Certain Activated Carbon from China

Investigation No. 731-TA-1103 (Review)

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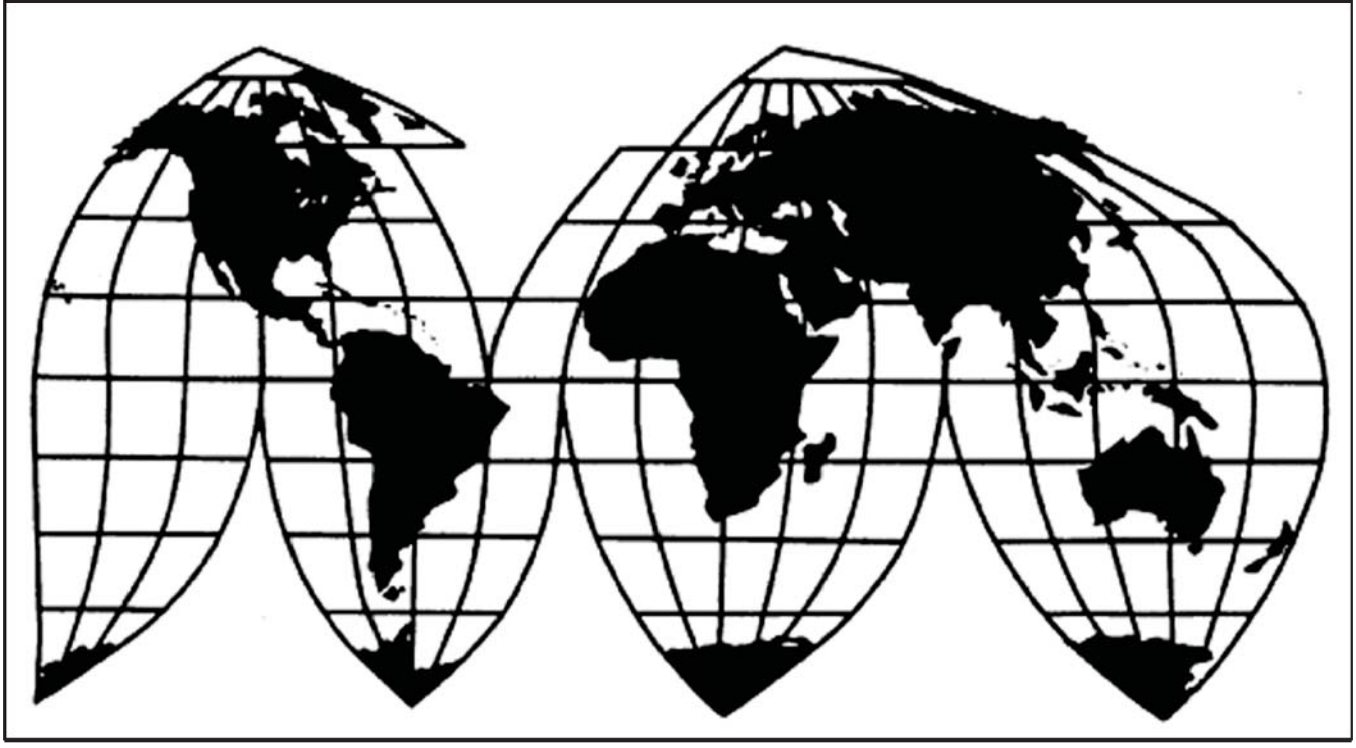
U.S. International Trade Commission



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U.S. International Trade Commission

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CONTENTS

CONTENTS

CONTENTS

Page

Appendixes

Note.–Information that would reveal confidential operations of individual concerns may not be published and therefore has been deleted from this report.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

UNITED STATES INTERNATIONAL TRADE COMMISSION

Investigation No. 731-TA-1103 (Review)

CERTAIN ACTIVATED CARBON FROM CHINA

DETERMINATION

On the basis of the record[1] developed in the subject five-year review, 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 order on certain activated carbon from China would be likely to lead to continuation or recurrence of material injury to an industry in the United States within a reasonably foreseeable time.

BACKGROUND

The Commission instituted this review on March 1, 2012 (77 F.R. 12614) and determined on June 4, 2012 that it would conduct a full review (77 F.R. 38082, June 26, 2012). Notice of the scheduling of the Commission's review 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 June 26, 2012 (77 F.R. 38082). The hearing was held in Washington, DC, on December 18, 2012, 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)).

VIEWS OF THE COMMISSION

Based on the record in this five-year review, we determine under section 751(c) of the Tariff Act of 1930, as amended ("the Act"), that revocation of the antidumping duty order on certain activated carbon from China would be likely to lead to continuation or recurrence of material injury to an industry in the United States within a reasonably foreseeable time.

I. BACKGROUND

On March 8, 2006, Calgon Carbon Corporation ("Calgon") and Norit Americas, Inc. ("Norit"), filed a petition alleging that an industry in the United States was materially injured and threatened with material injury by reason of imports of certain activated carbon from China that were being sold in the United States at less than fair value ("LTFV"). The Commission reached a final affirmative determination in April 2007,[1] and the U.S. Department of Commerce ("Commerce") published the resulting antidumping duty order on April 27, 2007.[2]

The Commission instituted the current review on March 1, 2012. Having received adequate group responses from both domestic and respondent interested parties, the Commission determined on June 4, 2012, to conduct a full review.[3]

The Commission sent questionnaires to three U.S. producers of certain activated carbon, all of which provided the Commission with information on their certain activated carbon operations. These producers are believed to account for virtually all domestic production in 2011.[4] The Commission also sent importers' questionnaires to 37 firms believed to be importers of subject activated carbon. It received usable questionnaire responses from 30 companies, representing 87.1 percent of subject imports from China, during the period January 2007-June 2012.[5] The Commission sent foreign producer questionnaires to 45 producers of certain activated carbon in China and four companies responded with usable data. These four firms accounted for an estimated *** percent of total production of certain activated carbon in China and *** percent of total subject exports to the United States in 2011.[6]

The Commission received prehearing and posthearing submissions from domestic producers Calgon, Norit, and ADA Carbon Solutions, LLC ("ADA") (collectively, "the domestic industry"). The Commission also received prehearing and posthearing submissions submitted jointly by two U.S. importers of certain activated carbon from China, Carbon Activated Corporation and Car Go Worldwide, Inc. (jointly, "respondents"). Representatives of the domestic industry and the respondents appeared at the Commission's hearing accompanied by counsel.

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[1] Certain Activated Carbon from China, Inv. No. 731-TA-1103 (Final), USITC Pub. 3913 (April 2007) ("Original Determination").

[2] Confidential Staff Report ("CR") at I-2, Public Staff Report ("PR") at I-2.

[3] See 77 Fed. Reg. 38082 (June 26, 2012); Explanation of Commission Determination on Adequacy, referenced in CR/PR at App. A.

[4] CR at I-20 & n.50, PR at I-14 & n.50.

[5] CR at I-21 to I-22 & n.51, PR at I-15 & n.51.

[6] CR at IV-11, PR at IV-5.

II. DOMESTIC LIKE PRODUCT AND INDUSTRY

A. Domestic Like Product

In making its determination under section 751(c) of the Act, the Commission first defines the "domestic like product" and the "industry."[7] The 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."[8] The Commission's practice in five-year reviews is to examine the domestic like product definition from the original investigation and any completed reviews and consider whether the record indicates any reason to revisit the prior findings.[9]

In its expedited sunset determination, Commerce defined the subject merchandise as it had in its original investigation, as follows:

> The merchandise subject to the order is certain activated carbon. Certain activated carbon is a powdered, granular, or pelletized carbon product obtained by "activating" with heat and steam various materials containing carbon, including but not limited to coal (including bituminous, lignite, and anthracite), wood, coconut shells, olive stones, and peat. The thermal and steam treatments remove organic materials and create an internal pore structure in the carbon material. The producer can also use carbon dioxide gas (CO_2) in place of steam in this process. The vast majority of the internal porosity developed during the high temperature steam (or CO_2 gas) activated process is a direct result of oxidation of a portion of the solid carbon atoms in the raw material, converting them into a gaseous form of carbon.
>
> The scope of this order covers all forms of activated carbon that are activated by steam or CO_2, regardless of the raw material, grade, mixture, additives, further washing or post-activation chemical treatment (chemical or water washing, chemical impregnation or other treatment), or product form. Unless specifically excluded, the scope of this order covers all physical forms of certain activated carbon including powdered activated carbon ("PAC"), granular activated carbon ("GAC"), and pelletized activated carbon.
>
> Excluded from the scope of the order are chemically activated carbons. The carbon-based raw material used in the chemical activation process is treated with a strong chemical agent, including but not limited

[7] 19 U.S.C. § 1677(4)(A).

[8] 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).

[9] 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).

> to phosphoric acid, zinc chloride, sulphuric acid or potassium hydroxide, that dehydrates molecules in the raw material, and results in the formation of water that is removed from the raw material by moderate heat treatment. The activated carbon created by chemical activation has internal porosity developed primarily due to the action of the chemical dehydration agent. Chemically activated carbons are typically used to activate raw materials with a lignocellulosic component such as cellulose, including wood, sawdust, paper mill waste and peat.
>
> To the extent that an imported activated carbon product is a blend of steam and chemically activated carbons, products containing 50 percent or more steam (or CO_2 gas) activated carbons are within the scope, and those containing more than 50 percent chemically activated carbons are outside the scope. This exclusion language regarding blended material applies only to mixtures of steam and chemically activated carbons.
>
> Also excluded from the scope are reactivated carbons. Reactivated carbons are previously used activated carbons that have had adsorbed [sic] materials removed from their pore structure after use through the application of heat, steam and/or chemicals.
>
> Also excluded from the scope of the order is activated carbon cloth. Activated carbon cloth is a woven textile fabric made of or containing activated carbon fibers. It is used in masks and filters and clothing of various types where a woven format is required.[10]

In the original determination, the Commission found one domestic like product that was coextensive with Commerce's scope of the investigation, certain activated carbon.[11]

Activated carbon is a solid material consisting primarily of carbon that has been specially treated to increase the porosity and the surface area of the material. The high surface area that results from "activation" allows greater adsorption of chemical species onto the solid carbon. The surface area and pore structure of activated carbon depend greatly on the raw materials and processing methods used. In both the United States and China, coal is the primary raw material, although activated carbon can be

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[10] Certain Activated Carbon From the People's Republic of China; Final Results of Expedited Sunset Review of the Antidumping Duty Order, 77 Fed. Reg. 33420-21 (June 6, 2012). There have been two scope clarifications since the imposition of the order. On June 1, 2007, Cherishmet requested that Commerce determine whether a certain type of patented activated carbon was within the scope. On July 26, 2007, Commerce ruled that carbon activated by Cherishmet's patented process was within the scope of the antidumping duty order. See 72 Fed. Reg. 62438 (November 5, 2007).

On November 14, 2008, Rolf C. Hagen (USA) Corporation requested that Commerce determine whether certain fish tank filter parts were within the scope. Commerce subsequently ruled that certain Chinese-origin fitted fish tank filters containing (1) less than 500 grams of activated carbon or (2) a combination of activated carbon and zeolite were outside the scope of the antidumping duty order. See 75 Fed. Reg. 14138 (March 24, 2010).

[11] Original Determination, USITC Pub. 3913, at 5-6. In the original investigation, the Commission examined whether the definition of the domestic like product should include reactivated carbon or chemically activated carbon, neither of which is within the scope. Id. at 7-10. Applying its six factor like product analysis, the Commission concluded that neither reactivated carbon nor chemically activated carbon should be included in the like product. Id. at 10. In the current review, no party has requested that the Commission revisit these issues.

produced from almost any solid material that has a high carbon content. Other common raw materials for making activated carbon are wood, coconut shells, olive stones, and peat. Activated carbon is sold in three basic forms: powdered, granular, and pelletized. In addition to the size and shape of the activated carbon particles, surface area, pore size distribution, ash content, and hardness influence the efficiency of activated carbon in a given application. These properties depend on the raw materials used as well as the activation process.[12]

The primary use for activated carbon is in the separation of small concentrations of chemical species from liquid and gas streams. A purchaser of activated carbon chooses an appropriate pore size distribution based on the size (and chemical properties) of the chemical species to be captured. Because activated carbon has a low affinity for water but strongly absorbs organic and sulfur-containing chemicals, it is widely used to remove undesirable tastes and odors from drinking water and to eliminate contaminants from industrial waste water. Activated carbon is used to remove unwanted color and impurities in the processing of foods (e.g. sugar, corn syrup, and vegetable oils), pharmaceuticals, and alcoholic beverages. Activated carbon is also used in the chemical process industries for solvent recovery. Applications of activated carbon in gas-phase systems include air purification, automobile emissions reduction, and solvent vapor recovery.[13]

Specific applications may require or strongly favor activated carbon made from a particular raw material, such as coal, coconut, or wood. Activated carbon made from coconut shells is harder and has smaller pores than activated carbon made from coal, and these physical differences generally translate into different end-use applications, although there is significant overlap. Coconut-based activated carbon is widely used in mining gold and in the cigarette industry, where coal-based activated carbon is seldom used. Industrial applications that treat water or purify air, however, use coal- or coconut-based activated carbon, whereas food and beverage applications typically use coal-based activated carbon. Certain water applications use either coal- or wood-based activated carbon. Coal-, coconut-, or wood-based activated carbon can be used in pharmaceutical applications but they must meet stringent purity requirements.[14]

In addition, specific applications may also require or strongly favor activated carbon in a particular form, such as powdered, granular, or pelletized form. Mercury abatement in coal-fired electric power plants requires powdered activated carbon.[15] Air purification applications typically require pelletized activated carbon; water treatment applications typically require granular activated carbon, although some special applications require powdered activated carbon.[16]

The record in this review contains no information suggesting that the characteristics and uses of domestically produced certain activated carbon have changed since the prior proceedings or that the like product definition should be revisited.[17] None of the responding parties argued for a different definition of the domestic like product.[18] We therefore find a single domestic like product that is coextensive with Commerce's scope of the investigation, certain activated carbon.

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[12] CR at I-12, PR at I-10 to I-11.

[13] CR at I-14, PR at I-10.

[14] CR at I-14 to I-15, PR at I-11; Hearing Transcript at 44-46 (O'Brien, Thompson), 78, 125-127 (O'Brien); see also CR/PR at Appendix D (discussion of effect of the order by U.S. importers). Comments by *** suggest overlapping uses for coal- and coconut-based activated carbon, while comments by *** suggest different uses.

[15] Hearing Transcript at 22 (Thompson).

[16] CR at I-15, PR at I-11.

[17] See generally CR at I-12 to I-16, PR at I-7 to I-12.

[18] Domestic Industry Substantive Response to the Commission's Notice of Institution at 16; Jacobi Carbons and Jacobi AB Substantive Response to the Commission's Notice of Institution at 8-9. Respondents Carbon Activated Corporation and Car Go Worldwide did not comment on the definitions of the domestic like product or the domestic industry.

B. 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."[19] In defining the domestic industry, the Commission's general practice has been to include in the industry producers of all domestic production of the like product, whether toll-produced, captively consumed, or sold in the domestic merchant market.

In its original investigation, the Commission defined the domestic industry as all domestic producers of certain activated carbon, with the exception of one firm, California Carbon, which was excluded pursuant to the related parties provision.[20] In the current review, one domestic producer that submitted a questionnaire response, Calgon, is a related party due to ownership relationships with foreign producers of certain activated carbon and its importation of the subject merchandise.[21] We determine that appropriate circumstances do not exist to exclude Calgon from the domestic industry.[22]

Given our definition of the domestic like product, we define the domestic industry, as we did in the original investigation, to include all domestic producers of certain activated carbon.

