (Final)	Air Products and Chemicals, Inc.	China	Affirmative	Order revoked, 66 FR 22145, May 3, 2001.
1995	731-TA-727 (Final)	Air Products and Chemicals, Inc.	Japan	Affirmative	Order revoked, 66 FR 22145, May 3, 2001.
1995	731-TA-728 (Preliminary)	Air Products and Chemicals, Inc.	Korea	Negligible/ Terminated	Commission determination, 60 FR 21829, May 3, 1995.
1995	731-TA-729 (Final)	Air Products and Chemicals, Inc.	Taiwan	Affirmative	Order revoked, 66 FR 22145, May 3, 2001
2002	731-TA-1018 (Preliminary)	Celanese and DuPont	Singapore	Negligible/ Terminated	Commission determination, 67 FR 65597, October 25, 2002.
2002	731-TA-1014 (Final)	Celanese and DuPont	China	Affirmative	Order in place, 68 FR 56620, October 1, 2003. ²
2002	731-TA-1015 (Final)	Celanese and DuPont	Germany	Negative	Commission determination, 68 FR 38386, June 27, 2003.
2002	731-TA-1016 (Final)	Celanese and DuPont	Japan	Affirmative	Order in place, 68 FR 39518, July 2, 2003.
2002	731-TA-1017 (Final)	Celanese and DuPont	Korea	Affirmative	Order in place, 68 FR 56621, October 1, 2003.
2004	731-TA-1088 (Preliminary)	Celanese	Taiwan	Pending	Notice of remand, 72 FR 10556, March 8, 2007.
¹ "Date" refers to the year in which the investigation was instituted by the Commission. ² Commerce corrected the "all others" Chinese margin, which initially appeared as 7.86 percent, to the correct margin of 97.86 percent. Correction notice, 68 FR 58169, October 8, 2003.					
Source: Compiled from Commission determinations and Commerce orders and revocations published in the <i>Federal Register</i> .					

The Commission has conducted several previous investigations on polyvinyl alcohol, as indicated above. The results of the most recent investigation, involving imports of polyvinyl alcohol from Taiwan, are not yet final. The investigation of polyvinyl alcohol from Taiwan began on September 7, 2004, with the filing of an antidumping duty petition by domestic producer Celanese. On October 21, 2004, the Commission determined by a vote of three to two, with one Commissioner not participating, that there

was no reasonable indication that an industry in the United States was materially injured or threatened with material injury by reason of subject imports from Taiwan.¹⁶

Subsequent Proceedings

On November 24, 2004, Celanese appealed the determination with respect to Taiwan to the CIT. On January 29, 2007, the Court issued a decision affirming the negative preliminary determination in part and remanding it in part. In a remand determination issued on April 30, 2007, the Commission majority consisting of Chairman Aranoff and Commissioners Williamson and Pinkert found a reasonable indication that an industry in the United States was materially injured by reason of subject imports from Taiwan; not having been Commissioners in the fall of 2004, these Commissioners had not participated in the original investigations, so they reviewed the record *de novo* on remand. Vice Chairman Pearson and Commissioners Okun and Lane, who had participated in the original investigation, again made a negative preliminary determination and filed dissenting remand views. On November 19, 2008, the CIT affirmed the affirmative preliminary injury determination. On January 16, 2009, domestic producer DuPont and Taiwan producer Chang Chun Petrochemical Co., Ltd. appealed the CIT's judgment to the Federal Circuit. Briefing before the Federal Circuit will take place in the first half of 2009.

STATUTORY CRITERIA AND ORGANIZATION OF THE REPORT

Statutory Criteria

Section 751(c) of the Act requires Commerce and the Commission to conduct a review no later than five years after the issuance of an antidumping or countervailing duty order or the suspension of an investigation to determine whether revocation of the order or termination of the suspended investigation "would be likely to lead to continuation or recurrence of dumping or a countervailable subsidy (as the case may be) and of material injury." Section 752(a) of the Act provides that in making its determination of likelihood of continuation or recurrence of material injury--

(1) IN GENERAL.-- . . . the Commission shall determine whether revocation of an order, or termination of a suspended investigation, would be likely to lead to continuation or recurrence of material injury within a reasonably foreseeable time. The Commission shall consider the likely volume, price effect, and impact of imports of the subject merchandise on the industry if the order is revoked or the suspended investigation is terminated. The Commission shall take into account--

(A) its prior injury determinations, including the volume, price effect, and impact of imports of the subject merchandise on the industry before the order was issued or the suspension agreement was accepted,

(B) whether any improvement in the state of the industry is related to the order or the suspension agreement,

(C) whether the industry is vulnerable to material injury if the order is revoked or the suspension agreement is terminated, and

(D) in an antidumping proceeding . . . , (Commerce's findings) regarding duty absorption . . .

¹⁶ The Commission's majority views were those of Vice Chairman Pearson and Commissioners Okun and Lane. Then-Commissioners Koplán and Miller reached an affirmative determination, and filed dissenting views. Then-Commissioner Hillman did not participate in the investigation.

(2) *VOLUME.*--In evaluating the likely volume of imports of the subject merchandise if the order is revoked or the suspended investigation is terminated, the Commission shall consider whether the likely volume of imports of the subject merchandise would be significant if the order is revoked or the suspended investigation is terminated, either in absolute terms or relative to production or consumption in the United States. In so doing, the Commission shall consider all relevant economic factors, including--

(A) any likely increase in production capacity or existing unused production capacity in the exporting country,

(B) existing inventories of the subject merchandise, or likely increases in inventories,

(C) the existence of barriers to the importation of such merchandise into countries other than the United States, and

(D) 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.

(3) *PRICE.*--In evaluating the likely price effects of imports of the subject merchandise if the order is revoked or the suspended investigation is terminated, the Commission shall consider whether--

(A) there is likely to be significant price underselling by imports of the subject merchandise as compared to domestic like products, and

(B) imports of the subject merchandise are likely to enter the United States at prices that otherwise would have a significant depressing or suppressing effect on the price of domestic like products.

(4) *IMPACT ON THE INDUSTRY.*--In evaluating the likely impact of imports of the subject merchandise on the industry if the order is revoked or the suspended investigation is terminated, the Commission shall consider all relevant economic factors which are likely to have a bearing on the state of the industry in the United States, including, but not limited to--

(A) likely declines in output, sales, market share, profits, productivity, return on investments, and utilization of capacity,

(B) likely negative effects on cash flow, inventories, employment, wages, growth, ability to raise capital, and investment, and

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

The Commission shall evaluate all such relevant economic factors . . . within the context of the business cycle and the conditions of competition that are distinctive to the affected industry.

Section 752(a)(6) of the Act states further that in making its determination, “the Commission may consider the magnitude of the margin of dumping or the magnitude of the net countervailable subsidy. If a countervailable subsidy is involved, the Commission shall consider information regarding the nature of

the countervailable subsidy and whether the subsidy is a subsidy described in Article 3 or 6.1 of the Subsidies Agreement.”

Organization of the Report

Information obtained during the course of these reviews that relates to the above-discussed statutory criteria is presented throughout this report. A summary of trade and financial data for the total and merchant PVA markets, as collected in these reviews, are presented in appendix C. U.S. industry data are based on the questionnaire responses of three U.S. producers of PVA that account for all domestic production of PVA. U.S. import data and related information are based on Commerce’s official import statistics and the questionnaire responses or other submissions of 13 U.S. importers of PVA that are believed to have accounted for the U.S. imports of subject PVA from China, Japan, and Korea, as well as the large majority of non-excluded PVA from nonsubject countries, most notably Taiwan. Foreign industry data and related information are based on the questionnaire responses of three PVA producers: one producer in China accounting for *** of China’s production and *** of China’s exports to the United States;¹⁷ one producer in Japan accounting for *** percent of Japanese production of PVA;¹⁸ and one producer in Korea accounting for all known Korean production.¹⁹ Responses by U.S. producers, importers, purchasers, and foreign producers of PVA to a series of questions concerning the significance of the existing antidumping duty orders and the likely effects of revocation are presented in appendix D. Finally, supplemental tables of U.S. producer’s shipments by type and nonsubject import price data appear in appendixes E and F, respectively.

COMMERCE’S REVIEWS

Administrative Reviews²⁰

Table I-3 presents information on Commerce’s administrative reviews of the subject antidumping duty order on PVA from China. Commerce did not initiate administrative reviews of the antidumping duty orders in place for Japan and Korea.

Table I-3
PVA: Administrative reviews of the antidumping duty order for China

Date results published	Period of review	Producer or exporter	Margin
May 15, 2006 (71 FR 27991)	8/11/2003 - 9/30/2004	SVW	0.04 ¹
		All others	97.86
October 23, 2006 (71 FR 62086)	10/1/2004 - 9/30/2005	SVW	0.00
		All others	97.86

¹ On June 21, 2006, Commerce amended its final SVW margin results from 0.04 percent to 0.03 percent (*de minimis*). Amended final results, 71 FR 35616, June 21, 2006.

Note.— On November 27, 2006, Commerce initiated an administrative review for the period of review October 1, 2005-September 30, 2006. This administrative review, however, was rescinded. Review rescinded, 72 FR 16766, April 5, 2007.

Source: Cited *Federal Register* notices.

¹⁷ SVW’s foreign producer questionnaire response, section II-17-a.

¹⁸ *Polyvinyl Alcohols*, March 2007, *Chemical Economics Handbook*, SRI Consulting, p. 580.1810 F.

¹⁹ See, e.g., DC Chemical’s foreign producer questionnaire response, section II-17-a and *Polyvinyl Alcohols*, March 2007, *Chemical Economics Handbook*, SRI Consulting, p. 580.1811 N.

²⁰ No duty absorption findings were made for any of the subject countries.

Results of Five-Year Reviews

Table I-4 presents the margins calculated by Commerce in its original investigations and first reviews.

Table I-4
PVA: Commerce's original and first five-year review antidumping duty margins for producers/exporters, by subject country

Producer/exporter	Original margin (percent)	First five-year review margin (percent)
China¹		
Sinopec Sichuan Vinylon Works	6.91	5.51
All others	97.86 ²	97.86
Japan³		
Denki Kagaku Kogyo Kabushiki Kaisha	144.16	144.16
Japan VAM & POVAL Co., Ltd.	144.16	144.16
Kuraray Co., Ltd.	144.16	144.16
The Nippon Synthetic Chemical Industry Co., Ltd.	144.16	144.16
All others	76.78	76.78
Korea⁴		
DC Chemical Company, Ltd.	38.74	38.74
All others	32.08	32.08
¹ Antidumping duty order, 68 FR 56620, October 1, 2003; final results of first expedited sunset review, 73 FR 57597, October 3, 2008. ² Correction notice, 68 FR 58169, October 8, 2003. ³ Antidumping duty order, 68 FR 39518, July 2, 2003; final results of first expedited sunset review, 73 FR 57597, October 3, 2008. ⁴ Antidumping duty order, 68 FR 56621, October 1, 2003; final results of first expedited sunset review, 73 FR 57597, October 3, 2008. Source: Cited <i>Federal Register</i> notices.		

DISTRIBUTION OF CONTINUED DUMPING AND SUBSIDY OFFSET ACT FUNDS

The Continued Dumping and Subsidy Offset Act of 2000 (“CDSOA”) (also known as the Byrd Amendment) provides that assessed duties received pursuant to antidumping or countervailing duty orders must be distributed to affected domestic producers for certain qualifying expenditures that these producers incur after the issuance of such orders.²¹ During the review period, qualified U.S. producers of PVA were eligible to receive disbursements from the U.S. Customs and Border Protection (“Customs”) under CDSOA relating to three antidumping duty orders on the subject product beginning in Federal fiscal year 2003.^{22 23} No disbursements have been made with respect to the order in place for Korea. In 2007 and 2008, DuPont received the only disbursements made from the order in place for China, in the amount of \$67.63 and \$177,878.35. In 2003 and 2004, Celanese received disbursements from the order in place for Japan in the amount of \$225,561.61 and \$60,738.02, respectively. In 2004, 2006, 2007, and 2008 DuPont received disbursements from the order in place for Japan in the amount of \$429.60;

²¹ Section 754 of the Tariff Act of 1930, as amended (19 U.S.C. § 1675(c)).

²² 19 CFR 159.64 (g).

²³ The Federal fiscal year is October 1-September 30.

\$1,025,212.14; \$1,044,902.95; and \$63,542.72. In 2005, no disbursements were made from the order in place for Japan.²⁴

THE SUBJECT MERCHANDISE

Commerce's Scope

The imported product subject to the antidumping duty orders under review, as defined by Commerce in its original orders, is PVA.

This product consists of all PVA hydrolyzed in excess of 80 percent, whether or not mixed or diluted with commercial levels of defoamer or boric acid, except as noted below. The following products are specifically excluded from the scope of these orders:

(1) PVA in fiber form. (2) PVA with hydrolysis less than 83 mole percent and certified not for use in the production of textiles. (3) PVA with hydrolysis greater than 85 percent and viscosity greater than or equal to 90 cps. (4) PVA with a hydrolysis greater than 85 percent, viscosity greater than or equal to 80 cps but less than 90 cps, certified for use in an ink jet application. (5) PVA for use in the manufacture of an excipient or as an excipient in the manufacture of film coating systems which are components of a drug or dietary supplement, and accompanied by an end-use certification. (6) PVA covalently bonded with cationic monomer uniformly present on all polymer chains in a concentration equal to or greater than one mole percent. (7) PVA covalently bonded with carboxylic acid uniformly present on all polymer chains in a concentration equal to or greater than two mole percent, certified for use in a paper application. (8) PVA covalently bonded with thiol uniformly present on all polymer chains, certified for use in emulsion polymerization of non-vinyl acetic material. (9) PVA covalently bonded with paraffin uniformly present on all polymer chains in a concentration equal to or greater than one mole percent. (10) PVA covalently bonded with silan {sic}²⁵ uniformly present on all polymer chains certified for use in paper coating applications. (11) PVA covalently bonded with sulfonic acid uniformly present on all polymer chains in a concentration level equal to or greater than one mole percent. (12) PVA covalently bonded with acetoacrylate uniformly present on all polymer chains in a concentration level equal to or greater than one mole percent. (13) PVA covalently bonded with polyethylene oxide uniformly present on all polymer chains in a concentration level equal to or greater than one mole percent. (14) PVA covalently bonded with quaternary amine uniformly present on all polymer chains in a concentration level equal to or greater than one mole percent. (15) PVA covalently bonded with diacetoneacrylamide uniformly present on all polymer chains in a concentration level greater than three mole percent, certified for use in a paper application.²⁶

²⁴ Customs' *CDSOA Annual Reports 2003-08*, http://www.cbp.gov/xp/cgov/trade/priority_trade/add_cvd/cont_dump/, retrieved on February 5, 2009.

²⁵ Staff believes that the appropriate term is "silane."

²⁶ *Final Results of the Expedited Sunset Reviews of the Antidumping Duty Orders*, 73 FR 57596, October 3, 2008.

Tariff Treatment

Polyvinyl alcohol is imported under Harmonized Tariff Schedule of the United States (“HTS”) subheading 3905.30.00 and enters the United States at a column-1 general duty tariff rate of 3.2 percent *ad valorem* for imports from countries with normal trade relations, including China, Japan, and Korea. The tariff rate remains unchanged since the original investigations.

Description and Applications²⁷

PVA is a water-soluble synthetic polymer, usually sold as a white granular solid or in powdered form. PVA can be categorized on the basis of the degree of hydrolysis, the viscosity of an aqueous solution, and the average molecular weight of the finished product. PVA is very stable in dry form. It is nontoxic and therefore considered safe to handle and relatively environmentally friendly. Care must be taken, however, to minimize airborne dust concentrations during shipping and storage to reduce the potential for dust explosions.

The degree of hydrolysis is determined by the percentage of acetate groups in the polyvinyl acetate feedstock that are replaced by hydroxyl groups in the finished PVA. Fully hydrolyzed PVA has a replacement percentage in excess of 98 percent. The viscosity (resistance to shear stress or flow) of an aqueous solution of PVA increases as the molecular weight of the PVA increases. The molecular weight is determined by the average length of the polymer chain in the finished product in terms of monomer units. Low-viscosity grades tend to have PVA chain lengths as low as 300 monomer units, with average molecular weights around 45,000 to 55,000 unified atomic mass units (u), whereas high-viscosity, fully hydrolyzed grades have PVA chain lengths up to 3,500 monomer units and average molecular weights around 200,000 to 225,000 u. The degree of hydrolysis of PVA affects a variety of PVA properties, such as solution interfacial tensions, compatibility, reaction kinetics, rheology, and water solubility.

In the United States, PVA is used primarily as an intermediate in the production of polyvinyl butyral (PVB), which is an adhesive used between panes of automotive safety glass or load-resistant architectural glass. PVA is also used in the textile and paper industries in sizing formulations; as a binder in adhesive and soil binding formulations; and as an emulsion or polymerization aid in colloidal suspensions, water-soluble films, cosmetics, and joint compounds.

For most applications, PVA is dissolved in an aqueous solution. PVA’s solubility behavior in water depends on several factors, including degree of polymerization, degree of hydrolysis, drying temperature, particle size, and molecular weight. PVA polymers possess variable solubility properties, ranging from soluble in cold (room temperature) water to soluble only in hot water. For example, PVA of 88 percent hydrolysis is soluble in both cold and hot water, whereas 98 percent hydrolyzed PVA may be soluble only in hot water. All other characteristics being equal, the higher the degree of hydrolysis, the lower the solubility. By altering certain product characteristics, however, solubility can be changed. All standard grades of PVA, regardless of degree of hydrolysis, must be “cooked” to achieve complete solubility. At the end of the saponification process²⁸ PVA is a hard solid suitable for grinding into granular or powdered form.

PVA is sold in a variety of standard and specialty grades, each grade varying according to its molecular weight and the degree of hydrolysis. According to the petitioners in the original investigations,

²⁷ In general, the information contained in this section was drawn from the publication for the original investigations, *Polyvinyl Alcohol from Germany and Japan, Invs. Nos. 731-TA-1015 and 1016 (Final)*, USITC Publication 3604, June 2003, and from the ***, on December 3, 2008.

²⁸ Saponification is the chemical reaction in which an ester is heated with aqueous alkali to form an alcohol and the sodium salt of the acid corresponding to the ester.

the degree of hydrolysis is commonly denoted as super (more than 99 percent hydrolyzed), fully (98-99 percent hydrolyzed), intermediate (90-98 percent hydrolyzed), and partial (85-89 percent hydrolyzed).²⁹

The specific performance of various grades of PVA varies with the degree of hydrolysis and viscosity. For example, the greater the degree of hydrolysis, the better the water resistance. For this reason, in adhesive applications that require water resistance, a fully hydrolyzed grade of PVA is used. On the other hand, in adhesive applications that do not require water resistance, a partially hydrolyzed PVA may be used. Similarly, paper manufacturers select a specific grade of PVA depending on the property required for the paper. Grease and water resistance, ink receptivity, and other components of the size solution determine grade selection. In the textile market, where PVA is used as a warp sizing for yarns to prevent breakage during weaving, various grades of PVA are selected for use depending on the yarn, machine type, other components of the sizing solution (e.g., starch), required viscosity, abrasion resistance, and ease of solution removal after fabric weaving.

Although all grades of PVA are not completely interchangeable with other grades, more than one grade may be sold to specific end-use markets. For example, fully hydrolyzed PVA can be used in many of the same end uses in which intermediate or partially hydrolyzed PVA can be used, such as textiles, paper, and adhesives. The same grade of PVA is frequently sold for different commercial uses, and many end users are able to use a wide range of grades. However, many applications have evolved using particular grades such that substitution, although possible, could involve some cost and time to reformulate, and end users tend to avoid changing the grade of PVA they use in their applications because their formulas and process parameters might have to be adjusted. Because it is a synthetic water soluble polymer with unique characteristics, PVA has few substitutes for most end-use applications.

Manufacturing Processes³⁰

PVA is generally manufactured by first polymerizing the vinyl acetate monomer (VAM) into polyvinyl acetate and then hydrolyzing the acetate groups with methanol in the presence of anhydrous sodium methylate or aqueous sodium hydroxide at moderate temperatures and pressures. This is a continuous process in which the end-product is PVA hydrolyzed in excess of 80 percent. All of the U.S. producers and respondents use some form of a continuous manufacturing process to make PVA.

Acetic acid, a by-product, could either be recycled to produce VAM or sold in the acetic acid market. Given the high-volume need for acetic acid in the production of VAM, in general producers return the by-product to their own production process rather than sell it on the market.

***.³¹ Solutia internally consumes all of its PVA to make PVB.³² DuPont has internally consumed *** of its production in each year during review period. All of this PVA was used by DuPont to manufacture PVB.³³

²⁹ The definitions of fully, intermediate, and partially hydrolyzed PVA in terms of degrees of hydrolysis vary somewhat within the industry.

³⁰ In general, the information contained in this section was drawn from the publication for the original investigations, *Polyvinyl Alcohol from Germany and Japan, Invs. Nos. 731-TA-1015 and 1016 (Final)*, USITC Publication 3604, June 2003, and from the ***, on December 3, 2008.

³¹ Celanese's producer questionnaire response, section II-9.

³² Solutia's producer questionnaire response, section II-9 and hearing transcript (open session), p. 131 (Feast).

³³ DuPont's producer questionnaire response, section II-9 and hearing transcript (open session), p. 27 (Korte).

DOMESTIC LIKE PRODUCT ISSUES

In its original determinations, the Commission defined the domestic like product as all domestically produced PVA meeting the specifications stated in Commerce's scope definition, and it defined the domestic industry as all domestic producers of PVA.³⁴ Celanese and DuPont indicated in their joint response to the Commission's notice of institution in these reviews that they do not object to the Commission's definition of domestic like product.³⁵ Korean producer DC Chemical and Chinese producer Anhui Wanwei indicated that they agree with the Commission's definitions of domestic like product and domestic industry.³⁷ Domestic producer Solutia, Chinese producer Hunan Xiangwei, and Japanese producer JVP did not indicate their positions on the Commission's definitions.³⁸ DC Chemical's draft questionnaire comments requested that the Commission collect information regarding the expansion of the domestic like product to include some of the excluded products.³⁹ The domestic producers, however, verified that they produce little to no excluded products.⁴⁰

³⁴ *Polyvinyl Alcohol from Germany and Japan, Invs. Nos. 731-TA-1015 and 1016 (Final)*, USITC Publication 3604, June 2003, p. 6.

³⁵ Celanese and DuPont's joint response to the notice of institution, p. 4. Celanese and DuPont indicated that they do object to the Commission's definition of the domestic industry as it includes Solutia as a domestic producer. They argued that Solutia should be excluded from the domestic industry because it imports the subject merchandise and would benefit from LTFV imports. Accordingly, these two producers urged the Commission to exclude Solutia from the definition of the domestic industry and suggested that the domestic industry be defined for purposes of this sunset review as only "those producers whose collective output of the domestic like product constitutes a major proportion of the total domestic production of the product." Ibid. However, Solutia reported that it does not import PVA. Hearing transcript (open session), p. 131(Feast). ***. Original Staff Report (INV-AA-056, May 27, 2003), Table III-4 and nn. 3,4.

³⁶ Celanese and DuPont also indicated that they believe that the Commission should apply the statutory captive production provision whereby it would focus primarily on the merchant market for the domestic like product, as it did in the original investigations. Celanese and DuPont's joint response to the notice of institution, p. 4. The Commission has previously stated, however, that the statutory captive production provision does not apply to five-year reviews. *See, e.g., Polyethylene Terephthalate Film, Sheet and Strip from India and Taiwan, Inv. Nos. 701-TA-415 (Review) and 731-TA-933-934 (Review)*, USITC Publication 3994 April 2008, p. 18, n. 123.

³⁷ DC Chemical's response to the notice of institution, p. 5 and Anhui Wanwei's response to the notice of institution, p. 4.

³⁸ Solutia's response to the notice of institution; Hunan Xiangwei's response to the notice of institution; and JVP's response to the notice of institution.

³⁹ Comments from Choi Byung Young, KPMG-Korea (on behalf of DC Chemical Co., Ltd.), September 30, 2008.

⁴⁰ Solutia's response, October 6, 2008 and Celanese and DuPont's response, October 6, 2008. In 2007, *** reported that it produced *** pounds of excluded forms of PVA. It reported *** production of excluded forms of PVA for January-September 2008.

U.S. MARKET PARTICIPANTS

U.S. Producers

As was the case in the original investigations, there are currently three producers of PVA in the United States: (1) Celanese; (2) DuPont; and (3) Solutia. These three firms account for 100 percent of the U.S. production of PVA. Domestic production of PVA is in Texas, Kentucky, Michigan, and Massachusetts. Details regarding each firm's production location(s), shares of 2002 and 2007 PVA production, and position on the orders are presented in table I-5.

Table I-5

PVA: U.S. producers, position on the petition, shares of U.S. production in 2002 and 2007, and U.S. production locations

Firm	Production locations	Share of production		Positions on the continuation of the orders
		2002	2007	
Celanese ¹	Calvert City, KY Pasadena, TX	***	***	Support
DuPont ²	La Porte, TX	***	***	Support
Solutia ³	Springfield, MA Trenton, MI	***	***	Oppose

¹ Celanese acquired the PVA business of Air Products in September 2000. *Staff Report*, May 27, 2003 (INV-AA-056), pp. III-2. Celanese is a publicly traded company on the New York Stock Exchange.
² DuPont is a publicly traded company on the New York Stock Exchange.
³ Solutia is a publicly traded company on the New York Stock Exchange.

Source: *Staff Report*, May 27, 2003 (INV-AA-056), pp. III-4 and compiled from data submitted in response to Commission questionnaires.

Celanese and DuPont manufacture PVA for the merchant market and for internal consumption in the production of downstream products while Solutia produces PVA only for internal consumption.⁴¹ Celanese reported that it *** and ***.⁴² DuPont reported that it ***.⁴³ Solutia reported that it is not a U.S. importer of PVA from any subject or nonsubject country.⁴⁴ All three domestic producers reported that they do not have any related firms (domestic or foreign) engaged in importing or exporting PVA from any of the subject countries or any other country to the United States.⁴⁵

⁴¹ Hearing transcript (open session), p. 16 (Purvis); hearing transcript (open session), pp. 26-27 (Korte); and hearing transcript (open session), p. 131 (Feast).

⁴² Celanese's importer questionnaire response, section II-11-b and II-12-a and b.

⁴³ DuPont's importer questionnaire response, section II-10-a and b.

⁴⁴ Solutia's producer questionnaire response, section II-14 and Hearing transcript (open session), p. 131 (Feast).

⁴⁵ Celanese's producer questionnaire response, section I-5 and I-6; DuPont's producer questionnaire response, section I-5 and I-6; and Solutia's producer questionnaire response, section I-5 and I-6.

Celanese AG purchased the polyvinyl alcohol business from Air Products on September 28, 2000.⁴⁶ The stated purpose for the acquisition was to transform the chemical operations into a higher value-added business.⁴⁷ On April 6, 2004, an indirect wholly-owned subsidiary of Celanese Corporation (that was also an affiliate of investment banking firm, The Blackstone Group)⁴⁸ acquired approximately 84 percent of the ordinary shares of Celanese AG.⁴⁹ In November 2004, the affiliate reorganized, became a Delaware corporation, and changed its name to Celanese Corporation.⁵⁰ In January 2005, Celanese Corporation's initial public offering was completed.⁵¹

DuPont has been producing PVA in La Porte, TX since 1972.⁵² DuPont's PVA production at this facility is limited to fully hydrolyzed grades.⁵³

On December 17, 2003, Solutia filed a voluntary petition for reorganization under Chapter 11 of the U.S. Bankruptcy Code.⁵⁴ On November 29, 2007, the U.S. Bankruptcy Court for the Southern District of New York confirmed Solutia's plan of reorganization and approved the company's exit from bankruptcy.⁵⁵ On February 28, 2008, Solutia emerged from Chapter 11 reorganization.⁵⁶

U.S. Importers

In the original investigations, the Commission sent importer questionnaires to 28 firms believed to be either importers of PVA from the subject countries or importers from significant nonsubject sources; in addition, each of the three U.S. producers received importer questionnaires.⁵⁷ Responses to the Commission's importer questionnaires in the final phase of the original investigations were received from 16 companies.⁵⁸ DC Chemical, of Korea, reported in its response to the Commission's notice of institution in these reviews that there have been no imports of subject merchandise from Korea since the

⁴⁶ Third quarter 2000 report of Celanese AG filed November 2, 2000, p. 10 (as filed). Retrieved from EDGAR on January 29, 2009.

⁴⁷ Ibid. Celanese AG (Aktiengesellschaft, "AG") was formed from the basic chemicals, acetates, performance products and technical polymers businesses transferred from Hoechst AG in a demerger that became effective on October 22, 1999. Registration statement of Celanese AG on Form F-1 filed on October 25, 1999, pp. 47-48 (as filed). Retrieved from EDGAR on January 30, 2009.

⁴⁸ Celanese Corp. Annual report on Form 10-K for the fiscal year ended December 31, 2006, p. 4 (as filed) and Note 2, pp. F-8-13 (as filed). Retrieved from EDGAR on January 29, 2009. The purchaser was Celanese Europe Holding GmbH & Co. KG, formerly known as BCP Crystal Acquisition GmbH & Co. KG.

⁴⁹ Ibid. The balance of these shares was acquired by January 2007. Ibid.

⁵⁰ Celanese Corp. Annual report on Form 10-K for the fiscal year ended December 31, 2006, p. 4 (as filed) and Note 2, pp. F-8-13 (as filed). Retrieved from EDGAR on January 29, 2009. The purchaser was Celanese Europe Holding GmbH & Co. KG, formerly known as BCP Crystal Acquisition GmbH & Co. KG.

⁵¹ Ibid.

⁵² *Polyvinyl Alcohol from Taiwan, Inv. No. 731-1088 (Preliminary)*, USITC Publication 3732, October 2004, p. III-1.

⁵³ Hearing transcript (open session), p. 26 (Korte).

⁵⁴ <http://www.solutia.com/reorganization/caseinfo.asp>, retrieved February 19, 2009.

⁵⁵ <http://investor.solutia.com/phoenix.zhtml?c=88803&p=irol-newsArticle&ID=1113553&highlight=>, retrieved February 19, 2009.

⁵⁶ Ibid.

⁵⁷ *Polyvinyl Alcohol from Germany and Japan, Invs. Nos. 731-1015 and 1016 (Final)*, USITC Publication 3604, June 2003, p. IV-1.

⁵⁸ Ibid.

imposition of the antidumping duty order.⁵⁹ Japan VAM POVAL (“JVP”), believed to be the ***⁶⁰ producer of subject merchandise in Japan, reported in its response to the Commission’s notice of institution in these reviews that, with respect to its exports of subject merchandise, *** have imported subject merchandise from Japan since 2003.⁶¹ Celanese and DuPont in their joint response to the Commission’s notice of institution in these reviews, listed nine U.S. importers of subject merchandise; while domestic producer Solutia provided in its response to the Commission’s notice of institution a listing of 75 U.S. importers of PVA.⁶² Staff cross-referenced these listings with information compiled by Customs and Border Patrol (“Customs”) and issued questionnaires to all of the largest importers.

In response to the Commission importers’ questionnaires issued in these reviews, the 13 firms identified in table I-6 supplied information regarding imports of within-scope PVA and, in some cases, excluded forms of PVA . Included are ***. In addition, five firms confirmed imports of excluded forms of PVA exclusively.⁶³

Table I-6
PVA: Reported U.S. imports, by importer and by source of imports, 2007

* * * * *

U.S. Purchasers

As shown in table I-7, 13 purchasers have supplied usable data in response to Commission purchaser questionnaires issued in these reviews.⁶⁴ Responding firms were concentrated along the east coast, including New York, North Carolina, South Carolina, and Virginia. Additionally, the Commission received purchaser responses from companies located in Missouri, Texas, Michigan, and Indiana. The responding purchasers represented firms in a variety of domestic industries, including adhesive and emulsion polymerization producers, ceramic manufacturers, PVB producers, paper producers, and distributors.

Table I-7
PVA: U.S. purchasers’ PVA suppliers and country source of PVA purchased, 2003-08

* * * * *

⁵⁹ *Response* of DC Chemical, July 22, 2008, p. 3.

⁶⁰ *Polyvinyl Alcohols*, March 2007, *Chemical Economics Handbook*, SRI Consulting, p. 580.1811 N.

⁶¹ *Response* of JVP, July 22, 2008, p. 7.

⁶² Celanese and DuPont’s joint response to the notice of institution, p. 16, and Solutia’s response to the notice of institution, p. 3.

⁶³ The five firms are ***. Email from ***, December 11, 2008. Two firms certified to the Commission that they had not imported PVA from any country at any time since January 1, 2003 (***) and ***). Four firms did not respond to the Commission’s importer questionnaire (***)).

⁶⁴ Purchases reported by these firms accounted for approximately *** percent of apparent U.S. consumption in 2007.

APPARENT U.S. CONSUMPTION AND MARKET SHARES

Table I-8 presents U.S. shipments, imports, and apparent U.S. consumption of PVA for 2003-07, January-September 2007, and January-September 2008. Table I-9 presents total U.S. consumption and market shares for the same period, and table I-10 presents open-market consumption and market shares. Apparent U.S. consumption (both open-market and total) increased between 2003 and 2004 and then remained relatively stable through 2007. Apparent U.S. consumption reported during January-September 2008 was lower than the level reported during the same period in 2007. Market shares generally did not shift dramatically during the period for which data were collected, although the shares held by imports from each of the subject countries declined overall, while those held by imports from nonsubject countries, including Taiwan, grew.