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[19] 19 U.S.C. § 1677(4)(A). The definitions in 19 U.S.C. § 1677 apply 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.

[20] Original Determination, USITC Pub. 3193, at 11-12. In the original investigation, California Carbon reported that it had imported certain activated carbon over the period of investigation and was affiliated with a Chinese producer of certain activated carbon. Confidential Views, EDIS Doc. 478715, at 15. The Commission concluded that California Carbon's principal interest was in the ***. Confidential Views at 17-18.

In its response to the Commission's notice of institution in this five-year review, the Domestic Industry indicated that California Carbon continues to produce activated carbon in the United States, and that it should be excluded from the Commission's definition of the domestic industry in this five-year review. CR at I-20 n.50, PR at I-14 n.50. In light of its very small production of activated carbon in the United States, however, staff did not issue California Carbon a producer's questionnaire during this five-year review. CR/PR at III-1 n.2. Consequently, the record of this review contains no data from California Carbon that could be excluded, even assuming arguendo that California Carbon is a related party.

[21] CR/PR at Tables I-4 and III-7. *** purchased subject imports during the review period. A purchaser of subject merchandise is a related party only if it controls large volumes of subject imports. The Commission has found such control to exist when the domestic producer was responsible for a predominant proportion of the importer's purchases and these purchases were substantial. See, e.g., Foundry Coke from China, USITC Pub. 3449 (Final) (September 2009) at 8-9. Most of ***'s purchases of subject imports occurred ***. CR/PR at Tables III-7, IV-1. Additionally, *** made its purchases through multiple importers. CR at III-9, PR at III-4. Because the record indicates that *** did not control large volumes of subject imports, we do not treat *** as a related party.

[22] Calgon accounted for *** percent of reported domestic production of certain activated carbon in 2011. It was a petitioner in the original investigation, is the largest domestic producer of the domestic like product, and *** the continuation of the order. CR/PR at Table I-4. Its ratio of subject imports to domestic production ranged between *** and *** percent during 2007-2011 and January-June 2012. CR/PR at Table III-7. We find that Calgon's interests are in domestic production rather than importation. Moreover, because of its size, excluding Calgon could have the effect of skewing the data for the rest of the industry.

III. LIKELIHOOD OF CONTINUATION OR RECURRENCE OF MATERIAL INJURY IF THE ANTIDUMPING DUTY ORDER IS REVOKED

A. Legal Standards

In a five-year review conducted under section 751(c) of the Act, Commerce will revoke an antidumping duty order unless (1) it makes a determination that dumping is likely to continue or recur and (2) the Commission makes a determination that revocation of the antidumping duty order "would be likely to lead to continuation or recurrence of material injury within a reasonably foreseeable time."[23] The Statement of Administrative Action ("SAA") states that "under the likelihood standard, the Commission will engage in a counterfactual analysis; it must decide the likely impact in the 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."[24] Thus, the likelihood standard is prospective in nature.[25] 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.[26]

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."[27] 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."[28]

Although the standard in a five-year review is not the same as the standard applied in an original antidumping duty investigation, it contains some of the same fundamental elements. The statute provides that the Commission is to "consider the likely volume, price effects, and impact of imports of the subject

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[23] 19 U.S.C. § 1675a(a).

[24] SAA, H.R. Rep. 103-316, vol. I, 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.

[25] 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.

[26] 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'").

[27] 19 U.S.C. § 1675a(a)(5).

[28] 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.

merchandise on the industry if the orders are revoked or the suspended investigation is terminated."[29] 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 under review, whether the industry is vulnerable to material injury if the order were revoked, and any findings by Commerce regarding duty absorption pursuant to 19 U.S.C. § 1675(a)(4).[30] 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.[31]

B. Conditions of Competition

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."[32]

1. The Original Determination

In the original investigation, the Commission found that demand for certain activated carbon increased over the period of investigation and was expected to grow moderately over several years due to expected enforcement of new regulations governing clean air and water, the increased popularity of bottled water and other beverages, and new mercury emissions standards for coal utilities.[33]

With respect to supply, the Commission found that the principal suppliers of activated carbon to the U.S. market were domestic producers, with the majority of U.S. shipments going to end users in each year of the period of investigation and the remainder going to distributors.[34] The Commission also found that the next largest suppliers were importers of subject merchandise with the majority of their U.S. shipments going to distributors. The remaining portion of the market was supplied by nonsubject imports. The Commission determined that all the activated carbon produced domestically and virtually all the subject imports were coal-based, while almost all the nonsubject imports were coconut-based.[35] The Commission found that the domestic producers' reported capacity utilization increased over the period. The domestic producers claimed that their facilities were designed for, and depended on, running at full capacity, except for scheduled maintenance shutdowns.[36]

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[29] 19 U.S.C. § 1675a(a)(1).

[30] 19 U.S.C. § 1675a(a)(1). In a second administrative review of the antidumping duty order on certain activated carbon from China, Commerce determined that antidumping duties were being absorbed on foreign exporter Jacobi Carbon AB's sales of the subject merchandise in the United States by its affiliated U.S. importer, Jacobi Carbons, Inc. See Certain Activated Carbon from the People's Republic of China: Notice of Preliminary Results of the Second Antidumping Duty Administrative Review and Preliminary Rescission in Part, 75 Fed. Reg. 26927 (May 13, 2010).

[31] 19 U.S.C. § 1675a(a)(5). Although the Commission must consider all factors, no one factor is necessarily dispositive. SAA at 886.

[32] 19 U.S.C. § 1675a(a)(4).

[33] Original Investigation, USITC Pub. 3913, at 13.

[34] Original Investigation, USITC Pub. 3913, at 13-14.

[35] Original Investigation, USITC Pub. 3913, at 14.

[36] Original Investigation, USITC Pub. 3913, at 15.

With respect to substitutability, the Commission found a majority of market participants reported that the domestic like product and subject imports were generally interchangeable, although it noted that the reports were mixed as to the extent to which the domestic like product and imports were interchangeable. The Commission determined that the most commonly stated reason for the lack of interchangeability was the unavailability in the United States of domestically produced coconut-based activated carbon. The Commission also determined that coconut-based activated carbon and coal-based activated carbon were not direct substitutes for one another, and were not completely interchangeable, because they had different physical structures, with coconut-based activated carbon's greater hardness and smaller pore sizes more suitable for certain applications, such as gold mining, cigarette filters, and specialty-oriented home water filters.[37]

Finally, the Commission found that another relevant condition of competition was increasing costs for raw materials and energy. The Commission found that the price of coal, the principal input in the domestic producers' manufacture of certain activated carbon, increased significantly over the period of investigation. The Commission further found that electricity and natural gas, also used in the production process, accounted for an increasing share of the total cost of goods sold ("COGS") because of increasing energy costs over the period.[38]

2. The Current Review

Demand. U.S. demand for certain activated carbon is derived from the demand for this product in its end-use applications. The principal end-use markets for the domestic like product, subject imports, and nonsubject imports are industrial applications. Other important markets include water treatment and food and beverage applications.[39]

During the current review period, apparent U.S. consumption increased from *** pounds in 2007 to *** pounds in 2011. It was *** pounds in January-June ("interim") 2011 and *** pounds in interim 2012.[40] The quantity of apparent U.S. consumption in 2008 to 2011 was higher than the peak reached during the period examined in the original investigation.[41]

The United States is the *** largest market for activated carbon in the world, accounting for *** percent of global demand in 2011. China, the *** largest market, accounted for *** percent in 2011.[42]

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[37] Original Investigation, USITC Pub. 3913, at 16.

[38] Original Investigation, USITC Pub. 3913, at 15.

[39] U.S. producers reported their U.S. commercial shipments to end-use markets in 2011 were *** percent for industrial applications, *** percent for water treatment, *** percent for food and beverage applications, *** percent for pharmaceutical and medical uses, and *** percent for other applications. See CR/PR at Table III-5. Based on combined responses of six large importers, the record shows that shipments of subject imports in 2011 were *** percent for industrial applications, *** percent for water treatment, *** percent for food and beverage applications, *** percent for pharmaceutical and medical uses, and *** percent for other applications. CR/PR at Table IV-3. Shipments of nonsubject imports in 2011 were *** percent for industrial applications, *** percent for water treatment, *** percent for food and beverage applications, *** percent for motor vehicles, *** percent for pharmaceutical and medical uses, and *** percent for other applications. CR/PR at Table IV-4.

[40] CR/PR at Table I-8.

[41] During the original period of investigation, apparent U.S. consumption ranged from *** pounds in 2003 to *** pounds in 2005. CR/PR at Table I-1.

[42] CR at IV-30, PR at IV-17; and CR/PR at Table IV-12. The available data concerning world demand compiled by an industry monitoring service include all forms of activated carbon, not merely the certain activated carbon within the scope definition.

Moreover, industry analysts predict that the *** will be the fastest growth markets, with demand in the ***.[43]

Major uses for certain activated carbon are pollution control and water purification. The record indicates that the use of powdered certain activated carbon in mercury abatement in coal-fired electric power plants, a key industrial application, has contributed importantly to the growth in apparent consumption during the period of review.[44] All three U.S. producers, seven of 17 responding purchasers, and 11 of 21 responding importers reported that demand for certain activated carbon in the U.S. market has increased since January 2007, and firms reporting demand increases often cited increased use of certain activated carbon in mercury abatement applications as a reason.[45] Most of the remaining purchasers and importers reported that demand either had not changed or had fluctuated.[46]

There is some uncertainty regarding how mercury abatement regulations published by the U.S. Environmental Protection Agency will affect future demand for certain activated carbon. The new regulations went into effect in April 2012 and could have the effect of increasing demand for certain activated carbon.[47] The new regulations, however, are currently subject to legal challenges that could delay implementation of the regulations and any increases in demand associated with them for the reasonably foreseeable future.[48] In addition, some coal-fired electrical plant operators are considering converting to natural gas as a less expensive energy source or are considering shutting down due to anticipated cost of compliance with the new regulations, either of which would reduce the effect of the EPA regulation on future demand for certain activated carbon.[49] In light of the increases in apparent U.S. consumption during the period of review and the mixed perceptions of market participants regarding the effect of the mercury abatement regulations on demand, we find U.S. demand is likely to increase at a moderate rate in the reasonably foreseeable future.

Producers and end-use purchasers indicate that, while certain activated carbon accounts for a substantial share of the cost of pollution control and certain intermediate products, it accounts for a relatively small share of the cost of consumer products.[50] The majority of producers, importers, and purchasers also reported that there are no substitutes for certain activated carbon.[51] Therefore, it is likely that demand for certain activated carbon is relatively insensitive to changes in price.[52]

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[43] CR at IV-31, PR at IV-17; and CR/PR at Table IV-12. The available data concerning world demand compiled by an industry monitoring service include all forms of activated carbon, not merely the certain activated carbon within the scope definition.

[44] CR at II-6, PR at II-4; Hearing Transcript at 22 (Thompson).

[45] CR at II-7, PR at II-4 to II-5.

[46] CR at II-7, PR at II-4.

[47] CR at I-15 and n.26, PR at I-11 and n.26; Respondents Carbon Activated Corporation and Car Go Worldwide Response to the Commission's Notice of Institution, Exhibit 8; see also Hearing Transcript at 72 and 108 (Thompson) (discussing 2008 State of Illinois environmental rule on mercury control) and Domestic Industry Prehearing Brief at 7-8 and Exhibit 1 (discussing EPA rule on Disinfectants and Disinfection Byproducts).

[48] CR at I-15, PR at I-11; Hearing Transcript at 27 (Thompson).

[49] CR at I-15, PR at I-11; Hearing Transcript at 21 (Leen) and 22 (Thompson).

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

[51] Some firms did report that substitution was possible for certain applications, such as clay-based absorbents, carbon cloth tapes, and pre-combustion bromine chemical addition for mercury abatement, and resins for sugar refining, and in corn syrup and lactic acid production. CR at II-8, PR at II-5.

[52] CR at II-7, II-16, PR at II-4, II-11.

Supply. There are currently three U.S. producers, with Calgon and Norit being the dominant producers.[53] The domestic industry's production capacity increased during the period of review.[54] *** to existing facilities and ADA commenced production of powdered activated carbon in ***.[55] These capacity increases have outpaced the increases in demand over the period; the U.S. producers' capacity exceeded apparent U.S. consumption in 2011.[56]

U.S. producers have the largest share of the market, by far, followed by nonsubject imports, and then subject imports. Following imposition of the order, U.S. producers' market share has fluctuated over the period of review,[57] while the market share of subject imports decreased.[58] Nonsubject imports' market share increased somewhat steadily over the period of review, although the nonsubject imports were predominantly coconut-based activated carbon.[59] Producers in both the United States and China predominantly produce coal-based certain activated carbon.[60]

Substitutability. The domestic like product and subject imports are generally substitutable. All three U.S. producers, five of 14 responding importers, and five of 11 responding purchasers reported that domestically produced product and the subject imports are "always" or "frequently" interchangeable, with an additional nine responding U.S. importers and four purchasers reporting that they are "sometimes" interchangeable. Two responding purchasers reported that domestically produced certain activated carbon and subject imports were "never" interchangeable.[61] Although nonprice factors are important in this market,[62] price is also important. Seventeen of 22 responding firms indicated that price is a very important factor in making purchases.[63] Twenty of 22 responding firms cited price as one of the top three

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[53] With respect to U.S. production in 2011, Calgon accounted for *** percent, Norit for *** percent, and ADA for *** percent. CR/PR at Table I-4.

[54] CR/PR at Table III-2.

[55] CR/PR at III-1 and Table III-1; Hearing Transcript at 68 (Leen). ADA reportedly built its activated carbon manufacturing facility in Coushatta, Louisiana, based largely on the opportunity to supply coal-fired power plants with the powdered activated carbon necessary to meet the EPA's new mercury emission standards. CR at III-2 and n.3, PR at III-1 and n.3; and Hearing Transcript at 25-28 (Leen).

[56] CR/PR at Table C-1. With respect to constraints on capacity, *** as constraints on its production capacity. CR at III-3, PR at III-2; and U.S. Producer Questionnaire Responses at Section II-6.

[57] U.S. producers' market share was *** percent in 2007, *** percent in 2008, *** percent in 2009, *** percent in 2010, and *** percent in 2011. It was *** percent in interim 2011 and *** percent in interim 2012. CR/PR at Table I-8.

[58] Subject imports' market share was *** percent in 2007, *** percent in 2008, *** percent in 2009, *** percent in 2010, and *** percent in 2011. It was *** percent in interim 2011 and *** percent in interim 2012. CR/PR at Table I-8.

[59] Nonsubject import market share was *** percent in 2007, *** percent in 2008, *** percent in 2009, *** percent in 2010, and *** percent in 2011. It was *** percent in interim 2011 and *** percent in interim 2012. CR/PR at Table I-8. The imports of certain activated carbon in 2011 from four of the top six nonsubject sources (Sri Lanka, India, Indonesia, and the Philippines) were primarily coconut based. CR at IV-25 to IV-26, PR at IV-13 to IV-14, and Table IV-11; see also Hearing Transcript at 46 (Luberda).

[60] CR at I-17, PR at I-12; CR at IV-19, PR at IV-8; and Respondent Response to Notice of Institution at 13 and Exhibit 10.

[61] CR at II-12 to II-13, PR at II-7 to II-9; CR/PR at Table II-4.

[62] See CR/PR at Table II-5 (five of 14 reporting U.S. importers and four of nine reporting purchasers indicated that differences other than price are a significant factor in their sales/purchases of certain activated carbon).

[63] CR/PR at Table II-3.

factors in their purchasing decisions.[64] Although most purchasers deemed the U.S. product superior with respect to delivery time, the domestic like product and the subject imports were reported by most purchasers to be comparable with respect to several other nonprice factors that were most frequently identified as "very important" in purchasing decisions, such as "reliability of supply", "availability", and "quality meeting industry standards".[65]

Finally, the domestic industry uses both the direct activation and reagglomeration methods to produce certain activated carbon.[66] Most Chinese producers supply direct-activated carbon, but a few Chinese producers can also supply reagglomerated carbon.[67] Reagglomerated activated carbon is preferred to direct-activated carbon for certain applications, such as pharmaceutical production and food purification.[68] For water treatment, the preference for the direct-activated or reagglomerated method varies by purchaser; some purchasers prefer direct-activated certain activated carbon due to its greater hardness, while other purchasers prefer the performance of reagglomerated certain activated carbon, and other purchasers show no preference.[69] Given that both the domestic industry and subject Chinese producers can and do produce both types of activated carbon, they compete directly in the U.S. market for sales in all applications using certain activated carbon, whether directly activated or reagglomerated.

Other Conditions. Raw material costs, principally metallurgical coal, increased substantially over the period of review.[70] These costs ranged between *** percent and *** percent of the total COGS during the period for which data were collected.[71]

The majority of sales, *** to *** percent, made by U.S. producers are made on a long-term contract or short-term contract basis. Nine of 16 importers reported that they sell entirely on a spot basis while six reported that all or a majority of their sales are on either a short-term or long-term basis.[72]

Based on the record of this review, we find that current conditions of competition in the U.S. certain activated carbon market are not likely to change significantly in the reasonably foreseeable future. Accordingly, in this review, we find that current conditions of competition provide us with a reasonable basis on which to assess the likely effects of revocation of the order in the reasonably foreseeable future.

C. Likely Volume of Subject Imports

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.[73] 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

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[64] CR/PR at Tables II-2 and II-3.

[65] CR/PR at Table II-3.

[66] CR at I-17, PR at I-12; Domestic Industry Posthearing Brief at 6 n.3 and Exhibit 1 at 59.

[67] CR at I-17, PR at I-12; Hearing Transcript at 169 and 223 (Perera).

[68] CR at I-17, PR at I-12; Hearing Transcript at 160 (Allen).

[69] CR at I-17, PR at I-12; Hearing Transcript at 163-164 (Allen).

[70] The average price of metallurgical coal priced at coke plants in the United States increased from $94 per short ton in the first quarter of 2007 to $191 per short ton in the third quarter of 2012. CR/PR at V-1 and Figure V-1. We recognize, however, that some domestic producers use coal grades other than metallurgical grade coal and that prices for these other coal types may not have experienced the same price increases as metallurgical grade coal during the period of review. See Hearing Transcript at 51-52, 79-82 (O'Brien); and 67-68, 79-80 (Leen).

[71] CR/PR at V-1.

[72] CR/PR at V-2.

[73] 19 U.S.C. § 1675a(a)(2).

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.[74]

1. The Original Determination

In the original investigation, the Commission found that the subject import volume was significant, both in absolute terms and relative to consumption and production in the United States, and that the increase in volume was also significant. The Commission found that the volume and market share of subject imports increased from 2003 to 2005, while the market share held by the domestic industry decreased. Although nonsubject imports had increased absolutely and as a share of the quantity of apparent U.S. consumption, the Commission found that these increases did not diminish the significance of the increase in subject imports both absolutely and relative to consumption. In this regard, the Commission found that, in absolute terms, the volume of subject imports was at least 150 percent of the volume of nonsubject imports over the entire period and there was limited substitutability of nonsubject coconut-based imports with the coal-based domestic production and subject imports. The Commission concluded that, while the increases in subject import volumes and market share came primarily at the expense of the domestic industry, increased nonsubject imports reflected increased demand for the coconut-based product for specific end uses.[75] The Commission determined that the domestic industry's condition had improved as domestic prices increased almost immediately after the petition was filed, while the volume of subject imports decreased rapidly after preliminary duties were imposed in October 2006. As a result, the Commission found that the improvements in the domestic industry in 2006 were related to the pendency of the investigation and, therefore, gave less weight to the 2006 data for purposes of its material injury analysis.[76]

2. The Current Review

During the period of review, with the order in place, the volume of subject imports fluctuated, but was slightly higher in 2011 than in 2007.[77] Nevertheless, throughout the period of review, subject import quantity and market penetration were both well below the levels of the original period of investigation.[78] We find that the order has thus had a restraining effect on subject import volume.[79] For that reason, as well as the reasons discussed below, we further find that a significant volume of subject certain activated carbon imports is likely if the order were revoked.

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[74] 19 U.S.C. § 1675a(a)(2)(A-D).

[75] Original Investigation, USITC Pub. 3913, at 18.

[76] Original Investigation, USITC Pub. 3913, at 17.

[77] Subject imports were 36.1 million pounds in 2007, 38.5 million pounds in 2008, 21.5 million pounds in 2009, 26.7 million pounds in 2010, and 36.6 million pounds in 2011. They were 17.0 million pounds in interim 2011 and 16.7 million pounds in interim 2012. CR/PR at Table IV-2.

[78] CR/PR at Table I-1. Subject imports from China and the market share held by those imports both decreased significantly after the antidumping duty order was imposed in 2007 and remained significantly below pre-order levels, despite increasing demand in the U.S. market, during the period of review. Subject imports were *** pounds in 2006 and *** pounds in 2011, and subject import market share was *** percent in 2006 and *** percent in 2011. CR/PR at Table I-1.

[79] At the hearing, the Chinese respondents acknowledged the restraining effect the order had on subject imports during the period of review. See Hearing Transcript at 137 (Perera).

The industry in China has more than ample excess capacity to produce additional subject merchandise and the incentive to ship it to the U.S. market in large quantities absent the restraining effect of the order. The three Chinese producers and one exporter of activated carbon in China that have supplied useable data in this review have estimated they collectively account for *** percent of certain activated carbon production in China and *** percent of subject exports to the United States in 2011.[80] Consequently, these firms account for a relatively low percentage of both the production and the export of subject merchandise. Indeed, the record indicates that there are more than 200 subject Chinese producers of certain activated carbon that produced more than 240 million metric tons of coal-based activated carbon in 2011.[81]

The production capacity of the reporting foreign producers decreased slightly between 2007 and 2011, but was greater in interim 2012 than in interim 2011.[82] Their production also decreased over the period, but was higher in interim 2012 than in interim 2011.[83] Their capacity utilization generally decreased over the period and was *** percent in 2011 and increased to *** percent in interim 2012.[84] End-of-period inventories fluctuated over the period, but were higher in 2011 than 2007, and were higher in interim 2012 than in interim 2011.[85] In 2011, the last full year of the review period, these foreign producers had *** pounds of excess capacity and over *** pounds of available inventory.[86] Thus, the reporting Chinese producers themselves have significant capacity, excess capacity, and large and increasing inventory levels that could be directed to the U.S. market if the order were revoked. Because the capacity of all Chinese producers and exporters of certain activated carbon is far greater than that of the reporting producers, the information in the record concerning the reporting producers' capacity and capacity utilization indicates that the much larger industry producing subject merchandise has the ability to significantly increase exports of certain activated carbon to the United States.

The industry producing subject merchandise in China also has the incentive to increase exports to the United States significantly upon revocation. The record indicates that producers of activated carbon in China are export oriented, with the reporting producers exporting a large proportion of their production throughout the period of review. The reporting producers shipped to customers worldwide and exported greater quantities in interim 2012 than in interim 2011.[87] Moreover, the U.S. market is attractive. It is the *** market in the world for certain activated carbon,[88] with relatively high prices.[89] By 2011, increasing average prices in the United States were higher than the world average, the Asia/Pacific region,

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[80] CR at IV-20, PR at IV-9.

[81] CR at IV-19, PR at IV-8; Domestic Industry Posthearing Brief, Exhibit 5.

[82] Capacity was *** pounds in 2007, *** pounds in 2008, *** pounds in 2009, *** pounds in 2010, *** pounds in 2011. It was *** pounds in interim 2011 and *** pounds in interim 2012. CR/PR at Table IV-7.

[83] Production was *** pounds in 2007, *** pounds in 2008, *** pounds in 2009, *** pounds in 2010, *** pounds in 2011. It was *** pounds in interim 2011 and *** pounds in interim 2012. CR/PR at Table IV-7.

[84] Over the whole period, capacity utilization was *** percent in 2007, *** percent in 2008, *** percent in 2009, *** percent in 2010, *** percent in 2011. It was *** percent in interim 2011 and *** percent in interim 2012. CR/PR at Table IV-7.

[85] End-of-period inventories were *** pounds in 2007, *** pounds in 2008, *** pounds in 2009, *** pounds in 2010, *** pounds in 2011. They were *** pounds in interim 2011 and *** pounds in interim 2012. CR/PR at Table IV-7.

[86] CR/PR at Table IV-7.

[87] Exports as a percentage of total shipments were *** percent in 2007, *** percent in 2008, *** percent in 2009, *** percent in 2010, *** percent in 2011. It was *** percent in interim 2011 and *** percent in interim 2012. CR/PR at Table IV-7.

[88] CR/PR at Table IV-12.

[89] CR at IV-32 to IV-33, PR at IV-18.

and prices in Western Europe. The record evidence also suggests that U.S. prices are likely to continue to be higher than prices in those markets through 2016.[90]

The size of the U.S. market and likely pricing available make it likely that producers of subject merchandise will use their excess capacity to direct further exports to the United States upon revocation of the order. Additionally, the subject producers are well positioned to do so. During the period of review subject imports maintained a significant ongoing presence in the U.S. market, although at somewhat lower levels since the original period of investigation due to the restraining effect of the order.[91] This demonstrates the continued importance of the U.S. market to the Chinese producers, and further shows that they already have distributors and/or customers currently in the market for additional subject imports.[92] Moreover, as previously discussed, demand for certain activated carbon in the United States increased during the period of review and is likely to continue to increase at a moderate rate in the reasonably foreseeable future.[93] By contrast, demand in Europe and the Asia Pacific regions is not expected to increase significantly enough in the reasonably foreseeable future to absorb increased levels of exports.[94]

The Chinese respondents have alleged that shortages of coal in China have had a restraining effect on any exports of certain activated carbon, which will continue into the reasonably foreseeable future.[95] We disagree. There is no evidence in the record of widespread coal shortages in China during the period of review or of the inability of subject Chinese producers to acquire the type of metallurgical coal used to make certain activated carbon. Moreover, to the extent there may have been coal shortages during the period, they did not appear to have had any apparent effect on the subject producers' production or exports of certain activated carbon during the period of review.[96]

Finally, exports of powdered certain activated carbon from China are subject to an antidumping measure in the European Union.[97] We find it significant that the EU antidumping measure covers powdered activated carbon, the form of certain activated carbon used in mercury abatement and a source of potential future growth in U.S. demand.[98] The EU measure increases the incentive for Chinese

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[90] CR at IV-32 to IV-33, PR at IV-18; Domestic Industry Prehearing Brief at Exhibit 4, at 58-59 (***). We note that the pricing data contained in the report attached as Exhibit 4 to the Domestic Industry's Posthearing Brief cover a broader category of activated carbon than the definition of certain activated carbon under review here. Although the data do not correspond exactly with the scope of the subject merchandise, they are the information available on trends in worldwide prices for certain activated carbon.

[91] CR/PR at Table I-1.

[92] See e.g., CR/PR at Table I-6 (showing *** importers of subject certain activated carbon in 2011).

[93] See Section III.B.2. above.

[94] CR at IV-30 to IV-32, PR at IV-17.

[95] Respondent Response to Notice of Institution at 5 and Exhibits 2 and 3.

[96] See Domestic Industry Posthearing Brief at 5 n.2 and Exhibit 11; Respondent Posthearing Brief at Exhibit 5B; Hearing Transcript at 53 (O'Brien); and CR/PR at Table IV-9. The data in Table IV-9 indicate large and increasing exports of activated carbon from China between 2009 and 2011. Although we note that these data are not limited specifically to subject merchandise, but cover a broader category including all activated carbon products, the trends indicate that any coal shortage in China does not appear to have affected Chinese exports of activated carbon generally and, therefore, would not likely have affected Chinese exports of certain activated carbon during the period of review.

[97] CR at IV-10, PR at IV-4.

[98] *** reported production, or anticipated production in the future, of other products on the same equipment and machinery used in the production of certain activated carbon, or the ability to switch production between certain activated carbon and other products in response to a relative change in the price of activated carbon vis-a-vis the price of other products, using the same equipment or labor. CR at IV-12, PR at IV-5; and Foreign Producer

(continued...)

producers to sell additional certain activated carbon into the U.S. mercury abatement market (which they are directly serving[99]) if the order were revoked.

In sum, the subject producers have significant excess capacity, the incentive to produce and export additional product, and the incentive to export additional product to the attractive U.S. market. We consequently find the volume of subject imports, both in absolute terms and relative to production and consumption in the United States, would likely be significant in the reasonably foreseeable future if the order were revoked.

D. Likely Price Effects of Subject Imports

When examining the likely price effects of subject imports if the order under review were to be 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.[100]

1. The Original Determination

In the original investigation, the Commission found that, given the general substitutability between the domestic like product and subject imports, price was the largest single factor affecting purchasing decisions, as long as the activated carbon met the specifications required for the end-use in question. The Commission noted that price was identified by numerous purchasers as either the most important or the second most important factor affecting purchasing decisions, and a large majority of purchasers listed price as "very important" in their purchasing decisions. The Commission also found that, by and large, purchasers found the domestic like product and subject imports to be fairly comparable, except in price, where almost all purchasers reported that the domestic like product was inferior, that is higher in price, to the subject imports. The Commission also noted that a majority of responding purchasers reported that they "always" or "usually" purchased the lowest-priced product.[101]

The Commission determined that the price comparison data showed substantial and consistent underselling by subject imports throughout the period. The Commission also determined, however, that the pricing movements in certain activated carbon over the period of investigation had varied with no clear trend. Consequently, the Commission found that there was no evidence that subject imports were depressing domestic prices to a significant degree.[102]

The Commission did find, however, the domestic industry's cost of goods sold as a share of net sales increased steadily throughout the period of investigation. The Commission stated that domestic producers should have been able to raise prices as costs increased in a market with increasing demand; however, the domestic producers were unable to raise prices to cover their increasing costs as significant volumes of lower priced subject imports entered the U.S. market, resulting in a cost-price squeeze. As a

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[98] (...continued)
Questionnaire Responses at Sections II-5 and II-7.

[99] Hearing Transcript at 119 (Thompson).

[100] 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.

[101] Original Investigation, USITC Pub. 3913, at 19.

[102] Original Investigation, USITC Pub. 3913, at 20.

result of these findings, the Commission determined that subject imports prevented domestic price increases that otherwise would have occurred to a significant degree.[103]

Finally, the Commission found that confirmed lost sales and lost revenues provided additional support of its finding that subject imports had taken sales from domestic producers and had suppressed prices to a significant degree, even as demand increased over the period of investigation. In conclusion, the Commission found that subject imports had significant adverse price effects on the U.S. industry.[104]

2. The Current Review

The record in this review indicates that there is a general degree of substitutability between certain activated carbon produced in the United States and China, and that price remains an important factor in purchasing decisions.[105]

For this review, the Commission collected pricing data on three certain activated carbon products. Three U.S. producers and nine importers of subject merchandise provided usable pricing data, although not all firms reported pricing for all products for all quarters. Pricing data reported by these firms accounted for approximately 56.8 percent of the domestic industry's U.S. shipments of certain activated carbon and 19.0 percent of U.S. shipments of subject imports from China during January 2007 through June 2012.[106]

Despite the increase in prices over the period of review,[107] prices of the subject imports undersold the domestic product in 60 of 66 quarterly comparisons, with margins of underselling ranging from 1.1 percent to 45.9 percent.[108] Thus, even with the discipline of the order in place, subject imports continued

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[103] Original Investigation, USITC Pub. 3913, at 20.