Table I-8

PVA: U.S. shipments of domestic product, U.S. imports, by sources, and apparent U.S. consumption, 2003-07, January-September 2007, and January-September 2008

* * * * *

Table I-9

PVA: Total U.S. consumption and market shares, 2003-07, January-September 2007, and January-September 2008

* * * * *

Table I-10

PVA: Open-market U.S. consumption and market shares, 2003-07, January-September 2007, and January-September 2008

* * * * *

Note.— Data on U.S. imports of PVA from China, Korea, Taiwan, and all other (nonsubject) countries are public and can be found in table IV-1.

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

CHANNELS OF DISTRIBUTION/ MARKET CHARACTERISTICS

PVA is used in a wide variety of end-use products, of which PVB (polyvinyl butyral) is by far the highest-volume in the United States.¹ Other high-volume end uses for PVA include textiles, paper (coated paperboard), adhesives, and emulsion polymerization (adhesives, coatings, and engineered fabrics). PVA is also used in the manufacture of a wide variety of other products including building materials, biodegradable health care products, ceramics, and film.

Only Celanese and DuPont produce PVA in the United States for sale on the open market. Solutia produces PVA for the production of PVB and purchases domestic PVA, but does not sell PVA on the open market. DuPont and Celanese produce PVA for most major applications; in contrast, Solutia produces PVA ***for PVB applications. According to Celanese, the vast majority of the PVA market (excluding Solutia) is highly fragmented, with most customers purchasing on average between 100 and 150 tons (200,000-300,000 pounds) per year.²

Shipments of PVA by U.S. producers and importers to distributors and end users are shown in table II-1. Responding domestic U.S. producers sold PVA primarily to end users. The share to end users decreased slightly from *** percent in 2003 to *** percent in 2007. Available data indicate that U.S. importers also sold primarily to PVA end users. For shipments of imports from China, *** throughout the period were to end users. While the *** of shipments of PVA imported from Japan were to distributors in 2003 (*** percent) and 2004 (*** percent), *** were to end users in 2005-07. Although imports from Korea have diminished since the issuance of the antidumping order, in 2000-02, they were primarily sold to end users. The share of shipments of PVA imported from Taiwan to end users increased from *** percent in 2003 to *** percent in 2007.

¹ ***.

² Celanese noted that there is “much less buying power across most of the domestic industry than what we see from purchasers like Solutia.” Hearing transcript (open session), p. 118 (Purvis).

Table II-1

PVA: U.S. producers' and importers' U.S. shipments of PVA, by sources and channels of distribution, 2003-07, and January-September 2008¹

Item	Calendar year					
	2003	2004	2005	2006	2007	Jan.-Sept. 2008
Share of reported shipments (percent)						
Domestic producers' U.S. shipments of PVA to:						
Distributors	***	***	***	***	***	***
End users	***	***	***	***	***	***
U.S. importers' U.S. shipments of PVA from China to:						
Distributors	***	***	***	***	***	***
End users	***	***	***	***	***	***
U.S. importers' U.S. shipments of PVA from Japan to:						
Distributors	***	***	***	***	***	***
End users	***	***	***	***	***	***
U.S. importers' U.S. shipments of PVA from Taiwan to:						
Distributors	***	***	***	***	***	***
End users	***	***	***	***	***	***
U.S. importers' U.S. shipments of PVA from all other countries to:						
Distributors	***	***	***	***	***	***
End users	***	***	***	***	***	***
¹ Data for Korea are not available.						
Note.--Data for domestic producers include only U.S. commercial shipments.						
Source: Compiled from data submitted in response to Commission questionnaires.						

U.S. purchasers were asked to describe their firms with respect their purchases of PVA. Thirteen purchasers responded to the Commission's questionnaire; their responses are summarized in the following tabulation.³

Number of firms	Type of company
6	Adhesive producers (packaging, woodworking, bookbinding, paper converters).
5	Emulsion polymerization producer (adhesives, coatings, carpet, building and construction materials, engineered fabrics).
1	Distributor
1	PVB producer
1	Building products producer
1	Ceramics producer
1	Paper producer (coated paperboard).
1	Pharmaceutical products producer (water soluble packaging films)
1	Speciality polyvinyl alcohol film producer
Note.--A number of firms reported producing products in more than one of these categories.	
Source: Compiled from data submitted in response to Commission questionnaires.	

³ Information on the source of the PVA purchased by the firms that responded to the Commission's purchaser questionnaire is presented in Part I of this report.

Overall reported purchases by the 13 responding U.S. purchasers increased by 35.7 percent between 2003 and 2007. Of the responding U.S. purchasers, *** was the predominant purchaser, accounting for *** percent of the total reported purchases in 2007.⁴ Other responding purchasers included *** (** percent), *** (** percent), *** (** percent), and *** (** percent).⁵

Overall, in 2007, two of the responding purchasers reported that they only purchased domestically produced PVA;⁶ one reported buying Chinese PVA; one firm reported *** of Japanese PVA (in addition to PVA from Taiwan); and the remaining firms reported buying PVA from nonsubject sources such as, Germany, Malaysia, Mexico, Singapore, Spain, and Taiwan.⁷ U.S. purchasers reported having actual marketing/pricing country of origin knowledge for PVA from China, Japan, Singapore, Taiwan, Germany, and Korea.

Purchasers were asked to discuss any changes in their purchasing patterns since 2003.⁸ Of the 11 purchasers that responded with regard to their purchases of domestic PVA, 6 of these firms reported increases in their purchases, 3 reported constant purchases and 1 firm reported a decrease in purchases of U.S.-produced PVA. Reasons given for increased purchases of domestic PVA include increased demand for end product (PVB film), addition of new business, and limited number of PVA suppliers. The one firm that reported a decrease, ***, stated that the domestic material was **. Three purchasers reported trends in their purchases of Chinese PVA, with two reporting no change and one reporting fluctuations in purchases due to fluctuations in the demand for its end product that uses PVA.⁹ Of the five firms providing information on trends in purchases of Japanese PVA, two reported decreases, two reported no changes and one reported fluctuations. Reasons given for the decrease in purchases of Japanese PVA include restricted supply and uncompetitive prices due to antidumping duty order. With regard to imports of PVA from Korea, two firms reported that their purchases were constant and one reported fluctuations. Several firms reported increasing purchases of PVA from nonsubject countries, including Germany, Singapore, and Taiwan. *** and *** reported that they increased their purchases from ***, ***, and *** to diversify sources of supply. *** reported that it increased its purchases from *** following a declaration of force majeure by domestic manufacturers. *** also reported that its purchases of PVA from *** and *** increased because its business has grown and ***.¹⁰

⁴ *** reported purchasing *** pounds of domestic PVA in 2003 and *** pounds in 2007. While the Commission's purchaser questionnaire requested purchase data for January-September 2008, *** also provided purchase data for the full calendar year 2008 ***.

⁵ ***.

⁶ U.S. purchasers' questionnaire, section II-3.

⁷ Purchasers were asked if they competed for PVA sales with the manufacturers or importers from which they purchased PVA. Four of the responding purchasers, ***, indicated that they did compete for sales of PVA with their suppliers. *** reported that ***. *** reported that ***.

⁸ Purchasers were asked to indicate the trend in their purchases of PVA from each country source and to provide an explanation for that trend.

⁹ One of the firms reporting no change in purchases was ***.

¹⁰ *** also reported that PVA producers in Taiwan have a very innovative supply of resins and having access to PVA from Taiwan is critically important to be globally competitive in ***.

SUPPLY AND DEMAND CONSIDERATIONS¹¹

U.S. Supply¹²

Based on available information, staff believes that U.S. producers of PVA have the ability to respond to changes in demand with moderate shipments to the U.S. market. The main contributing factors to the moderate degree of responsiveness of supply are the existence of some unused capacity, the existence of alternate markets, and moderate inventories; however, supply responsiveness may be constrained by forces such as weather and VAM production that have disrupted/affected U.S. production operations during the review period and by an inability to produce alternate products. Factors contributing to this degree of responsiveness are discussed below.

U.S. Industry Capacity

Total U.S. capacity to produce PVA increased from *** pounds in 2003 to *** pounds in 2007. Capacity utilization hovered near *** percent in each year except 2005, when it reached *** percent. U.S. producers' capacity utilization rates were *** percent in January-September 2007 and *** percent during January-September 2008. Because of high fixed costs involved in the production of PVA, U.S. producers reported that it is important to maintain a high capacity utilization rate. Nonetheless, the reported level of capacity utilization indicates that U.S. producers of PVA may still have some available capacity with which they could increase production of PVA in the event of a price change.¹³ Celanese, DuPont, and Solutia provided additional comments on capacity, which are shown in the following tabulation.¹⁴

* * * * *

U.S. Inventory Levels

End-of-period inventories declined from *** pounds in 2003 to *** pounds in 2004, and to *** pounds by 2007. Inventories were *** pounds in interim 2007 and in interim 2008. End-of-period inventories were equivalent to a high of *** percent of total shipments in 2003 and a low of *** percent in 2007. End-of-period inventories, relative to total U.S. shipments, increased from *** percent during interim 2007 to *** percent during interim 2008. *** reported that the recent economic crisis and reduction in demand for PVA *** limited its ability to build up inventories. *** reported that its inventory levels had been adversely affected by production stoppages, shutdowns at its U.S. plants, raw materials shortages, hurricanes, and unplanned power outages. These declining inventory levels suggest that U.S. producers may be somewhat limited in their ability to use inventories to respond to price changes in the short term.

¹¹ Short-run effects discussed in the supply and demand sections refer to changes that occur within 12 months, unless otherwise indicated.

¹² More detailed data on U.S. PVA production, production capacity, capacity utilization, inventories, and exports are shown in Part III.

¹³ At the hearing, DuPont reported that, during the period of review, its facilities did produce all the PVA that they could. Hearing transcript (open session), p. 116 (Korte). Celanese stated that, earlier in the period, its assets were not fully utilized but later in the period, they were more fully utilized. Celanese added that it sees "plenty of excess capacity to produce PVA today and in the foreseeable future." Ibid., p. 116 (Purvis).

¹⁴ U.S. producers' questionnaire, sections II-3 and II-6.

Alternative Markets

U.S. producers' exports of their U.S.-produced PVA increased irregularly from *** pounds in 2003 to *** pounds in 2007. U.S. producers' exports were *** pounds during interim 2007 and *** pounds during interim 2008. U.S. producers' export shipments, as a share of total shipments, fluctuated from *** percent in 2003 to *** percent in 2007, and were *** percent in interim 2007 compared to *** percent in interim 2008. This level of exports indicates that domestic producers have the ability to shift shipments to the U.S. market from other markets. *** reported that its principal export markets were ***, and products sold to domestic U.S. re-sellers that are destined for export. *** reported that its principal export markets were ***.¹⁵ Both DuPont and Celanese reported that the PVA products that they export are the same as those PVA products sold in the U.S. market.¹⁶

In response to a question on the ability of U.S. producers to shift sales of PVA between the U.S. market and alternative country markets, Celanese and DuPont reported the following in their questionnaire responses: ***

Production Alternatives

None of the three responding U.S. producers reported the ability to switch production between PVA and other products in response to a relative change in the price of PVA using the same equipment or machinery and/or production employees that were used to produce PVA.¹⁷

Production Constraints

U.S. producers, importers, and purchasers were asked to discuss any supply problems that occurred during the period of review. *** reported being unable to meet contractual commitments or shipments during certain periods since January 1, 2003.¹⁸ Celanese reported that its PVA customers were ***. According to Celanese, ***. Celanese noted that for the most part, ***. Celanese noted that it ***.¹⁹ DuPont reported that during the period of review, its facilities produced all the PVA that it could; there was one force majeure event driven by a hurricane in 2008 and there were also times when it had

¹⁵ U.S. producers were asked if exports of their U.S.-produced PVA were subject to any tariff or non-tariff barriers to trade in other countries. Only *** reported being affected by tariff and non-tariff barriers in other countries. *** reported that a PVA dumping case against the United States and other countries was filed in Korea in 2006 and resulted in the application of an antidumping duty of approximately 35 percent. (Korea imposed a duty on imports of PVA from the United States of 33.39 percent from December 12, 2006 through December 11, 2009. http://www.ktc.go.kr/en/kboard_child/list.jsp?bm=86&pg=3, retrieved February 19, 2009).

¹⁶ Hearing transcript (open session), pp. 70-71 (Korte and Purvis).

¹⁷ U.S. producers' questionnaire, section II-5.

¹⁸ ***.

¹⁹ Celanese reported that during the force majeure period, it made a commitment to its core customer base (i.e., its domestic contract customers) at the expense of participation in spot export markets during that time period. Celanese stated that there was "extremely minimal impact to our domestic customers during our period of force majeure and a very dramatic impact to...we took the hit in the export markets and the spot markets." Hearing transcript (open session), pp. 60-61 (Purvis).

small utility outages that resulted in some temporary delays in getting product to Solutia.^{20 21} DuPont noted that ***.²² According to DuPont,*** .

U.S. purchasers were asked to discuss any supply disruptions or problems that they experienced with PVA. Of the 13 responding purchasers, 9 firms reported that their suppliers of PVA placed them on allocation, declined to accept quantities requested, delivered less than the quantity promised, or otherwise departed from the normal course of supply. *** reported that *** placed it on allocation in *** following a hurricane and again during ***. *** also reported that *** put *** on allocation in *** and *** when ***. *** reported that these actions forced it to enter into long term agreements with other suppliers. Likewise, *** reported that they were affected by the force majeure at ***. *** asserted that, in ***, *** implemented a *** allocation for all contracts and the disruption was caused by production problems at ***. *** also noted *** instances for *** and *** for *** where PVA was shipped by trucks rather than by railcars between 2003 and 2008. *** reported that it was forced to adjust shipment schedules because *** was unable to ship during Hurricane Ike.

Solutia provided very detailed information on its difficulties in obtaining PVA from domestic suppliers. Solutia reported that during 2007-08, it experienced problems with PVA supply from *** as a consequence of production problems including: (1) *** were not shipping *** the volumes it requested and had under contract; (2) not shipping volumes in a timely fashion; (3) not shipping the quality agreed under contract; (4) *** on contracted volumes during this period for *** material; (5) *** forcing *** to accept a change in specification (lowering the quality) during contract negotiations for *** volume;²³ and (6)*** , and subsequently putting *** on *** percent allocation until further notice. *** placed customers on allocation in *** by *** and put *** on allocation. In May 2007, *** lowered the allocation for ***. *** subsequently lowered the allocation to *** percent and ***.

At the hearing Solutia noted that, in June 2007, Celanese experienced a problem at its acetic acid plant in Clear Lake, TX and placed Solutia on a 20-percent PVA allocation for five months. Solutia noted that that meant that Celanese did not supply Solutia with 80 percent of its contract volumes. According to Solutia, Celanese did not offer any alternative source of supply. At that point, Solutia went to DuPont to cover the shortfall, as Solutia also had a long-term supply contract with DuPont for PVA. Solutia reported that it encountered supply problems with DuPont, as well, and, on September 28, 2008, DuPont declared force majeure and placed Solutia on allocation at a level of 90 percent. Solutia stated that this allocation lasted throughout the fourth quarter of 2008.²⁴

Subject Imports from China, Japan, and Korea

Based on available information, producers in China, Japan, and Korea have the ability to respond to changes in demand with at least moderate changes in the quantity of shipments of PVA to the U.S. market. The main contributing factors are the availability of unused capacity and the existence of alternative markets.

²⁰ Hearing transcript (open session), p. 116 (Korte). In addition, DuPont provided detailed information on its supply problems and the steps that it took to address them in its posthearing brief. DuPont noted that ***. Celanese/DuPont's posthearing brief, Part II: Answers to Commission Questions, p. 5.

²¹ DuPont also noted that, ***. DuPont producer questionnaire response, section IV-19.

²² DuPont stated that ***. DuPont producer questionnaire response, section IV-19.

²³ Solutia reported that ***. Solutia's posthearing brief, pp. A2-A3. On this issue, DuPont reported that in ***. DuPont noted that, at that time, since Solutia ***. Celanese/DuPont's posthearing brief, Part II: Answers to Commission Questions, pp. 42-45.

²⁴ Solutia noted that this supply situation puts its PVB business at risk and jeopardizes the jobs of Solutia's 620 U.S. Saflex employees. Hearing transcript (open session), pp. 144-145 (Berezo).

China

One Chinese producer, SVW, responded to the Commission's foreign producer questionnaire. This firm accounted for *** of U.S. imports of PVA from China.²⁵ Based on available information, staff believes that the Chinese producer SVW has the ability to respond to changes in demand with moderate to large changes in the quantity shipped to the U.S. market due to the existence of alternative markets and inventories.

Industry Capacity

SVW's average production capacity remained constant from 2003 through 2007 at *** pounds and at *** pounds during the interim periods of 2007 and 2008. SVW reported that capacity utilization for PVA increased from *** percent in 2003 to *** percent in 2005 before declining to *** percent in 2007. SVW's capacity utilization was *** percent in interim 2007 and *** percent in interim 2008.

Alternative Markets

SVW reported that its products were shipped *** to its home market, *** to the European Union, *** to other Asian markets. SVW's total exports increased from *** pounds in 2003 to *** pounds in 2006 before declining to *** pounds in 2007. Exports in interim 2008 were *** pounds compared to *** pounds in interim 2007. Exports accounted for *** percent of total shipments in 2007 and *** percent during interim 2008.

Inventories

SVW reported that combined end-of-period inventory levels increased from *** pounds in 2005 to *** pounds in 2005 before declining to *** pounds in 2007. SVW's combined end-of-period inventories increased to *** pounds in interim 2008 from *** pounds in interim 2007. End-of-period inventories, relative to total shipments, decreased from *** percent during 2003 to *** percent in 2007.

Production Alternatives

SVW reported that it *** other products on the same equipment and machinery used in the production of PVA, *** production and related workers employed to produce PVA to produce other products. Furthermore, SVW reported that it is *** to switch production in response to a relative price change in PVA in the United States or elsewhere.

²⁵ SVW reported that it expects PVA shipments to the United States from subject countries will *** based on reports that ***.

Japan

Based on available information, staff believes that Japanese producers have the ability to respond to changes in demand with moderate to large changes in the quantity shipped to the U.S. market due to the level of their exports to other countries and inventories. One Japanese producer, JVP, responded to the Commission's foreign producers' questionnaire.²⁶ JVP reported *** in product range, mix, and marketing, between the United States and its home market. The company identified four PVA producers in Japan including: Kuraray, Nippon Goshsei, Denki Kagaku, and itself.

JVP reported that it *** a future change in terms of availability of PVA from Japan in the U.S. market.²⁷ *** inventories, *** capacity, and *** capacity utilization rates may constrain the ability of the responding Japanese producer to increase its shipments to the United States. JVP reported that it *** any changes in product range, product mix, or marketing of PVA in its home markets, for export to the United States, or to third-country markets.²⁸ JVP reported *** in the Japanese market over the last 2 to 3 years and that competition among Japanese producers has ***.²⁹ It also stated that its home market and those of its nearby Asian neighbors were ***.

Industry Capacity

JVP reported that its average production capacity increased irregularly from *** pounds in 2003 to *** pounds in 2005 before declining to *** pounds in 2007; capacity continued to decline from *** pounds in interim 2007 to *** pounds in interim 2008. JVP's capacity utilization rate for PVA increased from *** percent in 2003 to *** percent in 2007, but declined from *** percent in interim 2007 to *** percent in interim 2008.

Alternate Markets

JVP reported that the domestic Japanese and nearby Asian markets *** accounted for *** percent of its shipments. JVP's exports grew annually from *** pounds in 2003 to *** pounds in 2007. The company's total exports declined from *** pounds in interim 2007 to *** pounds in interim 2008. The company's exports were destined ***. Exports to Asia *** of JVP's total exports in 2007.

JVP reported that, consistent with its business plan, it has ***. According to JVP, shipments to *** markets have grown due to the ***. In 2008, JVP reported that it ***.

Inventories

JVP reported that its end-of-period inventories declined irregularly from *** pounds in 2003 to *** pounds in 2007, and also declined from *** pounds in interim 2007 to *** pounds in interim 2008. End-of-period inventories relative to total shipments decreased from *** percent during 2003 to *** percent in 2007.

²⁶ Questionnaires were sent to four Japanese producers. JVP is believed to account for approximately *** of Japanese production.

²⁷ Foreign producers' questionnaire, section III-10.

²⁸ Foreign producers' questionnaire, section III-12.

²⁹ Foreign producers' questionnaire, section III-24.

Production Alternatives

JVP reported that it *** other products on the same equipment and machinery used in the production of PVA, *** production and related workers employed to produce PVA to produce other products. Furthermore, JVP reported that it *** to switch production in response to a relative price change in PVA in the United States or elsewhere.³⁰

Korea

One Korean foreign producer, DC Chemicals, responded to the Commission's foreign producers' questionnaire.³¹ Based on available information, staff believes that Korean producer DC Chemicals has the ability to respond to changes in demand with moderate to large changes in the quantity shipped to the U.S. market due to the existence of alternative markets and inventories. DC Chemicals reported that ***.³² It also reported that it anticipated *** in terms of product range, product mix, or marketing of PVA in the U.S. market. The firm reported that there were *** during the manufacturing process between the PVA produced for its domestic market and that produced for export; however, grades can differ between domestic sales and exports due to the needs of each customer. DC Chemicals reported that it faces import competition from ***.

Industry Capacity

The sole responding Korean producer, DC Chemicals, reported that its capacity utilization for PVA declined from *** percent in 2003 to *** percent in 2005 before increasing to *** percent in 2007. DC Chemical's reported capacity was stable throughout this period at *** pounds.

Alternative Markets

DC Chemicals reported that its primary focus was on supplying PVA for ***.³³ DC Chemicals *** any significant changes in key export markets, although sales have ***. DC Chemicals' total exports declined irregularly from *** pounds in 2003 to *** pounds in 2007. The company increased its total exports during interim 2008 from *** pounds during interim 2007 to *** pounds during interim 2008. Shipments to Asia and the European Union comprised *** of the company's exports.

*** reported that there are *** contracts, other sales arrangements, or other constraints that would prevent or retard the firm from shifting PVA between the United States and alternative country markets within a 12-month period. However, the company indicated that *** shift shipments of PVA from one country to another easily, since each customer, regardless of market, ***. Furthermore, ***.

Inventories

DC Chemicals reported that its end-of-period inventories declined from *** pounds in 2003 to approximately *** pounds in 2007; end-of-period inventories increased from *** pounds in interim 2007

³⁰ Other Japanese producers, however, produce out-of-scope PVA products and have continued to export these products to the U.S. market ***.

³¹ DC Chemicals is believed to be the only producer of subject material in Korea.

³² Foreign producers' questionnaire, section III-10.

³³ DC Chemicals indicated that the domestic Korean market was *** and it anticipates *** significant changes in key export markets.

to *** pounds in interim 2008. DC Chemicals indicated that end-of-period inventories, relative to total shipments, decreased from *** percent in 2003 to *** percent in 2007.

Production Alternatives

DC Chemicals reported that it *** other products on the same equipment and machinery used in the production of PVA, ***. Furthermore, DC Chemicals also reported that it *** switch production in response to a relative price change in PVA in the United States or elsewhere.

U.S. Imports from Nonsubject Countries

U.S. imports of PVA from nonsubject countries accounted for *** percent of the quantity of total U.S. imports in 2007, with imports from Taiwan accounting for *** percent. With regard to the supply of imports of PVA from nonsubject sources, *** reported that Chang Chun Petrochemical (Taiwan) started up a new PVA plant in Jiangsu China in 2007. According to ***, this new PVA plant has an annual production capacity of *** tons. Chang Chun also announced its intention to *** the capacity of this plant to *** tons per year and also to increase the capacity of its Taiwan plant from *** to *** tons per year in 2009.

With regard to nonsubject imports, *** responding U.S. producers reported that there had been changes in PVA availability since 2003 from nonsubject countries. Three of the six responding U.S. importers reported that their ability to import PVA from nonsubject countries had changed since 2003. *** reported that imports from Taiwan had increased and that PVA was now available from Singapore. *** also noted the following with regard to the availability of nonsubject imports. “ ***.”

U.S. Demand

Based on available information, the overall demand for PVA is likely to change moderately in response to changes in price. The main contributing factors are the somewhat limited range of substitute products and the small share of PVA in most of its end-use products. However, some factors increase the responsiveness of demand, including the large cost share of PVA in some intermediate products and the existence of some substitutes.

Available data indicate that total apparent U.S. consumption of PVA increased from *** pounds in 2003 to *** pounds in 2007. However, apparent U.S. consumption of PVA declined from *** pounds in interim 2007 to *** pounds in interim 2008.

PVA is used mostly as an intermediate in the production of PVB, which is an adhesive used in the manufacture of automotive safety glass and load-resistant architectural glass. Data on U.S. apparent consumption of PVB resin indicate that consumption has increased from *** pounds in 2003 to *** pounds in 2006; projected apparent consumption of PVB resin for 2011 is *** pounds.³⁴ PVA is also used in the textile and paper industries in sizing formulations, as a binder in adhesive and soil binding formulations; and as an emulsion or polymerization aid in colloidal suspensions, water-soluble films, cosmetics, and joint compounds. The slowing of the general economy, and weakness in broad market sectors, such as automobiles, construction, and textiles, have reduced PVA demand.^{35 36} In particular, the

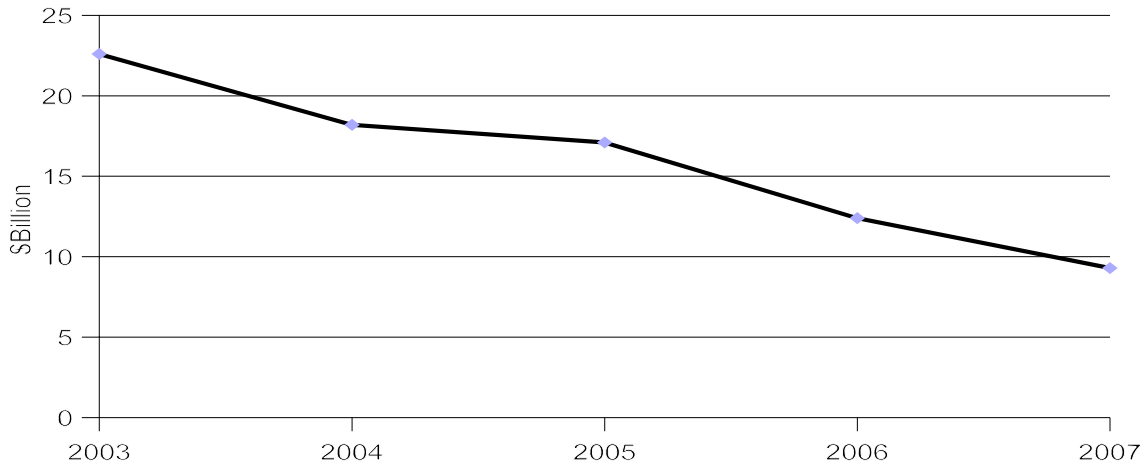
³⁴ *Polyvinyl Butryral*, April 2007, *Chemical Economics Handbook*, SRI Consulting, p. 580.1830 K.

³⁵ DuPont reported that since 2003, the textile industry has suffered in the United States through huge declines in its manufacturing as major suppliers such as Dan River, West Point Stevens and Springs either declared bankruptcy, were sold, or relocated offshore. DuPont also noted that similar declines in the U.S. automotive market have occurred over the last five years and more recently in 2008, the downturn in the construction and housing industry

(continued...)

annual shipment value of U.S. textile production fell continuously from \$22.6 billion in 2003 to \$9.3 billion in 2007, or by a total of 58.9 percent (figure II-1).

Figure II-1
U.S. textile production: Annual values of U.S. shipments of domestically produced textiles, 2003-07



Source: U.S. Census Bureau, M3 Series—Value of Manufacturers' Shipments, October 2008.

*** of the *** responding U.S. producers and all responding U.S. importers reported no changes in PVA end uses since 2003.³⁷ *** indicated that, although end uses for PVA have not changed, industrial production in the United States, particularly in industries such as textiles and automobile production, has declined and customers have gone out of business or relocated to lower cost countries. *** reported that the use of PVA in PVB applications has grown significantly in volume since 2003, largely due to growing demand in architectural and automotive applications.

Changes in U.S. Demand for PVA

U.S. producers were asked how U.S. demand for PVA has changed since 2003. *** reported that demand in the United States had declined while *** reported that it had increased. *** responding U.S. producers reported that they did anticipate future changes in PVA demand in the United States and the rest of the world. DuPont noted that it believes that overall demand for PVA in the United States will continue to decline in the short-term as a result of this economic crisis globally and the overall downturn especially in the housing and construction industry. DuPont further noted that the extent and length of this decline is not known at this time and that it has yet to see demand respond. Traditional industries and applications

³⁵ (...continued)

has impacted many customers. Hearing transcript (open session), p. 39 (Korte).

³⁶ One recent report noted that for the first ten months of 2008, sales of motor vehicles (passenger cars and light trucks) were down by two million vehicles versus the same period one year earlier, a 15-percent decline. This report further noted that the decline accelerated during the latter part of the year and sales were about one-third lower in October 2008 compared to the same month in 2007. CRS Report for Congress, *U.S. Motor Vehicle Industry: Federal Financial Assistance and Restructuring*, December 3, 2008, p. CRS-1.

³⁷ U.S. producers' questionnaire, section IV-13. U.S. importers' questionnaire, section III-13.

for PVA such as textiles and adhesives in the housing market have not recovered.³⁸ Solutia has reported that it believes that demand for PVA will continue to grow. It noted that it expects that “2009 is going to look a lot like 2008 in terms of a demand profile... and that 2010 is indeed going to be a year of recovery.”³⁹ In their questionnaire responses, DuPont, Celanese, and Solutia provided additional comments about possible future changes in domestic demand for PVA, which are shown in the following tabulation.

* * * * *

U.S. importers were also asked if demand for PVA had changed in the United States since 2003.⁴⁰ Four of the eight responding importers reported that demand had increased and one indicated that it had fluctuated. *** reported that changes in demand were based on overall demand for its customer’s the end-use products.⁴¹ *** asserted that there had been changes in the availability of raw materials, disappearing markets, unnecessary junk charges by governments, and complacency by PVA producers. *** reported that the global recession caused a general slowdown in production and that the largest PVA industry (polyvinyl butyral) has been directly affected by a downturn in the domestic auto industry, especially as U.S. auto manufacturers contemplate bankruptcy.

U.S. end-user purchasers were asked if the demand for their final end products which incorporate PVA has changed since 2003.⁴² All but one of the 13 responding purchasers reported that the demand for their final end products that incorporate PVA had changed since January 2003. Of those reporting changes, six reported that demand had increased, four reported that it had decreased, and two reported that it fluctuated. Eleven purchasers also reported that this change affected their demand for PVA. ***, which reported that the demand for its end product had decreased, noted that its *** declined by roughly *** percent due to foreign competition. Of those firms reporting increases in demand for their end products, *** noted that its annual demand for PVA *** increased by *** from 2003 to 2007.

Eight of the responding U.S. purchasers reported that they did anticipate further changes in their demand for PVA. *** reported that it expected to lose its remaining *** business which would decrease its PVA demand. *** reported that there would be moderate growth depending on economic conditions and reported that demand had increased since it ***, which is now also a wholly owned subsidiary of ***. *** indicated that PVA demand may increase due to the introduction of new manufacturing processes and reported that demand had fluctuated since 2005 because of the sale of several mills to the *** in 2006. *** and *** provided additional comments concerning anticipated changes in demand in their questionnaire responses which are presented in the following tabulation.

* * * * *

Substitute Products for PVA

U.S. producers, importers, and purchasers were asked to discussed the existence of substitute products for PVA. *** of *** responding U.S. producers and two of the seven responding importers

³⁸ A witness for DuPont agreed with Solutia that the future for new applications such as a photovoltaic application for PVB will eventually “grow demand” for PVA, but did not foresee that growth in the “immediate (1-2 years) future.” Hearing transcript (open session), p. 33 (Korte).

³⁹ Hearing transcript (open session), pp. 172-173 (Feast).

⁴⁰ U.S. importers’ questionnaire, section III-29.

⁴¹ According to DuPont, ***.

⁴² U.S. purchasers’ questionnaire, section III-5.

reported that there were substitutes for PVA.⁴³ *** reported that there are no “drop-in” substitutes for PVA for most applications but it did note that in some applications, starch, carboxy methyl cellulose (CMC), and polyvinyl acetate could possibly be substitutes for PVA.⁴⁴ *** reported that starches, cellulose ethers, and styrene butadiene latex (SBL) could be substituted for PVA in some applications.⁴⁵ For importers, six of the eight responding firms reported that there are no substitutes for PVA, while *** reported that there were. *** listed hydroxy ethyl cellulose (HEC), CMC, and guar as potential substitutes.⁴⁶ For purchasers, 11 of the 13 responding firms reported that there are no products that can be substituted for PVA. *** reported that starch can be substituted for PVA in textile sizing, and *** stated that dextrines could be used in place of PVA in paper converting and paper tubes. While *** identified no substitutes for PVA in the production of ***, it suggested that starch can be used as a sizing agent in textile production and SBL can be used as a binder and optical brightener in paper production, although PVA is more effective in both applications.

*** reported that changes in the prices of potential substitute products do not impact the price of PVA. According to ***, as the price of starch has increased rapidly over the last few years (as corn has been diverted to ethanol production), the differential between starch and PVA prices has diminished, so customers must continually evaluate the difference between overall formula cost versus performance in their system. Even at these higher prices for starch, *** asserted that it is still significantly lower in price than the PVA. *** indicated that substitutes do not drive prices for PVA, but the prices for these substitutes have the potential to impact the demand for PVA as customers try to offset rising PVA costs by substituting a lower cost additive. *** indicated that the price of substitutes had affected the price of PVA. *** indicated that prices for both starch and SBL had risen quite steeply since 2003, facilitating some changeover to PVA (extra demand) and allowed PVA producers to increase prices without having to fear that textile producers and paper mills would switch back to their PVA alternatives.

Only one U.S. importer reported that price changes for substitute products have affected the price of PVA. *** reported that substitutes are less expensive than PVA at present and it expects PVA to lose market share because of differences in relative prices. Similarly, virtually all responding purchasers reported that price changes for substitute products have not affected the price for PVA.

Cost Share

PVA likely accounts for a small to moderate percentage of the final cost of the wide variety of final products in which it is an input, although for the intermediate products such as textile finishing or

⁴³ *** U.S. producers indicated that there had been changes in the number and types of products that could be substituted for PVA since 2003. Also, *** responding U.S. producers reported that they do not anticipate any changes in terms of substitutability of other products for PVA. Only one of the responding importers (***) reported that there was a change in the number of substitute products; it noted that replacement products are being tried because PVA prices have increased more than other water soluble polymer prices. *** noted that it expects this trend to continue as PVA continues to “price itself out of the market.”

⁴⁴ *** noted that, “at the margins, the main products that could be substituted for PVA are starch, or carboxy methyl cellulose (CMC) in the textile and paper industries for use as in spun yarn weaving applications as a sizing for the warp yarns. The starch or CMC would be used to stiffen the warp yarns and allow for faster weaving. In the paper industry, the CMC could be used a back side treatment for recycled paper board to eliminate linting during the printing process. In the adhesive industry, starches or polyvinyl acetates could be substituted for PVA in applications such as paper lamination for tubes and cores.” *** producer questionnaire response, section IV-15.

⁴⁵ *** reported that “starches can be substituted for PVA in some formulation used for textile sizing and adhesive compounding. Cellulose ethers can be substituted in some formulations used in building product applications such as joint cements and SBR emulsion polymers can be substituted for PVA in some paper applications.” *** producer questionnaire response, section IV-15.

⁴⁶ ***.

adhesive compounds, it often accounts for a larger share. Producers, importers, and purchasers were asked to provide information on the cost share of PVA related to the end product in which it is used. *** reported that end uses included PVB (*** percent of the total cost accounted for by PVA), textiles (*** percent), emulsion polymerization (*** percent), adhesives (*** percent), paper coatings (*** percent), and building products (*** percent).

Only two U.S. importers responded. *** reported that end uses included emulsion polymers (*** percent of the total cost accounted for by PVA), adhesives (*** percent), and some dry blend adhesive products (up to *** percent). ***, the other responding importer, reported that end uses included paper (less than *** percent), adhesives (less than *** percent), and textiles (depending on finish between *** percent).

Most purchasers reported that PVA's share of the final cost ranged from minimal to 18 percent for products such as adhesives, airflex dispersions, emulsions, PVAC adhesives, vinnapas powders, and paperboard. Purchasers also reported a higher share for products like cold and hot water soluble film (*** percent), TerraLOC dust abatement solution (*** percent), PVA dry blends (*** percent), ceramic proppant (*** percent), PVB film (*** percent), and PVB specialty resins (*** percent).

Foreign Demand

*** U.S. producers reported that demand outside the United States had increased since 2003. *** reported that demand outside of the United States is growing due to expanding textile industries in Pakistan, China, and Vietnam. According to *** demand for exported products from those regions to the United States and other markets has resulted in an increase in overall demand for PVA for products in local U.S. textile, paper and adhesive industries. *** reported that demand for PVB for automotive and architectural applications in 2009 will be lower than in 2008. *** expects strong demand for PVA used in photovoltaic applications such that total demand for PVA will continue to grow in 2009. *** reported that Asian PVA demand has weakened recently after experiencing significant growth since 2003 and *** indicated that demand for PVA in Europe would also weaken as well. The deterioration in global demand for PVA is occurring just as Chinese, Japanese, and Korean producers are adding PVA production capacity. *** reported that despite the general weak economic outlook for Europe, it expects growth in Asia/Pacific, including strong growth in the photovoltaic applications for PVB film; currently the net expectation is that PVB demand will see a modest growth in 2009 versus 2008.

Responding importers were mixed with regard to changes in demand outside the United States, with one reporting that it fluctuated, one reporting that decreased, and three others stating that it increased. Three of the seven responding U.S. importers reported that they did anticipate future changes in PVA demand in the United States and the rest of the world. *** stated that demand will increase due to increased demand for PVA film found in LCD flat panel displays. *** reported a new application for polyvinyl butyral as a thin-film encapsulant for the electronics in photovoltaic cells could increase the demand for PVA in the future.⁴⁷ *** anticipates this growth to start in ***.

Responding foreign producers generally indicated that demand for PVA in the rest of the world since 2003 had increased.⁴⁸ JVP reported that it anticipates that PVA demand ***. JVP anticipated that demand for PVA ***. In contrast, however, *** did not anticipate any future changes in the demand for PVA in non-*** markets.

⁴⁷ According to ***, this is a relatively new industry with high potential as countries and industries search for alternatives to fossil fuels. PVB is one of several encapsulant technologies that could be used such as EVA or other polymers. ***. However, *** noted that the current macroeconomic issues in the United States and globally, along with falling energy prices and a potential recession, may delay the growth in this industry.

⁴⁸ Foreign producers' questionnaire, section III-21.

Foreign producers were asked to describe the end uses of PVA they manufacture and sell in their home markets.⁴⁹ Chinese producer SVW reported that there are *** between the PVA sold in the either the Chinese, U.S., or third-country markets. Korean producer DC Chemicals, reported that its PVA is used in the production of ***. End uses reported by Japanese producer JVP include ***. JVP indicated that the demand for ***. According to JVP, ***.⁵⁰

Foreign producers were asked if there had been any changes in PVA demand in their home markets, in the United States, or other export markets since 2003.⁵¹ DC Chemicals reported *** in the demand for PVA in its home country market but it reported that its domestic market for PVA was ***. *** reported increasing home-market demand, citing rapid economic development and the expansion of textile and adhesive production in Asian markets.

*** and *** reported that they do not anticipate changes in future demand in their respective home markets. *** reported that it expects PVA demand for *** to increase in its home market. According to ***, demand will increase not only in the automotive and construction industries, but also in the construction industry and for architectural use.

SUBSTITUTABILITY ISSUES

The degree of substitution in demand between domestic and imported PVA depends upon factors such as relative prices, conditions of sales (order lead times, payment terms, etc.), quality meeting industry standards, conditions of sale, qualified status of supplier, and product differentiation. Product differentiation depends on factors such as the range of products, quality (formulation standards, defect rates, product consistency, etc.), availability, reliability of supply, product services, and the market perception of these factors. Based on available data, there appears to be a moderate degree of substitution between PVA produced domestically and that imported from China, Japan, and Korea.

U.S. producers and importers were asked if there had been any changes in the product range, product mix, or marketing of PVA since January 2003.⁵² The *** responding U.S. producers and one of four reporting importers, *** reported that there had been changes. *** provided additional comments in their questionnaire responses, which are presented in the following tabulation.

* * * * *

⁴⁹ Foreign producers' questionnaire, section III-18.

⁵⁰ *** accounts for approximately ***.

⁵¹ Foreign producers questionnaire, section III-18.

⁵² U.S. producers' questionnaire, section IV-27.

Factors Affecting Purchasing Decisions

Purchasers were asked to identify the three major factors considered by their firm in deciding from whom to purchase PVA (table II-2); 13 purchasers provided usable responses.⁵³ Overall, availability and price were listed most frequently in the top three; however, availability and product meeting industry/company specifications were most frequently ranked as the leading factor in selecting a purchaser.

Table II-2
PVA: Most important factors in selecting a supplier, as reported by purchasers

Factor	First	Second ¹	Third
Availability	4	5	1
Price	2	3	6
Product meeting industry/company specifications	3	-	-
Quality	2	2	2
Capacity	1	-	-
Reliability of supply	-	1	2
Pre-arranged contracts	1	1	2
Other ²	-	-	-

¹ One firm reported availability/reliability as the second most important factor.
² "Other" includes commercial offer (price, payment terms, consignment stock).

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

Purchasers were asked to identify those factors that determined the quality of PVA.⁵⁴ Twelve of 13 purchasers responded and reported that factors influencing quality include bench-scale qualifications, consistency of product chemistry, hydrolysis (pH); solubility, viscosity (ash), volatiles (methanol content), end product properties for use in customer applications, and purity. *** reported that it uses standard ASTM testing to ensure all incoming resin matches both the physical and chemical characteristics per the Certificate of Analysis for the supplier (which is required for all incoming orders).

Purchasers were asked how often domestically produced, subject imports, and nonsubject imports of PVA meet minimum quality specifications.⁵⁵ As can be seen from the following tabulation, six of the responding purchasers reported that PVA from the United States always meets minimum quality specifications and the remaining three reported that it usually meets specifications. Similarly, all purchasers found PVA imports from Japan to always or usually meet minimum specifications. Purchasers, however, were split on the degree to which imports of PVA from China and Korea meet minimum specifications.

⁵³ U.S. purchasers' questionnaire, section IV-6.

⁵⁴ U.S. purchasers' questionnaire, section III-18.

⁵⁵ U.S. purchasers' questionnaire, section IV-8.

Country	Always	Usually	Sometimes	Never
United States	6	3	-	-
China	2	2	2	2
Japan	5	4	-	-
Korea	2	-	3	-

Purchasers were asked to rate the importance of 19 specified factors in their purchasing decisions for PVA (table II-3).⁵⁶ Factors listed as “very important” by a majority of responding purchasers were product consistency (13 firms), availability (12 firms), hydrolysis (12 firms), reliability of supply (12 firms), availability of preferred type (11 firms), price (11 firms), quality meets industry standards (11 firms), viscosity (11 firms), and supplier prequalification (10 firms). Factors frequently listed as “not important” include minimum quantity requirements (7 firms), extension of credit (5 firms), and packaging (5 firms).

Purchasers were asked if they required certification or prequalification with respect to the quality, chemistry, strength, or other performance characteristics of PVA. All of the 13 responding purchasers reported that they do require their suppliers to be certified before they will purchase PVA from them, with most (11 firms) indicating that they require it for all purchases of PVA.⁵⁷ Qualification generally takes place over a period of 3-12 months.⁵⁸ Factors considered in the qualification of a supplier included bench-scale lab qualification, lab testing on the proppant, ISO certification, FDA guarantee, and qualification trials. *** stated that no producer failed entirely, but some failed due to products not meeting the company’s specifications. Only *** reported that a foreign or domestic producer had failed in its attempts to certify or qualify its PVA. ***.⁵⁹ The company has attempted to qualify additional PVA producers and the following firms failed: (1) *** was not able to meet our specification for *** ; (2) *** was unable to meet *** specification for ***; (3) *** was unable to meet *** specifications for ***. ***. According to ***,***.⁶⁰

⁵⁶ U.S. purchasers’ questionnaire, section III-17.

⁵⁷ U.S. purchasers’ questionnaire, section III-14.

⁵⁸ Solutia reported that its first requirement for a potential PVA supplier is that it meets the physical specifications on a consistent basis. Solutia requires a time consuming and expensive pre-qualification process for all potential suppliers that generally take six to 12 months and ***. According to Solutia, U.S. PVA producers can all meet these requirements, because PVB production is the largest PVA application in the United States. However, Solutia noted that most PVA producers elsewhere in the world cannot meet its PVA requirements, generally because the products are too high in color, the level of hydrolysis is unsuitable, or the residual methanol content is too high. These potential suppliers produce PVA for local uses, such as vinylon fibers and textile sizing in China. Hearing transcript (open session), pp.140-141 (Berezo) and Solutia’s posthearing brief, p. 7.

⁵⁹ Solutia’s posthearing brief, p. 7.

⁶⁰ Ibid., p. 7.

Table II-3**PVA: Importance of purchase factors, as reported by U.S. purchasers**

Purchase factors	Number of purchasers reporting--		
	Very important	Somewhat important	Not important
Availability	12	1	-
Availability of preferred type	11	2	-
Delivery terms	4	9	-
Delivery time	5	7	1
Discounts offered	3	6	3
Extension of credit	2	6	5
Hydrolysis	12	1	-
Price	11	1	-
Minimum quantity requirements	-	5	7
Packaging	3	5	5
Product consistency	13	-	-
Quality meets industry standards	11	-	2
Quality exceeds industry standards	6	5	2
Product range	6	6	1
Reliability of supply	12	1	-
Supplier prequalification	10	2	-
Technical support/service	5	5	3
U.S. transportation costs	4	7	2
Viscosity	11	2	-
Other (particle size)	1	-	-
Other (meet company specs)	2	-	-
Note.-- Not all firms responded for all questions.			
Source: Compiled from data submitted in response to Commission questionnaires.			

Purchasers were asked how frequently they were aware of country of origin of the PVA they purchased, how often they knew the manufacturer, and how often their buyers were interested in the country of origin of the goods they supply. Responses from purchaser questionnaires are shown in the following tabulation.

Purchaser/customer decision	Always	Usually	Sometimes	Never
Purchaser knows country of origin	11	-	2	-
Purchaser knows producer	11	1	1	-
Purchaser's customers know country of origin	7	-	6	-

Purchasers were asked if they or their customers ever specifically order PVA from one country in particular over other possible sources of supply. Eight responding purchasers reported “no” and five reported “yes.” *** reported that it purchased small volumes of one *** because there was no alternative source of supply. *** reported that it prefers to order from U.S. producers because of better lead times and product support. *** reported that customers sometimes prefer PVOH made in ***, because it has *** and because they want a secondary source of supply. *** reported that some of its customers require NAFTA certification, which requires U.S.-produced raw materials. *** reported “no,” however, it stated that it competes globally and only prefers to buy PVA from the highest quality sources at a price that reflects the value-in-use of the resin.

Asked if certain grades, forms, or types of PVA were available from a single source, seven purchasers reported “no” and four reported “yes.”⁶¹ *** reported that *** was only available from ***. *** reported that it purchases one grade of *** from a domestic source, ***, because there is no other source available. *** reported that the only foreign suppliers that could meet their specifications were *** and ***. The company also reported that *** has tried to qualify *** for the main PVA grade it purchases (**% percent of volume), but these suppliers failed to qualify.

Purchasers were asked if they always, usually, sometimes, or never purchased the lowest priced PVA. Of the responding purchasers, three firms reported that they always buy the lowest-priced product, one reported that it usually does, six reported that they sometimes do, and three reported never. Purchasers were also asked if they purchased PVA from one source although a comparable product was available at a lower price from another source. Five purchasers reported that they had purchased PVA from a certain source when a comparable product was available at a lower price. Reasons given include quality of supply, reliability of supply, consistency, maintaining a purchasing relationship with multiple suppliers without being dependent on only one vendor because market disruptions can occur at anytime; and the inability to buy PVA on a spot basis and hence the need to cover 100 percent of needs under contract because of the requirement of qualified suppliers.

Comparison of the U.S.-Produced and Imported PVA

In order to determine whether U.S.-produced PVA can generally be used in the same applications as imports from China, Japan, and Korea, U.S. producers, U.S. importers, and U.S. purchasers were asked whether the products can “always,” “frequently,” “sometimes,” or “never” be used interchangeably. As shown from Table II-4, U.S. producers were split regarding interchangeability between U.S.-produced PVA and PVA imported from the subject countries. While two of the three U.S. producers reported that the U.S. product was always or frequently interchangeable with PVA from China, Japan, and/or Korea, one producer reported never. U.S. importers generally reported that PVA from China, Japan, and Korea

⁶¹ U.S. purchasers’ questionnaire, section IV-5.

can always or frequently be used interchangeably. With regard to China, five of the seven responding U.S. purchasers reported that Chinese PVA can sometimes or never be used interchangeably. U.S. purchasers were split with regard to imports from Japan, with a number of firms reporting that PVA from Japan can always (3 firms), frequently (4 firms), or sometimes (2 firms) be used interchangeably. With regard to imports from Korea, four responding purchasers reported that they were sometimes or never used interchangeably with domestic PVA and one firm indicated that imports from Korea were always interchangeable with domestic PVA.

Table II-4
PVA: Perceived interchangeability between PVA 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				Number of U.S. purchasers reporting			
	A	F	S	N	A	F	S	N	A	F	S	N
U.S. vs. subject countries:												
U.S. vs. China	1	1	-	1	1	2	-	-	2	-	3	2
U.S. vs. Japan	1	1	1	-	1	1	1	-	3	4	2	-
U.S. vs. Korea	1	1	-	1	1	1	-	-	1	-	3	1
U.S. vs. nonsubject countries:												
U.S. vs. Germany	2	1	-	-	-	-	2	-	4	4	-	-
U.S. vs. Singapore	1	1	-	-	1	1	-	-	3	4	-	-
U.S. vs. Taiwan	1	1	-	1	2	1	-	-	4	5	1	1
Subject country comparisons:												
China vs. Japan	-	1	1	1	-	2	-	-	-	1	2	1
China vs. Korea	2	-	-	-	1	-	-	-	-	-	2	-
Japan vs. Korea	1	-	-	-	1	-	-	-	-	-	2	-
Nonsubject country comparisons:												
Germany vs. China	-	2	1	-	-	1	1	-	-	-	3	-
Germany vs. Japan	3	-	-	-	1	-	1	-	2	2	-	-
Germany vs. Korea	1	1	-	-	-	1	-	-	-	1	1	-
Singapore vs. China	2	-	-	-	1	1	-	-	-	1	1	-
Singapore vs. Japan	2	-	-	-	1	1	-	-	-	1	1	-
Singapore vs. Korea	2	-	-	-	1	-	-	-	-	-	1	-
Taiwan vs. China	2	-	-	-	1	1	-	-	-	1	2	1
Taiwan vs. Japan	1	1	-	-	-	2	-	-	-	2	-	1
Taiwan vs. Korea	2	-	-	-	1	-	-	-	-	-	2	-
Note.--A = Always, F = Frequently, S = Sometimes, N = Never.												
Source: Compiled from data submitted in response to Commission questionnaires.												

Firms that reported that PVA from different sources was sometimes or never interchangeable were asked to explain the factors that limit or preclude interchangeable use. *** reported that the PVA produced in *** was different than the PVA made in the United States for the following reasons: (1) *** PVA has ***, (2) *** PVA has a different particle size. *** reported that, in general, the products are sometimes interchangeable due to the manufacturing process, but that the resulting finished product properties may not be interchangeable. *** reported that different viscosities may have hydrolysis levels that limit interchangeability. *** reported that Japanese (Nippon Goshei, Kuraray) and German (Kuraray) producers have more technical grades available than are produced domestically. All three U.S. producers, *** provided additional comments in their questionnaire responses which are presented in the following tabulation.

* * * * *

*** foreign producers reported that the PVA produced and sold in their home markets was interchangeable with what they sold in the United States and/or to third-country markets.⁶² ***, however, reported that it does not export the subject PVA in the U.S. market and that its home-market sales were focused on 20-kilogram bags (as opposed to bulk sales or larger bag sales).

U.S. PVA purchasers were also requested to make country-of-origin comparisons between the U.S.-produced and imported PVA for the specified purchase factors discussed earlier (table II-3) and to indicate for each factor whether product from one country was superior, comparable, or inferior to product from another country. Comparisons reported by the responding PVA purchasers are shown in table II-5.

The majority of responding purchasers indicated that PVA produced in the United States was either superior or comparable to PVA imported from China for all different purchasing factors, other than price. Purchasers indicated that PVA imported from Japan was primarily comparable for most of the different purchasing factors. Only one purchaser provided a comparison of PVA produced in the United States and that imported from Korea and it rated the U.S. product as superior for all factors. Purchasers reported that PVA produced in the United States and imported from Taiwan, Singapore, and Germany was generally comparable (or, in some instances the U.S. product was superior) for the different factors.

⁶² Foreign producers' questionnaire, III-17.

Table II-5

PVA: Purchasers' comparisons of domestic and imported products

Factor	U.S. vs. China			U.S. vs. Japan			U.S. vs. Korea			U.S. vs. Taiwan			U.S. vs. Singapore			U.S. vs. Germany		
	S	C	I	S	C	I	S	C	I	S	C	I	S	C	I	S	C	I
Availability	3	-	-	3	2	1	1	-	-	1	7	-	2	2	-	2	2	1
Availability of preferred type	2	1	-	1	5	-	1	-	-	1	7	-	2	2	-	2	2	1
Delivery terms	3	-	-	2	4	-	1	-	-	2	6	-	1	3	-	1	4	-
Delivery time	3	-	-	5	1	-	1	-	-	4	4	-	2	2	-	3	2	-
Discounts offered	2	1	-	4	1	-	1	-	-	1	7	-	1	3	-	2	3	-
Extension of credit	3	-	-	1	3	1	1	-	-	-	8	-	1	3	-	1	4	-
Hydrolysis	2	1	-	-	5	-	1	-	-	-	8	-	-	4	-	-	5	-
Lower price	1	1	1	1	4	1	1	-	-	-	6	2	1	3	-	2	3	-
Minimum quantity requirements	2	1	-	2	4	-	1	-	-	-	8	-	1	3	-	1	4	-
Packaging	2	1	-	1	5	-	1	-	-	2	6	-	-	4	-	2	3	-
Product consistency	2	1	-	-	6	-	1	-	-	1	7	-	-	3	-	-	4	1
Quality meets industry standards	2	1	-	-	6	-	1	-	-	1	7	-	-	4	-	-	4	1
Quality exceeds industry standards	2	1	-	-	6	-	1	-	-	1	7	-	-	4	-	-	4	1
Product range	2	1	-	1	4	1	1	-	-	-	8	-	1	3	-	-	5	-
Reliability of supply	2	1	-	2	2	1	1	-	-	2	6	-	2	2	-	2	2	1
Supplier prequalification	3	-	-	2	4	-	1	-	-	2	6	-	1	3	-	1	4	-
Technical support/service	3	-	-	2	4	-	1	-	-	2	5	1	1	3	-	1	4	-
Lower U.S. transportation costs	2	1	-	1	4	1	1	-	-	3	5	-	1	3	-	4	1	-
Viscosity	1	2	-	1	5	-	1	-	-	-	8	-	1	3	-	-	5	-

Note.--S = U.S. product superior, C = U.S. and foreign products comparable, I = U.S. product inferior.

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

U.S. purchasers were also asked to make country-of-origin comparisons among subject and nonsubject countries indicating for each factor whether PVA from one country was superior, comparable, or inferior to PVA from another country. A limited number of purchasers responded; comparisons reported by responding purchasers are presented in table II-6.

Table II-6
PVA: Purchasers' comparisons of imported products

Factor	China vs. Germany			China vs. Singapore			Japan vs. Taiwan			Germany vs. Taiwan			Japan vs. China			Japan vs. Germany		
	S	C	I	S	C	I	S	C	I	S	C	I	S	C	I	S	C	I
Availability	-	-	1	-	1	-	1	-	-	1	1	1	1	-	-	-	1	-
Availability of preferred type	-	-	1	-	1	-	1	-	-	1	1	1	1	-	-	-	-	1
Delivery terms	-	-	1	-	1	-	1	-	-	1	2	-	1	-	-	-	1	-
Delivery time	-	-	1	-	-	-	-	1	-	1	2	-	-	1	-	-	-	1
Discounts offered	1	-	-	-	-	-	-	1	-	-	2	1	-	1	-	1	-	-
Extension of credit	-	-	1	-	1	-	1	-	-	-	3	-	1	-	-	1	-	-
Hydrolysis	-	-	1	-	1	-	-	1	-	-	3	-	1	-	-	-	1	-
Lower price	1	-	-	-	-	1	-	-	1	-	2	1	-	-	1	1	-	-
Minimum quantity requirements	-	1	-	-	1	-	-	1	-	-	3	-	-	1	-	-	1	-
Packaging	-	1	-	-	-	1	1	-	-	-	3	-	-	1	-	-	1	-
Product consistency	-	-	1	-	-	1	1	-	-	1	2	-	1	-	-	-	1	-
Quality meets industry standards	-	-	1	-	1	-	1	-	-	1	2	-	1	-	-	-	1	-
Quality exceeds industry standards	-	-	1	-	1	-	1	-	-	1	2	-	1	-	-	-	1	-
Product range	-	-	1	-	1	-	-	1	-	1	2	-	1	-	-	-	-	1
Reliability of supply	-	-	1	-	1	-	1	-	-	1	2	-	1	-	-	-	-	1
Supplier prequalification	-	-	1	-	1	-	1	-	-	1	2	-	1	-	-	-	1	-
Technical support/service	-	-	1	-	-	1	1	-	-	1	2	-	1	-	-	-	1	-
Lower U.S. transportation costs	-	1	-	1	-	-	1	-	-	-	3	-	-	1	-	-	1	-
Viscosity	-	1	-	-	1	-	-	1	-	-	3	-	-	1	-	-	1	-

Note.--S = First country listed product superior, C = Both products comparable, I = First country listed inferior.

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

Producers and importers were asked to assess how often differences other than price were significant in sales of PVA from the United States, subject countries, and nonsubject countries (table II-7). Generally, U.S. producers reported that differences other than price were never significant and importers reported such differences to be sometimes or never significant, except with respect to Taiwan.

Table II-7
PVA: U.S. firms' perceived significance of differences other than price between U.S.-produced and imported product

* * * * *

In their questionnaire responses, DuPont and *** provided additional comments on the perceived significance of differences other than price between U.S.-produced and imported product; these comments are presented in the following tabulation.

* * * * *

ELASTICITY ESTIMATES

This section discusses elasticity estimates. Parties were requested to provide comments; these are addressed where appropriate.

U.S. Supply Elasticity⁶³

The domestic supply elasticity for PVA measures the sensitivity of the quantity supplied by U.S. producers to changes in the U.S. market price for PVA. The elasticity of domestic supply depends on factors such as the availability of inputs, the level of excess capacity, the ease with which producers can alter capacity, producers' ability to shift to and from production in other products, the existence of inventories, and the availability of alternative markets for U.S.-produced PVA.

In the short term, PVA producers are likely to respond to changes in price with at least moderate changes in the quantity shipped to the U.S. market. Supply responsiveness is enhanced by possible available capacity, the quantity of inventories on hand, and a large amount of exports, but limited by the presence of long-term contracts. A domestic supply elasticity in the range of 3 to 5 is suggested.

Celanese and DuPont made no comments on the staff's domestic supply elasticity. Solutia stated that "the staff's estimate of the range within which the U.S. PVA industry's supply elasticity is like to fall is reasonable."⁶⁴

⁶³ The elasticity responses in this section refer to changes that could occur within 12 months, unless otherwise indicated.

⁶⁴ Solutia prehearing brief, appendix 7, p. 1. Solutia also noted that "it is also worth noting that just as U.S. producers might shift some export shipments into the U.S. market in response to hypothetically higher U.S. prices, the reverse is equally true...That is, in response to any reduction in price within the U.S. market, the U.S. industry would shift supply into the export market. Ibid., p. 1.

U.S. Demand Elasticity

The U.S. demand elasticity for PVA measures the sensitivity of the overall quantity demanded to a change in the U.S. market price of PVA. This estimate depends on factors discussed earlier, such as the existence, availability, and commercial viability of substitute products, as well as the component share of PVA in the production of any downstream product. A demand elasticity in the range of -0.5 to -1.5 is suggested.

Celanese and DuPont made no comments on the staff's domestic supply elasticity. Solutia stated that "the staff's estimated demand elasticity is reasonable in characterizing likely short run market adjustment, though in our view the true value is likely to be in the middle to higher end of the range."⁶⁵

Substitution Elasticity

The elasticity of substitution largely depends upon the degree to which there is an overlap of competition between U.S.-produced and imported PVA, and the extent of product differentiation.⁶⁶ Product differentiation, in turn, depends on such factors as physical characteristics (e.g., formulations and quality) and conditions of sale (e.g., delivery lead times, reliability of supply, technical support/services, etc.). The elasticity of substitution between the imported domestic PVA and that from China, Japan, and Korea is estimated to be in the range of 2 to 4.

Celanese and DuPont made no comments on the staff's substitution elasticity. Solutia stated that this range is too high and noted that a more appropriate estimate would place the elasticity of substitution in a range of 1.5 to 2.5, or alternatively, the value is likely to be at the lower end of the staff estimated range.⁶⁷

⁶⁵ Solutia prehearing brief, appendix 7, p. 1.

⁶⁶ The substitution elasticity measures the responsiveness of the relative U.S. consumption levels of the subject imports and the domestic like product to changes in their relative prices. This reflects how easily purchasers switch from the U.S. product to the subject product (or vice versa) when prices change.

⁶⁷ Solutia prehearing brief, appendix 7, p. 1.

PART III: CONDITION OF THE U.S. INDUSTRY

OVERVIEW

Background

Information in this section is based on the questionnaire responses of three producers that accounted for all U.S. production during 2007.¹ Celanese produces PVA in Calvert City, KY, and Pasadena, TX, for commercial sales and for internal consumption.² DuPont produces PVA in La Porte, TX, also for commercial sales and for internal consumption.³ Solutia produces PVA in Springfield, MA, and Trenton, MI, exclusively for internal consumption.⁴

Changes Experienced in Operations

Domestic producers were asked to indicate whether their firm had experienced any plant openings, relocations, expansions, acquisitions, consolidation, closures, or prolonged shutdowns because of strikes or equipment failure; curtailment of production because of shortages of materials or other reasons including revision of labor agreements (including pension or health care obligations of retirees or current employees); or any other change in the character of their operations or organization relating to the production of PVA since 2003. All three domestic producers indicated that they had experienced some change in the character of their operations since 2003. The domestic producers' responses to this question are detailed in table III-1.

In 2007, Celanese experienced a force majeure event resulting from a reactor failure at its acetic acid production unit.⁵ Although Celanese's acetic acid production unit reportedly represents about 10 percent of global production capacity and its failure occurred at a time when the industry was completely sold out, Celanese was still able to recycle its acetic acid chemistry back into its VAM and PVA operations.⁶ In 2008, DuPont experienced a force majeure event as a result of the impact of Hurricane Ike.⁷ DuPont's La Porte production facility was idled for three weeks, but by November 14, 2008, was again running at full capacity.⁸

Finally, although Solutia did not experience production outages, the company did face challenges maintaining its supply of PVA during the period covered by the declarations of force majeure. Indeed, representatives for Solutia testified at the Commission's hearing that the company came "perilously close" to having to shut down production lines and layoff U.S. workers.⁹

¹ The data contained in this section have been updated to include Solutia's revisions submitted on February 17, 2009.

² Hearing transcript (open session), p. 16 (Purvis).

³ Hearing transcript (open session), pp. 26-27 (Korte).

⁴ Hearing transcript (open session), p. 131 (Feast).

⁵ Hearing transcript (open session), pp. 23 and 78 (Purvis).

⁶ Hearing transcript (open session), p. 23 (Purvis). Celanese contends that ***. Celanese/DuPont's posthearing brief, p. 47 and exhibit I.

⁷ Hearing transcript (open session), p. 56 (Korte).

⁸ Ibid.

⁹ Hearing transcript (open session), pp. 144-145 (Berezo) and p. 136 (Feast).

Table III-1
PVA: Changes in the character of U.S. operations

* * * * *

Anticipated Changes in Existing Operations

The Commission requested that domestic producers provide a copy of their company business plans or other internal documents that describe, discuss, or analyze expected future market conditions for PVA. One domestic producer initially reported that it did not have any company business plans or other internal documents concerning PVA,¹⁰ two domestic producers indicated that they possess such materials.¹¹ Table III-2 presents U.S. producers' anticipated changes to their U.S. operations.

Table III-2
PVA: Anticipated changes in U.S. operations

* * * * *

U.S. PRODUCERS' CAPACITY, PRODUCTION, AND CAPACITY UTILIZATION

The Commission requested information on PVA capacity and production from PVA producers. Their data on PVA capacity, production, and capacity utilization are presented in table III-3. Total U.S. capacity increased from 2003 to 2004 by *** percent and from 2004 to 2005 by *** percent. Total U.S. capacity remained relatively stable thereafter.¹² The level of capacity utilization for PVA, as reported by responding domestic producers, remained fairly consistent throughout the period for which data were collected, fluctuating between *** percent and *** percent except in 2005, when capacity utilization reached a high of *** percent. At the hearing, however, counsel for both Celanese and DuPont acknowledged that the production facilities were producing all the PVA they could during the period covered by force majeure events.¹³

Table III-3
PVA: U.S. PVA producers' total capacity, production, and capacity utilization, 2003-07, January-September 2007, and January-September 2008

* * * * *

¹⁰ *** producer questionnaire response, section IV-8. Staff followed up and ***. E-mail from ***, December 9, 2008. After the hearing, Staff followed up with ***. E-mail from ***, February 5, 2009.

¹¹ ***. *** producer questionnaire response, exhibit 1. ***. *** producer questionnaire response, section I-8, attachments 4, 5, 6, and 7.

¹² The domestic industry provided up-to-date production and capacity data for the fourth quarter 2007 and 2008 periods. Capacity levels were *** pounds in the fourth quarter of 2008, compared to *** pounds in the fourth quarter of 2007. Production levels were *** pounds in the fourth quarter of 2008, compared to *** pounds in the fourth quarter of 2007, while capacity utilization was *** percent, compared to *** percent in the preceding year. The fourth quarter *** in production levels were attributed to ***. Celanese and DuPont's filing on February 17, 2009, pp. 2-6 and hearing transcript (open session), p. 28 (Korte).