[104] Original Investigation, USITC Pub. 3913, at 21.

[105] CR/PR at Tables II-2 and II-3. See also discussion in Section III.B.2 above.

[106] See CR at V-3 to V-5, PR at V-3.

[107] In this regard, we note that prices of all U.S.-produced certain activated carbon products increased substantially during the period of review from their 2007 levels, which we find attributable in large part to the imposition of the antidumping duty order. In the original investigation, domestic prices increased almost immediately after the petition was filed. Original Determination, USITC Pub. 3913, at 17. Once the antidumping duty order was issued in April 2007, the prices for subject imports increased significantly, allowing for domestic prices and profits to increase as well. See CR/PR at Tables IV-2 and V-1 to V-3. Notably, the record shows that importers deliberately priced their U.S. sales by adding the amount of the dumping duties deposited to the price of the certain activated carbon paid to the Chinese exporter. Hearing Transcript at 195 (Perera); Domestic Industry Posthearing Brief at Exhibit 1. We find that this shows that the antidumping duty order has been effective in increasing prices for subject imports of certain activated carbon in the U.S. market during the period of review. Overall, prices of all U.S.-produced certain activated carbon increased irregularly over the period of review, with increases ranging from *** percent to *** percent. CR at V-5, PR at V-3; CR/PR at Table V-4 (percentage change from first quarter to last quarter for which price data were available using rounded data). Prices of subject imports also increased irregularly over the period, with increases ranging from *** percent to *** percent. Id. At least some of these increases are due to the ability to pass on increased raw material costs, as noted earlier. See CR/PR at V-1 and Figure V-1.

[108] CR/PR at Table V-5.

to undersell the domestic like product at significant margins.[109] [110] Given the substitutability of the domestic like product and the subject imports and the importance of price in purchasing decisions, and in light of the incentives for Chinese producers to increase their exports to the U.S. market as described above, we find that Chinese producers would likely price their product more aggressively to gain market share in the absence of the order. As a result, they would likely undersell the domestic like product at even larger margins.

Moreover, we find that the likely increasing volume of low-priced subject imports would likely cause price suppression. Even with the discipline of the order and increasing domestic prices during the period of review, the domestic industry's COGS/net sales ratio increased during the period after 2009, indicating a cost-price squeeze. [111] [112] This adverse trend would likely accelerate with the introduction into the U.S. market of additional quantities of low-priced subject imports upon revocation.

We find a likelihood of significant negative price effects from the subject imports upon revocation of the order given the following factors: (1) the likely significant volume of subject imports from China; (2) the importance of price in purchasing decisions; (3) the substitutability of subject imports and the domestic like product; (4) the price effects of low-priced subject imports in the original investigation; (5) the underselling by subject imports during the original investigation which has continued in this review; and (6) the incentive that exists for subject imports to enter the U.S. market in significantly increased quantities. Accordingly, we find that, upon revocation of the order, subject imports would likely significantly undersell the domestic like product and have a significant depressing or suppressing effect on prices within a reasonably foreseeable time.

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[109] During the original investigation, subject imports undersold the domestic like product in 45 of 48 possible comparisons at margins up to 58 percent. Original Determination, USITC Pub. 3913, at 19-20; CR at V-13 and n.5, PR at V-6 and n.5.

[110] The respondents argue that to prevent injury to the domestic industry, subject imports must be "priced at a reasonable level, like what we have been seeing the past few years." Hearing Transcript at 206-07 (Noonan). In this regard, we note that subject import prices were decreasing at the end of the period of review, while at the same time, raw material costs, particularly for coal, were increasing significantly. CR/PR at Figure V-1 and Tables V-1 to V-3; Hearing Transcript at 178, 207, 221 (Allen); and Domestic Industry Posthearing Brief, Exhibits 1 and 12. We find that this decreasing trend in subject import prices in the face of substantially increasing raw material costs provides further evidence of the likely aggressive pricing behavior of the Chinese producers in the U.S. market if the order were revoked and undermines respondents' contention that subject imports have been priced at reasonable levels throughout the period of review.

[111] CR/PR at Table C-1. The COGS/net sales ratio increased steadily from *** percent in 2009 to *** percent in 2011, and was higher in interim 2012 than in interim 2011, indicating some restraining pressure on U.S. prices. Id.

[112] Commissioners Broadbent and Pearson note that the additional volumes of *** may have played a role in higher COGS/sales ratios after 2009. See Domestic Industry Posthearing Brief, Exhibit 1 at 23-25 and n.9.

E. Likely Impact of Subject Imports [113]

In analyzing the likely impact of imports of subject merchandise if the order under review were to be 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.[114] 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. 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.[115]

1. The Original Determination

In its original investigation, the Commission found that the performance indicators for the domestic industry were mixed over the period examined. The Commission found that, although domestic consumption of activated carbon increased over the period, the domestic producers' total shipments decreased before increasing in 2006. U.S. producers' capacity, the average number of production and related workers, and hours worked also decreased. By contrast, capacity utilization and wages paid increased. The Commission found that many of the domestic industry's consolidated financial indicators decreased overall from 2003 to 2005, before recovering in 2006.[116] The decrease in the domestic industry's performance indicators occurred as subject imports entered the U.S. market in significant volumes and gained market share almost exclusively at the expense of the domestic industry. At the same time, subject imports undersold the domestic like product, typically by double-digit margins, and

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[113] Under the statute, "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 expedited its determination in this five-year review and determined that revocation would likely lead to continuation or recurrence of dumping at likely antidumping duty margins ranging from of 61.95 percent to 228.11 percent for 23 Chinese producers/exporters; and 228.11 percent for the PRC-Wide Entity. 77 Fed. Reg. at 33420-21.

The Chinese respondents have argued that the cash deposit rates assigned to certain Chinese producers and exporters through Commerce's administrative reviews should be viewed as a positive indication of the willingness and ability of these parties to participate responsibly in the U.S. market if the order were revoked. See Chinese Respondent Posthearing Brief at 5-7. We find that the fact that some Chinese producers and exporters have been found to be selling the subject merchandise at fair value during Commerce's administrative reviews is not probative, for our purposes, of the likely future behavior of the Chinese producers in the U.S. market in the absence of the order, given that Commerce has found in its expedited sunset review that the subject producers and exporters, including the Chinese producer and exporter cited by the respondents in their posthearing brief, were likely to dump certain activated carbon if the order were revoked. See id. at 6 and 77 Fed. Reg. at 33421.

[114] 19 U.S.C. § 1675a(a)(4).

[115] 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.

[116] Original Investigation, USITC Pub. 3913, at 22.

suppressed domestic prices to a significant degree, such that domestic producers were unable to raise prices sufficiently to cover increasing raw material and energy costs.[117]

The Commission found the absolute and relative volume, and the increase in the volume of subject imports, as well as the underselling by the subject imports, significant. The Commission determined that, as subject imports captured market share, they suppressed domestic prices to a significant degree, and thereby caused decreases in the domestic industry's financial performance. Thus, the Commission found substantial evidence of a causal connection between subject imports and the injury experienced by the domestic industry. Although the Commission gave reduced weight to post-petition data, it found that the record evidence for the period of time after the petition was filed and after preliminary duties were imposed further supported the finding that subject imports were a cause of material injury to the domestic industry. The Commission observed that prices in the U.S. market increased after the filing of the petition and that the quantity of subject imports decreased after Commerce's preliminary determination of sales at less than fair value. The Commission determined that these two events brought about significant improvements for the domestic industry because the domestic industry was able to expand production and sales volume.[118]

Finally, the Commission found that nonsubject imports were in the U.S. market throughout the period of investigation, but that nonsubject import volume decreased in 2006 along with subject import volumes. The Commission determined that the simultaneous drop in the volume of both subject and nonsubject imports was explained by the fact that subject imports and nonsubject imports were sold for different end uses and that the pricing data showed the prices of nonsubject imports were typically much higher. Based on these facts, the Commission found that nonsubject imports were not a factor affecting prices and that the primary cause of material injury to the domestic industry was the intense price suppression caused by low-priced subject imports. As a result, the Commission found that the domestic industry was materially injured by reason of the subject imports that were found to be sold at less than fair value in the United States.[119]

2. The Current Review

Although certain of the industry's performance indicators decreased, most indicators of the domestic industry's performance showed considerable improvement over the period of review. The domestic industry's capacity increased relatively steadily over the period of review,[120] while its production levels also increased.[121] The domestic industry's U.S. shipments increased,[122] although the domestic industry's end-of-period inventories increased significantly.[123] The quantity of net sales

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[117] Original Investigation, USITC Pub. 3913, at 23.

[118] Original Investigation, USITC Pub. 3913, at 23-24.

[119] Original Investigation, USITC Pub. 3913, at 24.

[120] Production capacity was *** pounds in 2007, *** pounds in 2008, *** pounds in 2009, *** pounds in 2010, and *** pounds in 2011. It was *** pounds in interim 2011 and *** pounds in interim 2012. CR/PR at Table III-2. Capacity utilization, however, decreased substantially despite increasing apparent U.S. consumption over the period. Capacity utilization was *** percent in 2007, *** percent in 2008, *** percent in 2009, *** percent in 2010, and *** percent in 2011. It was *** percent in interim 2011 and *** percent in interim 2012. CR/PR at Table III-2.

[121] Production was *** pounds in 2007, *** pounds in 2008, *** pounds in 2009, *** pounds in 2010, and *** pounds in 2011. It was *** pounds in interim 2011 and *** pounds in interim 2012. CR/PR at Table III-2.

[122] U.S. shipments were *** pounds in 2007, *** pounds in 2008, *** pounds in 2009, *** pounds in 2010, and *** pounds in 2011. They were *** pounds in interim 2011 and *** pounds in interim 2012. CR/PR at Table III-3.

[123] End-of-period inventories were *** pounds in 2007, *** pounds in 2008, *** pounds in 2009, *** pounds in 2010, and *** pounds in 2011. They were *** pounds in interim 2011 and *** pounds in interim 2012. CR/PR at

(continued...)

fluctuated over the period of review, but was slightly higher in 2011 relative to 2007.[124] The domestic industry's market share was relatively steady over the period, but was lower in 2011 than in 2007.[125] The number of production and related workers increased between 2007 and 2011.[126] The number of hours worked[127] and wages paid[128] followed the same trend. Productivity decreased overall, however, while unit labor costs increased steadily.[129]

Consistent with the domestic producer's testimony that demand for certain activated carbon is relatively recession-proof, the domestic industry was profitable throughout the period.[130] Operating income increased substantially from 2007 to 2011, but was lower in interim 2012 than in interim 2011.[131] The industry's operating income margin increased from 2007 to 2011, although it was lower in interim 2012 than in interim 2011.[132] Capital expenditures and research and development expenses increased over the period.[133]

In light of the foregoing, we find the domestic industry is not currently vulnerable to injury if the order is revoked. The industry's production, capacity utilization, and shipments increased overall during the period of review. Its market share was high and remained so throughout this period, while demand also increased steadily. The quantity of net sales increased and the industry overall had profitable performance throughout the period.

Nonetheless, we find that the domestic industry is likely to be materially injured by subject imports upon revocation of the order. Should the order under review be revoked, we have found that the

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[123] (...continued)
Table III-6.

[124] The quantity of net sales was *** pounds in 2007, *** pounds in 2008, *** pounds in 2009, *** pounds in 2010, and *** pounds in 2011. It was *** pounds in interim 2011 and *** pounds in interim 2012. CR/PR at Table III-9.

[125] The domestic industry's market share was *** percent in 2007, *** percent in 2008, *** percent in 2009, *** percent in 2010, and *** percent in 2011. It was *** percent in interim 2011 and *** in interim 2012. CR/PR at Table C-1.

[126] The number of production and related workers was *** in 2007, *** in 2008, *** in 2009, *** in 2010, and *** in 2011. It was *** in interim 2011 and *** in interim 2012. CR/PR at Table III-8.

[127] The number of hours worked was *** in 2007, *** in 2008, *** in 2009, *** in 2010, and *** in 2011. It was *** in interim 2011 and *** in interim 2012. CR/PR at Table III-8.

[128] Wages paid were $*** in 2007, $*** in 2008, $*** in 2009, $*** in 2010, and $*** in 2011. They were $*** in interim 2011 and $*** in interim 2012. Hourly wages were $*** in 2007, $*** in 2008, $*** in 2009, $*** in 2010, and $*** in 2011. They were $*** in interim 2011 and $*** in interim 2012. CR/PR at Table III-8.

[129] In pounds per hour, productivity was *** in 2007, *** in 2008, *** in 2009, *** in 2010, and *** in 2011. It was *** pounds per hour in interim 2011 and *** pounds per hour in interim 2012. Unit labor costs per pound were $*** in 2007, $*** in 2008 and 2009, and $*** in 2010 and 2011. They were $*** in interim 2011 and $*** in interim 2012. CR/PR at Table III-8.

[130] Hearing Transcript at 48-49 (O'Brien), 49-50 (Thompson).

[131] Operating income was $*** in 2007, $*** in 2008, $*** in 2009, $*** in 2010, and $*** in 2011. It was $*** in interim 2011 and $*** in interim 2012. CR/PR at Table III-9. The domestic industry, as a whole, was profitable at the operating level even though ***. CR/PR at Table III-10.

[132] The operating income margin was *** percent in 2007, *** percent in 2008, *** percent in 2009, *** percent in 2010, and *** percent in 2011. It was *** percent in interim 2011 and *** percent in interim 2012. CR/PR at Table III-9.

[133] Capital expenditures were $*** in 2007, $*** in 2008, $*** in 2009, $*** in 2010, and $*** in 2011. They were $*** in interim 2011 and $*** in interim 2012. Research and development expenses were $*** in 2007, $*** in 2008, $*** in 2009, $*** in 2010, and $*** in 2011. They were $*** in interim 2011 and $*** in interim 2012. CR/PR at Table III-12.

volume of subject imports would likely increase significantly. Although demand has increased over the period of review and is expected to increase moderately in the future, we note that increased demand during the original investigation did not preclude material injury by reason of subject imports. We have further found that these additional volumes of subject imports would be priced in a manner that would likely undersell the domestic like product and likely have significant depressing or suppressing effects on prices for the domestic like product. Consequently, the domestic industry would need either to respond to subject imports by foregoing sales and ceding market share, or by cutting or restraining prices in the face of increasing costs for raw materials. The resulting loss of production or revenues would likely cause deterioration in the financial performance of the domestic industry in light of likely demand conditions. Further deterioration in financial performance would result in likely losses of employment and decreasing investment.

We have also considered the role of nonsubject imports in the U.S. market. Nonsubject imports hold a relatively small but increasing portion of the market, although they did not have an adverse impact on the domestic industry over the period of review. As discussed above, the record indicates that the nonsubject imports were predominantly coconut-based certain activated carbon products with generally different end-use applications from coal-based activated carbon. As such, the nonsubject imports were less direct competitors with the coal-based subject imports and the domestic like product for the majority of end-use applications.[134] Moreover, no party has alleged other causes for the likely adverse impact on the domestic industry described above nor are any such causes apparent from the record.