¹³ Hearing transcript (open session), pp. 58-61 (Greenwald) (Korte) (Purvis) and hearing transcript (open session), pp. 115-116 (Purvis) (Korte).

During 2003 through 2005, Celanese ***,¹⁴ its capacity in 2004 and 2005 by *** and *** pounds, respectively. After 2005 Celanese's capacity ***. DuPont's capacity *** in 2004 by *** pounds and ***. In 2006, DuPont's capacity *** by *** pounds. Solutia's capacity *** throughout the period for which data were collected. *** domestic producers reported *** production levels in 2005. *** production fell by *** percent and *** percent, respectively in January-September 2008 when compared to January-September 2007.¹⁵

Constraints on Capacity

The Commission asked domestic producers to report constraints on their capacity to produce PVA. Celanese characterized the PVA industry as capital intensive with high fixed costs.¹⁶ Celanese identified three physical constraints to capacity: ***.¹⁷ DuPont reported that, although it has improved its production process by ***, it would need *** to increase its production.¹⁸ It also stated that the *** performance of its PVA business means that it ***.¹⁹ Moreover, DuPont stated that it is only able to produce ***.²⁰ Solutia reported that its constraints on capacity *** so that now both its plants are producing ***.²¹ However, in order to create more PVA it would need ***.²² At the hearing, Solutia's representative provided three reasons why Solutia chose to add PVB production capacity without adding corresponding PVA production capacity. First, Solutia's strategic goal is to grow the overall PVB business which it can only achieve by growing sales of PVB and expanding PVB resin and film capacity. Second, the economic scale for a PVA plant is approximately 90 million pounds and Solutia does not demand that much PVA; therefore, it would have excess PVA and would need to enter the merchant PVA business. Third, Solutia is a world leader in PVB but not PVA.²³

All three domestic producers reported that they are unable to produce any alternative products utilizing the same equipment or labor.²⁴

U.S. PRODUCERS' DOMESTIC SHIPMENTS, COMPANY TRANSFERS, AND EXPORT SHIPMENTS

As detailed in table III-4, the quantity of U.S. producers' U.S. shipments increased by *** percent from 2003 to 2004, by *** percent from 2004 to 2005, and by *** percent from 2006 to 2007, for a net increase of *** percent over 2003 through 2007. U.S. shipments decreased by *** percent from 2005 to 2006 and were *** percent lower in January-September 2008 than in January-September 2007.

¹⁴ Celanese's producer questionnaire response, section II-2. ***. E-mail from ***, January 6, 2009.

¹⁵ *** DuPont's producer questionnaire response, section II-8.

¹⁶ Celanese's producer questionnaire response, section II-6 and hearing transcript (open session) pp. 23-24 (Purvis).

¹⁷ Celanese's producer questionnaire response, section II-6.

¹⁸ DuPont's producer questionnaire response, section II-6.

¹⁹ It will invest in projects that ***. DuPont's producer questionnaire response, section II-6.

²⁰ DuPont's producer questionnaire response, section II-6.

²¹ Solutia's producer questionnaire response, section II-6.

²² Solutia's producer questionnaire response, section II-6.

²³ Hearing transcript (open session), pp. 133-134 (Feast).

²⁴ Celanese's producer questionnaire response, section II-7, DuPont's producer questionnaire response, section II-7, and Solutia's producer questionnaire response, section II-7.

U.S. shipments for commercial use were consistently the largest component of total U.S. shipments.²⁵ The value of U.S. shipments increased by *** percent from 2003 through 2007. In January-September 2008, the value of U.S. shipments was *** percent higher than in January-September 2007. The unit values of U.S. shipments rose steadily from *** per pound in 2003 to *** per pound in 2007. The unit value of U.S. shipments reported for January-September 2008 reached *** per pound.²⁶ In January-September 2008, internal consumption accounted for *** percent of total shipments,²⁷ while exports accounted for *** percent.^{28 29} For more detailed information, refer to appendix E, which presents each U.S. producer's shipments by type.

Table III-4

PVA: U.S. producers' shipments, by type, 2003-07, January-September 2007, and January-September 2008

* * * * *

U.S. PRODUCERS' INVENTORIES

Data collected in these reviews on domestic producers' end-of-period inventories of PVA are presented in table III-5. The domestic industry's inventories of PVA fell overall during the period for which data were collected, with the lowest level of inventories reported for year end 2007. Inventories held at the end of September 2008 were *** than for the same time period in 2007. Inventories, relative to total shipments, decreased from a high of *** percent in 2003 to a low of *** percent in 2007. For the period January-September 2008, however, the ratio of inventories to total shipments was *** percent, as compared to *** percent in January-September 2007.³⁰

²⁵ During January-September 2008, U.S. producers' U.S. commercial shipments by end use and corresponding shares of total U.S. shipments were as follows: ***.

During January-September 2008, U.S. producers' exports by end use and corresponding shares of total exports were as follows: ***.

²⁶ The domestic industry provided up-to-date shipment data for the fourth quarter of 2007 and 2008 periods. The average unit values of U.S. shipments were \$*** in the fourth quarter of 2008, compared to *** in the fourth quarter or 2007.

²⁷ The domestic industry provided up-to-date shipment data for the fourth quarter 2007 and 2008 periods. U.S. commercial shipments were *** pounds lower in the fourth quarter of 2008 than in the fourth quarter 2007. U.S. internal consumption was *** pounds lower in the fourth quarter 2008 than in the fourth quarter 2007. U.S. export shipments to related firms were *** pound lower in the fourth quarter 2008 than in the fourth quarter 2007. U.S. export shipments for commercial use were *** pounds lower in the fourth quarter 2008 than in the fourth quarter 2007.

²⁸ Korea imposed a duty on imports of PVA from the United States of 33.39 percent from December 12, 2006 through December 11, 2009. http://www.ktc.go.kr/en/kboard_child/list.jsp?bm=86&pg=3, retrieved February 19, 2009.

²⁹ During January-September 2008, U.S. producers' internal consumption for PVB production accounted for *** percent of total U.S. internal consumption. The remainder of U.S. producers' internal consumption consisted of ***.

³⁰ ***. E-mail from ***, January 5, 2009. ***. Ibid. ***. E-mail from ***, January 6, 2009. ***. Ibid. ***. Ibid.

Table III-5

PVA: U.S. producers' end-of-period inventories, 2003-07, January-September 2007, and January-September 2008

* * * * *

U.S. PRODUCERS' IMPORTS AND PURCHASES

Table III-6 presents direct imports by U.S. producers, along with their production of PVA. ***. In addition, ***. ***. ***. Solutia reported that it purchased PVB-grade PVA only from Celanese and DuPont.^{31 32}

Table III-6

PVA: U.S. producers' imports, 2003-07, January-September 2007, and January-September 2008

* * * * *

U.S. PRODUCERS' EMPLOYMENT, WAGES, AND PRODUCTIVITY

Data provided by U.S. producers on the number of production and related workers ("PRWs") engaged in the production of PVA, the total hours worked by such workers, and wages paid to such PRWs during the period for which data were collected in these reviews are presented in table III-7. After reported highs of *** PRWs working *** hours in 2003, the numbers of workers and hours worked decreased by *** percent and *** percent, respectively, by 2007.³³ Rising productivity and lower wage rates resulted in decreased unit labor costs between 2003 and 2007. Employment and wages were higher in January-September 2008 than in January-September 2007. Wage rates, in contrast, were lower, but could not fully offset the impact of reduced productivity in January-September 2008 relative to January-September 2007, resulting in an overall higher unit labor cost.³⁴

Table III-7

PVA: U.S. producers' employment-related indicators, 2003-07, January-September 2007, and January-September 2008

* * * * *

³¹ ***. Solutia's purchaser questionnaire response, section II-2 and Hearing transcript (open session), p. 131 (Feast).

³² DuPont reports that ***. Celanese/DuPont's posthearing brief, pp. 44-45. Solutia reports that ***. Solutia's posthearing brief, pp. A2-A3.

³³ ***. E-mail from ***, January 5, 2009. ***. Ibid.

³⁴ At the hearing, DuPont stated that it halted PVA production from early December 2008-late January 2009. During this production shutdown, however, it continued to employ all the plant employees. Hearing transcript (open session), pp. 28, 82 (Korte).

FINANCIAL EXPERIENCE OF U.S. PRODUCERS

Background

The same three firms, Celanese, DuPont,³⁵ and Solutia,³⁶ that provided production and shipment data reported usable financial data on their operations on PVA. Each of these firms has a December 31 fiscal year end. These data accounted for all known U.S. production of PVA in 2007.

Total PVA Operations

Results of U.S. firms' operations on PVA are briefly summarized here. Total net sales quantities increased *** between 2003 and 2004, declined *** between 2005 and 2006, and then *** in 2007. Commercial sales, transfers to related firms, and internal consumption all increased, although commercial sales exhibited the largest net increase. Total net sales values also increased in each category between 2003 and 2007, albeit more steadily than sales quantity between the yearly periods, reflecting greater volume in 2004 and rising average unit values during 2004-07.³⁷ Commercial sales were consistently the largest component of total sales by the U.S. PVA industry, accounting for approximately *** of the quantity sold during the period for which data were collected. Raw material costs increased in absolute terms and at a more rapid pace than sales (thus, the ratio of raw materials to sales increased, and the per-unit value of raw materials increased more than did the similar measure of sales). Increases in raw materials were due to the increasing costs of petroleum-based products and natural gas during the period reviewed. Direct labor was relatively stable while other factory costs declined irregularly from 2003 to 2006 and increased between 2006 and 2007. The industry's total net cost of goods sold ("COGS") increased in absolute terms with the increases in volume and raw materials, rising more rapidly than did sales (as reflected by the higher per-unit value and ratio of COGS to sales) between most periods. Each firm recycles, or recovers, a part of its raw material inputs. These byproducts,³⁸ valued at fair market value, were deducted from COGS. Increasing byproduct revenues moderated somewhat the increase in COGS between 2003 and 2007; the industry's total net COGS after byproducts was fairly stable on ratio-to-sales basis and the per-unit value of COGS did not increase by the same amount as sales. The industry recorded a gross profit in each year. Selling, general, and administrative ("SG&A") expenses declined from a period high in 2003 to 2006 and then increased *** from 2006 to 2007. The industry recorded operating losses during 2003-05 (the operating loss was greatest in 2003, declining thereafter). On the other hand, operating profit was greatest in 2006 and declined in 2007. Net income before taxes was negative in each full year period except 2006; cash flow was positive in each period except 2004 and 2005.

Total net sales quantity was lower in January-September 2008 than in January-September 2007, but sales value was higher, reflecting higher per-unit sales values in the most recent period. Total net

³⁵ Commission staff verified Celanese's questionnaire response and the results of that verification are incorporated herein (verification report, memorandum INV-FF-153, December 17, 2008). ***.

³⁶ Solutia corrected its data on February 17, 2009, due to a methodological change in how the firm "recognized" its "sales" of PVA (***). This change affected the quantity and value of its internal consumption, certain costs, and operating income or loss in all periods for which data were collected, as well as for October-December 2007 and October-December 2008. Although the underlying data changed, ***. Solutia submission dated February 17, 2009.

³⁷ Witnesses for Celanese and DuPont testified that the firms were able to gain market share and slowly raise prices once the orders were in effect. Price increases were moderated because traditional applications (e.g., textiles) had either moved offshore or had declined. Hearing transcript (open session), pp. 17, 33, and 46 (Purvis and Korte).

³⁸ The byproducts are ***.

COGS after byproduct credit was higher in January-September 2008 than in January-September 2007, however, reflecting *** higher raw material costs and other factory costs, and the industry recorded a loss on total PVA operations. Net income before taxes was negative in both interim periods although cash flow was positive.³⁹ These data for the industry are shown in table III-8, while table III-9 provides firm-by-firm data on the results of operations on PVA.⁴⁰

Table III-8

PVA: Results of operations of U.S. firms, fiscal years 2003-07, January-September 2007, and January-September 2008

* * * * *

Table III-9

PVA: Results of operations of U.S. firms, by firm, fiscal years 2003-07, January-September 2007, and January-September 2008

* * * * *

Celanese, the *** producer of the three reporting firms, provided data for ***. The firm’s sales quantity increased from 2003 to 2004 and remained *** through 2007. With an average *** cents per pound increase in sales value, total sales values increased *** between 2003 and 2007.⁴¹ Although sales quantity was lower in January-September 2008 than in the same period in 2008, higher per-unit sales values led to increased sales values between the interim periods. Before deduction of byproduct credit, COGS increased in dollar terms on a yearly basis and between the interim periods, driven by higher sales volume and higher raw material costs. However, some of the increase in raw material costs was moderated by stable labor and lower other factory costs.⁴² When the byproduct credit is considered, COGS net of the byproduct credit increased in dollar terms, but declined as a ratio to sales and on a per-unit basis from 2003 to 2006; these measures were higher in 2007, and were higher again in January-September 2008 from January-September 2007. The firm’s SG&A expenses declined *** between 2003

³⁹ Each firm provided financial data for October-December 2007 and October-December 2008. On an aggregated basis, sales quantity and value were lower in October-December 2008 than in October-December 2007, by *** percent and *** percent, respectively, at *** and \$***. The three firms combined recorded an operating *** in October-December 2008 compared with a *** in the same period in 2007. The average unit value of total net sales was higher at \$*** per pound in October-December 2008 compared to \$*** per pound in the same period in 2007. Fourth quarter data are discussed by firm later in this section of the report.

⁴⁰ For a discussion of individual company profitability, *see* Celanese/DuPont posthearing brief, Part II, pp. 9-11. DuPont’s ***. *See also*, hearing transcript (open session), p. 41 (Korte) for a discussion of DuPont’s restructuring.

⁴¹ A Celanese spokesman testified that the firm was able to institute orderly price increases following institution of the order. Hearing transcript (open session), p. 17 (Purvis).

⁴² Celanese ***. Production outages totaled *** during all of 2007 of which *** was incurred during the November 2007 power outage at Calvert City, KY. Celanese also reported production outages during 2008 totaling *** of which *** was incurred during the period of October-December 2008. Celanese attributed ***. Celanese/DuPont submission of February 17, 2009. “Fixed costs,” which are typically classified in other factory costs, continue to accrue during periods of outage, and are included in the fully accumulated cost of the product. As a result of ***. Celanese’s questionnaire response, II-8. With respect to hedging of natural gas, Celanese stated ***. E-mail to staff from ***, February 13, 2009.

and 2007 and were *** higher in January-September 2008 compared with the same period in 2007. Celanese reported operating ***.⁴³

DuPont, the *** largest producer, reported data for its trade sales and internal consumption of PVA for PVB. Its sales quantity ***⁴⁴ but ***⁴⁵ ***.⁴⁶ These measures ***.⁴⁷

Solutia, the *** of the three producers, reported data for its internal consumption of PVA for PVB. Its consumption increased *** between the years and the two interim periods for which data were collected, largely reflecting increasing volume between the full year periods and increasing unit value between the interim periods. Solutia estimated the value of its internal consumption based on ***, as noted earlier. The rationale for this methodology was stated as follows: ***; its PVA differs qualitatively from PVA purchased from Celanese or DuPont, and is consumed on equipment dedicated to its own PVA;⁴⁸ and the use of “market prices would ***.”⁴⁹ It also reported ***.⁵⁰

Raw material costs are a large part in industry total COGS and they vary with the fluctuations in petroleum products and natural gas, used as inputs and for processing. Raw material costs were offset to a great degree by the fact that these firms are able to recycle some of their key inputs. Overhead costs also are high for this industry, and are accounted for by utility and environmental costs such as steam,

⁴³ During October-December 2008, Celanese’s sales quantity and value, *** were lower by *** percent and *** percent, respectively, from the same period in 2007. Celanese recorded an operating *** of sales in October-December 2008 versus a *** of sales in the same period in 2007. In October-December 2008, total net sales unit value was \$*** per pound, while the operating *** per pound a year earlier. Per-unit raw material costs were higher in October-December 2008 than in the same period in 2007, \$*** per pound compared to \$*** per pound. E-mail to staff from ***, February 13, 2009. Celanese stated the following with respect to its input VAM costs: ***. E-mail to staff from ***, February 24, 2009. Celanese also stated that its SG&A expenses were ***. E-mail to staff from ***, February 13, 2009. As noted earlier, Celanese reported production outages for *** during the fourth quarter of 2008 compared with a production outage of *** during the fourth quarter of 2007. Celanese/DuPont submission of February 17, 2009.

⁴⁴ With respect to raw material cost hedging DuPont stated that ***. E-mail to staff from ***, February 13, 2009.

⁴⁵ DuPont classifies the results of its natural gas hedging in “other factory costs.” The firm stated that ***. E-mail to staff from ***, February 13, 2009. DuPont confirmed that it ***. E-mail to staff from ***, February 24, 2009.

⁴⁶ Hurricane Ike affected DuPont’s production unit at La Porte, TX, ***. DuPont also conducted maintenance ***. DuPont’s questionnaire response, II-2 and II-8. It also ***. Its production outage was *** in 2007 (including *** during October-December 2007) and *** from November 3, 2008 to January 30, 2009 of ***. Celanese/DuPont submission, February 17, 2009. During these periods, fixed costs accrue and are included in the fully accumulated cost of the product.

⁴⁷ DuPont’s sales in October-December 2008 were ***, which were less than in the same period in 2007 by ***, respectively. Its operating ***. The unit value of its total net sales was higher in October-December 2008 at \$*** per pound compared with \$*** per pound in the same period in 2007, as was its *** at \$*** versus \$*** per pound. With regard to raw material costs, DuPont stated that “while ***. Also, DuPont’s ***. E-mail to staff from ***, February 13, 2009. As noted earlier, DuPont ***. E-mail to staff from ***, February 24, 2009.

⁴⁸ Hearing transcript (open session), p. 145 (Berezo).

⁴⁹ Solutia’s prehearing brief, app. 4 (report of ***), p. 4. Solutia’s argument is that with ***. Solutia also argued ***. Hearing transcript (closed session), pp. 234-235, and 247 (***). Solutia provided ***.

⁵⁰ Solutia’s reported internal consumption was ***. The average unit value of its internal consumption was \$*** in October-December 2008 compared to \$*** in the period one year earlier. Raw material costs were *** in October-December 2008 than in the same period one year earlier, leading to a \$***. Operating *** in October-December 2008 compared with *** in the same period in 2007. Solutia’s submission dated February 17, 2009. As noted earlier, the data in the submission of February 17, 2009, corrected data submitted with Solutia’s posthearing brief. Changes in the data ***.

process costs, health and environmental remediation, and plant administrative costs (including salaries, maintenance, and depreciation).

Merchant Market Operations on PVA

The Commission's questionnaire did not request firms to provide data separately for their merchant market operations from their internal consumption or their transfers. Hence, Commission staff calculated the cost data shown in table III-10 from the total data reported.⁵¹

Table III-10

PVA: Results of U.S. firms on their merchant market operations, fiscal years 2003-07, January-September 2007, and January-September 2008

* * * * *

The merchant market data in table III-10 (calculated for Celanese and DuPont) generally follow the data shown in table III-8 for total operations of the three firms; differences are attributable to different unit sales values and the allocation of proportionate costs. Celanese's ***, DuPont's ***.⁵²

Variance Analysis

The variance analysis showing the effects of prices and volume on U.S. producers' net sales of PVA, and of costs and volume on their total expenses, is presented in table III-11. The information for this variance analysis is derived from table III-8, but differs in that only total net sales are shown. The variance analysis provides an assessment of changes in profitability as related to changes in pricing, cost, and volume. The variance analysis is summarized at the bottom of the table and shows that the increase in operating income from 2003 to 2007 is attributable to the favorable price variance (higher unit prices) that was much greater than the unfavorable net cost/expense variance (higher unit costs). Comparing January-September 2008 and the same period in 2007, the favorable price variance was less than the unfavorable net cost/expense variance (higher unit prices were outweighed by higher unit costs) and the industry's operating profit was lower. The net volume variance generally is unfavorable for those periods in which sales volume increased because it was more costly to produce and sell that volume; it generally was favorable for those periods in which sales quantity declined, such as between 2004 and 2005, and between 2005 and 2006.

Table III-11

PVA: Variance analysis on U.S. firms' operations, fiscal years 2003-07, and January-September 2007-08

* * * * *

⁵¹ Celanese and DuPont ***.

⁵² Celanese/DuPont posthearing brief, part II, p. 37.

Assets and Return on Investment

The Commission's questionnaire requested data on assets used in the production, warehousing, and sale of PVA to compute return on investment ("ROI") for 2003 to 2007 (table III-12). The data for total net sales and operating losses are from table III-8. Operating income was divided by total assets, resulting in ROI.

Table III-12

PVA: Value of assets used in production, warehousing, and sales, and return on investment, fiscal years 2003-07

* * * * *

ROI generally followed operating income (discussed earlier in connection with table III-8). The value of total assets (particularly non-current assets of property, plant, and equipment) fell from 2003 to 2005, following ***.

Capital Expenditures and Research and Development Expenses

U.S. producers' data on their capital expenditures, research and development ("R&D") expenses, and depreciation expenses for their operations on PVA are shown in table III-13.

Table III-13

PVA: U.S. firms' capital expenditures, research and development expenses, and depreciation expenses, fiscal years 2003-07, January-September 2007, and January-September 2008

* * * * *

Celanese's capital expenditures were ***. DuPont's capital expenditures have been focused on improving energy efficiency in its plants.⁵³

Celanese's capital expenditures ***. On the other hand, DuPont's capital expenditures ***. Generally speaking, when capital expenditures are less than depreciation, it is a sign that a firm or the industry is not reinvesting in itself and replacing its productive assets.

⁵³ Hearing transcript (open session), p. 41 (Korte).

PART IV: U.S. IMPORTS AND THE FOREIGN INDUSTRY

U.S. IMPORTS

The Commission sent questionnaires to 24 firms believed to have imported PVA between January 2003 and September 2008. Questionnaire responses were received from 13 firms.¹ U.S. import data are based on official import statistics for all sources, except for Japan for which questionnaire data were utilized due to the relatively large amount of U.S. imports of nonsubject (excluded) PVA from Japan.^{2 3} Firms responding to the Commission's questionnaire accounted for substantially all subject imports from China and Japan. There were no known imports from Korea in 2007, but based on the last year for which there were sizeable subject imports, 2003, there is *** percent coverage of the subject imports from Korea. Data regarding U.S. imports appear in table IV-1.⁴

With respect to questionnaire coverage of nonsubject countries, there is almost complete coverage for the leading nonsubject country, Taiwan. Furthermore, there is high coverage for each of the other principal nonsubject countries, Germany, Singapore, and Spain. No importers reported entering or withdrawing PVA from foreign trade zones or bonded warehouses. In addition, no importers reported imports of PVA under the temporary importation under bond program.

¹ Five firms confirmed that they imported excluded forms of PVA exclusively. Two firms reported that they did not import PVA during the period for which data were collected. Four firms did not respond to the Commission's questionnaire.

² The HTS classification for PVA includes both subject PVA and nonsubject PVA, the latter category consisting of 15 forms of PVA hydrolyzed in excess of 80 percent excluded by Commerce as well as all PVA hydrolyzed at 80 percent or lower.

³ Questionnaire responses were received from ***.

⁴ Israel, Italy, Netherlands, and the United Kingdom were excluded from the category "other countries" following confirmation that imports originating in those countries are almost all excluded forms of PVA. The data for the remaining nonsubject countries are compiled from official Commerce statistics.

Table IV-1

PVA: U.S. imports, by sources, 2003-07, January-September 2007, and January-September 2008

Source	Calendar year					January - September	
	2003	2004	2005	2006	2007	2007	2008
Quantity (1,000 pounds)							
China	5,869	5,519	6,155	6,662	4,539	4,329	1,295
Japan	***	***	***	***	***	***	***
Korea	2,014	126	4	44	0	0	0
Subject subtotal	***	***	***	***	***	***	***
Taiwan	23,539	28,117	20,777	23,354	26,127	18,207	24,903
Other countries	4,871	5,120	7,780	10,413	11,346	8,397	5,816
Nonsubject subtotal	28,410	33,236	28,557	33,767	37,473	26,604	30,720
Total	***	***	***	***	***	***	***
Value (1,000 dollars)							
China	4,011	3,795	4,521	4,973	3,813	3,645	1,454
Japan	***	***	***	***	***	***	***
Korea	1,500	114	44	85	0	0	0
Subject subtotal	***	***	***	***	***	***	***
Taiwan	16,402	19,048	16,654	19,340	24,012	16,395	27,466
Other countries	4,481	5,009	7,795	9,876	11,807	8,494	7,454
Nonsubject subtotal	20,883	24,057	24,449	29,215	35,819	24,889	34,920
Total	***	***	***	***	***	***	***
Unit value (dollars per pound)							
China	\$0.68	\$0.69	\$0.73	\$0.75	\$0.84	\$0.84	\$1.12
Japan	***	***	***	***	***	***	***
Korea	0.74	0.90	10.17	1.93	(¹)	(¹)	(¹)
Subject subtotal	***	***	***	***	***	***	***
Taiwan	0.70	0.68	0.80	0.83	0.92	0.90	1.10
Other countries	0.92	0.98	1.00	0.95	1.04	1.01	1.28
Nonsubject subtotal	0.74	0.72	0.86	0.87	0.96	0.94	1.14
Total	***	***	***	***	***	***	***

Table continued on next page.

Table IV-1 – *Continued*

PVA: U.S. imports, by sources, 2003-07, January-September 2007, and January-September 2008

Item	Calendar year					January-September	
	2003	2004	2005	2006	2007	2007	2008
Share of quantity (percent)							
China	***	***	***	***	***	***	***
Japan	***	***	***	***	***	***	***
Korea	***	***	***	***	***	***	***
Subject subtotal	***	***	***	***	***	***	***
Taiwan	***	***	***	***	***	***	***
Other countries	***	***	***	***	***	***	***
Nonsubject subtotal	***	***	***	***	***	***	***
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Share of value (percent)							
China	***	***	***	***	***	***	***
Japan	***	***	***	***	***	***	***
Korea	***	***	***	***	***	***	***
Subject subtotal	***	***	***	***	***	***	***
Taiwan	***	***	***	***	***	***	***
Other countries	***	***	***	***	***	***	***
Nonsubject subtotal	***	***	***	***	***	***	***
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Ratio of import quantity to U.S. production (percent)							
China	***	***	***	***	***	***	***
Japan	***	***	***	***	***	***	***
Korea	***	***	***	***	***	***	***
Subject subtotal	***	***	***	***	***	***	***
Taiwan	***	***	***	***	***	***	***
Other countries	***	***	***	***	***	***	***
Nonsubject subtotal	***	***	***	***	***	***	***
Total	***	***	***	***	***	***	***
¹ Not applicable. Source: Compiled from official Commerce statistics and from data submitted in response to Commission questionnaires.							

LEADING NONSUBJECT SOURCES OF IMPORTS

During the period for which data were collected, imports of PVA entered the United States from several sources other than the three subject countries. The leading nonsubject suppliers are shown in table IV-2. The total quantity of PVA imports from all nonsubject sources fluctuated during the period for which data were collected, with a high recorded in 2007. Nonsubject imports were lowest in 2003 and 2005. Taiwan is by far the leading nonsubject country supplier. Imports from Taiwan in January-September 2008 accounted for 81.1 percent of the quantity of nonsubject imports.

Table IV-2

PVA: U.S. imports from leading nonsubject sources, 2003-07, January-September 2007, and January-September 2008

Item	Calendar year					January - September	
	2003	2004	2005	2006	2007	2007	2008
Quantity (1,000 pounds)							
Germany	2,207	2,153	4,504	7,709	7,054	5,227	3,834
Singapore	909	1,314	1,189	1,135	2,465	1,781	1,639
Spain	1,662	1,524	1,794	1,354	1,137	854	122
Taiwan	23,539	28,117	20,777	23,354	26,127	18,207	24,903
All others ¹	94	128	293	214	690	536	220
Total nonsubject	28,410	33,236	28,557	33,767	37,473	26,604	30,720
Value (1,000 dollars)							
Germany	1,991	2,131	4,115	7,090	6,891	4,941	4,803
Singapore	746	998	1,035	1,064	2,578	1,782	2,067
Spain	1,692	1,740	2,161	1,496	1,701	1,289	322
Taiwan	16,402	19,048	16,654	19,340	24,012	16,395	27,466
All others ¹	52	140	485	226	637	483	262
Total nonsubject	20,883	24,057	24,449	29,215	35,819	24,889	34,920
Unit value (dollars per pound)							
Germany	\$0.90	\$0.99	\$0.91	\$0.92	\$0.98	\$0.95	\$1.25
Singapore	0.82	0.76	0.87	0.94	1.05	1.00	1.26
Spain	1.02	1.14	1.20	1.10	1.50	1.51	2.63
Taiwan	0.70	0.68	0.80	0.83	0.92	0.90	1.10
All others ¹	0.56	1.09	1.66	1.05	0.92	0.90	1.19
Total nonsubject	0.74	0.72	0.86	0.87	0.96	0.94	1.14
¹ All others includes Austria, Belgium, Brazil, Canada, Denmark, France, India, Ireland, Mexico, Sweden, Switzerland, and Thailand. The increase in imports from "all others" among nonsubject sources in 2007 is primarily attributable to PVA from France and Canada.							
Source: Compiled from official Commerce statistics.							

EXCLUDED FORMS OF PVA

U.S. imports of excluded forms of PVA⁵ are shown by source in table IV-3. U.S. imports from Japan comprised *** in each period for which data were collected.

Table IV-3
PVA: U.S. imports of excluded forms, by source, 2003-07, January-September 2007, and January-September 2008

Country	Calendar year					January - September	
	2003	2004	2005	2006	2007	2007	2008
Quantity (1,000 pounds)							
Japan	***	***	***	***	***	***	***
Israel	0	84	0	0	0	0	0
Italy	1,112	1,133	999	1,354	1,222	838	1,169
Netherlands	50	126	42	22	110	108	127
United Kingdom	3,768	4,449	3,582	3,665	3,207	2,477	2,567
Total	***	***	***	***	***	***	***
Value (1,000 dollars)							
Japan	***	***	***	***	***	***	***
Israel	0	101	0	0	0	0	0
Italy	991	1,166	1,029	1,160	908	642	917
Netherlands	97	119	40	22	88	83	77
United Kingdom	6,492	7,593	6,139	6,291	5,819	4,437	4,431
Total	***	***	***	***	***	***	***
Unit value (dollars per pound)							
Japan	\$***	\$***	\$***	\$***	\$***	\$***	\$***
Israel	(¹)	1.21	(¹)	(¹)	(¹)	(¹)	(¹)
Italy	0.89	1.03	1.03	0.86	0.74	0.77	0.79
Netherlands	1.93	0.95	0.95	0.99	0.80	0.77	0.61
United Kingdom	1.72	1.71	1.71	1.72	1.81	1.79	1.73
Total	***	***	***	***	***	***	***
¹ Not defined. Source: Compiled from official Commerce statistics and from data submitted in response to Commission questionnaires.							

⁵ The excluded forms of PVA are defined on page I-11 of this report.

CUMULATION CONSIDERATIONS

In assessing whether subject imports are likely to compete with each other and with the domestic like product with respect to cumulation, the Commission generally has considered the following four factors: (1) the degree of fungibility, including specific customer requirements and other quality-related questions; (2) presence of sales or offers to sell in the same geographic markets; (3) common channels of distribution; and (4) simultaneous presence in the market. Channels of distribution and fungibility (interchangeability) are discussed in Parts I and II of this report. Additional information concerning fungibility, geographical markets, and simultaneous presence in the market is presented below.

At the hearing, Celanese and DuPont requested that the Commission exercise its discretion to cumulate imports from all three of the subject countries.⁶ Solutia argued that the Commission should not exercise its discretion to cumulate imports from China contending that the Chinese industry is not export oriented and is completely focused on supplying its domestic market.⁷ Solutia did not argue that imports from Korea and Japan should not be cumulated.⁸

Fungibility

Celanese and DuPont produce PVA for most major applications; in contrast, Solutia produces PVA *** for PVB applications. One of the largest end use applications for PVA is PVB. Several of the largest PVB producers worldwide (e.g., Solutia, DuPont, Kuraray, Kingboard, and Chang Chun) are integrated backward and produce PVA for PVB production,⁹ and each subject country currently produces *** PVB-grade PVA.¹⁰

Importers from subject countries state that they tend to concentrate their sales in certain end-use products. Most importers import from only one country. The quantities and shares of PVA produced in the United States and in each subject country that were sold for each major end use in the United States during 2002, 2007, and January-September 2008 are shown in table IV-4. Table IV-5 shows the quantities and shares of PVA by hydrolysis range for the United States and each of the subject countries for 2002, 2007, and January-September 2008.

Table IV-4
PVA: Quantity and shares of production/shipments and imports, by country and by end uses, 2002, 2007, and January-September 2008

* * * * *

⁶ Hearing transcript (open session), p. 105 (Greenwald).

⁷ Hearing transcript (open session), p. 211-212 (Shor).

⁸ Hearing transcript (open session), p. 211 (Shor).

⁹ Hearing transcript (open session), p. 141 (Berezo) and hearing transcript (open session), pp. 226-227 (Feast). Solutia testified that the four largest producers of PVB are Solutia (U.S.), DuPont (U.S.), Sekisui (Japan), and Kuraray (Japan). Hearing transcript (open session), pp. 225 (Staff) and hearing transcript (open session), p. 226 (Feast). Solutia further testified that it believed Kingboard to be the largest PVB producer in China and Chang Chun to be the largest PVB producer in Taiwan. Hearing transcript (open session), p. 226 (Feast).