CONCLUSION

For the foregoing reasons, we determine that revocation of the antidumping duty order on subject certain activated carbon from China would be likely to lead to continuation or recurrence of material injury to an industry in the United States within a reasonably foreseeable time.

[134] CR at IV-24 to IV-26, PR at IV-13 to IV-14, and CR/PR at Table IV-11; see also Hearing Transcript at 46 (Luberda). The respondents claim that the subject imports and the domestic like product do not compete because of differences in the characteristics of the coal used to produce certain activated carbon in the United States and China. The respondents argue that this lack of competition means that revocation of the order would not lead to the continuation or recurrence of material injury to the domestic industry. Respondent Prehearing Brief at 5. The record shows, however, that producers in both the United States and China produce coal-based certain activated carbon, using both the agglomerated and direct activation methods, and that responding purchasers of subject imports reported end uses in the major markets of the domestic producers including air filtration, water filtration and purification, food processing, and pollution control. CR at I-16, I-24, PR at I-12, I-16, and CR/PR at Table I-6; CR at IV-18, PR at IV-7 to IV-8; Domestic Industry Posthearing Brief at 6-7 and Exhibit 1. Therefore, we find the respondents' arguments regarding attenuated competition between the subject imports and the domestic like product unavailing.

PART I: INTRODUCTION AND OVERVIEW

BACKGROUND

On March 1, 2012, 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 a review to determine whether revocation of the antidumping duty order on certain activated carbon ("CAC") from China would likely lead to the continuation or recurrence of material injury to a domestic industry.[2] [3] On June 4, 2012, the Commission determined that it would conduct a full review pursuant to section 751(c)(5) of the Act.[4] The following tabulation presents information relating to the schedule of this proceeding:[5]

[1] 19 U.S.C. 1675(c).

[2] *Activated Carbon From China: Institution of a Five-Year Review*, 77 FR 12614, March 1, 2012. 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 a five-year review of the subject antidumping duty order concurrently with the Commission's notice of institution. *Initiation of Five-Year ("Sunset") Review*, 77 FR 12562, March 1, 2012.

[4] *Certain Activated Carbon from China: Notice of Commission Determination to Conduct a Full Rive-Year Review and Scheduling of a Full Five-Year Review Concerning the Antidumping Duty Order on Certain Activated Carbon From China*, 77 FR 38082, June 26, 2012. The Commission's findings with respect to adequacy and whether to conduct a full or an expedited review were based on substantive responses to its notice of institution. The Commission received a joint substantive response from three domestic producers of certain activated carbon, Calgon Carbon Corp. ("Calgon"), Norit Americas, Inc. ("Norit"), and ADA Carbon Solution, LLC ("ADA"). The Commission found the joint response of the domestic CAC producers to be individually adequate. The Commission further determined the domestic interested party group response was adequate because these producers accounted for virtually all domestic production of certain activated carbon in 2011. The Commission also received two joint substantive responses from respondent interested parties to the Commission's notice of institution. The Commission received a joint response from Jacobi Carbon AB ("Jacobi AB"), a foreign exporter of CAC from China, and Jacobi Carbons, Inc. ("Jacobi"), a U.S. importer of CAC from China. The Commission received a second joint response from Carbon Activated Corp. ("Carbon Activated") and Car Go Worldwide ("CarGo"), U.S. importers of certain activated carbon from China. The Commission found the individual response of each respondent interested party to be individually adequate. The Commission further determined the respondent interested party group response was adequate because the respondent interested parties accounted for a significant volume of subject imports from China in 2011. The Commission therefore determined to conduct a full review.

[5] The Commission's statement on adequacy and Commissioners' votes on whether to conduct an expedited or a full review, as well as pertinent *Federal Register* notices, are referenced in appendix A and may be found at the Commission's web site (www.usitc.gov). Appendix B presents the witnesses appearing at the Commission's hearing.

Effective date	Action
April 27, 2007	Commerce's antidumping duty order on certain activated carbon from China (72 FR 20988)
March 1, 2012	Commission's institution of five-year review (77 FR 12614)
March 1, 2012	Commerce's initiation of five-year review (77 FR 12562)
June 4, 2012	Commission's determination to conduct full five-year review and scheduling of the review (77 FR 38082, June 26, 2012)
June 6, 2012	Commerce's final results of expedited five-year review of the antidumping duty order on certain activated carbon from China (77 FR 33420)
December 18, 2012	Commission's hearing
February 8, 2013	Commission's vote
February 22, 2013	Commission's determination transmitted to Commerce

The Original Investigation

The original investigation resulted from a petition filed by Calgon Carbon Corp. ("Calgon"), Pittsburgh, PA and Norit Americas, Inc. ("Norit"), Marshall, TX, on March 8, 2006, alleging that an industry in the United States is materially injured and threatened with material injury by reason of less-than-fair-value ("LTFV") imports of CAC from China. Following notification of a final determination by Commerce that imports of CAC from China were being sold at LTFV, the Commission determined on April 16, 2007 that a domestic industry was materially injured by LTFV imports of CAC from China.[6] Commerce published the antidumping duty order on CAC from China on April 27, 2007.[7]

SUMMARY DATA

Table I-1 presents a summary of data from the original investigation and the current full five-year review.

Table I-1
CAC: Comparative data from the original investigation (2003-06) and current review (2007-11)

* * * * * * *

PREVIOUS AND RELATED INVESTIGATIONS

CAC has been the subject of one prior antidumping duty investigation in the United States. On January 26, 2006, domestic producers Calgon and Norit filed a petition alleging that an industry in the United States was materially injured and threatened with material injury by reason of LTFV imports of

[6] *Certain Activated Carbon from China, Inv. No. 731-TA-1103 (Final),* USITC Publication 3913, April 2007.

[7] *Notice of Antidumping Duty Order: Certain Activated Carbon from the People's Republic of China,* 72 FR 20988, April 27, 2007.

activated carbon[8] from China. As a result of that filing, the Commission instituted investigation No. 731-TA-1102 (Preliminary): Activated Carbon from China.[9] Subsequently, on February 15, 2006, petitioners withdrew their petition at Commerce and the Commission. Accordingly, Commerce did not initiate its investigation by that date and the Commission discontinued its investigation effective that date.[10]

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 . . ..*
>
> *(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--*

[8] The term activated carbon refers to both CAC (which can also be referred to as steam-activated carbon) and chemically activated carbon ("CHAC").

[9] *Activated Carbon from China: Institution of Antidumping Investigation and Scheduling of a Preliminary Phase Investigation,* 71 FR 5688, February 2, 2006.

[10] *Activated Carbon from China: Notice of Withdrawal of Petition in Antidumping Investigation,* 71 FR 9155, February 22, 2006.

(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 the review that relates to the statutory criteria is presented throughout this report. A summary of trade and financial data for CAC as collected in the reviews is presented in appendix C. U.S. industry data are based on the questionnaire responses of three U.S. producers of CAC that are believed to have accounted for virtually all of domestic production of CAC in 2011. U.S. import data and related information are based on the questionnaire responses of 30 U.S. importers of CAC that are believed to have accounted for nearly 90 percent of imports of CAC from all sources during 2011, including virtually all such imports from China. Foreign industry data and related information are based on the questionnaire responses of three producers of CAC and one exporter of CAC in China accounting for an estimated *** percent of total production of CAC in China in 2011. Responses by U.S. producers, importers, purchasers, and foreign producers of CAC to a series of questions concerning the significance of the existing antidumping and countervailing duty orders and the likely effects of revocation of such orders are presented in appendix D.

COMMERCE'S REVIEWS

Administrative Reviews[11]

Commerce has completed four administrative reviews of the outstanding antidumping duty order on CAC from China.[12] Details from Commerce's completed administrative reviews, as well as ongoing administrative reviews, appear in table I-2. As shown in the table, Commerce calculated weighted-average margins in percent ad valorem in its antidumping duty order and its first administrative review. Subsequently, Commerce calculated weighted-average margins in dollars per kilogram.

[11] In the second administrative review, Commerce determined that antidumping duties were being absorbed on Jacobi Carbon AB's U.S. sales of the subject merchandise through its affiliated importer, given that Jacobi did not rebut the duty absorption presumption with evidence that the unaffiliated U.S. purchaser paid the full duty ultimately assessed on the subject merchandise. *Certain Activated Carbon from the People's Republic of China: Notice of Preliminary Results of the Second Antidumping Duty Administrative Review, and Preliminary Rescission in Part*, 75 FR 26927, May 13, 2010.

[12] For previously reviewed or investigated companies not included in an administrative review, the cash deposit rate continues to be the company-specific rate published for the most recent period.

Table I-2
CAC: Administrative reviews of the antidumping duty order for China

Period	Type of proceeding and date results published	Weighted-average margin (*percent ad valorem*)
7/1/05-12/31/05	**Final determination** (72 FR 9508, March 2, 2007) **AD order** (72 FR 20988, April 27, 2007)	**Margin range ..... 61.95 - 228.11** (Five exporters at 61.95; 22 exporters at 67.14; 27 exporters at 69.54; six exporters at 228.11; and a PRC-wide rate of 228.11)
10/11/06-03/31/08	**Administrative Review Initiation** (73 FR 31813, June 4, 2008) **Administrative Review Partial Rescissions** (73 FR 42550, July 22, 2008) and (73 FR 57058, October 1, 2008) **Administrative Review Extension** (73 FR 72026, November 26, 2008) **Administrative Review Preliminary Determination and Extension** (74 FR 21317, May 7, 2009) **Administrative Review Final Results** (74 FR 57995, November 10, 2009) **Amended Results of Administrative Review** (74 FR 66952, December 17, 2009)	Calgon Tianjin ..... 14.58 Jacobi AB ..... 18.22 Ningxia Guanghua Cherishmet ..... 18.40 Datong Municipal Yunguang AC ..... 16.40 Ningxia Huahui AC ..... 16.40 Ningxia Lingzhou Foreign Trade ..... 16.40 Tangshan Solid Carbon .....16.40 Tianjin Maijin Industries ..... 16.40 PRC-wide rate 228.11

Table continued on next page.

Table I-2--*Continued*
CAC: Administrative reviews of the antidumping duty order for China

Period	Type of proceeding and date results published	Weighted-average margin (*dollars per killogram*)
04/01/08-03/31/09	**Administrative Review Initiation** (74 FR 25711, May 29, 2009) **Administrative Review Partial Rescissions** (74 FR 31690, July 2, 2009) and (74 FR 47558, September 16, 2009) **Administrative Review Extension** (74 FR 61330, November 24, 2009) **Administrative Review Preliminary Results** (75 FR 26927, May 13, 2010) **Administrative Review Extension** (75 FR 39916, July 13, 2010) **Administrative Review Partial Rescissions** (75 FR 48644, August 11, 2010) and (75 FR 51754, August 23, 2010) **Administrative Review Extension** (75 FR 61126, October 4, 2010) **Administrative Review Final Result** (75 FR 70208, November 17, 2010)	Jacobi AB ..... 0.11 Ningxia Huahui AC ..... 0.44 Datong Juqiang AC ..... 0.28 Datong Municipal Yunguang AC ..... 0.28 Jilin Bright Future Chemicals ..... 0.28 Ningxia Guanghua Cherishmet ..... 0.28 Ningxia Mineral & Chemical ..... 0.28 Shanxi DMD ..... 0.28 Shanxi Industry Technology Trading ..... 0.28 Shanxi Qixian Foreign Trade ..... 0.28 Tangshan Solid Carbon ..... 0.28 PRC-wide rate 2.42
04/01/09-03/31/10	**Administrative Review Initiation** (75 FR 29976, May 28, 2010) **Administrative Review Extension** (75 FR 61697, October 6, 2010) **Administrative Review Preliminary Results** (75 FR 23978, April 29, 2011) **Administrative Review Extension** (76 FR 43654, July 21, 2011) **Administrative Review Final Result** (76 FR 67142, October 31, 2011)	Jacobi AB ..... 0.00 Calgon Tianjin ..... 0.00 Ningxia Huahui AC ..... 0.44 Datong Municipal Yunguang AC ..... 0.28 Ningxia Guanghua Cherishmet ..... 0.28 Shanxi DMD ..... 0.28 Shanxi Industry Technology Trading ..... 0.28 Shanxi Sincere ..... 0.28 Tangshan Solid Carbon ..... 0.28 Tianjin Maijin Industries ..... 0.28 PRC-wide rate 2.42
04/01/10-03/31/11	**Administrative Review Initiation** (76 FR 30912, May 27, 2011) **Administrative Review Partial Rescissions** (76 FR 39851, July 7, 2011) and (76 FR 58246, September 20, 2011) **Administrative Review Extension** (76 FR 60803, September 30, 2011) **Administrative Review Preliminary Result** (77 FR 26496, May 4, 2012) **Administrative Review Final Result** (77 FR 67337, November 9, 2012)	Datong Juquiang AC ..... 0.00 Jacobi AB ..... 0.44 Ningxia Guanghua Cherishmet ..... 2.11 Datong Municipal Yunguang AC ..... 1.04 Jilin Bright Future Chemicals ..... 1.04 Ningxia Mineral and Chemical ..... 1.04 Shanxi DMD ..... 1.04 Shanxi Sincere ..... 1.04 Shanxi Industry Technology Trading ..... 1.04 Tangshan Solid Carbon ..... 1.04 Tianjin Maijin Industries ..... 1.04 PRC-wide rate 2.42
04/01/11-03/31/12	**Administrative Review Initiation** (77 FR 31568, May 29, 2012)	(Pending)

Source: Cited Federal Register notices.

Five-Year Review

Commerce has issued the final results of its expedited review with respect to China. Table I-3 presents the dumping margins calculated by Commerce in its original investigation and first review.

Table I-3
CAC: Commerce's original and first five-year dumping margins for producers/exporters in China

Original margin (*percent*)	First five-year review margin (*percent*)
China[1]	
Sixty exporters; margin range: 61.95 - 228.11 (five exporters at 61.95; 22 exporters at 67.14; 27 exporters at 69.54; and six exporters at 228.11)	**Twenty-three exporters; margin range: 61.95-228.11** (one exporter at 61.95; 19 exporters at 67.14; one exporter at 69.54; and two exporters at 228.11)
PRC-wide rate of 228.11	PRC-wide rate of 228.11

[1] Antidumping duty order, 72 FR 20988, April 27, 2007; final results of Commerce's expedited review, 77 FR 33420, June 6, 2012.

Source: Cited *Federal Register* notices.

THE SUBJECT MERCHANDISE

Commerce's Scope

The imported product subject to the antidumping duty order under review, as defined by Commerce in its original order, is as follows:

> *"Certain activated carbon is a powdered, granular, or pelletized carbon product obtained by "activating" with heat and steam various materials containing carbon, including but not limited to coal (including bituminous, lignite, and anthracite), wood, coconut shells, olive stones, and peat. The thermal and steam treatments remove organic materials and create an internal pore structure in the carbon material. The producer can also use carbon dioxide gas (CO_2) in place of steam in this process. The vast majority of the internal porosity developed during the high temperature steam (or CO_2 gas) activated process is a direct result of oxidation of a portion of the solid carbon atoms in the raw material, converting them into a gaseous form of carbon.*
>
> *The scope of this order covers all forms of activated carbon that are activated by steam or CO_2, regardless of the raw material, grade, mixture, additives, further washing or post-activation chemical treatment (chemical or water washing, chemical impregnation or other treatment), or product form. Unless specifically excluded, the scope of this order covers all physical forms of certain activated carbon including powdered activated carbon ("PAC"), granular activated carbon ("GAC"), and pelletized activated carbon.*
>
> *Excluded from the scope of the order are chemically activated carbons. The carbon-based raw material used in the chemical activation process is treated with a strong chemical agent, including but not limited to phosphoric acid, zinc chloride, sulfuric acid or potassium hydroxide, that dehydrates molecules in the raw material , and results in the formation of water that is removed from the raw material by moderate heat treatment. The activated carbon created by chemical activation has internal porosity*

developed primarily due to the action of the chemical dehydration agent. Chemical activated carbons are typically used to activate raw materials with a lignocellulosic component such as cellulose, including wood, sawdust, paper mill waste and peat.