¹⁰ Data regarding *** are presented in tables IV-10, IV-14, and IV-18. See also *Polyvinyl Butyral*, April 2007, *Chemical Economics Handbook*, SRI Consulting, pp. 580.1831 E-H and 580.1831 M.

Table IV-5

PVA: Quantities of production/shipments and imports, by country and by hydrolysis levels, 2002, 2007, and January - September 2008

* * * * *

Geographic Markets

U.S. producers DuPont and Celanese reported that their sales were nationwide.¹¹ In January-September 2008, the two largest Customs districts for subject PVA entering the United States from China were Charleston, SC, and Los Angeles, CA.¹² Charleston's share of the total imports from China was 73.7 percent and Los Angeles's share of the total imports from China was 16.1 percent.¹³ Based on questionnaire data all imports from China are subject forms of PVA.¹⁴ The three largest Customs districts for all forms of PVA imported from Japan into the United States in January-September 2008 were Houston-Galveston, TX, Los Angeles, CA, and New Orleans, LA.¹⁵ The Houston-Galveston district represented 33.8 percent, the Los Angeles district represented 21.7 percent, and the New Orleans district represented 12.7 percent.¹⁶ 2003 was the last year in which a substantial amount of PVA was imported into the United States from Korea.¹⁷ In that year, the three largest Customs districts for PVA from Korea were Los Angeles, CA, Savannah, GA, and Charleston, SC.¹⁸ The Los Angeles district represented 54.1 percent, the Savannah district represented 21.3 percent, and the Charleston district represented 14.6 percent.¹⁹ Additional information on geographic markets may be found in Part V of this report.

Presence in the Market

After imposition of the orders, the presence of subject imports from Korea and Japan has been limited. Japanese producers, however, shipped increasing quantities of nonsubject PVA.²⁰ U.S. imports from China, however, entered the U.S. market in 66 out of 69 months between January 2003 and September 2008.²¹

U.S. IMPORTERS' INVENTORIES

Data relating to U.S. importers' inventories of PVA are presented in table IV-6. As the data presented in table IV-6 illustrate, inventories of subject imports fluctuated greatly throughout the period for which data were collected, with the lowest inventory level reported in 2005 and the highest inventory level reported in 2006. Inventories were *** lower (***) percent) in January-September 2008 than they were during the same period in 2007. Imported material from China accounted for *** the subject import

¹¹ Solutia internally consumes all the PVA it produces.

¹² Compiled from official Commerce statistics.

¹³ Compiled from official Commerce statistics.

¹⁴ SVW's questionnaire response, section II-18-a.

¹⁵ Compiled from official Commerce statistics.

¹⁶ Compiled from official Commerce statistics.

¹⁷ Compiled from official Commerce statistics.

¹⁸ Compiled from official Commerce statistics.

¹⁹ Compiled from official Commerce statistics.

²⁰ See Table IV-3.

²¹ Compiled from official Commerce statistics.

inventories. Inventory levels of nonsubject imports fluctuated during the period for which data were collected. In several periods, inventories of imported material from Taiwan accounted for as much or more than the inventories of imported material from all other sources.

Table IV-6

PVA: U.S. importers' end-of-period inventories of imports, by source, 2003-07, January-September 2007, and January-September 2008

* * * * *

THE INDUSTRY IN CHINA

Overview

In the original investigations the Commission collected data from SVW, the Chinese manufacturer/exporter that accounted for *** of China's reported exports of PVA to the United States during 2000-02.^{22 23} In the current reviews, SVW has again provided data on its PVA operations. As shown in table IV-7, SVW's capacity has increased by about *** pounds since 2002. However, SVW's export share has increased by *** percentage points.

Table IV-7

PVA: Comparison of select SVW data, 2002 and 2007

* * * * *

While SVW has been a primary exporter of Chinese PVA to the U.S. market, it is only one of approximately 14 firms believed to produce PVA in China.²⁴ Between 2003 and 2006 (the most recent year for which estimates are available), Chinese PVA production increased steadily from *** metric tons (***) to *** metric tons (***), while capacity was estimated to be *** metric tons (***).²⁵ During this

²² Staff Report, INV-AA-125 (August 27, 2003), p. I-2.

²³ As previously reported, in 2002, three PVA shipments were made by firms other than SVW amounting to *** pounds. The three shipping firms were ***. In addition, Customs records show an *** of *** pounds manufactured by ***. *** stated that it was a provider of logistical services and did not submit a questionnaire response. Lastly, Customs documents show *** possibly erroneous entries totaling *** pounds manufactured by ***. *** informed Commerce that it did not show any exports of Chinese produced PVA to the United States. Staff Report, INV-AA-056 (May 27, 2003), pp. IV-2 and IV-3.

²⁴ Solutia reported in its prehearing brief that two of the fourteen Chinese producers, Sinopec Beijing Dongfang Petrochemical and Huiangxi Guangwei, are no longer in operation. Solutia's prehearing brief, pp. 17-18. Solutia provided further press releases as part of its posthearing brief submission detailing the two Chinese plant closings. Solutia's posthearing brief, app. 21. See also "China's smog shutdown," <http://en.chinaelections.org/newsinfo.asp?newsid=15926>, retrieved January 29, 2009.

²⁵ Polyvinyl Alcohols, March 2007, *Chemical Economics Handbook*, SRI Consulting, p. 580.1811 Y.

period of rising production, China is believed to have shifted from being a net importer of PVA to being a net exporter of PVA.^{26 27} The four major Chinese producers are believed to be ***.^{28 29 30}

PVA Operations

Table IV-8 presents data for reported production and shipments of PVA for China by SVW. SVW accounts for *** of China's reported exports of PVA to the United States, however, it accounts for only approximately *** percent of Chinese production of PVA.³¹ Internal consumption has increased *** from 2003 to 2007. SVW's share of exports to the United States *** throughout 2003 to 2006; however, in 2007 SVW's share of exports to the United States fell to *** percent, and continued to decline into 2008. SVW reported that it *** alternative products utilizing the same equipment or labor that it uses to produce PVA.³² Finally, SVW reported that its exports of PVA (all reported Chinese exports of PVA are shown in table IV-9)³³ are subject to a 35.17 percent duty in Korea.³⁴ In addition, the European Union initiated an antidumping proceeding that resulted in the application of provisional duties but subsequently terminated the proceeding.³⁵

²⁶ *Polyvinyl Alcohols*, March 2007, *Chemical Economics Handbook*, SRI Consulting, p. 580.1811 Y. *See also Global Trade Atlas* (China was a net importer in 2003-04 and again in 2007, and a net exporter in 2005-06 and again in 2008).

²⁷ The Chinese VAT tax rebate on PVA is 5 percent. Celanese/DuPont's posthearing brief, p. 23 and Solutia's posthearing brief, p. A7.

²⁸ *Polyvinyl Alcohols*, March 2007, *Chemical Economics Handbook*, SRI Consulting, p. 580.1811 Y.

²⁹ One publication stated that December 2008 market conditions were weak, with an average PVA plant utilization rate at 30-40 percent. This same publication reported that Northeast Chemical will start-up a 40,000 tons per annum ("tpa") PVA unit in the second half of 2009, Changchun Chemical has plans to expand its PVA production from 40,000 tpa to 80,000 tpa, Anhui Vinyon Works is expected to increase its capacity by 40,000 tpa at the end of 2009, and Hunan Vinyon Works planned expansion to add 60,000 tpa to its PVA capacity has been postponed. Tecnon OrbiChem, *Chemical Business Focus: A Monthly Roundup and Analysis of the Key Factors Shaping World Chemical Markets*, issue no. 256, p. 2, January 8, 2009, contained in Celanese/DuPont's prehearing brief, exhibit 1.

³⁰ It has been reported that a producer in Taiwan, Chang Chun, opened a PVA plant in China in 2007. Solutia's prehearing brief, p. 25. *See also* Tecnon OrbiChem, *Chemical Business Focus: A Monthly Roundup and Analysis of the Key Factors Shaping World Chemical Markets*, issue no. 256, p. 2, January 8, 2009, contained in Celanese/DuPont's prehearing brief, exhibit 1.

³¹ SVW's foreign producer questionnaire response, section II-17. *See also Polyvinyl Alcohols*, March 2007, *Chemical Economics Handbook*, SRI Consulting, p. 580.1811 X.

³² SVW's foreign producer questionnaire response, section II-7.

³³ Export values reported by *Global Trade Atlas* for all countries (with the exception of the United States) are reported as F.O.B. (free on board) foreign port values.

³⁴ SVW's foreign producer questionnaire response, section II-13. Korea imposed a duty on imports of PVA from China of 11.1-35.17 percent from December 12, 2006 through December 11, 2009. http://www.ktc.go.kr/en/kboard_child/list.jsp?bm=86&pg=3, retrieved February 19, 2009.

³⁵ On December 19, 2006, the European Union ("EU") initiated an antidumping proceeding with regard to imports of PVA from China. EC Regulation No. C 311, December 19, 2006. On September 17, 2007, the EU imposed a provisional antidumping duty of 10.06 percent on imports from China. EC Regulation No. 1069, September 17, 2007. On March 17, 2008, the EU terminated its antidumping proceeding concerning imports of PVA from China. EC Regulation No. 227, March 17, 2008.

Table IV-8

PVA: SVW's capacity, production, shipments, and inventories, 2003-07, January-September 2007, and January-September 2008

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Table IV-9

PVA: China's exports, by country, 2003-07 and January-September 2008

Source	Calendar year					January-September
	2003	2004	2005	2006	2007	2008
Quantity (1,000 pounds)						
Netherlands	16,696	18,625	17,635	20,863	16,878	18,164
Belgium	4,330	3,649	5,371	6,592	8,577	10,255
Italy	8,930	6,986	15,938	15,955	7,549	4,624
Pakistan	589	3,995	5,706	5,667	6,066	5,481
United States	6,086	5,287	5,693	6,273	4,255	206
Japan	11	21	4,045	5,504	3,975	9,026
Thailand	3,772	4,331	4,651	3,874	1,986	2,174
Turkey	262	1,535	1,845	3,089	1,883	1,899
France	1,452	734	2,749	3,644	1,509	3,733
Russia	2,533	1,770	1,969	1,490	1,115	280
India	248	641	545	1,384	1,115	1,271
Spain	2,148	1,360	2,693	2,129	1,093	973
Malaysia	82	268	653	1,012	1,009	1,984
United Kingdom	344	1,317	1,346	1,429	974	1,010
North Korea	894	875	911	946	825	705
All other	6,570	8,392	10,815	11,655	7,384	14,424
Total	54,946	59,786	82,564	91,505	66,193	76,207
Value (1,000 dollars)						
Netherlands	8,656	11,019	10,863	12,709	12,639	19,133
Belgium	2,271	2,130	3,656	4,369	6,708	11,835
Italy	5,006	4,335	10,461	9,721	5,723	5,202
Pakistan	352	2,425	4,061	4,049	5,139	6,579
United States	3,432	3,066	3,696	4,185	3,239	270
Japan	6	20	2,698	3,668	3,055	9,632
Thailand	2,013	2,602	3,193	2,727	1,632	2,591
Turkey	149	975	1,232	1,991	1,536	2,117
France	749	437	1,807	2,312	1,070	4,158
Russia	1,590	1,089	1,313	1,100	966	339
India	153	477	479	969	990	1,473
Spain	1,214	811	1,828	1,410	903	1,182
Malaysia	49	164	468	702	876	2,309
United Kingdom	186	791	914	934	758	1,096
North Korea	493	560	602	690	817	897
All other	3,687	5,194	7,574	8,297	6,404	17,542
Total	30,005	36,095	54,845	59,834	52,454	86,356

Table continued on next page.

Table IV-9 – Continued

PVA: China's exports, by country, 2003-07 and January-September 2008.

Source	Calendar year					January-September
	2003	2004	2005	2006	2007	2008
Unit value (dollars per pound)						
Netherlands	\$0.52	\$0.59	\$0.62	\$0.61	\$0.75	\$1.05
Belgium	0.52	0.58	0.68	0.66	0.78	1.15
Italy	0.56	0.62	0.66	0.61	0.76	1.13
Pakistan	0.60	0.61	0.71	0.71	0.85	1.20
United States	0.56	0.58	0.65	0.67	0.76	1.31
Japan	0.57	0.96	0.67	0.67	0.77	1.07
Thailand	0.53	0.60	0.69	0.70	0.82	1.19
Turkey	0.57	0.64	0.67	0.64	0.82	1.12
France	0.52	0.59	0.66	0.63	0.71	1.11
Russia	0.63	0.62	0.67	0.74	0.87	1.21
India	0.62	0.74	0.88	0.70	0.89	1.16
Spain	0.56	0.60	0.68	0.66	0.83	1.21
Malaysia	0.60	0.61	0.72	0.69	0.87	1.16
United Kingdom	0.54	0.60	0.68	0.65	0.78	1.09
North Korea	0.55	0.64	0.66	0.73	0.99	1.27
All other	0.56	0.62	0.70	0.71	0.87	1.22
Total	0.55	0.60	0.66	0.65	0.79	1.13

Source: Compiled from Global Trade Atlas.

Table IV-10 presents SVW's production of PVA by end use application. The *** end use application produced is ***. In 2006 (the most recent year for which information is available), the major Chinese (including but not limited to SVW) end use applications which utilize PVA were polymerization aids (***) percent), textile warp sizing (***) percent), architecture coating (***) percent), paper sizing and coating (***) percent), adhesives (***) percent), vinal (vinyon) fibers (***) percent), and others.³⁶

Table IV-10

PVA: Quantity and shares of SVW's production by end uses, 2007 and January-September 2008

* * * * *

³⁶ Polyvinyl Alcohols, March 2007, *Chemical Economics Handbook*, SRI Consulting, p. 580.1811 Y.

THE INDUSTRY IN JAPAN

Overview

Only JVP provided data for these reviews. JVP accounts for *** percent of Japanese production of PVA.³⁷ In 2005, JVP became a wholly owned subsidiary of the Shin-Etsu Group company.³⁸ In the original investigations, data were received by Denki, JVP, and Kuraray Japan.³⁹ As previously stated, once the antidumping duty order from these investigations went into effect, Japanese exports of subject PVA to the United States declined.

Table IV-11

PVA: Comparison of select Japan industry data, 2002 and 2007

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Although JVP has been one of the exporters of Japanese PVA to the U.S. market, it is only one of four companies believed to produce PVA in Japan (the others include Denki Kagaku Kogyo K.K. (“Denki”);⁴⁰ Kuraray Co. Ltd. (“Kuraray”) ((reportedly the *** producer of PVA in the world);⁴¹ and Nippon Synthetic Chemical Industry Co., Ltd. (“Nippon”)).⁴² In 1999, Kuraray and Nippon built a collaborative plant (Poval Asia Pte. Ltd. (“Poval Asia”)) for PVA in Singapore with a capacity of *** metric tons (***).⁴³ Additionally, in 2001, Kuraray acquired Clariant’s PVA facility in Frankfurt, Germany and formed Kuraray Specialties Europe GmbH.⁴⁴ Between 2003 and 2006 (the most recent year for which estimates are available), Japanese PVA production increased irregularly from *** metric tons (*** pounds) to *** metric tons (*** pounds), while capacity was estimated to be *** metric tons (*** pounds).⁴⁵ During this period of rising production, Japan is believed to have been a net exporter of PVA.⁴⁶

³⁷ *Polyvinyl Alcohols*, March 2007, *Chemical Economics Handbook*, SRI Consulting, p. 580.1810 F. Additionally, JVP estimated that it accounts for *** percent of Japanese production of PVA. JVP’s foreign producer questionnaire response, section II-17-a.

³⁸ *Polyvinyl Alcohols*, March 2007, *Chemical Economics Handbook*, SRI Consulting, p. 580.1811 N.

³⁹ *Polyvinyl Alcohol from Germany and Japan, Invs. Nos. 731-1015 and 1016 (Final)*, USITC Publication 3604, June 2003, p. VII-3.

⁴⁰ ***. *Polyvinyl Alcohols*, March 2007, *Chemical Economics Handbook*, SRI Consulting, p. 580.1811 N.

⁴¹ ***. *Polyvinyl Alcohols*, March 2007, *Chemical Economics Handbook*, SRI Consulting, p. 580.1811 O.

⁴² Celanese/DuPont’s response to the notice of institution, p. 19.

⁴³ Reportedly exports of PVA from Japan have not increased since 1999 when Poval Asia in Singapore began operations. ***. *Polyvinyl Alcohols*, March 2007, *Chemical Economics Handbook*, SRI Consulting, pp. 580.1811 O-P.

⁴⁴ *Polyvinyl Alcohols*, March 2007, *Chemical Economics Handbook*, SRI Consulting, p. 580.1811 O.

⁴⁵ *Polyvinyl Alcohols*, March 2007, *Chemical Economics Handbook*, SRI Consulting, p. 580.1811 O.

⁴⁶ *Polyvinyl Alcohols*, March 2007, *Chemical Economics Handbook*, SRI Consulting, pp. 580.1811 M-O. See also Global Trade Atlas (Japan was a net exporter in 2003-08, with trade balances reaching 177.7 million pounds in 2007).

PVA Operations

Table IV-12 presents data for reported production and shipments of PVA in Japan by JVP. During the period for which data were collected, home market shipments *** from 2003 to 2007. Production *** reaching a *** in 2005. JVP *** alternative products utilizing the same equipment or labor used to produce PVA.⁴⁷ Finally, JVP reported that its exports of PVA (total Japanese PVA exports are shown in table IV-13) are subject to barriers to trade in Korea.⁴⁸ However, ***.⁴⁹

Table IV-12

PVA: JVP's capacity, production, shipments, and inventories, 2003-07, January-September 2007, and January-September 2008

* * * * *

Table IV-13

PVA: Japan's exports, by country, 2003-07 and January-September 2008

Source	Calendar year					January-September
	2003	2004	2005	2006	2007	2008
Quantity (1,000 pounds)						
China	19,640	29,760	32,117	34,091	41,127	21,124
Belgium	26,192	17,277	16,663	20,629	25,476	22,654
Germany	7,004	14,184	12,692	10,684	18,685	8,544
Netherlands	8,531	7,690	7,068	12,318	13,267	8,692
Indonesia	10,353	10,014	8,454	10,462	12,052	8,249
Thailand	6,683	8,277	7,593	9,417	10,126	9,014
United States	8,067	8,797	8,584	7,900	7,929	6,137
Singapore	8,838	8,672	5,880	7,024	6,796	1,151
India	2,146	1,414	1,609	4,033	6,295	4,337
South Korea	4,552	4,883	4,692	3,699	5,620	3,849
Pakistan	1,557	1,557	1,019	1,372	3,593	2,039
Brazil	2,995	2,663	2,783	2,756	3,162	2,043
Australia	759	1,166	1,962	2,644	3,096	1,368
Hong Kong	5,434	4,385	2,388	1,580	2,543	1,667
Iran	2,130	1,330	1,437	2,551	2,473	1,986
All other	30,723	32,602	27,893	24,756	24,144	16,692
Total	145,605	154,670	142,834	155,917	186,385	119,546

Table continued on next page.

⁴⁷ JVP's foreign producer questionnaire response, section II-7.

⁴⁸ JVP's foreign producer questionnaire response, section II-13. In 1998, Korea imposed a 37.75 percent tariff rate.

⁴⁹ *Polyvinyl Alcohols*, March 2007, *Chemical Economics Handbook*, SRI Consulting, p. 580.1811 W.

Table IV-13 – Continued
PVA: Japan's exports, by country, 2003-07 and January-September 2008

Source	Calendar year					January-September
	2003	2004	2005	2006	2007	2008
Value (1,000 dollars)						
China	17,829	25,550	32,019	34,617	43,654	29,142
Belgium	20,063	13,323	13,537	18,318	21,646	23,555
Germany	6,120	13,902	12,945	11,973	18,998	10,822
Netherlands	9,654	8,684	8,379	12,132	14,565	13,296
Indonesia	6,142	6,635	6,640	7,962	10,487	10,332
Thailand	5,193	6,002	6,092	7,431	9,049	11,320
United States	12,080	13,577	13,502	12,486	13,507	11,573
Singapore	7,213	7,584	6,013	7,259	7,281	1,206
India	1,778	1,332	1,712	3,560	6,122	5,698
South Korea	6,214	6,454	5,902	4,926	7,776	6,884
Pakistan	1,143	1,235	891	1,237	3,038	2,527
Brazil	4,214	3,283	3,417	3,668	4,395	4,525
Australia	631	1,049	1,730	2,377	2,983	1,753
Hong Kong	6,062	5,325	3,337	2,227	2,187	1,620
Iran	1,310	941	1,231	2,092	2,290	2,757
All other	28,233	30,614	27,495	26,080	27,700	24,897
Total	133,879	145,491	144,841	158,346	195,677	161,908
Unit value (dollars per pound)						
China	\$0.91	\$0.86	\$1.00	\$1.02	\$1.06	\$1.38
Belgium	0.77	0.77	0.81	0.89	0.85	1.04
Germany	0.87	0.98	1.02	1.12	1.02	1.27
Netherlands	1.13	1.13	1.19	0.98	1.10	1.53
Indonesia	0.59	0.66	0.79	0.76	0.87	1.25
Thailand	0.78	0.73	0.80	0.79	0.89	1.26
United States	1.50	1.54	1.57	1.58	1.70	1.89
Singapore	0.82	0.87	1.02	1.03	1.07	1.05
India	0.83	0.94	1.06	0.88	0.97	1.31
South Korea	1.37	1.32	1.26	1.33	1.38	1.79
Pakistan	0.73	0.79	0.87	0.90	0.85	1.24
Brazil	1.41	1.23	1.23	1.33	1.39	2.22
Australia	0.83	0.90	0.88	0.90	0.96	1.28
Hong Kong	1.12	1.21	1.40	1.41	0.86	0.97
Iran	0.62	0.71	0.86	0.82	0.93	1.39
All other	0.92	0.94	0.99	1.05	1.15	1.49
Total	0.92	0.94	1.01	1.02	1.05	1.35

Source: Compiled from Global Trade Atlas.

Table IV-14 presents data of JVP's production of PVA by end use application. The single *** specified end use application produced is ***, followed by ***; in addition, a *** share of production is divided between *** and ***. For the broader Japanese market PVA fibers were identified as the largest application in 2006 (the most recent year for which estimates are available) followed by *** and ***.⁵⁰

Table IV-14

PVA: Quantity and shares of JVP's production by end uses, 2007 and January-September 2008

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THE INDUSTRY IN KOREA

Overview

As shown in table IV-15, data were received from DC Chemical Co., Ltd. ("DC Chemical") for these reviews. DC Chemical was the only known PVA producer in Korea⁵¹ at the time of the original investigations and is believed to be the only PVA producer in Korea today.⁵² As previously stated, after imposition of these antidumping duty orders, Korean exports to the United States diminished and then halted. Overall, however, Korea is believed to be a net exporter of PVA.⁵³

Table IV-15

PVA: Comparison of select Korean industry data, 2002 and 2007

* * * * *

PVA Operations

Table IV-16 presents data for reported production and shipments of PVA for Korea. DC Chemical's capacity *** throughout the period for which data were collected.⁵⁴ From 2003 to 2005, production decreased by *** percent. However, after 2005 production began to increase in 2006 and 2007; although it ***. End-of-period inventories for January-September 2008 are *** percent greater than for the same period in 2007. Capacity utilization reached ***. In 2007, capacity utilization rose to ***. DC Chemical does not produce any alternative products utilizing the same equipment or labor used

⁵⁰ *Polyvinyl Alcohols*, March 2007, *Chemical Economics Handbook*, SRI Consulting, pp. 580.1811 Q-T.

⁵¹ "Korea" and "South Korea" are used synonymously in this section of the report.

⁵² *Polyvinyl Alcohol from Germany and Japan, Invs. Nos. 731-TA-1015 and 1016 (Final)*, USITC Publication 3604, June 2003, p. VII-3, DC Chemical's foreign producer questionnaire response, section II-17a, and *Polyvinyl Alcohols*, March 2007, *Chemical Economics Handbook*, SRI Consulting, p. 580.1810 F.

⁵³ See *Global Trade Atlas* (Korea was a net exporter in 2003-08, with trade balances reaching 13.9 million pounds in 2007).

⁵⁴ ***. DC Chemical's producer questionnaire response, sections II-2 and II-5 (2008) and DC Chemical's producer questionnaire response, section II-1 (2003). An independent source, *Polyvinyl Alcohols, Chemical Economics Handbook*, shows DC Chemical's capacity to be *** pounds. *Polyvinyl Alcohols*, March 2007, *Chemical Economics Handbook*, SRI Consulting, p. 580.1812 A, and *Polyvinyl Alcohols*, December 2003, *Chemical Economics Handbook*, SRI Consulting, p. 580.1811 Q.

to produce PVA.⁵⁵ Finally, DC Chemical reported that its exports of PVA (as shown in table IV-17) are not subject to any barriers to trade.⁵⁶

Table IV-16

PVA: Korean capacity, production, shipments, and inventories, 2003-07, January-September 2007, and January-September 2008

* * * * *

Table IV-17

PVA: Korea's exports, by country, 2003-07 and January-September 2008

Source	Calendar year					January-September
	2003	2004	2005	2006	2007	2008
Quantity (1,000 pounds)						
Italy	5,821	4,708	198	1,982	6,920	1,687
India	2,913	2,964	4,456	2,717	3,004	1,411
Indonesia	3,660	3,843	3,130	2,249	2,630	2,708
China	687	1,015	862	1,728	1,279	519
Vietnam	293	980	1,049	1,354	1,181	657
Pakistan	2,175	1,764	941	1,623	1,164	494
Iran	819	1,623	811	600	988	287
Uzbekistan	1,340	952	741	670	811	494
United Arab Emirates	0	141	35	11	741	670
Malaysia	1,279	1,742	1,746	666	638	536
Belgium	165	66	0	0	529	212
Mauritius	0	185	340	433	371	370
Netherlands	586	853	319	31	317	0
Egypt	127	139	459	776	282	71
Brazil	35	211	317	247	247	247
All other	4,716	4,250	2,479	2,465	1,540	7,336
Total	24,617	25,435	17,885	17,551	22,643	17,698

Table continued on next page.

⁵⁵ DC Chemical's foreign producer questionnaire response, section II-7.

⁵⁶ DC Chemical's foreign producer questionnaire response, section II-13.

Table IV-17 – Continued
PVA: Korea's exports, by country, 2003-07 and January-September 2008

Source	Calendar year					January-September
	2003	2004	2005	2006	2007	2008
Value (1,000 dollars)						
Italy	3,494	3,382	134	1,433	6,279	2,229
India	1,637	1,947	3,219	1,973	2,352	1,895
Indonesia	1,994	2,496	2,230	1,601	2,497	3,738
China	431	678	646	1,365	1,159	705
Vietnam	214	692	847	1,097	1,171	868
Pakistan	1,324	1,230	700	1,192	1,039	632
Iran	498	1,113	614	461	980	372
Uzbekistan	959	751	700	678	960	804
United Arab Emirates	0	97	26	9	879	813
Malaysia	732	1,195	1,296	472	569	684
Belgium	93	44	0	0	442	276
Mauritius	0	141	295	365	373	533
Netherlands	332	582	234	23	258	0
Egypt	89	98	355	564	244	99
Brazil	21	146	242	190	236	330
All other	2,889	2,965	1,920	1,917	1,494	9,544
Total	14,704	17,557	13,458	13,340	20,934	23,523
Unit value (dollars per pound)						
Italy	\$0.60	\$0.72	\$0.67	\$0.72	\$0.91	\$1.32
India	0.56	0.66	0.72	0.73	0.78	1.34
Indonesia	0.54	0.65	0.71	0.71	0.95	1.38
China	0.63	0.67	0.75	0.79	0.91	1.36
Vietnam	0.73	0.71	0.81	0.81	0.99	1.32
Pakistan	0.61	0.70	0.74	0.73	0.89	1.28
Iran	0.61	0.69	0.76	0.77	0.99	1.30
Uzbekistan	0.72	0.79	0.95	1.01	1.18	1.63
United Arab Emirates	(¹)	0.69	0.73	0.81	1.19	1.21
Malaysia	0.57	0.69	0.74	0.71	0.89	1.28
Belgium	0.56	0.66	(¹)	(¹)	0.84	1.31
Mauritius	(¹)	0.76	0.87	0.84	1.01	1.44
Netherlands	0.57	0.68	0.73	0.73	0.81	(¹)
Egypt	0.70	0.71	0.77	0.73	0.87	1.41
Brazil	0.58	0.69	0.76	0.77	0.96	1.33
All other	0.61	0.70	0.77	0.78	0.97	1.30
Total	0.60	0.69	0.75	0.76	0.92	1.33
¹ Not defined. Source: Compiled from Global Trade Atlas.						

Table IV-18 presents data of DC Chemical's production of PVA by end use application. The two largest end use applications produced are ***.

Table IV-18

PVA: Quantity and shares of DC Chemical's production by end uses, 2007 and January-September 2008

* * * * *

GLOBAL MARKET

Supply and Demand

According to the published sources, global capacity at the end of 2006 was approximately *** MT (*** pounds) with approximately three-quarters located in Asia. China alone was estimated to account for *** percent of global capacity in 2006.⁵⁷ Table IV-19 presents capacity, production, trade and consumption data on a regional basis.

Table IV-19

PVA: World capacity, production, imports, exports and consumption, 2006, consumption, 2011, and annual growth rate, 2006-11, by region/country

* * * * *

The different regions consume PVA for different applications. In the United States, PVA is primarily used to make PVB. The next two major uses in the U.S. market are *** and ***. In Western Europe, the primary application for PVA is again to make PVB, but the next two leading uses are *** and ***. In Japan, PVB production is still substantial, but the top three applications of PVA are vinylon fibers, ***, and ***. In China, the primary application is the manufacture of polymerization aids, followed by textile warp sizing and architecture coating. The Korean market is similar to that of Japan with the same three major applications; however, in Korea, *** are paramount.⁵⁸

Table IV-20 presents export data for the larger producing countries. Throughout this period, the United States has been among the largest exporters of PVA in the world.

⁵⁷ *Polyvinyl Alcohols*, March 2007, *Chemical Economics Handbook*, SRI Consulting, p. 580.1810 E.

⁵⁸ *Polyvinyl Alcohols*, March 2007, *Chemical Economics Handbook*, SRI Consulting, pp. 580.1810 L, 580.1811 E, 580.1811 P, 580.1811 Y.

Table IV-20
PVA: Global exports, by country, 2003-07 and January-September 2008

Item	Calendar year					January-September
	2003	2004	2005	2006	2007	2008
Quantity (1,000 pounds)						
Japan	145,605	154,670	142,834	155,917	186,385	119,546
Taiwan	138,067	156,109	133,798	159,921	164,446	123,393
United States	117,988	139,972	135,436	155,308	160,747	118,715
Singapore	100,481	109,604	98,905	106,736	106,570	(¹)
China	54,946	59,786	82,564	91,505	66,193	76,207
Spain	7,394	7,496	7,185	8,217	47,381	34,526
Netherlands	50,380	43,391	45,324	35,509	46,537	39,454
South Korea	24,617	25,435	17,885	17,551	22,643	17,698
Italy	18,801	19,412	21,122	23,455	20,401	10,265
Belgium	28,402	20,128	13,574	13,913	19,405	15,811
United Kingdom	12,676	13,922	13,823	15,800	19,006	14,722
France	9,054	14,409	10,084	13,913	12,222	12,183
Hong Kong	6,928	7,821	5,106	2,515	2,624	2,617
Austria	174	258	328	467	1,060	637
Thailand	29	198	382	373	842	448
All other	80,534	81,917	6,467	7,155	6,652	3,423
Total	796,077	854,527	734,817	808,256	883,114	589,644

Table continued on next page.

Table IV-20 – Continued
PVA: Global exports, by country, 2003-07 and January-September 2008

Item	Calendar year					January-September
	2003	2004	2005	2006	2007	2008
Value (1,000 dollars)						
Japan	133,879	145,491	144,841	158,346	195,677	161,908
Taiwan	77,071	97,128	95,937	118,267	136,520	137,610
United States	75,207	97,861	105,749	119,423	134,236	132,217
Singapore	65,879	79,426	79,186	90,256	103,346	(¹)
China	30,005	36,095	54,845	59,834	52,454	86,356
Spain	6,101	6,543	6,430	7,442	53,369	48,817
Netherlands	42,681	42,072	45,140	36,455	56,873	63,789
South Korea	14,704	17,557	13,458	13,340	20,934	23,523
Italy	15,536	19,011	18,905	21,075	22,043	14,272
Belgium	26,993	20,244	13,222	14,328	21,779	20,772
United Kingdom	20,906	25,606	23,028	27,562	39,643	33,649
France	5,354	8,337	7,065	9,220	9,425	10,868
Hong Kong	5,752	7,899	5,420	2,686	3,126	3,471
Austria	260	495	532	813	1,578	1,199
Thailand	25	173	355	310	833	536
All other	71,907	79,499	5,777	6,263	8,068	4,911
Total	592,261	683,437	619,891	685,619	859,905	743,898

Table continued on next page.

Table IV-20 – Continued
PVA: Global exports, by country, 2003-07 and January-September 2008

Item	Calendar year					January-September
	2003	2004	2005	2006	2007	2008
Unit value (per pound)						
Japan	\$0.92	\$0.94	\$1.01	\$1.02	\$1.05	\$1.35
Taiwan	0.56	0.62	0.72	0.74	0.83	1.12
United States	0.64	0.70	0.78	0.77	0.84	1.11
Singapore	0.66	0.72	0.80	0.85	0.97	(¹)
China	0.55	0.60	0.66	0.65	0.79	1.13
Spain	0.83	0.87	0.89	0.91	1.13	1.41
Netherlands	0.85	0.97	1.00	1.03	1.22	1.62
South Korea	0.60	0.69	0.75	0.76	0.92	1.33
Italy	0.83	0.98	0.90	0.90	1.08	1.39
Belgium	0.95	1.01	0.97	1.03	1.12	1.31
United Kingdom	1.65	1.84	1.67	1.74	2.09	2.29
France	0.59	0.58	0.70	0.66	0.77	0.89
Hong Kong	0.83	1.01	1.06	1.07	1.19	1.33
Austria	1.49	1.92	1.62	1.74	1.49	1.88
Thailand	0.86	0.87	0.93	0.83	0.99	1.19
All other	0.89	0.97	0.89	0.88	1.21	1.43
Total	0.74	0.80	0.84	0.85	0.97	1.26
¹ Data not available for this country for January-September 2008. Source: Global Trade Atlas.						

Prices of PVA in the U.S. Market Compared to Prices in Other Countries

U.S. PVA producers, importers and foreign PVA producers were requested to compare prices of PVA in the United States with PVA prices in other countries during January 2003-September 2008.⁵⁹ Three U.S. PVA producers (Celanese, DuPont, and Solutia) and two U.S. importers (***) provided useable comments, which are shown in the following tabulation.⁶⁰

* * * * *

⁵⁹ U.S. producer and importer questionnaire responses, sections IV-31 and III-30, respectively; U.S. purchaser questionnaire responses, section VI-5; and foreign producer questionnaire responses, section IV-8. The responding firms were requested to provide the basis for any price comparison, and note the specific information as to price levels, products, time periods, and countries or regions for any price comparisons.

⁶⁰ In addition, data for prices of PVA in the United States and other markets, reported by SRI Consulting, indicate that annual prices for PVA in the United States were above those for PVA in Western Europe and Japan. *Polyvinyl Alcohols*, March 2007, *Chemical Economics Handbook*, SRI Consulting, pp. 580.1810 P, 580.1811 I, 580.1811 U. U.S. prices were between *** in 2003 and *** to between *** in 2007. Western European prices *** from *** (per kilogram) in 2003 to *** in 2007. Japanese prices were *** (per kilogram) in 2003, *** to *** in 2004 then *** to *** in 2007. It should be noted, however, that U.S. prices are list prices and as the report states “actual market prices are believed to be less.” Western European and Japanese prices are for commodity grade PVA and thus, do not include prices for higher-grade, specialty products. *Ibid.*, p. 16.

PART V: PRICING AND RELATED INFORMATION

FACTORS AFFECTING PRICING

U.S. prices of PVA can fluctuate based on demand factors such as overall U.S. economic activity and demand fluctuations in sectors such as PVB, textiles, emulsion polymerization, adhesives, and paper. On the supply side, prices of PVA can differ by a number of product specifications, including, but not restricted to, the degree of hydrolysis and viscosity.¹ In addition, the price of PVA can fluctuate due to competitive pricing, and the size of the shipment.

The various standard and specialty grades of PVA offer a variety of performance properties that make PVA useful in a wide range of applications. Some of these performance properties of PVA include water solubility, abrasion resistance, adhesive and bonding properties, and grease/oil resistance.

Historically, the highest prices have been paid by the paper industry, followed by adhesives and emulsion polymerization, then textiles, with the lowest prices for products sold to textile compounders. At the time of the original investigations, PVA for PVB applications was priced between textiles and adhesives applications.² However, this price hierarchy has been characterized as being “aspirational” in that sales of PVA for more valuable end products do not consistently result in higher returns.^{3 4}

Solutia noted that the cost of production for a particular type of PVA is a function of raw materials and the production run time. While PVB grade PVA does not use more VAM per pound than other grades of PVA, different grades can involve additional production steps and thus have higher production costs.⁵ With respect to PVA generally, including PVB grade PVA, Celanese and DuPont contend that “the role of quality specifications in PVA pricing is overshadowed by (1) purchase volume, (2) purchasing terms (long-term contract, short-term contract, or spot market), and (3) overall supply/demand in the market.”⁶

Raw Material Costs

The principal raw material inputs used to produce PVA are ethylene, acetic acid, and methanol, or VAM and methanol. Ethylene and acetic acid are combined to produce VAM, which is polymerized and combined with methanol to produce PVA. As discussed in Part III of this report, raw materials constituted the largest share of U.S. producers’ costs of goods sold (COGS), averaging approximately *** of COGS. Natural gas, or its derivative ethane, is the primary feedstock used by U.S. PVA producers to manufacture VAM, the principal raw material source to produce PVA. Thus, natural gas prices reportedly have been a substantial factor in U.S. PVA production costs.⁷ Figure V-1 shows quarterly natural gas prices to U.S. industrial users during January 2003-November 2008.⁸ As shown in figure V-1, quarterly prices of natural gas increased from \$6.77 per thousand cubic feet (“Mcf”) in the first quarter of

¹ DuPont reported that ***. Email correspondence from ***, received December 16, 2008.

² *Polyvinyl Alcohol from Germany and Japan*, Inv. Nos. 731-TA-1015-1016 (Final), USITC Publication 3604, June 2003, p. II-1.

³ Staff interview with *** officials, December 3, 2008.

⁴ In fact, Celanese and DuPont contend that ***. Celanese/DuPont’s posthearing brief, Part II: Answers to Commission Questions, p. 7.

⁵ Solutia’s posthearing brief, p. A46.

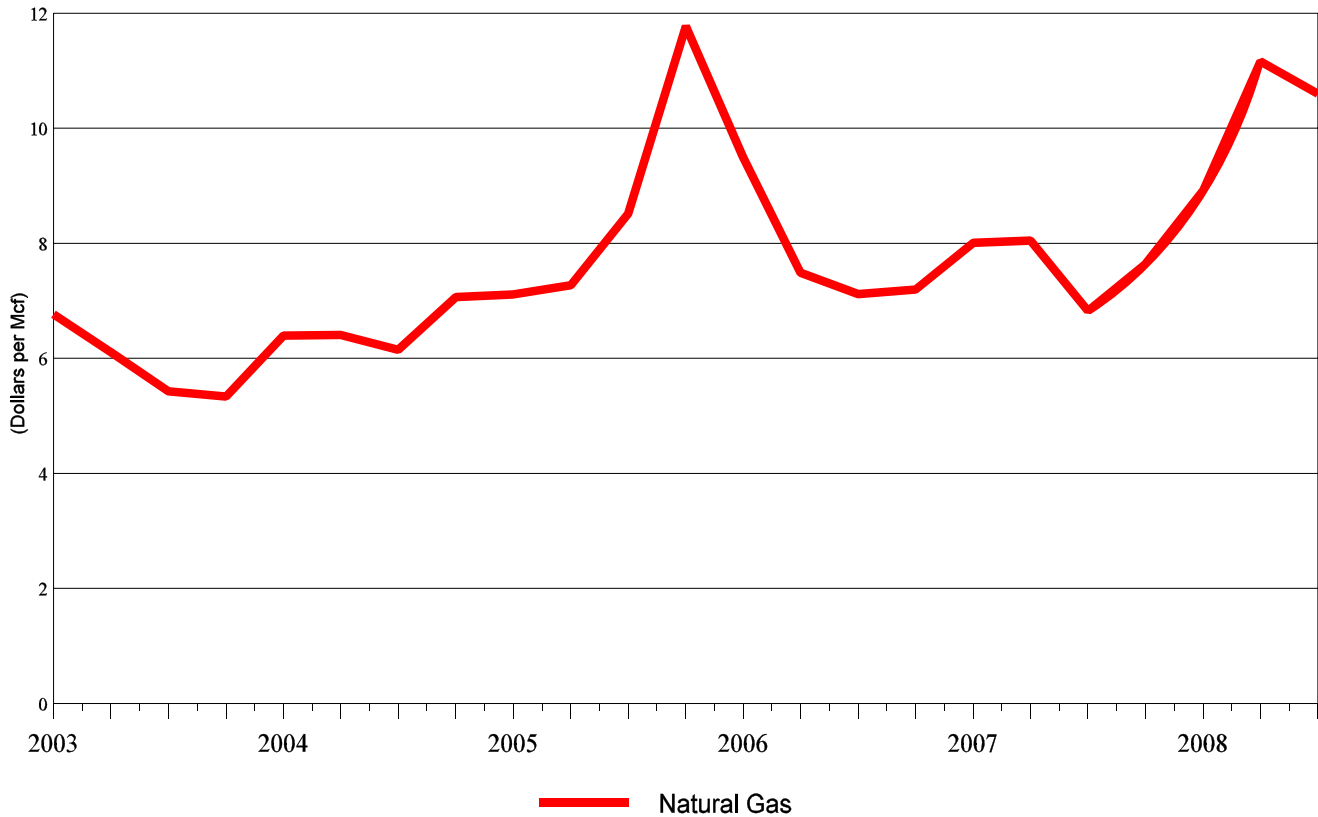
⁶ Celanese/DuPont’s posthearing brief, Part II: Response to Commission Questions, p.6. In addition, Celanese and DuPont stated that ***. Ibid., p. 7.

⁷ U.S. producer questionnaire responses, section IV-14.

⁸ Quarterly price data were calculated as simple averages of monthly price data reported by the Energy Information Administration.

2003 to a period high of \$11.78 in the fourth quarter of 2005. Prices for natural gas then fell to \$6.83 in third quarter of 2007, rose again to \$11.16 by April-June 2008, before falling to \$10.65 per thousand cubic feet in July-September 2008.⁹

Figure V-1
Natural gas prices: U.S. natural gas industrial prices, by quarter, January 2003-September 2008



Note.—“Mcf” refers to one thousand cubic feet of natural gas.

Source: Compiled from monthly price data reported by the U.S. Department of Energy, Energy Information Administration, <http://tonto.eia.doe.gov/dnav/ng/hist/n3035us3m.htm>, retrieved Feb. 24, 2009.

⁹ Natural Gas Navigator, U.S. Department of Energy, Energy Information Administration.

U.S. producers were asked to what extent have changes in raw material costs affected their firm's PVA selling price.¹⁰ All three U.S. producers provided comments, presented in the following tabulation.

* * * * *

In addition, Celanese and DuPont were asked to discuss the relationship between price increases during the later part of the period of review and increases in raw material costs. DuPont reported that the bulk of its price increases over the past two years were driven by higher energy costs as DuPont was forced to try to recover margins and pass on the cost increases to its customers.¹¹ Celanese and DuPont reported that they try to increase prices to cover rising raw material costs, however, Celanese reported that this is typically attempted directly through a price increase, rather than a raw material surcharge.¹² In the case of sales to ***, however, examples of contracts ***.¹³

Foreign producers in China, Japan, and Korea were also asked to what extent had changes in the prices of raw materials affected their firm's selling prices for PVA since 2003.¹⁴ *** indicated that oil prices can be a major factor affecting the cost of raw materials (VAM). *** reported that since 2003, it had increased the selling price of PVA by nearly *** percent in order to cover cost increases for raw materials, mainly ethylene. According to ***, raw material costs will decline in accordance with a decrease in the price of oil; however, such a decrease will be subject to a time lag as oil stocks are re-supplied.

Tariff Rates

The U.S. normal trade relations *ad valorem* import duty rate was 3.2 percent for imports of PVA under HTS subheading 3905.30.00 during January 2003-September 2008; no future staged tariff reductions are currently planned under this HTS subheading. In addition, under the NAFTA Canada/Mexico Preference, PVA classified under the above HTS subheading qualifying for North American treatment has been accorded a zero duty rate.

Transportation Costs to the U.S. Market

Transportation charges to ship PVA from China and Japan to the U.S. port of entry, as a ratio to the U.S. official customs value, averaged 9.2 percent and 5.8 percent, respectively, during 2003-07. The transportation costs from China fluctuated, but declined from 12.9 percent in 2003 to 7.0 percent in 2007. Transportation charges to ship PVA from Japan declined from 5.9 percent in 2003 to 5.3 percent in 2007. Although there were no imports of PVA from Korea in 2007, transportation charges from Korea declined from 6.7 percent in 2003 to 2.0 percent in 2006.

U.S. Inland Transportation Costs

U.S. producers' U.S. inland transportation costs, as a share of total delivered cost for PVA, reported by *** ranged between *** and *** percent of the total delivered price of PVA during January

¹⁰ At the hearing, Celanese and DuPont were asked if they were able to hedge on energy supplies. Celanese reported that it ***. Celanese/DuPont's posthearing brief, Part II: Responses to Commission Questions, p. 3.

¹¹ DuPont also noted that the tightness in the supply/demand balance in the market also contributed to the increase in prices. Hearing transcript (open session), p. 44 (Korte).

¹² Hearing transcript (open session), pp. 45-46 (Purvis).

¹³ As noted in the contracts, ***. Celanese/DuPont's posthearing brief, Attachment F.

¹⁴ Foreign producers' questionnaire, section III-6.

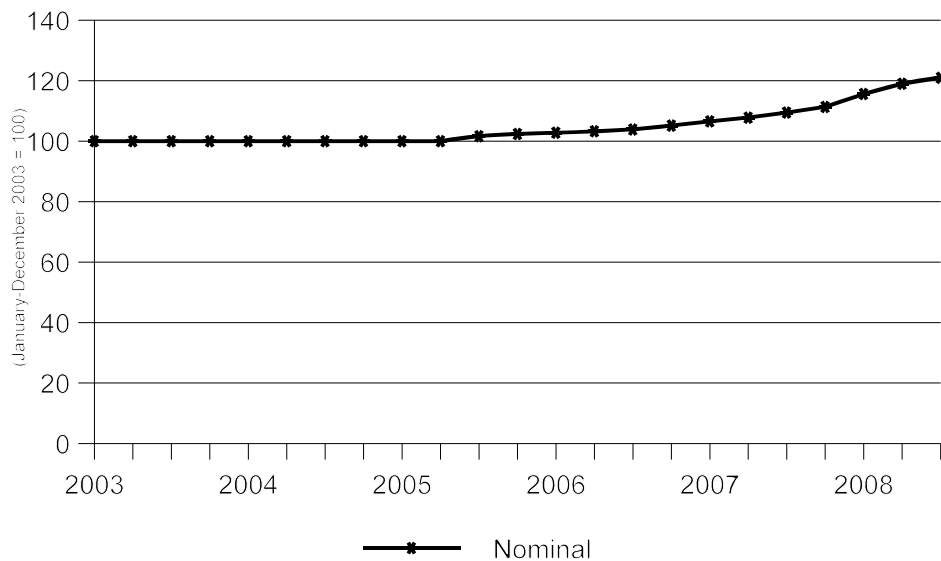
2003-September 2008.¹⁵ Similarly, six responding importers reported that U.S. inland transportation costs were 3.4 percent or less of the total delivered price of PVA.¹⁶ All responding U.S. producers and importers reported that their firms arranged for transportation. U.S. producers and importers also were asked to estimate the share of their sales that occurred within certain distance ranges. U.S. producers *** reported that their sales were nationwide. On average, U.S. producers reported shipping *** percent of their PVA within 100 miles of their storage or production facilities, *** percent between 101 and 1,000 miles, and *** percent beyond 1,000 miles.¹⁷ Two of the five responding U.S. importers also reported selling their PVA throughout the United States, and of the remaining three one sold PVA solely in the Southwest, one sold solely in the Southeast, and one solely in the Midwest. On average, U.S. importers of PVA reported shipping *** percent of their PVA within 100 miles of their U.S. shipping facilities, *** percent between 101 and 1,000 miles, and *** percent over 1,000 miles.

U.S. producers were asked about the average lead time between order and delivery for their firm's U.S. sales. Both responding producers reported that for sales from inventory, the lead time ranged between *** to *** days for 2007 and *** days for the January-September period of 2008.

Exchange Rates

Quarterly exchange rates reported by the International Monetary Fund for the three subject countries during the period January 2003-September 2008 are shown in figures V-2, V-3, and V-4.

Figure V-2
Exchange rates: Indices of the nominal exchange rate of the Chinese yuan relative to the U.S. dollar, by quarter, January 2003-September 2008



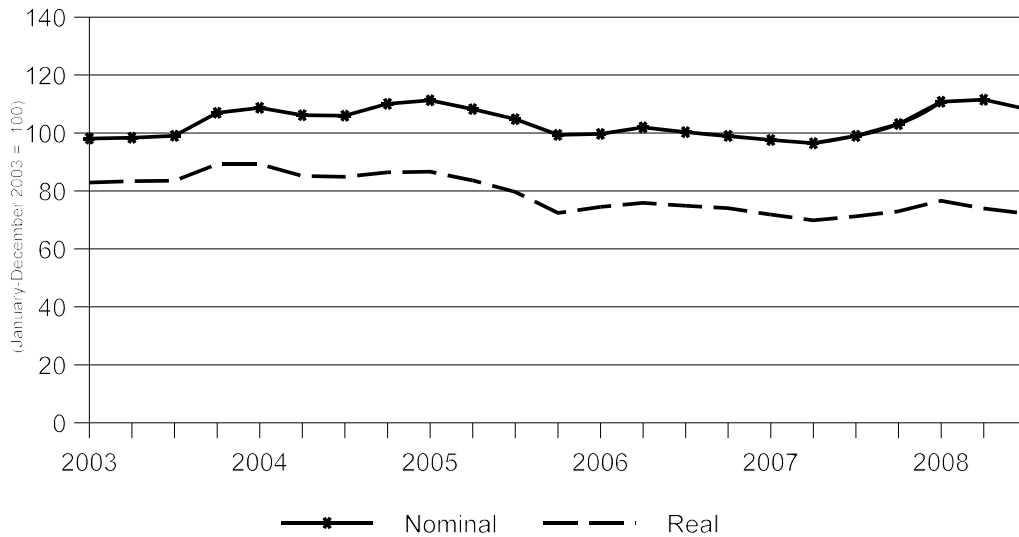
Source: International Monetary Fund, *International Financial Statistics* online, <http://imfstatistics.org/imf>, retrieved February 16, 2009.

¹⁵ U.S. producers' and importers' questionnaire responses, sections IV-B-11 and III-B-11, respectively.

¹⁶ U.S. importers' questionnaire response, section III-10.

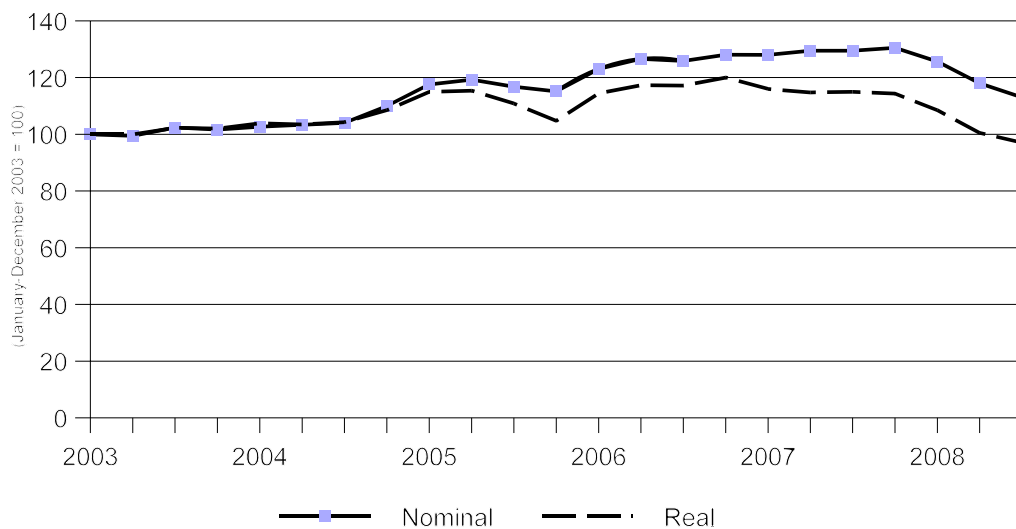
¹⁷ U.S. producers' questionnaire, section IV-10.

Figure V-3
Exchange rates: Indices of the nominal and real exchange rates of the Japanese yen relative to the U.S. dollar, by quarter, January 2003-September 2008



Source: International Monetary Fund, *International Financial Statistics* online, <http://imfstatistics.org/imf>, retrieved February 16, 2009.

Figure V-4
Exchange rates: Indices of the nominal and real exchange rates of the Korean won relative to the U.S. dollar, by quarters, January 2003-September 2008



Source: International Monetary Fund, *International Financial Statistics* online, <http://imfstatistics.org/imf>, retrieved February 16, 2009.

PRICING PRACTICES¹⁸

Pricing Methods

Producers were asked to describe how they determine the prices that they charged for their sales of PVA.¹⁹ Celanese reported that it ***. According to Celanese, its ***.²⁰ DuPont reported that ***.²¹

Importers of PVA reported using a variety of methods in determining prices for PVA. *** noted that contract pricing for its U.S. sales of PVA is based on annual agreements, with firm pricing for a 12-month period being common. *** also reported that, for recent business, quarterly price negotiations were selected as a more accurate method of conducting business.²² *** reported that its prices of imported PVA are set for a certain period and are negotiated and revised every quarter. The company also posts price increase announcements on its web page. Another importer of PVA from Japan, ***, reported that *** and its pricing is on a “cost plus” basis to cover U.S. inland freight and documentation fees. For imports of PVA from nonsubject sources, *** reported that prices for PVA were determined on a transaction-by-transaction basis. *** reported that its total delivered cost for PVA imported from *** includes: CIF, duties, financing, “junk charges,” warehouse transport, and warehouse in and out plus transport to customer, plus 10 percent profit.

U.S. producers and importers of PVA from China, Japan, and Korea were asked to report the percentage of their sales that were on a (1) long-term contract basis (multiple deliveries for more than 12 months), (2) short-term contract basis, and (3) spot sales basis (for a single delivery) in 2007. U.S. producers and importers reported a mix of contract and spot sales. *** reported that long-term contracts accounted for *** percent of its sales, short-term contracts for *** percent, and spot sales for *** percent.²³ *** reported that long-term contracts accounted for *** percent of its sales and the remainder (***) percent) consisted of spot sales.²⁴ Three U.S. importers, ***, provided information on the share of sales made on a contract and/or spot basis. For its shipments of PVA from ***, *** reported that short term contract sales accounted for *** percent of its shipments and the remainder (***) percent) consisted of spot sales. *** reported that *** percent of their sales of PVA from *** and ***, respectively, were on a spot basis.

As noted earlier in the report, *** is the *** consumer of PVA in the U.S. market. As such, DuPont, Celanese, and Solutia were requested to provide additional information with regard to their

¹⁸ Information on pricing practices discussed here was based on questionnaire responses of the U.S. producers and importers of PVA, unless otherwise noted; Celanese and DuPont provided all of the pricing practice information for U.S.-produced PVA.

¹⁹ U.S. producers’ questionnaire response section IV-3.

²⁰ Celanese reported that prices are typically set on a quarterly basis in the U.S. market and that if Celanese wanted to raise prices, it would typically make an announcement 30 days before the end of the quarter. However, Celanese also noted that it can announce price increases but it still has to negotiate to achieve those. Hearing transcript (open session), pp. 46-47 (Purvis).

²¹ U.S. producers’ questionnaire response section IV-3.

²² ***.

²³ DuPont reported that ***. Celanese/DuPont’s posthearing brief, Part II: Responses to Commissioners’ Questions, p. 41.

²⁴ In response to a question at the hearing, Celanese reported that, over review period, approximately *** percent of its sales were covered by long-term contracts. Celanese noted that, in the future, the percentage is expected to be closer to *** percent as it ***. Celanese/DuPont’s posthearing brief, Part II: Responses to Commissioners’ Questions, p. 40.

contracts with one another.²⁵ DuPont reported that it has been a *** to Solutia since *** and the initial contract between DuPont and Solutia was put into place ***.²⁶ According to DuPont, during the course of this contract, Solutia ***.²⁷ Celanese reported that it had ***. This contract ***. While the contract ***.²⁸ According to Celanese, it ***. Solutia reported that ***. For its contract with Celanese, ***. Under this contract, pricing is determined ***. Solutia reported that the contract contains ***.²⁹ Solutia's contract with DuPont ***. This contract contains ***.³⁰

*** responding U.S. producers, ***, reported that it offers short term contracts and the average duration of its long-term contracts was ***. *** reported that prices can be renegotiated during the contract period; contracts fixed both quantity and price; and contracts could potentially contain meet-or-release provisions.³¹ *** reported that its contracts ***. *** reported that its contract policy typically provides for ***.

Importers that use long-term contracts reported that the duration of contracts ranged between one and two years; prices could be renegotiated during the contract period; contracts fixed both quantity and price; and contracts typically contained meet-or-release provisions. Most responding importers that reported using short-term contracts stated that the duration of contracts for PVA ranged from four months to one year. Responding importers reported that prices could be renegotiated during the contract period; that quantity and prices were fixed by the contract; and that contracts typically contained meet-or-release provisions.³² *** that base pricing may be fixed initially, but quantity typically is set as a range of volumes or as a share of the customer's requirements.³³

Sales Terms and Discounts

U.S. producers and importers were asked to describe their discount policies for their sales of PVA.³⁴ ***. Similarly, ***. With regard to sales terms, *** Celanese and DuPont reported that payment terms for sales of PVA are ***.

Five of the six responding importers reported that they did not have any discount policy for their sales of PVA. The remaining responding importer, ***, reported that discounts for its sales of imported PVA are ***; thus, discounts for its sales of imported PVA vary and are based on contractual negotiations. Importers also reported that payment terms for sales of PVA are net 30 days.

²⁵ Copies of contracts between Solutia and both Celanese and DuPont are contained in the Celanese/DuPont's posthearing brief (see exhibits F-H).

²⁶ ***. Celanese/DuPont's posthearing brief, Part II: Responses to Commissioners' Questions, p. 43.

²⁷ DuPont reported that ***. Celanese/DuPont's posthearing brief, Part II: Responses to Commissioners' Questions, p. 44.

²⁸ ***. Celanese/DuPont's posthearing brief, appendix G, p. 3.

²⁹ Solutia's posthearing brief, appendix A, p. A42.

³⁰ Solutia's posthearing brief, appendix A, p. A42-A43.

³¹ Celanese reported that "the vast majority" of its contractual customer base has contracts with meet-or-release clauses and noted that "its very common for the meet-or-release" clauses to be invoked. Hearing transcript, pp. 120-121 (Purvis). However, ***. Celanese/DuPont's posthearing brief, Part II: Responses to Commissioners' Questions, p. 25.

³² U.S. importers' questionnaire response, section III-3.

³³ In addition, *** reported that, although its standard contract does not contain a meet-or-release provision, its contracts with a given customer may include a such provision because contracts are negotiated on a customer-by-customer basis.

³⁴ ***.

Questionnaire Price Data

The Commission requested U.S. producers and importers of PVA to provide quarterly data for the total quantity and f.o.b. value of selected products that were shipped to unrelated U.S. end user customers. Data were requested for the period January 2003-September 2008. The products for which pricing data were requested are as follows:³⁵

Product 1. –PVA for use in textile applications with a range of hydrolysis between 95-100 (percent) and a viscosity between 20-35 (centipois)

Product 2. –PVA for use in adhesive applications with a range of hydrolysis between 80-89 (percent) and a viscosity between 20-35 (centipois)

Product 3. –PVA for use in paper applications with a range of hydrolysis between 95-100 (percent) and a viscosity between 20-35 (centipois)

Product 4. –PVA for use in adhesive applications with a range of hydrolysis between 80-89 (percent) and a viscosity between 0-19 (centipois)

Product 5. –PVA for use in adhesive applications with a range of hydrolysis between 80-89 (percent) and a viscosity between 36-55 (centipois)

Product 6. –PVA for use in PVB applications with a range of hydrolysis between 98-100 (percent) and a viscosity between 28-32 (centipois)

As originally drafted and issued to producers and importers, the Commission's questionnaires requested data for sales of PVA products in bulk sold to end users.³⁶ Subsequent to the mailing of the questionnaires, staff received information from *** which indicated that a substantial portion of sales of both domestic and imported PVA were made in bags not in bulk.^{37 38} Accordingly, staff issued supplemental questionnaires which requested price data for PVA sold to end users in bags. Price data discussed in this section are for sales of the 6 specified PVA products sold in bulk and sold in bags.

*** U.S. producers, ***, and six importers of PVA from the subject countries, ***, provided usable price data for sales of the requested products, although not all firms reported pricing for all

³⁵ ***. Email correspondence from ***, received December 9, 2008.

³⁶ Staff requested data for sales exclusively to end users because it was argued during the questionnaire comment phase that prices differed for sales to distributors and sales to end users (JVP's comments on draft questionnaires, submitted by Hughes, Hubbard & Reed, October 1, 2008, p. 2). In an effort to gather data reflecting the majority of sales of both domestic and imported PVA and to minimize the burden on responding firms, data were requested for sales of PVA to end user customers.

³⁷ Staff phone conversation with ***, October 23, 2008. *See also* email correspondence from ***, October 27, 2008.

³⁸ Data in this report show that U.S. producers reported sales of PVA in bulk for two of the specified products (product 1, PVA for textile applications and product 2, PVA for use in PVB applications); prices for domestic PVA sold in bags was reported for products 1-6. Price data for imported PVA were predominantly for sales of PVA in bags.

quarters on subject countries.³⁹ In addition, ***, also reported the requested quarterly selling price data for one nonsubject country, Taiwan.⁴⁰

U.S. producers' reported price data accounted for approximately *** percent of total reported U.S. commercial shipments of U.S.-produced PVA during January 2003-September 2008. U.S. importers' reported price data accounted for *** percent of total reported U.S. commercial shipments of PVA imported from China during this period and approximately *** percent of total reported U.S. commercial shipments of PVA imported from Japan. There were no reported data for sales of imports of PVA from Korea during this period.

Price Trends

In general, prices for domestic PVA fluctuated within a fairly narrow range for the period 2003 through 2007 then increased in 2008 (tables V-1 to V-8 and figures V-5 to V-12). Price data for imports of subject PVA from subject sources were limited in many cases; for those products for which there were data for the entire period of review, prices also showed increases in 2008.

Table V-1

PVA: Weighted-average f.o.b. prices of domestic and imported product 1, sold in BAGS to end users, and margins of (overselling)/underselling, January 2003-September 2008

* * * * *

Table V-2

PVA: Weighted-average f.o.b. prices of domestic and imported product 1, sold in BULK to end users, and margins of (overselling)/underselling, January 2003-September 2008

* * * * *

Table V-3

PVA: Weighted-average f.o.b. prices of domestic and imported product 2, sold in BAGS to end users, and margins of (overselling)/underselling, January 2003-September 2008

* * * * *

Table V-4

PVA: Weighted-average f.o.b. prices of domestic and imported product 3, sold in BAGS to end users, and margins of (overselling)/underselling, January 2003-September 2008

* * * * *

Table V-5

PVA: Weighted-average f.o.b. prices of domestic and imported product 4, sold in BAGS to end users, and margins of (overselling)/underselling, January 2003-September 2008

* * * * *

³⁹ ***. Staff equally divided the annual quantity and value data into quarterly data.

⁴⁰ Price data for sales of PVA imported from Taiwan are presented in appendix F.

Table V-6

PVA: Weighted-average f.o.b. prices of domestic and imported product 5, sold in BAGS and in BULK to end users, and margins of (overselling)/underselling, January 2003-September 2008

* * * * *

Table V-7

PVA: Weighted-average f.o.b. prices of domestic and imported product 6, sold in BULK to end users, and margins of (overselling)/underselling, January 2003-September 2008

* * * * *

Figure V-5

PVA: U.S. weighted-average net f.o.b. selling prices of U.S.-produced and subject imported product 1, sold in BAGS to end users, by quarters, January 2003-September 2008

* * * * *

Figure V-6

PVA: U.S. weighted-average net f.o.b. selling prices of U.S.-produced and subject imported product 1, sold in BULK to end users, by quarters, January 2003-September 2008

* * * * *

Figure V-7

PVA: U.S. weighted-average net f.o.b. selling prices of U.S.-produced and subject imported product 2, sold in BAGS to end users, by quarters, January 2003-September 2008

* * * * *

Figure V-8

PVA: U.S. weighted-average net f.o.b. selling prices of U.S.-produced and subject imported product 3, sold in BAGS to end users, by quarters, January 2003-September 2008

* * * * *

Figure V-9

PVA: U.S. weighted-average net f.o.b. selling prices of U.S.-produced and subject imported product 4, sold in BAGS to end users, by quarters, January 2003-September 2008

* * * * *

Figure V-10

PVA: U.S. weighted-average net f.o.b. selling prices of U.S.-produced and subject imported product 5, sold in BAGS to end users, by quarters, January 2003-September 2008

* * * * *

Figure V-11

PVA: U.S. weighted-average net f.o.b. selling prices of U.S.-produced and subject imported product 5, sold in BULK to end users, by quarters, January 2003-September 2008

* * * * *

Figure V-12

PVA: U.S. weighted-average net f.o.b. selling prices of U.S.-produced and subject imported product 6, sold in BULK to end users, by quarters, January 2003-September 2008

* * * * *

Table V-8

PVA: Summary of reported weighted-average f.o.b. selling prices, by product, and by country

Item	Number of quarters	Low price (per pound)	High price (per pound)	Change in price ¹ (percent)
Product 1 sold in BAGS to end users				
United States	23	***	***	***
China	10	***	***	***
Taiwan	23	***	***	***
Product 1 sold in BULK to end users				
United States	23	***	***	***
Japan	2	***	***	***
Product 2 sold in BAGS to end users				
United States	23	***	***	***
China	21	***	***	***
Taiwan	23	***	***	***
Product 3 sold in BAGS to end users				
United States	23	***	***	***
China	23	***	***	***
Taiwan	21	***	***	***
Product 4 sold in BAGS to end users				
United States	23	***	***	***
China	13	***	***	***
Taiwan	23	***	***	***
Product 5 sold in BAGS to end users				
United States	23	***	***	***
China	23	***	***	***
Taiwan	23	***	***	***
Product 5 sold in BULK to end users				
Japan	7	***	***	***
Product 6 sold in BULK to end users				
United States	23	***	***	***
¹ Percentage change from the first quarter in which price data were available to the last quarter in which price data were available, based on unrounded data.				
Source: Compiled from data submitted in response to Commission questionnaires.				