To the extent that an imported activated carbon product is a blend of steam and chemically activated carbons, products containing 50 percent or more steam (or CO_2 gas) activated carbons are within this scope, and those containing more than 50 percent chemically activated carbons are outside this scope. This exclusion language regarding blended material applies only to mixtures of steam and chemically activated carbons.

Also excluded from the scope are reactivated carbons. Reactivated carbons are previously used activated carbons that have had adsorbed materials removed from their pore structure after use through the application of heat, steam, and/or chemicals.

Also excluded from the scope is activated carbon cloth. Activated carbon cloth is a woven textile fabric made of or containing activated carbon fibers. It is used in masks and filters and clothing of various types where a woven format is required.

Any activated carbon meeting the physical description of subject merchandise provided above that is not expressly excluded from the scope is included within this scope."[13]

Tariff Treatment

CAC is classifiable in the Harmonized Tariff Schedule of the United States ("HTS") under subheading 3802.10.00. The current rate of duty for CAC is 4.8 percent ad valorem.

THE PRODUCT[14]

Physical Characteristics and Uses[15]

Activated carbon is a solid material consisting primarily of carbon that has been specially treated to increase the porosity, and thus the surface area, of the material. The high surface area that results from "activation" allows greater adsorption of chemical species onto the solid carbon. The surface area and pore structure of activated carbon depend greatly on the raw materials and processing methods used. In both the United States and China, coal is the primary raw material. However, activated carbon can be produced from almost any solid material that has a high carbon content. Other common raw materials for making activated carbon are wood, coconut shells, olive stones, and peat.

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[13] *Notice of Antidumping Duty Order: Certain Activated Carbon From the People's Republic of China*, 72 FR 20988, April 27, 2007. On June 1, 2007, requestor Cherishmet inquired whether a certain type of patented activated carbon (192 patent HTCC product) is within the scope of the antidumping duty order; on July 26, 2007, Commerce ruled that carbon activated by the hydro-thermal catalytic chemical activated process protected by U.S. Patent No. 6,858,192 ("192 patent HTCC product") is within the scope of the antidumping duty order (72 FR 62438, November 5, 2007). On November 14, 2008, requestor Rolf C. Hagen (USA) Corp., inquired whether certain fish filter parts are within the scope of the antidumping duty order; Commerce subsequently issued a final scope ruling stating that certain Chinese-origin fitted fish tank filters containing (1) less than 500 grams of activated carbon or (2) a combination of activated carbon and zeolite are outside the scope of the order (75 FR 14138, March 24, 2010).

[14] In this section, the general term "activated carbon" refers to both CAC (also referred to as steam-activated carbon) and CHAC (chemically-activated carbon). As discussed later in this chapter, CHAC is not included in the domestic like product defined by the Commission in the original investigation and has not been raised as an issue by the interested parties in this review.

[15] Unless otherwise stated, the information in this section of the report is drawn from USITC, *Certain Activated Carbon from China, Inv. 731-TA-1103 (Final)*, USITC Publication 3913, April 2007, pp. I-5 - I-8.

Activated carbon is sold in three basic forms: powdered, granular, and pelletized. Powdered activated carbon ("PAC") is usually defined as being predominately material that passes through an 80 mesh.[16] Granular activated carbon ("GAC") has larger particles than PAC. The size range for GAC is usually specified by two mesh numbers between which most of the material is retained. For example, an 8x30 GAC predominately contains particles that pass through an 8 mesh (2.38 mm sieve openings) but do not pass through a 30 mesh (0.59 mm sieve openings). Pelletized activated carbon consists of uniformly sized cylinders with typical diameters of 2 mm and lengths of 0.5 to 2 cm. The primary benefit of pelletized activated carbon is that it produces a lower pressure drop over a fixed bed than GAC.

In addition to the size and shape of the activated carbon particles, surface area, pore size distribution, ash content, and hardness influence the efficiency of activated carbon in a given application. These properties depend on the raw materials used as well as the activation process. The surface area and pore size distribution are related properties that determine how much of the desired chemical species will adsorb onto the activated carbon. Two characteristics of a given activated carbon sample that are related to the pore size distribution and surface area are the iodine number and the molasses number. The iodine number expresses the activity level of a carbon and measures the mass of iodine that is absorbed from a standard solution by a given mass of activated carbon and is usually reported in units of milligrams of iodine absorbed per gram of activated carbon.[17] Since iodine is a small molecule, a high iodine number indicates the abundance of small diameter pores (micropores) in the activated carbon. The molasses number measures the efficiency with which a sample of activated carbon removes the color-inducing molecules from a mixture of molasses and water. Since the molecules that give molasses its color are large relative to iodine, the molasses number measures the abundance of medium- to large-sized pores. A purchaser of activated carbon chooses an appropriate pore size distribution based on the size (and chemical properties) of the chemical species to be captured.

Ash content of activated carbons varies greatly according to the raw material used to produce it. Since the ash is inorganic material that cannot be "activated," a higher ash content reduces the effectiveness of a given mass of activated carbon. Manufacturers generally control ash content by selecting low-ash starting materials. If a higher-ash raw material is used, it may be subjected to an acid wash step to reduce the ash content after activation.

Hardness is an important property for specifying granular activated carbon. Harder activated carbons produce fewer fines during shipping and use. In some applications, generation of fines can be problematic.[18] According to hearing testimony from Carbon Activated and Car Go, some customers in water treatment prefer harder activated carbon that does not break down and change shape during repeated backwashing of the filter bed.[19]

The primary use for activated carbon is in the separation of small concentrations of chemical species from liquid and gas streams. Because activated carbon has a low affinity for water but strongly absorbs organic and sulfur-containing chemicals, it is widely used to remove undesirable tastes and odors from drinking water and to eliminate contaminants from industrial waste water.[20] In the processing of foods (e.g., sugar, corn syrup, and vegetable oils), pharmaceuticals, and alcoholic beverages, activated carbon is used to remove unwanted color and impurities. Activated carbon is also used in the chemical

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[16] Mesh numbers refer to hole sizes in sieves used to separate granular materials. For example, an 80 mesh has sieve openings that are nominally 0.177 mm. Lower mesh numbers typically have larger-sized holes.

[17] Since the iodine number is relatively simple to measure, it is often used as a substitute for surface area measurements, which require specialized equipment and highly trained technicians.

[18] Because CHAC is generally made using wood, it has lower hardness than certain activated, coal-based, carbon. CHACs are generally powdered or pelletized due to their lower hardness.

[19] Hearing transcript, pp. 141 (Perera) and 163 (Allen).

[20] Frederick S. Baker, Charles E. Miller, Albert J. Repik, and E. Donald Tolles, "Carbon, Activated," Kirk-Othmer Encyclopedia of Chemical Technology, John Wiley & Sons, Inc., 2003, Section 10.

process industries for solvent recovery. Applications of activated carbon in gas-phase systems include air purification, automobile emissions reduction, and solvent vapor recovery.[21]

CAC made from coconut shells typically has different properties from CAC made from coal. Specifically, coconut-based activated carbon usually has greater hardness and smaller pore sizes than coal-based activated carbon.[22] These differences may make coconut-based carbon better than coal-based carbon for certain applications. In the United States, two industries for which coconut-based activated carbon is preferred over coal-based activated carbon are gold mining and manufacturing filters for cigarettes.[23] The process of recovering gold from mined ore involves the adsorption of gold on activated carbon. The extra hardness of coconut-based carbon helps to reduce the loss of gold that can occur when the activated carbon particles break into smaller pieces.[24] In cigarette filters, coconut-based carbon may be better than coal-based activated carbon at adsorbing chemicals that affect the flavor of the cigarette. In other applications, these property differences may not be meaningful and either coconut- or coal-based activated carbon could be used.

Powdered activated carbon is used for the removal of mercury and other metals from flue gas of coal-fired power plants.[25] On May 3, 2011, under authority of Clean Air Act (CAA) sections 111 and 112, the EPA proposed both national emission standards for hazardous air pollutants, including mercury, from coal- and oil-fired electric utility steam generating units and standards of performance for fossil-fuel-fired electric utility, industrial-commercial-institutional, and small industrial-commercial-institutional steam generating units.[26] However, these standards for mercury emissions are currently subject to legal challenges that might not be resolved for some time.[27] Additionally, U.S. CAC producers anticipate that the cost of mercury control technologies other than powdered activated carbon and electric utilities closing coal-burning power plants in favor of natural gas-burning plants will affect the demand for CAC used for mercury abatement.[28]

Certain customers prefer a specific form of CAC, made from a specific raw material, for a particular application.[29] Industrial customers typically use coal- or coconut-based, granular CAC for waste water treatment and pelletized CAC for air purification. Most water treatment facilities use coal- or coconut-based, granular CAC, but some special applications in water treatment require powdered CAC from coal or wood. Food and beverage makers typically prefer coal-based carbon. The pharmaceutical industry requires high purity for its activated carbon but can use coal-, coconut-, or wood-base activated carbons if they meet the purity requirements.

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[21] Ibid., Section 10.

[22] Ibid.

[23] Ibid. In addition to these two uses, home water filter manufacturers use coconut-based CAC.

[24] Hearing transcript, p. 78 (O'Brien).

[25] Hearing transcript, p. 21 (Thompson).

[26] *National Emission Standards for Hazardous Air Pollutants from Coal- and Oil-Fired Electric Utility Steam Generating Units and Standards of Performance for Fossil-Fuel-Fired Electric Utility, Industrial-Commercial-Institutional, and Small Industrial-Commercial-Institutional Steam Generating Units.* 77 FR 9304, February 16, 2012, Carbon Activated and Car Go's Response to the Commission's Notice of Institution of Five-Year Review, Exhibit 8.

[27] Hearing transcript, p. 21 (Thompson).

[28] Hearing transcript, pp. 22 (Thompson) and 27 (Leen).

[29] Information in this paragraph is drawn from Carbon Activated and Car Go's posthearing brief, Exhibit 5, pp. 1 - 2.

Activated carbon is non-toxic and has no adverse environmental effects.[30] However, once the activated carbon has been used, it may take on the toxicity of adsorbed materials. Like nearly all powdered and granular materials, eye or skin exposure to activated carbon may cause mild irritation. Inhalation of the dust from powdered or granular activated carbon may cause irritation of the respiratory tract. Activated carbon is generally packaged and stored in plastic bags at weights ranging from 25 pounds to 2,000 pounds. Bags of activated carbon are shipped either by rail or truck. Bulk delivery by truck is also common.

Manufacturing Processes[31] [32]

The process of making activated carbon differs based on the starting material used and whether the carbon is thermally or chemically activated. The two most common methods for producing activated carbon in the United States are thermal activation (also called steam activation) of coal, which is the process that ADA, Calgon, and Norit use,[33] and chemical activation of wood.

Two commonly used processes for thermally activating coal are direct activation and reagglomeration. These processes differ in the initial treatment of the coal. In direct activation, the coal is crushed to the desired size before undergoing subsequent processing steps. For reagglomeration, the coal is first crushed, then mixed with a binder, such as coal tar or petroleum pitch, and finally pressed into briquettes. These briquettes are crushed to the desired size before beginning the carbonization and activation process. To make pelletized carbon in either of these processes, the crushed starting material is mixed with a binder and extruded to produce cylinders that are typically 2 mm in diameter and 0.5 to 2 cm in length.

The domestic industry uses both direct activation and reagglomeration to produce CAC. Calgon activates carbon after reagglomeration, Norit primarily produces CAC by direct activation of coal, and ADA exclusively produces CAC by direct activation of coal.[34] Most Chinese producers supply direct-activated carbon but a few Chinese producers can also supply reagglomerated carbon.[35] According to hearing testimony, reagglomerated CAC is preferred to direct-activated CAC in some applications. For example, end users in pharmaceutical production and food purification prefer reagglomerated CAC.[36] For water treatment, preference for direct-activated or reagglomerated varies by purchaser: some purchasers prefer direct-activated CAC due to its greater hardness, other purchasers prefer the performance of reagglomerated CAC, and other purchasers show no preference.[37] According to hearing testimony from Carbon Activated, customers who prefer direct-activated CAC for water treatment are typically located on the West Coast, while customers who prefer reagglomerated CAC are typically on the East Coast.[38]

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[30] Norit America, Inc., *Material Safety Data Sheet, Activated Carbon,* http://www.norit.com/files/documents/MSDS108_REV02.pdf (accessed January 14, 2013).

[31] In this section, the term activated carbon refers to both CAC (also referred to as steam-activated carbon) and CHAC.

[32] Unless otherwise stated, the information in this section of the report is drawn from USITC, *Certain Activated Carbon From China, Inv. 731-TA-1103 (Final),* USITC Publication 3913, April 2007, pp. I-8 - I-9.

[33] Hearing transcript, p. 68 (Leen).

[34] Domestic industry's posthearing brief, p. 6, fn. 3; exhibit 1, p. 59.

[35] Hearing transcript, pp. 169 and 223 (Perera).

[36] Hearing transcript, p. 160 (Allen).

[37] Hearing transcript, pp. 163 - 164 (Allen).

[38] Hearing transcript, pp. 170 - 171 (Perera).

For both direct activation and reagglomeration, the crushed material is added to one or more rotary kilns[39] for the carbonization step. The raw material is heated in the kiln, in the absence of oxygen, to approximately 400 degrees Celsius. During this step, the water and volatile organic compounds are vaporized and removed from the kiln in the exhaust gases. The charred material is removed from the kiln after approximately six hours, ready for the activation step.

In thermal activation, the carbonized material is transferred to a rotary kiln or multiple hearth kiln.[40] The kiln is maintained at a temperature of approximately 1,000 degrees Celsius. An oxidizing agent, usually steam,[41] is fed to the kiln. The high surface area of activated carbon is created in this step as the reaction between steam and carbon removes much of the material and leaves a porous structure. Variables such as the pore size and surface area are controlled by the kiln temperature and residence time of the material. After the activated carbon is removed from kiln, it can be milled and screened to final size and packaged for sale.

In the chemical activation of wood, an activating agent, typically phosphoric acid,[42] is added to sawdust before it is added to a rotary kiln. Both the carbonization process and the activation process take place in this kiln. The activating agent extracts moisture, reduces tar formation, and generates an open pore structure.[43] The pores created by chemical activation are generally larger than the pores formed during thermal activation. The yield of activated carbon is generally 50 percent by weight of the raw material for chemical activation compared to 30 to 35 percent by weight for thermal activation.[44]

After activation, CACs and CHACs can be further treated depending on the application for which it will be used. Two common treatments are acid washing, which is usually only used for CAC, and impregnation with metals. Acid washing is often used for CACs that have a high ash content.[45] Washing the CAC with hydrochloric or other acids removes minerals and ash resulting in a higher purity product. Acid-washed CACs are often used in applications where process streams are acidic, such as purification of corn syrup. For some speciality applications, the activated carbon, either thermally or chemically activated, may be impregnated with metals or other chemicals. The impregnation gives the activated carbon the ability to adsorb a particular impurity or catalyze a desired reaction.