For product 1, weighted-average quarterly selling prices for U.S.-produced PVA product 1 (sold in bags) increased irregularly for U.S.-produced PVA, whereas prices of imported Chinese PVA declined irregularly from the first quarter of 2003 through the second quarter of 2005 (table V-1 and figure V-5). Quarterly selling prices of the U.S.-produced product 1 (in bags) declined irregularly from *** per pound during January-March 2003 to per pound in July-September 2004, or by *** percent, before increasing irregularly to *** per pound by July-September 2008, or *** percent higher than the initial-period price.

Quarterly selling prices of PVA product 1 imported from China irregularly increased from *** per pound in January-March 2003 to *** per pound in January-March 2005, or by *** percent, before declining to *** per pound in April-June 2005, or was *** percent lower than the initial-period price.⁴¹ The quarterly selling price of imported Japanese product 1 (sold in bulk) remained constant during the first two quarters of 2003 (table V-2 and figure V-6).⁴²

Weighted-average quarterly selling prices for U.S. product 2 increased irregularly from *** per pound in January-March 2003 to *** per pound in January-March 2006, then increased to *** per pound in July-September 2008, or *** percent higher than the initial-period price (table V-3 and figure V-7). Quarterly selling prices of PVA product 2 imported from China increased irregularly from *** per pound in January-March 2003 to *** per pound in July-September 2005, or by *** percent. These prices then declined to *** per pound in April-June 2006.⁴³ Quarterly selling prices of imported Chinese product 2 reached *** in July-September 2008, or *** percent higher than the initial period.

Weighted-average quarterly selling prices of U.S.-produced PVA product 3 (sold in bags) prices for U.S. product 3 declined irregularly from *** per pound in January-March 2003 to *** per pound in January-March 2004 or by *** percent; these prices reached *** per pound in July-September 2008, or *** percent higher than the initial-period price (table V-4 and figure V-8). Sales prices of PVA product 3 imported from China increased irregularly from *** per pound in January-March 2003 to *** per pound in October-December 2005, or by *** percent, before increasing irregularly to *** per pound in July-September 2008, or *** percent higher than the price in the initial quarter of the period.

Weighted-average quarterly selling prices for U.S.-produced PVA product 4 (sold in bags) increased irregularly from *** per pound in January-March 2003 to *** per pound in July-September 2008 (table V-5 and figure V-9). Quarterly selling prices of PVA of product 4 imported from China increased from *** per pound in January-March 2003 to *** per pound in July-September 2008, a level approximately *** percent above the price in the first quarter of the review period.⁴⁴

Weighted-average quarterly selling prices for U.S.-produced product 5 (sold in bags) increased irregularly from *** per pound in January-March 2003 to a peak of *** per pound in July-September 2008, or *** percent higher than the initial-period price (table V-6 and figure V-10). Quarterly selling prices of PVA imported from China increased from *** per pound in January-March 2003 to *** per pound in July-September 2008, or *** percent higher than the initial period. Quarterly selling prices of imported Japanese product 5 (sold in bulk) increased from *** per pound in January-March 2003 to *** per pound in October-December 2003; these prices declined irregularly to *** per pound in October-December 2004 (table V-6 and figure V-11).

Weighted-average quarterly selling prices for U.S.-produced PVA product 6 (sold in bulk) increased irregularly from *** per pound in January-March 2003 to *** per pound in January-March 2006, before increasing to *** per pound in January-September 2008, or *** percent higher than the initial-period price (table V-7 and figure V-12).

⁴¹ Data for Chinese product were reported for sales of PVA in bags only during January 2003-June 2005.

⁴² Data for Japanese product were reported for sales of bulk PVA during for the first and second quarters of 2003.

⁴³ Data for Chinese product were not reported during the third and fourth quarters of 2006.

⁴⁴ Data for Chinese product were not reported during fourth quarter of 2004, the first three quarters of 2005, and October 2006-December 2007.

In addition to collecting quarterly price data from U.S. producers and importers, U.S. purchasers were asked if their firm has negotiated prices for 2009 to report the percentage price increase or decrease for 2009 prices as compared to 2008 prices.⁴⁵ Seven purchasers provided information and the following tabulation summarizes the responses of the responding firms.⁴⁶

* * * * *

Price Comparisons

Margins of underselling and overselling are presented by country in table V-9. As can be seen from the table, prices for PVA imported from China were below those for U.S.-produced PVA in 40 of 90 possible instances; margins of underselling ranged from *** to *** percent. In the other 50 instances, prices for Chinese PVA were priced above the domestic product, with margins of overselling ranging from *** to *** percent. With regard to Japan, prices for Japanese PVA were below those for U.S.-produced PVA in the only two instances where comparisons could be made; margins of underselling were *** percent.

Table V-9
PVA: Instances, range, and average margins of underselling/(overselling), by country, January 2004-September 2008

Country	Underselling			Overselling		
	Number of instances	Range (percent)	Average margin (percent)	Number of instances	Range (percent)	Average margin (percent)
China	40	***	***	50	***	***
Japan	2	***	***	-	-	-
Total subject countries	42	***	***	50	***	***

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

⁴⁵ ***.

⁴⁶ Solutia reported that while its purchases of PVA are down slightly from 2008, in terms of volume, the prices that Solutia is paying are higher. According to Solutia, it pays more per pound in the first quarter of 2009 than it paid in the fourth quarter of 2008 and it paid substantially more in the fourth quarter of 2008 than it did in the fourth quarter of 2007. Hearing transcript (open session), p. 149 (Berezo).

Table V-10 presents instances and ranges of margins of under/overselling from the original investigations.

Table V-10

PVA: Instances and ranges of margins of under/overselling from the original investigations, by country, January 2000-December 2002

	Underselling		Overselling	
	Number of instances	Range (<i>percent</i>)	Number of instances	Range (<i>percent</i>)
Country:				
China	41	***	4	***
Korea	10	***	4	***
Japan	3	***	3	***
Total	54	***	11	***
Source: Staff report from the original investigations (INV-AA-125, August 27, 2003) .				

APPENDIX A

***FEDERAL REGISTER* NOTICES AND THE
COMMISSION'S STATEMENT ON ADEQUACY**

INTERNATIONAL TRADE COMMISSION

[Investigation Nos. 731-TA-1014, 1016, and 1017 (Review)]

Polyvinyl Alcohol from China, Japan, and Korea

AGENCY: United States International Trade Commission.

ACTION: Institution of five-year reviews concerning the antidumping duty orders on polyvinyl alcohol from China, Japan, and Korea.

SUMMARY: The Commission hereby gives notice that it has instituted reviews pursuant to section 751(c) of the Tariff Act of 1930 (19 U.S.C. 1675(c)) (the Act) to determine whether revocation of the antidumping duty orders on polyvinyl alcohol from China, Japan, and Korea would be likely to lead to continuation or recurrence of material injury. Pursuant to section 751(c)(2) of the Act, interested parties are requested to respond to this notice by submitting the information specified below to the Commission;¹ to be assured of consideration, the deadline for responses is July 22, 2008. Comments on the adequacy of responses may be filed with the Commission by August 15, 2008. For further information concerning the conduct of these reviews and rules of general application, consult the Commission's Rules of Practice and Procedure, part 201, subparts A through E (19 CFR part 201), and part 207, subparts A, D, E, and F (19 CFR part 207).

DATES: *Effective Date:* June 2, 2008.

FOR FURTHER INFORMATION CONTACT: Mary Messer (202-205-3193), Office of Investigations, U.S. International Trade Commission, 500 E Street SW., Washington, DC 20436. Hearing-impaired persons can obtain information on this matter by contacting the Commission's TDD terminal on 202-205-1810. Persons with mobility impairments who will need special assistance in gaining access to the Commission should contact the Office of the Secretary at 202-205-2000. General information concerning the Commission may also be obtained by accessing its Internet server (<http://www.usitc.gov>).

¹ No response to this request for information is required if a currently valid Office of Management and Budget (OMB) number is not displayed; the OMB number is 3117-0016/USITC No. 08-5-182, expiration date June 30, 2008. Public reporting burden for the request is estimated to average 15 hours per response. Please send comments regarding the accuracy of this burden estimate to the Office of Investigations, U.S. International Trade Commission, 500 E Street, SW., Washington, DC 20436.

www.usitc.gov). The public record for these reviews may be viewed on the Commission's electronic docket (EDIS) at <http://edis.usitc.gov>.

SUPPLEMENTARY INFORMATION:

Background—On July 2, 2003, the Department of Commerce ("Commerce") issued an antidumping duty order on imports of polyvinyl alcohol from Japan (68 FR 39518). On October 1, 2003, Commerce issued antidumping duty orders on imports of polyvinyl alcohol from China and Korea (68 FR 56620, 56621). The Commission is conducting reviews to determine whether revocation of the orders would be likely to lead to continuation or recurrence of material injury to the domestic industry within a reasonably foreseeable time. It will assess the adequacy of interested party responses to this notice of institution to determine whether to conduct full reviews or expedited reviews. The Commission's determinations in any expedited reviews will be based on the facts available, which may include information provided in response to this notice.

Definitions—The following definitions apply to these reviews:

(1) *Subject Merchandise* is the class or kind of merchandise that is within the scope of the five-year reviews, as defined by Commerce.

(2) The *Subject Countries* in these reviews are China, Japan, and Korea.

(3) The *Domestic Like Product* is the domestically produced product or products which are like, or in the absence of like, most similar in characteristics and uses with, the Subject Merchandise. In its original determinations, the Commission defined the Domestic Like Product as all domestically produced polyvinyl alcohol meeting the specifications stated in Commerce's scope definition.

(4) The *Domestic Industry* is the U.S. producers as a whole of the Domestic Like Product, or those producers whose collective output of the Domestic Like Product constitutes a major proportion of the total domestic production of the product. In its original determinations, the Commission defined the Domestic Industry as all domestic producers of polyvinyl alcohol.

(5) The *Order Dates* are the dates that the antidumping duty orders under review became effective. In the review concerning Japan, the Order Date is July 2, 2003. In the reviews concerning China and Korea, the Order Date is October 1, 2003.

(6) An *Importer* is any person or firm engaged, either directly or through a parent company or subsidiary, in

importing the Subject Merchandise into the United States from a foreign manufacturer or through its selling agent.

Participation in the reviews and public service list—Persons, including industrial users of the Subject Merchandise and, if the merchandise is sold at the retail level, representative consumer organizations, wishing to participate in the reviews as parties must file an entry of appearance with the Secretary to the Commission, as provided in section 201.11(b)(4) of the Commission's rules, no later than 21 days after publication of this notice in the **Federal Register**. The Secretary will maintain a public service list containing the names and addresses of all persons, or their representatives, who are parties to the reviews.

Former Commission employees who are seeking to appear in Commission five-year reviews are advised that they may appear in a review even if they participated personally and substantially in the corresponding underlying original investigation. The Commission's designated agency ethics official recently has advised that a five-year review is no longer considered the "same particular matter" as the corresponding underlying original investigation for purposes of 18 U.S.C. 207, the post employment statute for Federal employees, and Commission rule 201.15(b)(19 CFR 201.15(b)), 73 FR 24609 (May 5, 2008). This advice was developed in consultation with the Office of Government Ethics. Consequently, former employees are no longer required to seek Commission approval to appear in a review under Commission rule 19 CFR 201.15, even if the corresponding underlying original investigation was pending when they were Commission employees. For further ethics advice on this matter, contact Carol McCue Verratti, Deputy Agency Ethics Official, at 202-205-3088.

Limited disclosure of business proprietary information (BPI) under an administrative protective order (APO) and APO service list—Pursuant to section 207.7(a) of the Commission's rules, the Secretary will make BPI submitted in these reviews available to authorized applicants under the APO issued in the reviews, provided that the application is made no later than 21 days after publication of this notice in the **Federal Register**. Authorized applicants must represent interested parties, as defined in 19 U.S.C. 1677(9), who are parties to the reviews. A separate service list will be maintained by the Secretary for those parties

authorized to receive BPI under the APO.

Certification—Pursuant to section 207.3 of the Commission's rules, any person submitting information to the Commission in connection with these reviews must certify that the information is accurate and complete to the best of the submitter's knowledge. In making the certification, the submitter will be deemed to consent, unless otherwise specified, for the Commission, its employees, and contract personnel to use the information provided in any other reviews or investigations of the same or comparable products which the Commission conducts under Title VII of the Act, or in internal audits and investigations relating to the programs and operations of the Commission pursuant to 5 U.S.C. Appendix 3.

Written submissions—Pursuant to section 207.61 of the Commission's rules, each interested party response to this notice must provide the information specified below. The deadline for filing such responses is July 22, 2008. Pursuant to section 207.62(b) of the Commission's rules, eligible parties (as specified in Commission rule 207.62(b)(1)) may also file comments concerning the adequacy of responses to the notice of institution and whether the Commission should conduct expedited or full reviews. The deadline for filing such comments is August 15, 2008. All written submissions must conform with the provisions of sections 201.8 and 207.3 of the Commission's rules and any submissions that contain BPI must also conform with the requirements of sections 201.6 and 207.7 of the Commission's rules. The Commission's rules do not authorize filing of submissions with the Secretary by facsimile or electronic means, except to the extent permitted by section 201.8 of the Commission's rules, as amended, 67 FR 68036 (November 8, 2002). Also, in accordance with sections 201.16(c) and 207.3 of the Commission's rules, each document filed by a party to the reviews must be served on all other parties to the reviews (as identified by either the public or APO service list as appropriate), and a certificate of service must accompany the document (if you are not a party to the reviews you do not need to serve your response).

Inability to provide requested information—Pursuant to section 207.61(c) of the Commission's rules, any interested party that cannot furnish the information requested by this notice in the requested form and manner shall notify the Commission at the earliest possible time, provide a full explanation of why it cannot provide the requested

information, and indicate alternative forms in which it can provide equivalent information. If an interested party does not provide this notification (or the Commission finds the explanation provided in the notification inadequate) and fails to provide a complete response to this notice, the Commission may take an adverse inference against the party pursuant to section 776(b) of the Act in making its determinations in the reviews.

Information to be Provided in Response to this Notice of Institution: If you are a domestic producer, union/worker group, or trade/business association; import/export Subject Merchandise from more than one Subject Country; or produce Subject Merchandise in more than one Subject Country, you may file a single response. If you do so, please ensure that your response to each question includes the information requested for each pertinent Subject Country. As used below, the term "firm" includes any related firms.

(1) The name and address of your firm or entity (including World Wide Web address if available) and name, telephone number, fax number, and e-mail address of the certifying official.

(2) A statement indicating whether your firm/entity is a U.S. producer of the Domestic Like Product, a U.S. union or worker group, a U.S. importer of the Subject Merchandise, a foreign producer or exporter of the Subject Merchandise, a U.S. or foreign trade or business association, or another interested party (including an explanation). If you are a union/worker group or trade/business association, identify the firms in which your workers are employed or which are members of your association.

(3) A statement indicating whether your firm/entity is willing to participate in these reviews by providing information requested by the Commission.

(4) A statement of the likely effects of the revocation of the antidumping duty orders on the Domestic Industry in general and/or your firm/entity specifically. In your response, please discuss the various factors specified in section 752(a) of the Act (19 U.S.C. 1675a(a)) including the likely volume of subject imports, likely price effects of subject imports, and likely impact of imports of Subject Merchandise on the Domestic Industry.

(5) A list of all known and currently operating U.S. producers of the Domestic Like Product. Identify any known related parties and the nature of the relationship as defined in section 771(4)(B) of the Act (19 U.S.C. 1677(4)(B)).

(6) A list of all known and currently operating U.S. importers of the Subject Merchandise and producers of the Subject Merchandise in each Subject Country that currently export or have exported Subject Merchandise to the United States or other countries since the Order Dates.

(7) If you are a U.S. producer of the Domestic Like Product, provide the following information on your firm's operations on that product during calendar year 2007 (report quantity data in pounds and value data in U.S. dollars, f.o.b. plant). If you are a union/worker group or trade/business association, provide the information, on an aggregate basis, for the firms in which your workers are employed/which are members of your association.

(a) Production (quantity) and, if known, an estimate of the percentage of total U.S. production of the Domestic Like Product accounted for by your firm's(s') production;

(b) the quantity and value of U.S. commercial shipments of the Domestic Like Product produced in your U.S. plant(s); and

(c) the quantity and value of U.S. internal consumption/company transfers of the Domestic Like Product produced in your U.S. plant(s).

(8) If you are a U.S. importer or a trade/business association of U.S. importers of the Subject Merchandise from the Subject Country(ies), provide the following information on your firm's(s') operations on that product during calendar year 2007 (report quantity data in pounds and value data in U.S. dollars). If you are a trade/business association, provide the information, on an aggregate basis, for the firms which are members of your association.

(a) The quantity and value (landed, duty-paid but not including antidumping duties) of U.S. imports and, if known, an estimate of the percentage of total U.S. imports of Subject Merchandise from each Subject Country accounted for by your firm's(s') imports;

(b) the quantity and value (f.o.b. U.S. port, including antidumping duties) of U.S. commercial shipments of Subject Merchandise imported from each Subject Country; and

(c) the quantity and value (f.o.b. U.S. port, including antidumping duties) of U.S. internal consumption/company transfers of Subject Merchandise imported from each Subject Country.

(9) If you are a producer, an exporter, or a trade/business association of producers or exporters of the Subject Merchandise in the Subject Country(ies), provide the following

information on your firm's(s') operations on that product during calendar year 2007 (report quantity data in pounds and value data in U.S. dollars, landed and duty-paid at the U.S. port but not including antidumping). If you are a trade/business association, provide the information, on an aggregate basis, for the firms which are members of your association.

(a) Production (quantity) and, if known, an estimate of the percentage of total production of Subject Merchandise in each Subject Country accounted for by your firm's(s') production; and

(b) the quantity and value of your firm's(s') exports to the United States of Subject Merchandise and, if known, an estimate of the percentage of total exports to the United States of Subject Merchandise from each Subject Country accounted for by your firm's(s') exports.

(10) Identify significant changes, if any, in the supply and demand conditions or business cycle for the Domestic Like Product that have occurred in the United States or in the market for the Subject Merchandise in the Subject Countries since the Order Dates, and significant changes, if any, that are likely to occur within a reasonably foreseeable time. Supply conditions to consider include technology; production methods; development efforts; ability to increase production (including the shift of production facilities used for other products and the use, cost, or availability of major inputs into production); and factors related to the ability to shift supply among different national markets (including barriers to importation in foreign markets or changes in market demand abroad). Demand conditions to consider include end uses and applications; the existence and availability of substitute products; and the level of competition among the Domestic Like Product produced in the United States, Subject Merchandise produced in the Subject Countries, and such merchandise from other countries.

(11) (Optional) A statement of whether you agree with the above definitions of the Domestic Like Product and Domestic Industry; if you disagree with either or both of these definitions, please explain why and provide alternative definitions.

Authority: These reviews are being conducted under authority of title VII of the Tariff Act of 1930; this notice is published pursuant to section 207.61 of the Commission's rules.

By order of the Commission.

Issued: May 19, 2008.

Marilyn R. Abbott,

Secretary to the Commission.

[FR Doc. E8-11528 Filed 5-30-08; 8:45 am]

BILLING CODE 7020-02-P

DEPARTMENT OF COMMERCE**International Trade Administration****Initiation of Five-Year ("Sunset") Reviews**

AGENCY: Import Administration, International Trade Administration, Department of Commerce.

SUMMARY: In accordance with section 751(c) of the Tariff Act of 1930, as amended ("the Act"), the Department of Commerce ("the Department") is automatically initiating a five-year review ("Sunset Review") of the antidumping duty orders listed below. The International Trade Commission ("the Commission") is publishing concurrently with this notice its notice of *Institution of Five-Year Review* which covers the same orders.

EFFECTIVE DATE: June 2, 2008.

FOR FURTHER INFORMATION CONTACT: The Department official identified in the *Initiation of Review* section below at AD/CVD Operations, Import Administration, International Trade Administration, U.S. Department of Commerce, 14th Street & Constitution Ave., NW., Washington, DC 20230. For information from the Commission contact Mary Messer, Office of Investigations, U.S. International Trade Commission at (202) 205-3193.

SUPPLEMENTARY INFORMATION:**Background**

The Department's procedures for the conduct of Sunset Reviews are set forth in its Procedures for Conducting Five-Year ("Sunset") Reviews of Antidumping and Countervailing *Duty Orders*, 63 FR 13516 (March 20, 1998) and 70 FR 62061 (October 28, 2005). Guidance on methodological or analytical issues relevant to the Department's conduct of Sunset Reviews is set forth in the Department's Policy Bulletin 98.3—*Policies Regarding the Conduct of Five-Year ("Sunset") Reviews of Antidumping and Countervailing Duty Orders: Policy Bulletin*, 63 FR 18871 (April 16, 1998).

Initiation of Review

In accordance with 19 CFR 351.218(c), we are initiating the Sunset Review of the following antidumping duty orders:

DOC Case No.	ITC Case No.	Country	Product	Department Contact
A-570-879	731-TA-1014	PRC	Polyvinyl Alcohol	Brandon Farlander, (202) 482-0182.
A-588-861	731-TA-1016	Japan	Polyvinyl Alcohol	Brandon Farlander, (202) 482-0182.
A-580-850	731-TA-1017	Korea	Polyvinyl Alcohol	Brandon Farlander, (202) 482-0182.
A-570-878	731-TA-1013	PRC	Saccharin	Andrea Berton, (202) 482-4037.

Filing Information

As a courtesy, we are making information related to Sunset proceedings, including copies of the pertinent statute and Department's regulations, the Department schedule for Sunset Reviews, a listing of past revocations and continuations, and current service lists, available to the public on the Department's sunset Internet Web site at the following address: "<http://ia.ita.doc.gov/sunset/>." All submissions in this Sunset Review must be filed in accordance with the Department's regulations regarding format, translation, service, and certification of documents. These rules can be found at 19 CFR 351.303.

Pursuant to 19 CFR 351.103(c), the Department will maintain and make available a service list for this proceeding. To facilitate the timely preparation of the service list(s), it is requested that those seeking recognition as interested parties to a proceeding contact the Department in writing 10 days of the publication of the Notice of Initiation.

Because deadlines in Sunset Reviews can be very short, we urge interested parties to apply for access to proprietary information under administrative protective order ("APO") immediately following publication in the **Federal Register** of this notice of initiation by filing a notice of intent to participate. The required contents of the notice of intent to participate are set forth at 19 CFR 351.218(d)(1)(ii) as set forth below.

Information Required From Interested Parties

Domestic interested parties defined in section 771(9)(C), (D), (E), (F), and (G) of the Act and 19 CFR 351.102(b) wishing to participate in this Sunset Review must respond not later than 15 days after the date of publication in the **Federal Register** of this notice of initiation by filing a notice of intent to participate. The required contents of the notice of intent to participate are set forth at 19 CFR 351.218(d)(1)(ii). In accordance with the Department's regulations, if we do not receive a notice of intent to participate from at least one

domestic interested party by the 15-day deadline, the Department will automatically revoke the order without further review. See 19 CFR 351.218(d)(1)(iii).

If we receive an order-specific notice of intent to participate from a domestic interested party, the Department's regulations provide that all parties wishing to participate in the Sunset Review must file complete substantive responses not later than 30 days after the date of publication in the **Federal Register** of this notice of initiation. The required contents of a substantive response, on an order-specific basis, are set forth at 19 CFR 351.218(d)(3). Note that certain information requirements differ for respondent and domestic parties. Also, note that the Department's information requirements are distinct from the Commission's information requirements. Please consult the Department's regulations for information regarding the Department's conduct of Sunset Reviews.¹ Please consult the Department's regulations at 19 CFR Part 351 for definitions of terms and for other general information concerning antidumping and countervailing duty proceedings at the Department.

This notice of initiation is being published in accordance with section 751(c) of the Act and 19 CFR 351.218(c).

Dated: May 30, 2008.

Stephen J. Claeys,

Deputy Assistant Secretary for Import Administration.

[FR Doc. E8-12611 Filed 6-4-08; 8:45 am]

BILLING CODE 3510-DS-P

¹ In comments made on the interim final sunset regulations, a number of parties stated that the proposed five-day period for rebuttals to substantive responses to a notice of initiation was insufficient. This requirement was retained in the final sunset regulations at 19 CFR 351.218(d)(4). As provided in 19 CFR 351.302(b), however, the Department will consider individual requests of that five-day deadline based upon a showing of good cause.

Commission's Rules of Practice and Procedure, part 201, subparts A through E (19 CFR part 201), and part 207, subparts A, D, E, and F (19 CFR part 207).

DATES: *Effective Date:* September 5, 2008.

FOR FURTHER INFORMATION CONTACT: Mary Messer (202-205-3193), Office of Investigations, U.S. International Trade Commission, 500 E Street, SW., Washington, DC 20436. Hearing-impaired persons can obtain information on this matter by contacting the Commission's TDD terminal on 202-205-1810. Persons with mobility impairments who will need special assistance in gaining access to the Commission should contact the Office of the Secretary at 202-205-2000. General information concerning the Commission may also be obtained by accessing its internet server (<http://www.usitc.gov>). The public record for these reviews may be viewed on the Commission's electronic docket (EDIS) at <http://edis.usitc.gov>.

SUPPLEMENTARY INFORMATION: On September 5, 2008, the Commission determined that it should proceed to full reviews in the subject five-year reviews pursuant to section 751(c)(5) of the Act. The Commission found that the domestic interested party group response to its notice of institution (72 FR 31507, June 2, 2008) was adequate and that the respondent interested party group response with respect to Korea was adequate and decided to conduct a full review with respect to the antidumping duty order concerning polyvinyl alcohol from Korea. The Commission found that the respondent interested party group responses with respect to China and Japan were inadequate.¹ However, the Commission determined to conduct full reviews concerning the antidumping duty orders on polyvinyl alcohol from China and Japan to promote administrative efficiency in light of its decision to conduct a full review with respect to the order concerning polyvinyl alcohol from Korea. A record of the Commissioners' votes, the Commission's statement on adequacy, and any individual Commissioner's statements will be available from the Office of the Secretary and at the Commission's Web site.

Authority: These reviews are being conducted under authority of title VII of the Tariff Act of 1930; this notice is published

INTERNATIONAL TRADE COMMISSION

[Investigation Nos. 731-TA-1014, 1016, and 1017 (Review)]

Polyvinyl Alcohol From China, Japan, and Korea

AGENCY: United States International Trade Commission.

ACTION: Notice of Commission determinations to conduct full five-year reviews concerning the antidumping duty orders on polyvinyl alcohol from China, Japan, and Korea.

SUMMARY: The Commission hereby gives notice that it will proceed with full reviews pursuant to section 751(c)(5) of the Tariff Act of 1930 (19 U.S.C. 1675(c)(5)) to determine whether revocation of the antidumping duty orders on polyvinyl alcohol from China, Japan, and Korea would be likely to lead to continuation or recurrence of material injury within a reasonably foreseeable time. A schedule for the reviews will be established and announced at a later date. For further information concerning the conduct of these reviews and rules of general application, consult the

¹ Commissioner Lane dissenting with respect to China and Japan. Commissioner Pinkert dissenting with respect to Japan.

pursuant to section 207.62 of the Commission's rules.

By order of the Commission.
Issued: September 10, 2008.

Marilyn R. Abbott,

Secretary to the Commission.

[FR Doc. E8-21537 Filed 9-15-08; 8:45 am]

BILLING CODE 7020-02-P

¹ Vice Chairman Pearson dissenting with respect to the respondent interested party group response.

**INTERNATIONAL TRADE
COMMISSION**

[Investigation Nos. 731-TA-1014, 1016, and
1017 (Review)]

**Polyvinyl Alcohol from China, Japan,
and Korea**

AGENCY: United States International
Trade Commission.

ACTION: Scheduling of full five-year
reviews concerning the antidumping
duty orders on polyvinyl alcohol from
China, Japan, and Korea.

SUMMARY: The Commission hereby gives
notice of the scheduling of full reviews
pursuant to section 751(c)(5) of the
Tariff Act of 1930 (19 U.S.C.
§ 1675(c)(5)) (the Act) to determine
whether revocation of the antidumping
duty orders on polyvinyl alcohol from
China, Japan, and Korea would be likely
to lead to continuation or recurrence of
material injury within a reasonably
foreseeable time. For further
information concerning the conduct of
these reviews and rules of general
application, consult the Commission's
Rules of Practice and Procedure, part
201, subparts A through E (19 CFR part
201), and part 207, subparts A, D, E, and
F (19 CFR part 207).

DATES: *Effective Date:* September 11,
2008.

FOR FURTHER INFORMATION CONTACT:
Angela Wissler (202-708-5409), Office
of Investigations, U.S. International
Trade Commission, 500 E Street, SW.,
Washington, DC 20436. Hearing-
impaired persons can obtain
information on this matter by contacting
the Commission's TDD terminal on 202-
205-1810. Persons with mobility
impairments who will need special
assistance in gaining access to the
Commission should contact the Office
of the Secretary at 202-205-2000.
General information concerning the
Commission may also be obtained by
accessing its Internet server ([\[www.usitc.gov\]\(http://www.usitc.gov\)\). The public record for
these reviews may be viewed on the
Commission's electronic docket \(EDIS\)
at <http://edis.usitc.gov>.](http://</p></div><div data-bbox=)

SUPPLEMENTARY INFORMATION:

Background.—On September 5, 2008,
the Commission determined that
responses to its notice of institution of
the subject five-year reviews were such
that full reviews pursuant to section
751(c)(5) of the Act should proceed (73
F.R. 53444, September 16, 2008). A
record of the Commissioners' votes, the
Commission's statement on adequacy,
and any individual Commissioner's
statements are available from the Office
of the Secretary and at the
Commission's Web site.

*Participation in the reviews and
public service list.*—Persons, including
industrial users of the subject
merchandise and, if the merchandise is
sold at the retail level, representative
consumer organizations, wishing to
participate in these reviews as parties
must file an entry of appearance with
the Secretary to the Commission, as
provided in section 201.11 of the
Commission's rules, by 45 days after
publication of this notice. A party that
filed a notice of appearance following
publication of the Commission's notice
of institution of the reviews need not
file an additional notice of appearance.
The Secretary will maintain a public
service list containing the names and
addresses of all persons, or their
representatives, who are parties to the
reviews.

*Limited disclosure of business
proprietary information (BPI) under an
administrative protective order (APO)
and BPI service list.*—Pursuant to
section 207.7(a) of the Commission's
rules, the Secretary will make BPI
gathered in these reviews available to
authorized applicants under the APO
issued in the reviews, provided that the
application is made by 45 days after
publication of this notice. Authorized
applicants must represent interested
parties, as defined by 19 U.S.C. 1677(9),
who are parties to the reviews. A party
granted access to BPI following
publication of the Commission's notice
of institution of the reviews need not
reapply for such access. A separate
service list will be maintained by the
Secretary for those parties authorized to
receive BPI under the APO.

Staff report.—The prehearing staff
report in the reviews will be placed in
the nonpublic record on January 7,
2009, and a public version will be
issued thereafter, pursuant to section
207.64 of the Commission's rules.

Hearing.—The Commission will hold
a hearing in connection with the

reviews beginning at 9:30 a.m. on January 27, 2009, at the U.S. International Trade Commission Building. Requests to appear at the hearing should be filed in writing with the Secretary to the Commission on or before January 21, 2009. A nonparty who has testimony that may aid the Commission's deliberations may request permission to present a short statement at the hearing. All parties and nonparties desiring to appear at the hearing and make oral presentations should attend a prehearing conference to be held at 9:30 a.m. on January 22, 2009, at the U.S. International Trade Commission Building. Oral testimony and written materials to be submitted at the public hearing are governed by sections 201.6(b)(2), 201.13(f), 207.24, and 207.66 of the Commission's rules. Parties must submit any request to present a portion of their hearing testimony *in camera* no later than 7 business days prior to the date of the hearing.

Written submissions.—Each party to the reviews may submit a prehearing brief to the Commission. Prehearing briefs must conform with the provisions of section 207.65 of the Commission's rules; the deadline for filing is January 16, 2009. Parties may also file written testimony in connection with their presentation at the hearing, as provided in section 207.24 of the Commission's rules, and posthearing briefs, which must conform with the provisions of section 207.67 of the Commission's rules. The deadline for filing posthearing briefs is February 5, 2009; witness testimony must be filed no later than three days before the hearing. In addition, any person who has not entered an appearance as a party to the reviews may submit a written statement of information pertinent to the subject of the reviews on or before February 5, 2009. On March 4, 2009, the Commission will make available to parties all information on which they have not had an opportunity to comment. Parties may submit final comments on this information on or before March 6, 2009, but such final comments must not contain new factual information and must otherwise comply with section 207.68 of the Commission's rules. All written submissions must conform with the provisions of section 201.8 of the Commission's rules; any submissions that contain BPI must also conform with the requirements of sections 201.6, 207.3, and 207.7 of the Commission's rules. The Commission's rules do not authorize filing of submissions with the Secretary by facsimile or electronic means, except to

the extent permitted by section 201.8 of the Commission's rules, as amended, 67 FR 68036 (November 8, 2002). Even where electronic filing of a document is permitted, certain documents must also be filed in paper form, as specified in II (C) of the Commission's Handbook on Electronic Filing Procedures, 67 FR 68168, 68173 (November 8, 2002).