In some instances, used CAC can be "reactivated" ("RAC"). Spent carbon is reactivated by heating it in a kiln until the adsorbed species are desorbed[46] or destroyed. RAC tends to have slightly lower activity than virgin CAC. Reactivation is usually performed on granular or pelletized activated carbon and is rarely used on powdered activated carbon. Reactivation is sometimes performed by the end user and then reused by the same user. However, some firms take spent carbon from the end user, reactivate it, and return it to the original user. In processes where environmentally regulated chemicals

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[39] A rotary kiln consists of a long cylindrical combustion chamber that is slightly tilted from horizontal. The material to be burned is added to the elevated end of the kiln. The tilt and rotation of the combustion chamber move the material out the opposite end. Residence time is controlled by the feed and rotation rates.

[40] A multiple hearth kiln consists of a vertical column with grates at various heights in the column. Solid materials are fed into the top of the kiln and arms attached to a rotating center shaft push the material to the lower grates. Steam and/or air are fed into the bottom of the kiln. The residence time of the solid material in the kiln is determined by the rotation rate of the center shaft and by the feed rate, which controls the bed height on each grate.

[41] Carbon dioxide, CO_2, may also be used as an oxidizing agent.

[42] In addition to phosphoric acid, other chemicals such as zinc chloride, sulfuric acid, or potassium hydroxide can be used to chemically activate steam. Zinc chloride is no longer used in the United States because of environmental concerns regarding zinc.

[43] Baker et al., "Carbon, Activated," op. cit., Sections 10 and 11.

[44] Baker et al., "Carbon, Activated," op. cit., Section 3.

[45] Ibid.

[46] Desorption is the process in which a molecule leaves the surface to which it is adsorbed.

are being captured on activated carbon, strict bookkeeping of the amount of regulated chemical produced and how it is disposed of is required. For this reason, firms that reactivate carbon for a user usually process the carbon as single batch and return the same carbon to the user. In some applications, such as using activated carbon to capture molecules in the gas phase, there is little risk that residual species in reactivated carbon will leach into the process. In these applications, it is possible for spent carbons from different users to be mixed together, reactivated, and sold to yet another user as "pooled" RAC.

DOMESTIC LIKE PRODUCT ISSUES

In its original determination, the Commission defined the domestic like product as a single like product corresponding to Commerce's scope of investigation.[47] In its notice of institution in these current five-year reviews, the Commission solicited comments from interested parties regarding the appropriate domestic like product and domestic industry.[48] Interested parties, Calgon, Norit, ADA, Jacobi Carbons, and Jacobi AB, commented on the Commission's definitions of domestic like product and all indicated in their responses to the Commission's notice of institution in this five-year review that they agreed with the Commission's definition of the domestic like product and domestic industry as set forth in the Commission's notice.[49] No party requested that the Commission collect data concerning other possible domestic like products in their comments on the Commission's draft questionnaires.

U.S. MARKET PARTICIPANTS

U.S. Producers

During the original investigation, three firms supplied the Commission with information on their U.S. operations with respect to CAC. These firms accounted for 100 percent of U.S. production of CAC in 2006.[50] In these current proceedings, the Commission issued producers' questionnaires to three firms, all of which provided the Commission with information on their CAC operations. These firms are believed to account for virtually all of U.S. production of CAC in 2011. Table I-4 presents a list of current domestic producers of CAC and each company's position on continuation of the orders, production location(s), related and/or affiliated firms, and share of reported production of CAC in 2011.

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[47] *Certain Activated Carbon from China, Inv. No. 731-TA-1103 (Final),* USITC Publication 3913 (April 2007), p. 10.

[48] *Activated Carbon From China: Institution of a Five-Year Review*, 77 FR 12614, March 1, 2012.

[49] *Substantive Responses to the Commission's Notice of Institution*: the domestic industry (Calgon, Norit, and ADA), p. 16; Jacobi Carbons and Jacobi AB, pp. 8-9. Carbon Activated Corp. and CarGo Worldwide had no comment on like product or the definition of the domestic industry.

[50] The three U.S. producers that supplied the Commission with usable questionnaire information during the original investigations were: Calgon, Norit, and California Carbon. In its response to the Commission's notice of institution in this five-year review, the domestic industry (Calgon, Norit, and ADA) indicated that there is one other very small current producer of subject activated carbon in the United States, California Carbon Co., Inc., Wilmington, CA, which the Commission excluded from the domestic industry in the original investigation. The domestic industry agreed with the Commission's determination and believes that California Carbon should be excluded from the domestic industry in this five-year review.

Table I-4
CAC: U.S. producers, positions on the orders, U.S. production locations, related and/or affiliated firms, and shares of 2011 reported U.S. production

Firm	Position on continuation of the orders	U.S. production location(s)	Related and/or affiliated firms	Share of production (*percent*)
ADA	Support	Coushatta, LA	Energy Capital Partners, Short Hills, NJ	***
Calgon	Support	Catlettsburg, KY; Pearlington, MS	Calgon Carbon (Tianjin) Co., Ltd., Tianjin, China; Datong Carbon Corp., Datong Shanxi Province, China; Chemviron Carbon Ltd., Wigan, United Kingdom; Chemviron Carbon, Feluy, Belgium	***
Norit[1]	Support	Marshall, TX	Norit EAPA Holding BV, Amersfoort, Netherlands; Norit Canada Inc., St. John, New Brunswick, Canada	***

[1] Norit's U.S. producer questionnaire response (section I-4).

Note.–Because of rounding, shares may not total to 100.0 percent.

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

As indicated in table above, *** is related to foreign producers of the subject merchandise. In addition, as discussed in greater detail in Part III, *** directly imported the subject merchandise and *** purchased the subject merchandise from U.S. importers.

U.S. Importers

In the original investigation, 25 U.S. importing firms supplied the Commission with useable information on their operations involving the importation of CAC from China, for all, or part of, the period 2003-06. The 21 firms that reported imports of Chinese CAC in 2006 accounted for 95.9 percent of total CAC imports (based on official statistics) from China. The five largest responding importers of CAC from China were ***. Of the responding U.S. importers, ***.

In the current proceedings, the Commission issued importers' questionnaires to 37 firms believed to be importers of subject CAC, as well as to all U.S. producers of CAC. Usable questionnaire responses were received from 30 companies,[51] representing 87.1 percent of imports from China (based on official statistics for all forms of activated carbon) during the period for which data were collected[52] and 100.8 percent of imports of CAC from China in 2011 (based on official statistics). The six largest responding importers together accounted for *** percent of reported imports of CAC from China in 2011: ***. Of the responding U.S. importers, ***. Responding U.S. importers' geographic distribution is as follows: ***. Table I-5 lists all responding U.S. importers of CAC from China and other sources, their locations, and their shares of U.S. imports in 2011.

[51] Of the remaining seven firms: ***.

[52] Not all imports of CAC from China were dutiable; some were out of scope material.

Table I-5
CAC: U.S. importers, source(s) of imports, and quantity of imports in 2011

* * * * * * *

U.S. Purchasers

The Commission received 24 useable purchaser questionnaire responses from firms that bought CAC during January 1, 2007-June 30, 2012, as presented in table I-6.[53] Two responding purchasers are distributors, 17 are end users, and the other 5 include manufacturers, a firm that functions as both a distributor and an end user, and a retailer/reseller. In general, responding U.S. purchasers were located in the Northeast, the Southeast, the Midwest, the Southwest, and the West Coast. The responding purchasers represented firms in a variety of domestic industries, including food processing, water purification, and pollution control. The largest purchasers of CAC are ***.

Table I-6
CAC: Purchaser names, location, type of firm, end uses, and source(s) of purchases

* * * * * * *

APPARENT U.S. CONSUMPTION

Apparent U.S. consumption of CAC during the period for which data were collected in this proceeding are shown in table I-7.

[53] Of the 24 responding purchasers, 22 purchased the U.S.-produced CAC, six purchased imports of the subject merchandise from China, and six purchased imports of CAC from other sources.

Table I-7
CAC: U.S. shipments of domestic product, U.S. shipments of imports, and apparent U.S. consumption, 2007-11, January-June 2011, and January-June 2012

Item	Calendar year					January-June	
	2007	2008	2009	2010	2011	2011	2012
	Quantity (*1,000 pounds*)						
U.S. producers' U.S. shipments	***	***	***	***	***	***	***
U.S. shipments of imports from-							
China	37,446	35,249	32,736	27,914	34,252	15,806	16,905
Nonsubject countries	60,151	78,619	83,868	105,304	110,734	54,779	56,844
Total U.S. shipments of imports	97,597	113,868	116,604	133,217	144,985	70,586	73,749
Apparent U.S. consumption[1]	***	***	***	***	***	***	***
	Value (*1,000 pounds*)						
U.S. producers' U.S. shipments	***	***	***	***	***	***	***
U.S. shipments of imports from-							
China	31,576	41,023	44,657	34,750	42,099	18,749	20,225
Nonsubject countries	60,984	86,224	93,808	115,200	133,240	62,692	78,618
Total U.S. shipments of imports	92,560	127,247	138,465	149,950	175,340	81,442	98,843
Apparent U.S. consumption[1]	***	***	***	***	***	***	***

[1] Apparent consumption may be modestly overstated by the inclusion of *** in U.S. producers' U.S. shipments.

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

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

U.S. MARKET SHARES

U.S. market share data are presented in table I-8.

Table I-8
CAC: U.S. consumption and market shares, 2007-11, January-June 2011, and January-June 2012

* * * * * * *

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

INTRODUCTION

CAC is used in gas, air, and water purification, including mercury control; in food and beverage filtration/purification; and in chemical process filtration. It is also used in gold mining, military gas masks, and in catalysts and pharmaceuticals.

CHANNELS OF DISTRIBUTION

Table II-1 presents U.S. shipments of CAC to distributors and end users by U.S. producers and U.S. importers of CAC from China and nonsubject sources during January 2007 through June 2012. In each annual and interim period, the majority of shipments from all sources went to end users rather than distributors. At the hearing, the domestic interested parties reported that they use distributors to serve smaller customers that would not require direct shipment of large quantities from manufacturers. They also use distributors to serve geographic areas or markets where it is not economical to use their own sales staff.[1]

Table II-1
CAC: U.S. producers' and importers' U.S. shipments, by sources and channels of distribution, 2007–11, January-June 2011, and January-June 2012

Item	Period						
						January-June	
	2007	2008	2009	2010	2011	2011	2012
Share of reported shipments (*percent*)							
U.S. producers' U.S. shipments of CAC to:							
Distributors	***	***	***	***	***	***	***
End users	***	***	***	***	***	***	***
U.S. importers' U.S. shipments of CAC from China to:							
Distributors	22.7	20.2	10.4	16.1	32.7	21.1	20.4
End users	77.3	79.8	89.6	83.9	67.3	78.9	79.6
U.S. importers' U.S. shipments of CAC from all other countries to:							
Distributors	18.2	17.1	15.3	12.1	13.4	13.9	13.1
End users	81.8	82.9	84.7	87.9	86.6	86.1	86.9

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

[1] Hearing transcript, p. 83 (Thompson and O'Brien). The producers sell directly to large end-use customers. Price differences in CAC depend upon the product specifications rather than the channel of distribution. Domestic interested parties' posthearing brief, exhibit 1, pp. 44-45.

GEOGRAPHIC DISTRIBUTION

U.S.-produced and imported CAC from Chinese sources are sold throughout the United States. All three U.S. producers and four importers of CAC from China reported that they sell throughout the continental United States and in one or more of the following areas: Alaska, Hawaii, Puerto Rico, and the U.S. Virgin Islands. The other 13 responding importers of CAC from China reported that they sell in all or most areas of the United States or in specific regions including the Northeast, the Midwest, the Southeast, the Pacific Coast, and others. Imports from nonsubject sources are also sold in all areas of the United States.

SUPPLY AND DEMAND CONSIDERATIONS

U.S. Supply

Domestic Production

Based on available information, U.S. producers have the ability to respond to changes in demand with moderate to large changes in the quantity of shipments of CAC to the U.S. market. The main contributing factor to this degree of responsiveness of supply is the existence of excess capacity, consistently large product inventories, and the ability to shift sales between the United States and alternate markets.

Industry capacity

The U.S. CAC industry's annual capacity increased from *** pounds in 2007 to *** pounds in 2011. The industry capacity utilization rate decreased each year during 2007-11, declining from *** percent in 2007 to *** percent in 2011. During January-June 2012, capacity utilization was *** percent, as compared to *** percent in January-June 2011.

Alternative markets

Exports as a share of total industry shipments ranged from a low of *** percent in 2010 to a high of *** percent in 2007. During interim 2012, exports accounted for *** percent of shipments as compared to *** percent in interim 2011.

When U.S. producers were asked how easily they could shift sales of CAC between the United States and alternative country markets, answers were varied. ***.

None of the producers reported that their exports were subject to any tariff or nontariff trade barriers.

Inventory levels

The ratio of end-of-period inventories to shipments ranged from a high of *** percent in 2009 to a low of *** percent in 2007. During interim 2012 the ratio was *** percent, *** in interim 2011.

Production alternatives

None of the U.S. producers make other products on the machinery and equipment used to produce CAC.

Foreign Supply[2]

Subject Imports

Based on available information, responding Chinese producers have the ability to respond to changes in demand with *** changes in the quantity of shipments of CAC to the U.S. market. The main contributing factors to this degree of responsiveness of supply are ***.

Industry capacity

Capacity of the responding Chinese producers decreased irregularly from *** pounds in 2007 to *** pounds in 2011. It was *** pounds interim 2012 as compared to *** pounds in interim 2011. Capacity utilization ranged from a low of *** percent in 2010 to a high of *** percent in 2007. Capacity utilization was *** percent in interim 2012 as compared to *** percent in interim 2011.

Alternative markets

The responding Chinese producers' home market shipments are *** of reported total shipments during 2007-11. Exports to markets other than the United States ranged from a low *** percent of total shipments in 2011 to a high of *** percent in 2007. During interim 2012, they accounted for *** percent of total shipments as compared to *** percent in interim 2011.

Inventory levels

During 2007-11, the ratio of end-of-period inventories to total shipments of the responding Chinese producers and exporters ranged from a low of *** percent in 2008 to a high of *** percent in 2011. During interim 2012, the ratio was *** percent as compared to *** percent in interim 2011.

Production alternatives

***.

U.S. DEMAND

Demand Characteristics

The demand for CAC is a derived demand that depends upon demand for this product in its end-use applications. U.S. producers reported their U. S. commercial shipments to end-use markets in 2011. The estimates show that *** percent of shipments went to industrial markets, *** percent was used in water treatment, *** percent was used in food and beverage applications, *** percent went to pharmaceutical and medical uses, and *** percent went to other applications.[3] Based on combined responses of six large importers, estimates show that *** percent of shipments of imports from China went to industrial markets, *** percent was used in water treatment, *** percent was used in food and

[2] The responding Chinese producers accounted for an estimated *** percent of total exports to the United States in 2011.

[3] See table III-5.

beverage applications, and *** percent went to pharmaceutical and medical uses and *** percent was used in other applications (table IV-3). For shipments of imports from nonsubject sources, *** percent went to industrial markets, *** percent was used in water treatment, *** percent was used in food and beverage applications, *** percent was used in motor vehicles, *** percent went to pharmaceutical and medical uses, and *** percent went to other applications (table IV-4).