Additional written submissions to the Commission, including requests pursuant to section 201.12 of the Commission's rules, shall not be accepted unless good cause is shown for accepting such submissions, or unless the submission is pursuant to a specific request by a Commissioner or Commission staff.

In accordance with sections 201.16(c) and 207.3 of the Commission's rules, each document filed by a party to the reviews must be served on all other parties to the reviews (as identified by either the public or BPI service list), and a certificate of service must be timely filed. The Secretary will not accept a document for filing without a certificate of service.

Authority: These reviews are being conducted under authority of title VII of the Tariff Act of 1930; this notice is published pursuant to section 207.62 of the Commission's rules.

By order of the Commission.

Issued: September 17, 2008.

Marilyn R. Abbott,

Secretary to the Commission.

[FR Doc. E8-22087 Filed 9-19-08; 8:45 am]

BILLING CODE 7020-02-P

(“Sunset”) Reviews, 73 FR 31974 (June 5, 2008) (*Notice of Initiation*).

The Department received notices of intent to participate from Celanese Chemicals, Ltd. and E.I. Dupont de Nemours & Co. (collectively, “the domestic interested parties”) within the deadline specified in 19 CFR 351.218(d)(1)(i). The companies claimed interested party status under section 771(9)(C) of the Act as manufacturers of a domestic like product in the United States. The Department also received a notice of intent to participate from two Japanese respondent interested parties: The Nippon Synthetic Chemical Industry Co., Ltd. and Marubeni Specialty Chemicals Inc. The companies claimed interested party status under section 771(9)(A) of the Act as a foreign producer and a U.S. importer, respectively, of the subject merchandise.

The Department received complete substantive responses to the notice of initiation from the domestic interested parties within the 30-day deadline specified in 19 CFR 351.218(d)(3)(i). We received no substantive responses from respondent interested parties with respect to any of the orders covered by these sunset reviews, nor was a hearing requested. As a result, pursuant to 19 CFR 351.218(e)(1)(ii)(C)(2), the Department is conducting expedited (120-day) sunset reviews of the antidumping duty orders for Japan, Korea, and the PRC.

Scope of the Orders

The merchandise covered by these orders is PVA. This product consists of all PVA hydrolyzed in excess of 80 percent, whether or not mixed or diluted with commercial levels of defoamer or boric acid, except as noted below.

The following products are specifically excluded from the scope of these orders:

- (1) PVA in fiber form.
- (2) PVA with hydrolysis less than 83 mole percent and certified not for use in the production of textiles.
- (3) PVA with hydrolysis greater than 85 percent and viscosity greater than or equal to 90 cps.
- (4) PVA with a hydrolysis greater than 85 percent, viscosity greater than or equal to 80 cps but less than 90 cps, certified for use in an ink jet application.
- (5) PVA for use in the manufacture of an excipient or as an excipient in the manufacture of film coating systems which are components of a drug or dietary supplement, and accompanied by an end-use certification.
- (6) PVA covalently bonded with cationic monomer uniformly present on

all polymer chains in a concentration equal to or greater than one mole percent.

(7) PVA covalently bonded with carboxylic acid uniformly present on all polymer chains in a concentration equal to or greater than two mole percent, certified for use in a paper application.

(8) PVA covalently bonded with thiol uniformly present on all polymer chains, certified for use in emulsion polymerization of non-vinyl acetic material.

(9) PVA covalently bonded with paraffin uniformly present on all polymer chains in a concentration equal to or greater than one mole percent.

(10) PVA covalently bonded with silan uniformly present on all polymer chains certified for use in paper coating applications.

(11) PVA covalently bonded with sulfonic acid uniformly present on all polymer chains in a concentration level equal to or greater than one mole percent.

(12) PVA covalently bonded with acetoacetylate uniformly present on all polymer chains in a concentration level equal to or greater than one mole percent.

(13) PVA covalently bonded with polyethylene oxide uniformly present on all polymer chains in a concentration level equal to or greater than one mole percent.

(14) PVA covalently bonded with quaternary amine uniformly present on all polymer chains in a concentration level equal to or greater than one mole percent.

(15) PVA covalently bonded with diacetoneacrylamide uniformly present on all polymer chains in a concentration level greater than three mole percent, certified for use in a paper application.

The merchandise subject to these orders is currently classifiable under subheading 3905.30.00 of the Harmonized Tariff Schedule of the United States (HTSUS). Although the HTSUS subheading is provided for convenience and customs purposes, the written description of the scope of these orders is dispositive.

Analysis of Comments Received

All issues raised in these reviews are addressed in the “Issues and Decision Memorandum for the Expedited Sunset Reviews of the Antidumping Duty Orders on Polyvinyl Alcohol from Japan, the Republic of Korea, and the People’s Republic of China” from Stephen J. Claeys, Deputy Assistant Secretary for Import Administration, and David M. Spooner, Assistant Secretary for Import Administration (September 29, 2008) (Decision Memo), which is

DEPARTMENT OF COMMERCE

International Trade Administration

[A–588–861, A–580–850, A–570–879]

Polyvinyl Alcohol From Japan, the Republic of Korea, and the People’s Republic of China: Final Results of the Expedited Sunset Reviews of the Antidumping Duty Orders

AGENCY: Import Administration, International Trade Administration, Department of Commerce.

SUMMARY: On June 5, 2008, the Department of Commerce (the Department) initiated sunset reviews of the antidumping duty orders on polyvinyl alcohol (PVA) from Japan, the Republic of Korea (Korea), and the People’s Republic of China (PRC) pursuant to section 751(c) of the Tariff Act of 1930, as amended (the Act). The Department has conducted expedited (120-day) sunset reviews for these orders pursuant to 19 CFR 351.218(e)(1)(ii)(C)(2). As a result of these sunset reviews, the Department finds that revocation of the antidumping duty orders would be likely to lead to continuation or recurrence of dumping.

DATES: *Effective Date:* October 3, 2008.

FOR FURTHER INFORMATION CONTACT: Elizabeth Eastwood or Miriam Eqab, AD/CVD Operations, Office 2, Import Administration, International Trade Administration, U.S. Department of Commerce, 14th Street & Constitution Avenue, NW., Washington, DC 20230; telephone: (202) 482–3874 and (202) 482–3693, respectively.

SUPPLEMENTARY INFORMATION

Background

On June 5, 2008, the Department published the notice of initiation of the sunset reviews of the antidumping duty orders on PVA from Japan, Korea, and the PRC pursuant to section 751(c) of the Act. See *Initiation of Five-Year*

hereby adopted by this notice. The issues discussed in the Decision Memo include the likelihood of continuation or recurrence of dumping and the magnitude of the margins likely to prevail if the orders were revoked. Parties can find a complete discussion of all issues raised in these reviews and the corresponding recommendations in this public memorandum which is on file in the Central Records Unit, room 1117 of the main Department building.

In addition, a complete version of the Decision Memo can be accessed directly on the Web at <http://ia.ita.doc.gov/frn>. The paper copy and electronic version of the Decision Memo are identical in content.

Final Results of Reviews

We determine that revocation of the antidumping duty orders on PVA from Japan, Korea, and the PRC would be likely to lead to continuation or recurrence of dumping at the following weighted-average percentage margins:

Manufacturers/exporters/ producers	Weighted- average margin (percent)
Japan:	
Denki Kagaku Kogyo Kabushiki Kaisha	144.16
Japan VAM & POVAL Co., Ltd	144.16
Kuraray Co., Ltd	144.16
The Nippon Synthetic Chem- ical Industry Co., Ltd	144.16
All-Others Rate	76.78
Korea:	
DC Chemical Company, Ltd	38.74
All-Others Rate	32.08
PRC:	
Sinopec Sichuan Vinylon Works	5.51
PRC-Wide Rate	97.86

This notice also serves as the only reminder to parties subject to administrative protective orders (APO) of their responsibility concerning the return or destruction of proprietary information disclosed under APO in accordance with 19 CFR 351.305. Timely notification of the return or destruction of APO materials or conversion to judicial protective orders is hereby requested. Failure to comply with the regulations and terms of an APO is a violation which is subject to sanction.

We are issuing and publishing the results and notice in accordance with sections 751(c), 752(c), and 777(i)(1) of the Act.

Dated: September 29, 2008.

David M. Spooner,
*Assistant Secretary for Import
Administration.*

[FR Doc. E8-23455 Filed 10-2-08; 8:45 am]

BILLING CODE 3510-DS-P

EXPLANATION OF COMMISSION'S DETERMINATIONS ON ADEQUACY

in

Polyvinyl Alcohol from China, Japan, and Korea
Inv. Nos. 731-TA-1014, 731-TA-1016, and 731-TA-1017 (Review)

On September 5, 2008, the Commission unanimously determined that it should proceed to full reviews in the subject five-year reviews pursuant to section 751(c)(5) of the Tariff Act of 1930, as amended, 19 U.S.C. § 1675(c)(5).

In response to the notice instituting five-year reviews of the antidumping duty orders on imports of polyvinyl alcohol from the People's Republic of China ("China"), Japan, and Korea, the Commission received six responses. The petitioners in the original investigations, domestic producers Celanese Chemicals, Ltd. ("Celanese") and E.I. DuPont de Nemours & Co. ("DuPont"), filed a joint submission. Solutia Inc. ("Solutia"), a domestic producer that captively consumes all of its polyvinyl alcohol production, also filed a response to the notice of institution. The Commission found each of these domestic interested party responses to the notice of institution to be individually adequate. Based on the current record, because Celanese, DuPont, and Solutia account for all known U.S. polyvinyl alcohol production, the Commission additionally found that the domestic interested party group response to the notice of institution was adequate.

With respect to the review on polyvinyl alcohol from China, the Commission received two responses to the notice of institution, one from Anhui Wanwei Updated High Tech Chemical Industry Co. Ltd. and one from Hunan Xiangwei Co. Ltd., both producers of the subject merchandise in China. The Commission found each of these respondent interested party responses to the notice of institution to be individually adequate. The current record suggests that there are several other producers of subject merchandise in China that may have accounted for a much greater share of the production of subject merchandise in China and/or the exports of subject merchandise from China during the original investigations and/or subsequent to Commerce's issuance of the underlying antidumping duty order. In light of these facts, the Commission determined that the respondent interested party group response was inadequate in this review.¹

With respect to the review on polyvinyl alcohol from Japan, one respondent interested party filed a response to the notice of institution, Japan VAM & POVAL Co. Ltd. ("JVP"), a producer of subject merchandise in Japan that exported subject merchandise to the United States during the original investigations and subsequent to Commerce's imposition of the antidumping duty order on subject merchandise from Japan. The current record suggests that three additional firms produced subject merchandise in Japan and/or exported subject merchandise to the United

¹ Commissioner Charlotte R. Lane found the respondent interested party group response was adequate in the review of the order on subject merchandise from China.

States during the original investigations and/or subsequent to Commerce's imposition of the antidumping duty order on subject merchandise from Japan. Thus, although the Commission found that JVP's response to the notice of institution was individually adequate, given JVP's share of Japanese production and exports to United States, the Commission determined that the group respondent interested party response was inadequate in this review.²

With respect to the review on polyvinyl alcohol from Korea, the Commission received one response to the notice of institution from DC Chemical, a producer and exporter of subject merchandise in Korea. The Commission found that this response to the notice of institution was individually adequate, and because DC Chemical is the only known producer of subject merchandise in Korea, the Commission further determined that the respondent interested party group response was adequate in this review.

Notwithstanding the Commission's determination that the respondent interested party group response was inadequate with respect to the reviews of the orders on subject merchandise from China and Japan, given the Commission's decision to conduct a full review of the order on subject merchandise from Korea, the Commission unanimously determined to conduct full reviews of the orders on polyvinyl alcohol from China, Japan, and Korea in order to promote administrative efficiency.

A record of the Commissioners' votes is available from the Office of the Secretary and the Commission's web site (www.usitc.gov).

² Commissioner Charlotte R. Lane and Commissioner Dean A. Pinkert found that the respondent interested party group response was adequate in the review of the order on subject merchandise from Japan. They took into consideration JVP's status as a substantial producer of subject merchandise in Japan, and its prior exports to the United States.

APPENDIX B
COMMISSION'S HEARING WITNESS LIST

CALENDAR OF PUBLIC HEARING

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

Subject: Polyvinyl Alcohol from China, Japan, and Korea
Inv. Nos.: 731-TA-1014, 1016, and 1017 (Review)
Date and Time: January 27, 2009 - 9:35 a.m.

Sessions were held in connection with these reviews in the Main Hearing Room, 500 E Street (room 101), SW, Washington, D.C.

**In Support of Continuation of
Antidumping Duty Orders:**

WilmerHale
Washington, D.C.
on behalf of

Celanese, Ltd.
E.I. DuPont de Nemours & Co.

Lou Purvis, General Manager, Polyvinyl
Alcohol Business, Celanese, Ltd.

Laura Korte, Vinyls Business Manager,
E.I. DuPont de Nemours & Co.

Eugene Bartolomeo, Product Line Manager,
Celanese, Ltd.

Jeanne Walker, Associate General Counsel,
Celanese International Corporation

Miriam Ronchi, Elvanol Product Manager,
E.I. DuPont de Nemours & Co.

Elaine Olsen, International Trade Specialist,
E.I. DuPont de Nemours & Co.

John D. Greenwald)
Ronald I. Meltzer) – OF COUNSEL
Patrick McLain)

**In Opposition to Continuation of
Antidumping Duty Orders:**

Arnold & Porter LLP
Washington, D.C.
on behalf of

Solutia Inc. (“Solutia”)

Michael Berezo, Vice President, Global Procurement,
Solutia

David McCool, Vice President *and* Deputy General
Counsel, Solutia

Tim Feast, President, Saflex, Solutia

Richard Boltuck, Economist, CRA International

Michael T. Shor)
) – OF COUNSEL
Sarah A. Friedman)

APPENDIX C
SUMMARY DATA

Table C-1

PVA: Summary data concerning the U.S. market, 2003-07, January-September 2007, and January-September 2008

(Quantity=1,000 pounds, value=1,000 dollars, unit values, unit labor costs, and unit expenses are per pound; period changes=percent, except where noted)

Item	Reported data					Period changes								
	2003	2004	2005	2006	2007	January-September		2003-07	2003-04	2004-05	2005-06	2006-07	Jan.-Sept. 2007-08	
						2007	2008							
U.S. consumption quantity:														
Amount	***	***	***	***	***	***	***	***	***	***	***	***	***	
Producers' share (1)	***	***	***	***	***	***	***	***	***	***	***	***	***	
Importers' share (1):														
China	***	***	***	***	***	***	***	***	***	***	***	***	***	
Japan	***	***	***	***	***	***	***	***	***	***	***	***	***	
Korea	***	***	***	***	***	***	***	***	***	***	***	***	***	
Subtotal (subject)	***	***	***	***	***	***	***	***	***	***	***	***	***	
Taiwan	***	***	***	***	***	***	***	***	***	***	***	***	***	
All other sources	***	***	***	***	***	***	***	***	***	***	***	***	***	
Subtotal (nonsubject)	***	***	***	***	***	***	***	***	***	***	***	***	***	
Total imports	***	***	***	***	***	***	***	***	***	***	***	***	***	
U.S. consumption value:														
Amount	***	***	***	***	***	***	***	***	***	***	***	***	***	
Producers' share (1)	***	***	***	***	***	***	***	***	***	***	***	***	***	
Importers' share (1):														
China	***	***	***	***	***	***	***	***	***	***	***	***	***	
Japan	***	***	***	***	***	***	***	***	***	***	***	***	***	
Korea	***	***	***	***	***	***	***	***	***	***	***	***	***	
Subtotal (subject)	***	***	***	***	***	***	***	***	***	***	***	***	***	
Taiwan	***	***	***	***	***	***	***	***	***	***	***	***	***	
All other sources	***	***	***	***	***	***	***	***	***	***	***	***	***	
Subtotal (nonsubject)	***	***	***	***	***	***	***	***	***	***	***	***	***	
Total imports	***	***	***	***	***	***	***	***	***	***	***	***	***	
U.S. imports from:														
China:														
Quantity	5,869	5,519	6,155	6,662	4,539	4,329	1,295	-22.7	-6.0	11.5	8.2	-31.9	-70.1	
Value	4,011	3,795	4,521	4,973	3,813	3,645	1,454	-4.9	-5.4	19.1	10.0	-23.3	-60.1	
Unit value	\$0.68	\$0.69	\$0.73	\$0.75	\$0.84	\$0.84	\$1.12	22.9	0.6	6.8	1.6	12.5	33.4	
Ending inventory quantity	***	***	***	***	***	***	***	***	***	***	***	***	***	
Japan:														
Quantity	***	***	***	***	***	***	***	***	***	***	***	***	***	
Value	***	***	***	***	***	***	***	***	***	***	***	***	***	
Unit value	***	***	***	***	***	***	***	***	***	***	***	***	***	
Ending inventory quantity	***	***	***	***	***	***	***	***	***	***	***	***	***	
Korea:														
Quantity	2,014	126	4	44	0	0	0	-100.0	-93.7	-96.6	920.0	-100.0	(2)	
Value	1,500	114	44	85	0	0	0	-100.0	-92.4	-61.7	93.4	-100.0	(2)	
Unit value	\$0.74	\$0.90	\$10.17	\$1.93	(2)	(2)	(2)	(2)	21.5	1024.2	-81.0	(2)	(2)	
Ending inventory quantity	***	***	***	***	***	***	***	***	***	***	***	***	***	
Subtotal (subject):														
Quantity	***	***	***	***	***	***	***	***	***	***	***	***	***	
Value	***	***	***	***	***	***	***	***	***	***	***	***	***	
Unit value	***	***	***	***	***	***	***	***	***	***	***	***	***	
Ending inventory quantity	***	***	***	***	***	***	***	***	***	***	***	***	***	
Taiwan:														
Quantity	23,539	28,117	20,777	23,354	26,127	18,207	24,903	11.0	19.4	-26.1	12.4	11.9	36.8	
Value	16,402	19,048	16,654	19,340	24,012	16,395	27,466	46.4	16.1	-12.6	16.1	24.2	67.5	
Unit value	\$0.70	\$0.68	\$0.80	\$0.83	\$0.92	\$0.90	\$1.10	31.9	-2.8	18.3	3.3	11.0	22.5	
Ending inventory quantity	***	***	***	***	***	***	***	***	***	***	***	***	***	
All other sources:														
Quantity	4,871	5,120	7,780	10,413	11,346	8,397	5,816	132.9	5.1	52.0	33.8	9.0	-30.7	
Value	4,481	5,009	7,795	9,876	11,807	8,494	7,454	163.5	11.8	55.6	26.7	19.6	-12.2	
Unit value	\$0.92	\$0.98	\$1.00	\$0.95	\$1.04	\$1.01	\$1.28	13.1	6.3	2.4	-5.3	9.7	26.7	
Ending inventory quantity	***	***	***	***	***	***	***	***	***	***	***	***	***	
Subtotal (nonsubject):														
Quantity	28,410	33,236	28,557	33,767	37,473	26,604	30,720	31.9	17.0	-14.1	18.2	11.0	15.5	
Value	20,883	24,057	24,449	29,215	35,819	24,889	34,920	71.5	15.2	1.6	19.5	22.6	40.3	
Unit value	\$0.74	\$0.72	\$0.86	\$0.87	\$0.96	\$0.94	\$1.14	30.0	-1.5	18.3	1.1	10.5	21.5	
Ending inventory quantity	***	***	***	***	***	***	***	***	***	***	***	***	***	
All sources:														
Quantity	***	***	***	***	***	***	***	***	***	***	***	***	***	
Value	***	***	***	***	***	***	***	***	***	***	***	***	***	
Unit value	***	***	***	***	***	***	***	***	***	***	***	***	***	
Ending inventory quantity	***	***	***	***	***	***	***	***	***	***	***	***	***	

Table continued on next page.

Table C-1--Continued

PVA: Summary data concerning the U.S. market, 2003-07, January-September 2007, and January-September 2008

(Quantity=1,000 pounds, value=1,000 dollars, unit values, unit labor costs, and unit expenses are per pound; period changes=percent, except where noted)

Item	Reported data					Period changes								
	2003	2004	2005	2006	2007	January-September		2003-07	2003-04	2004-05	2005-06	2006-07	Jan.-Sept. 2007-08	
						2007	2008							
U.S. producers':														
Average capacity quantity	***	***	***	***	***	***	***	***	***	***	***	***	***	
Production quantity	***	***	***	***	***	***	***	***	***	***	***	***	***	
Capacity utilization (1)	***	***	***	***	***	***	***	***	***	***	***	***	***	
U.S. shipments:														
Quantity	***	***	***	***	***	***	***	***	***	***	***	***	***	
Value	***	***	***	***	***	***	***	***	***	***	***	***	***	
Unit value	***	***	***	***	***	***	***	***	***	***	***	***	***	
Export shipments:														
Quantity	***	***	***	***	***	***	***	***	***	***	***	***	***	
Value	***	***	***	***	***	***	***	***	***	***	***	***	***	
Unit value	***	***	***	***	***	***	***	***	***	***	***	***	***	
Ending inventory quantity	***	***	***	***	***	***	***	***	***	***	***	***	***	
Inventories/total shipments (1)	***	***	***	***	***	***	***	***	***	***	***	***	***	
Production workers	***	***	***	***	***	***	***	***	***	***	***	***	***	
Hours worked (1,000s)	***	***	***	***	***	***	***	***	***	***	***	***	***	
Wages paid (\$1,000)	***	***	***	***	***	***	***	***	***	***	***	***	***	
Hourly wages	***	***	***	***	***	***	***	***	***	***	***	***	***	
Productivity (pounds per hour)	***	***	***	***	***	***	***	***	***	***	***	***	***	
Unit labor costs	***	***	***	***	***	***	***	***	***	***	***	***	***	
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 (1)	***	***	***	***	***	***	***	***	***	***	***	***	***	
Operating income or (loss)/ sales (1)	***	***	***	***	***	***	***	***	***	***	***	***	***	

(1) "Reported data" are in percent and "period changes" are in percentage points.

(2) Not applicable.

(3) Undefined.

Note.--Financial data are reported on a fiscal year basis and may not necessarily be comparable to data reported on a calendar year basis. Because of rounding, figures may not add to the totals shown. Unit values and shares are calculated from the unrounded figures.

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

Table C-2
PVA: Summary data concerning the U.S. open market, 2003-07, January-September 2007, and January-September 2008

(Quantity=1,000 pounds, value=1,000 dollars, unit values, unit labor costs, and unit expenses are per pound; period changes=percent, except where noted)

Item	Reported data					January-September		Period changes					Jan.-Sept. 2007-08
	2003	2004	2005	2006	2007	2007	2008	2003-07	2003-04	2004-05	2005-06	2006-07	
U.S. consumption quantity:													
Amount	***	***	***	***	***	***	***	***	***	***	***	***	***
Producers' share (1)	***	***	***	***	***	***	***	***	***	***	***	***	***
Importers' share (1):													
China	***	***	***	***	***	***	***	***	***	***	***	***	***
Japan	***	***	***	***	***	***	***	***	***	***	***	***	***
Korea	***	***	***	***	***	***	***	***	***	***	***	***	***
Subtotal (subject)	***	***	***	***	***	***	***	***	***	***	***	***	***
Taiwan	***	***	***	***	***	***	***	***	***	***	***	***	***
All other sources	***	***	***	***	***	***	***	***	***	***	***	***	***
Subtotal (nonsubject)	***	***	***	***	***	***	***	***	***	***	***	***	***
Total imports	***	***	***	***	***	***	***	***	***	***	***	***	***
U.S. consumption value:													
Amount	***	***	***	***	***	***	***	***	***	***	***	***	***
Producers' share (1)	***	***	***	***	***	***	***	***	***	***	***	***	***
Importers' share (1):													
China	***	***	***	***	***	***	***	***	***	***	***	***	***
Japan	***	***	***	***	***	***	***	***	***	***	***	***	***
Korea	***	***	***	***	***	***	***	***	***	***	***	***	***
Subtotal (subject)	***	***	***	***	***	***	***	***	***	***	***	***	***
Taiwan	***	***	***	***	***	***	***	***	***	***	***	***	***
All other sources	***	***	***	***	***	***	***	***	***	***	***	***	***
Subtotal (nonsubject)	***	***	***	***	***	***	***	***	***	***	***	***	***
Total imports	***	***	***	***	***	***	***	***	***	***	***	***	***
U.S. imports from:													
China:													
Quantity	5,869	5,519	6,155	6,662	4,539	4,329	1,295	-22.7	-6.0	11.5	8.2	-31.9	-70.1
Value	4,011	3,795	4,521	4,973	3,813	3,645	1,454	-4.9	-5.4	19.1	10.0	-23.3	-60.1
Unit value	\$0.68	\$0.69	\$0.73	\$0.75	\$0.84	\$0.84	\$1.12	22.9	0.6	6.8	1.6	12.5	33.4
Ending inventory quantity	***	***	***	***	***	***	***	***	***	***	***	***	***
Japan:													
Quantity	***	***	***	***	***	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***	***	***	***	***	***
Unit value	***	***	***	***	***	***	***	***	***	***	***	***	***
Ending inventory quantity	***	***	***	***	***	***	***	***	***	***	***	***	***
Korea:													
Quantity	2,014	126	4	44	0	0	0	-100.0	-93.7	-96.6	920.0	-100.0	(2)
Value	1,500	114	44	85	0	0	0	-100.0	-92.4	-61.7	93.4	-100.0	(2)
Unit value	\$0.74	\$0.90	\$10.17	\$1.93	(2)	(2)	(2)	(2)	21.5	1024.2	-81.0	(2)	(2)
Ending inventory quantity	***	***	***	***	***	***	***	***	***	***	***	***	***
Subtotal (subject):													
Quantity	***	***	***	***	***	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***	***	***	***	***	***
Unit value	***	***	***	***	***	***	***	***	***	***	***	***	***
Ending inventory quantity	***	***	***	***	***	***	***	***	***	***	***	***	***
Taiwan:													
Quantity	23,539	28,117	20,777	23,354	26,127	18,207	24,903	11.0	19.4	-26.1	12.4	11.9	36.8
Value	16,402	19,048	16,654	19,340	24,012	16,395	27,466	46.4	16.1	-12.6	16.1	24.2	67.5
Unit value	\$0.70	\$0.68	\$0.80	\$0.83	\$0.92	\$0.90	\$1.10	31.9	-2.8	18.3	3.3	11.0	22.5
Ending inventory quantity	***	***	***	***	***	***	***	***	***	***	***	***	***
All other sources:													
Quantity	4,871	5,120	7,780	10,413	11,346	8,397	5,816	132.9	5.1	52.0	33.8	9.0	-30.7
Value	4,481	5,009	7,795	9,876	11,807	8,494	7,454	163.5	11.8	55.6	26.7	19.6	-12.2
Unit value	\$0.92	\$0.98	\$1.00	\$0.95	\$1.04	\$1.01	\$1.28	13.1	6.3	2.4	-5.3	9.7	26.7
Ending inventory quantity	***	***	***	***	***	***	***	***	***	***	***	***	***
Subtotal (nonsubject):													
Quantity	28,410	33,236	28,557	33,767	37,473	26,604	30,720	31.9	17.0	-14.1	18.2	11.0	15.5
Value	20,883	24,057	24,449	29,215	35,819	24,889	34,920	71.5	15.2	1.6	19.5	22.6	40.3
Unit value	\$0.74	\$0.72	\$0.86	\$0.87	\$0.96	\$0.94	\$1.14	30.0	-1.5	18.3	1.1	10.5	21.5
Ending inventory quantity	***	***	***	***	***	***	***	***	***	***	***	***	***
All sources:													
Quantity	***	***	***	***	***	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***	***	***	***	***	***
Unit value	***	***	***	***	***	***	***	***	***	***	***	***	***
Ending inventory quantity	***	***	***	***	***	***	***	***	***	***	***	***	***
U.S. producers':													
U.S. commercial shipments:													
Quantity	***	***	***	***	***	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***	***	***	***	***	***
Unit value	***	***	***	***	***	***	***	***	***	***	***	***	***
Net commercial sales:													
Quantity	***	***	***	***	***	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***	***	***	***	***	***
Unit value	***	***	***	***	***	***	***	***	***	***	***	***	***
Cost of goods sold (COGS):													
Gross profit or (loss)	***	***	***	***	***	***	***	***	***	***	***	***	***
SG&A expenses	***	***	***	***	***	***	***	***	***	***	***	***	***
Operating income or (loss)	***	***	***	***	***	***	***	***	***	***	***	***	***
Unit COGS	***	***	***	***	***	***	***	***	***	***	***	***	***
Unit SG&A expenses	***	***	***	***	***	***	***	***	***	***	***	***	***
Unit operating income or (loss)	***	***	***	***	***	***	***	***	***	***	***	***	***
COGS/sales (1)	***	***	***	***	***	***	***	***	***	***	***	***	***
Operating income or (loss)/sales (1)	***	***	***	***	***	***	***	***	***	***	***	***	***

(1) "Reported data" are in percent and "period changes" are in percentage points.
(2) Not applicable.
(3) Undefined.

Note.--Financial data are reported on a fiscal year basis and may not necessarily be comparable to data reported on a calendar year basis. Because of rounding, figures may not add to the totals shown. Unit values and shares are calculated from the unrounded figures.

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

APPENDIX D

**RESPONSES OF U.S. PRODUCERS, U.S. IMPORTERS, U.S. PURCHASERS,
AND FOREIGN PRODUCERS CONCERNING THE SIGNIFICANCE OF THE
ANTIDUMPING DUTY ORDERS AND THE LIKELY EFFECTS OF
REVOCATION**

U.S. PRODUCERS' COMMENTS REGARDING THE SIGNIFICANCE OF THE ANTIDUMPING ORDERS AND THE LIKELY EFFECTS OF REVOCATION

The Commission requested U.S. producers to describe any anticipated changes to the character of their operations or organization relating to the production of PVA in the future if the subject antidumping duty orders (China, Japan, and Korea) on PVA were to be revoked. (Question II-3.) The following are quotations from the responses of U.S. producers.

* * * * *

The Commission requested U.S. producers to describe the significance of the existing antidumping duty orders covering imports of PVA from China, Japan, and Korea in terms of its effect on their firm's production capacity, production, U.S. shipments, inventories, purchases, employment, revenues, costs, profits, cash flow, capital expenditures, research and development expenditures, and asset values. (Question II-15.) The following are quotations from the responses of U.S. producers.

* * * * *

The Commission requested U.S. producers to anticipate any changes to their production capacity, production, U.S. shipments, inventories, purchases, employment, revenues, costs, profits, cash flow, capital expenditures, research and development expenditures, or asset values relating to the production of PVA in the future if the antidumping duty orders on PVA from China, Japan, and Korea were to be revoked. (Question II-16.) The following are quotations from the responses of U.S. producers.

* * * * *

U.S. IMPORTERS' COMMENTS REGARDING THE SIGNIFICANCE OF THE ANTIDUMPING DUTY ORDERS AND THE LIKELY EFFECTS OF REVOCATION

The Commission requested U.S. importers to describe any anticipated changes in the character of their operations or organization relating to the importation of PVA in the future if the subject antidumping duty orders (China, Japan, and Korea) were revoked. (Question II-3.) The following are quotations from the responses of importers.

* * * * *

The Commission requested U.S. importers to describe the significance of the existing antidumping duty orders (China, Japan, and Korea) on PVA in terms of their effect on their imports, U.S. shipments of imports, and inventories. (Question II-13.) The following are quotations from the responses of importers.

* * * * *

The Commission requested U.S. importers to describe any anticipated changes in their imports, U.S. shipments of imports, or inventories of PVA in the future if the subject antidumping duty orders (China, Japan, and Korea) on PVA were revoked. (Question II-14.) The following are quotations from the responses of importers.

* * * * *

U.S. PURCHASERS' COMMENTS REGARDING THE LIKELY EFFECTS OF REVOCATION OF THE ANTIDUMPING DUTY ORDERS

The Commission requested U.S. purchasers to describe the likely effects of any revocation of the antidumping duty orders for imports of PVA from China, Japan, and/or Korea; and to discuss any potential effects of revocation of the antidumping duty orders on (1) the future activities of their firm and (2) the U.S. market as a whole.

(1) Activities of your firm:

* * * * *

(2) Entire U.S. market:

* * * * *

FOREIGN PRODUCERS' COMMENTS REGARDING THE SIGNIFICANCE OF THE ANTIDUMPING DUTY ORDERS AND THE LIKELY EFFECTS OF REVOCATION

The Commission requested foreign producers to describe any anticipated changes in the character of their operations or organization relating to the production of PVA in the future if the subject antidumping duty orders (China, Japan, and Korea) were to be revoked. (Question II-4.) The following are quotations from the responses of foreign producers.

* * * * *

The Commission requested foreign producers to describe any anticipated changes in their production capacity, production, home market shipments, exports to the United States and other markets, or inventories relating to the production of PVA in the future if the subject antidumping duty orders (China, Japan, and Korea) were to be revoked. (Question II-16.) The following are quotations from the responses of foreign producers.

* * * * *

APPENDIX E
U.S. PRODUCERS' SHIPMENTS BY TYPE

Table E-1
PVA: U.S. producers' shipments, by type, 2003-07, January - September 2007, and January - September 2008

* * * * *

APPENDIX F
NONSUBJECT PRICE DATA

Table F-1

PVA: Weighted-average f.o.b. prices and quantities of domestic and imported product 1, sold in BAGS to end users, and margins of (overselling)/underselling, January 2003-September 2008

* * * * *