At the hearing it was established that the use of CAC in mercury control at coal-fired electric power plants, a key industrial application, has contributed importantly to the growth in apparent consumption. The domestic interested parties stated that the continuing growth in mercury control applications at coal plants depends upon the implementation of EPA regulations concerning mercury and air toxic standards. They argued that implementation has been delayed due to court challenges.[4] The domestic interested parties also argued that natural gas is rapidly replacing coal in electricity production due to declining natural gas prices, which could result in reduced demand for CAC in mercury control in the future due to declining coal usage.[5]

Data from the Energy Information Administration show that from October 2007 to October 2012, the most recent month where data were available, the average cost of coal used at electric utilities increased by 39 percent from $1.74 per million Btu to $2.42 per million Btu, while the cost of natural gas used for electric power decreased by 41 percent from $7.08 to $4.16 per million Btu during the same period. In line with the changes in relative costs, the amount of electricity generated from coal increased just slightly from 120 million megawatt hours in October 2007 to 122 million megawatt hours in 2012 while the amount of electricity generated from gas increased from 28 million megawatt hours in April 2007 to 92 million megawatt hours in October 2012.[6] On an annual basis the percentage of electricity generated from coal declined from 49.6 percent in 2007 to 37.6 percent in 2012, and the percentage generated by natural gas increased from 18.8 percent in 2007 to 30.3 percent in 2012.[7]

It is likely that the demand for CAC is relatively insensitive to changes in price as a result of a lack of close substitutes in most applications, and its relatively small share of the cost of end-use products.

Apparent Consumption

The quantity of apparent consumption of CAC increased in each year from *** pounds in 2007 to *** pounds in 2011. During January-June 2012, apparent consumption was *** pounds as compared with *** pounds in January-June 2011.

Demand Perceptions

Questionnaire respondents were asked whether the demand for CAC has increased, remained unchanged, decreased, or fluctuated since January 2007. Overall, a plurality of firms reported that demand had increased. All three U.S. producers reported that demand had increased. Among 21 responding importers, 11 reported that demand had increased, 4 reported no change, 3 reported that it had decreased, and 3 reported that it had fluctuated. Among 17 responding purchasers, 7 reported that demand had increased, 7 reported no change, and 3 reported that it had fluctuated. Firms reporting an

[4] Hearing transcript, p. 22 (Thompson).

[5] Hearing transcript, p. 22 (Thompson).

[6] From October 2011 to October 2012 the cost of coal used in electricity generation was largely stable while the cost of natural gas used in electricity generation declined by about 12 percent during this period. See U.S. Energy Information Administration, www.eia.gov/electricity/data, retrieved January 7, 2013.

[7] U.S. Energy Information Administration, www.eia.gov/electricity, retrieved January 7, 2013.

increase in demand often cited the increased use of CAC in mercury removal resulting from environmental regulations as a primary contributing factor. Firms reporting a decrease in demand cited the rising costs of CAC.

When firms were asked whether the CAC market is subject to business cycles or conditions of competition (including seasonal business) distinctive to CAC, responses were mixed. The three U.S. producers all answered "yes." Among 22 responding importers, 7 answered "yes" and 15 answered "no." Among 21 responding purchasers, 4 answered "yes" and 17 answered "no." Several questionnaire respondents answering "yes" reported that there are seasonal changes in the demand for water. Some firms also reported that the demand for CAC is related to the seasonality in the industries that use CAC. The use of CAC for mercury recovery that has developed as a result of government regulations was also cited as a distinctive feature of this market.

Substitute Products

The majority of producers, importers, and purchasers reported that there are no substitutes for CAC. However, some firms did report that substitution is possible in certain applications. For example, one producer and three purchasers identified substitutes for use in mercury control applications such as clay-based sorbents, carbon cloth tapes, and pre-combustion bromine chemical addition. Resins were mentioned by firms as a substitute in sugar refining, and in corn syrup and lactic acid production.

Cost Share

Major uses for CAC are pollution control and water purification. Estimates by producers and end-use purchasers indicate that while CAC accounts for a substantial share of the cost of pollution control and certain intermediate products, it accounts for a relatively small share of consumer products. For gas and air purification, costs ranged from 2 to 5 percent of the final product; generally, for food and beverage filtration, final product cost shares range from 2 to 10 percent. For drinking water, estimates ranged widely from less than 1 percent to as much as 15 percent. For soft drinks and juices, the cost share was less than one tenth of 1 percent. For corn syrup and for maltodextrin, the estimated costs were about 2 percent and for citric acid the cost was less than 1 percent. For pharmaceuticals, the cost share was also less than 1 percent.

SUBSTITUTABILITY ISSUES

The degree of substitution between domestic and imported CAC depends upon such factors as relative prices, quality (e.g., grade standards, reliability of supply, defect rates, etc.), and conditions of sale (e.g., price discounts/rebates, lead times between order and delivery dates, payment terms). Available evidence indicates that imports of CAC from China are generally substitutable for the U.S.-produced product.

At the hearing and in their posthearing brief, the respondent interested parties argued that imports do not compete with U.S.-produced CAC in certain applications.[8] They contend that in one of the major end uses of CAC, mercury control, the Chinese product cannot compete in price with the U.S.-produced product.[9] In response, the U.S. producers reported that ***.[10] Subsequent to the hearing, the

[8] Hearing transcript, p. 11 (Noonan). Respondent interested parties' posthearing brief, exhibit 5, p. 3.

[9] Hearing transcript, p. 175 (Allen).

[10] Domestic interested parties' posthearing brief, p. 58.

importer, *** reported that it shipped *** pounds of imported CAC from China for use in ***. This company accounted for *** percent of imports from China in 2011.

In another major end use, water treatment, respondent interested parties argued that water treatment facilities in the Eastern and Midwestern states prefer U.S.-produced re-agglomerated CAC as opposed to directly activated CAC or Chinese-produced re-agglomerated CAC.[11] [12] The domestic interested parties responded that Chinese imports are able to compete in this market as well as other markets. [13]

Lead Times

U.S. producers and the majority of importers of product from China reported that CAC is more commonly sold from inventory rather than produced to order. Among the three U.S. producers, between *** and *** percent of all sales are from product held in inventory. Producers reported that lead times for products held in inventory ranged from *** to *** days and from *** to *** days for CAC produced to order. Of the 11 responding importers, 7 reported that between 90 and 100 percent of their sales were from products held in inventory, while 3 of the other 4 firms reported that 90 to 100 percent of their sales consisted of CAC produced to order. For items held in inventory, lead times for Chinese imports ranged from 2 to 15 days. For material produced to order, lead times ranged from 60 to 112 days. For CAC held in foreign manufacturers' inventories, lead times ranged from 30 to 45 days.

Purchasers

Twenty-four purchasers, including 2 distributors, 17 end users, 1 retailer/reseller, 3 manufacturers of pollution control and other products, and 1 firm that functions as both an end user and distributor submitted questionnaires. End users reported that they use CAC in various applications including air and water filtration, mercury control, and food processing. Manufacturers reported that they use CAC as an input in their manufacturing process, or in a mix with other materials. Twenty-two of the purchasers had purchased U.S.-produced CAC during January 2007 through June 2012, six has purchased imports from China, and six had purchased imports from nonsubject sources including Australia, India, Indonesia, Malaysia, the Netherlands, the Philippines, and Sri Lanka. During 2011, combined purchases by these responding purchasers amounted to $59.7 million, equivalent to *** percent of the value of apparent U.S. consumption in 2011.

Four purchasers bought both U.S.-produced and imported CAC from China during January 2007 through June 2012. Three of these firms used CAC in water purification and one used it in food processing. The combined volume of purchases by these firms was over *** pounds during the period, with U.S.-produced CAC accounting for *** percent, imports from China accounting for *** percent, and imports from nonsubject sources accounting for *** percent.

Eighteen purchasers bought U.S.-produced and/or nonsubject imports of CAC during January 2007 through June 2012. Among these firms, CAC uses included mercury control, water purification, air and water filtration, food processing and mixing, or blending with other materials. Two firms also operated as distributors. The combined purchases of these 18 firms was *** pounds with U.S.-produced CAC accounting for *** percent, and imports from nonsubject sources accounting for *** percent.

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[11] Hearing transcript, p. 158 (Allen) and respondent interested parties' posthearing brief, exhibit A.

[12] Names, locations, and country supply sources of purchasers that use CAC in water purification are presented in table I-6.

[13] Domestic interested parties' posthearing brief, pp. 6-7.

Purchases of CAC for mercury control accounted for *** percent of total purchases by the 18 firms during the period. The combined purchases for mercury control by four firms that purchased entirely from U.S. producers increased from *** pounds in 2008 to *** pounds in 2010 and then declined to *** pounds in 2011. Purchases intended for mercury control by firms that buy only U.S.-produced CAC and/or imports from nonsubject sources accounted for *** percent of total purchases by the 18 firms in 2010 and *** percent in 2011.

Two purchasers bought CAC entirely from China during January 2007 through June 2012 with their combined purchases exceeding *** pounds during this period. One used CAC to treat water for taste and color (*** percent of their combined total) and the other used it to produce pollution control products including mercury adsorbents, radioiodine absorbents and miscellaneous impregnated carbons (*** percent).

Factors Affecting Purchasing Decisions

Table II-2 summarizes the questionnaire responses by 22 purchasers concerning the top three factors that they consider when purchasing CAC. As indicated in the table, price, quality, and availability tend to be the most important considerations.

Table II-2
CAC: Ranking of factors used in purchasing decisions as reported by U.S. purchasers

Factor	Number of firms reporting		
	Number one factor	Number two factor	Number three factor
Availability	4	5	3
Price	7	7	6
Quality	6	6	-
Other[1]	5	4	13

[1] Other factors cited included delivery, freight costs, lead time, reliability, service, and product consistency.

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

Purchasers were also asked how often their firm purchases CAC at the lowest possible price. Of the 23 responding purchasers, 9 answered “always,” 4 answered “usually,” 7 answered “sometimes,” and 3 answered “never.”

Purchasers were asked to indicate whether the 15 factors listed in table II-3 were “very important,” “somewhat important,” or “not important” in their purchasing decisions. The factors most frequently ranked “very important” were reliability of supply (23 purchasers), followed by availability and quality meeting industry standards (22 purchasers each). Other important factors are delivery time (20 purchasers), product consistency and delivery terms (18 purchasers each), and price (17 purchasers).

Table II-3
CAC: Importance of purchasing factors, as reported by U.S. purchasers

Factor	Number of firms reporting		
	Very important	Somewhat important	Not important
Availability	22	1	0
Delivery terms	18	5	0
Delivery time	20	3	0
Discounts offered	7	11	4
Extension of credit	3	10	9
Price	17	5	0
Minimum quantity requirements	8	10	4
Packaging	8	11	3
Product consistency	18	5	0
Quality meets industry standards	22	1	0
Quality exceeds industry standards	7	12	4
Product range	5	14	4
Reliability of supply	23	0	0
Technical support/service	8	12	3
U.S. transportation costs	8	12	3

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

Comparisons of Domestic Products and Subject and Nonsubject Imports

When asked whether U.S.-produced and imported products from the United States and China are "always," "frequently," "sometimes," or "never" interchangeable, all three U. S. producers answered "always" while a majority of importers answered "sometimes" (table II-4). Among 11 responding purchasers, 1 answered "always," 4 answered "frequently," 4 answered "sometimes," and 2 answered "never." [14] One importer (***) reported that domestically manufactured activated carbon has a history ofbetter quality, lower ash, and less impurities than Chinese-produced activated carbon. It said that critical applications such as ultra pure water and dialysis usually will not use Chinese-produced activated carbon. Another importer, ***, reported that coal carbon produced in the United States and China is only sometimes substitutable because of differences in the characteristics of the coal used in the production processes in the two countries. Another importer, ***, reported that some U.S. activated carbon companies produce proprietary grades which have specifications difficult to match by Chinese or other country manufacturers such as the low level of iron content useful in the food production industry. One purchaser (***) reported that Chinese CAC is not as effective in corn syrup as domestic CAC.

[14] The two purchasers that answered "never" were *** and ***. ***, which has purchased only U.S.-produced CAC since 2007 reported that the Chinese product was purchased once prior to 2007 but did not perform as well as the domestic product. The use of the Chinese product resulted in a drinking water violation of state and EPA regulations. *** has bought only Chinese-produced CAC since 2007 with annual purchases ranging from $*** to $*** for use in production of mercury absorbents, radio iodine absorbents and miscellaneous impregnated carbons. It reported that U.S. producers do not produce the pelleted coal carbons that it needs.

Table II-4
CAC: Perceived degree of interchangeability of product produced in the United States and in other countries, by country pairs

	U.S. producers				U.S. importers				U.S. purchasers			
Country pair	A	F	S	N	A	F	S	N	A	F	S	N
U.S. vs. China	3	0	0	0	2	3	9	0	1	4	4	2
U.S. vs. nonsubject	3	0	0	0	2	3	11	0	1	2	6	1
China vs. nonsubject	3	0	0	0	0	4	7	0	1	1	4	0

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

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

When firms were asked how often differences in factors other than price between the U.S.-produced products and imports from China and nonsubject sources were a factor in their sales of CAC, U.S. producers indicated that these are "sometimes" or "never" a factor, while responses by importers and purchasers varied widely (table II-5). One importer (***) reported that it sources from China because the base carbon that it requires is not available in the United States.

Table II-5
CAC: Perceived importance of factors other than price between product produced in the United States and in other countries, by country pairs

	U.S. producers				U.S. importers				U.S. purchasers			
Country pair	A	F	S	N	A	F	S	N	A	F	S	N
U.S. vs. China	0	0	1	2	4	1	7	2	4	0	4	1
U.S. vs. nonsubject	0	0	3	0	1	2	7	2	1	1	6	0
China vs. nonsubject	0	0	1	2	1	4	5	1	1	0	3	0

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

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

Purchasers were also asked to compare U.S.-produced CAC from China with respect to the 15 characteristics listed in table II-6, noting whether the domestic product was superior, comparable, orinferior to the imported product. A majority of purchasers ranked the U.S. product superior in delivery time and a plurality ranked the United States superior in technical support. In all other characteristics, neither country was ranked either superior or inferior by a majority or plurality of purchasers. However, 5 of 11 purchasers ranked the U.S. product superior in product consistency and 4 ranked the United States superior in availability, minimum quantity requirements, quality exceeding industry standards, and reliability of supply. Four of 11 purchasers ranked the Chinese product superior in price and 3 of 9 ranked China superior in discounts offered.

Table II-6
CAC: Purchasers comparisons of domestic and subject imported products

Factor	Number of firms reporting		
	U.S. vs. China		
	S	C	I
Availability	4	6	1
Delivery terms	3	8	0
Delivery time	7	4	0
Discounts offered	0	6	3
Extension of credit	0	8	1
Price	3	4	4
Minimum quantity requirements	4	6	1
Packaging	2	9	0
Product consistency	5	6	0
Quality meets industry standards	3	7	1
Quality exceeds industry standards	4	6	1
Product range	3	6	1
Reliability of supply	4	5	2
Technical support/service	5	4	2
U.S. transportation costs	2	6	1

Note.–S = domestic product superior, C = domestic product comparable, I = domestic product inferior.
Note.– Some firms did not rank all of the characteristics.

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

ELASTICITY ESTIMATES

This section discusses elasticity estimates; parties were encouraged to comment on these estimates in their prehearing or posthearing briefs but none commented.

U.S. Supply Elasticity

The domestic supply elasticity for CAC measures the sensitivity of the quantity supplied by U.S. producers to changes in the U.S. market price of CAC. The elasticity of domestic supply depends on several factors, including the level of excess capacity, the ease with which producers can alter capacity, producers' ability to shift to production of other products, the existence of inventories, and the availability of alternate markets for U.S.-produced CAC. Analysis of these factors, the availability of alternate markets, substantial inventories, and excess capacity indicates that the elasticity is likely to be in a range of 2 to 4.

U.S. Demand Elasticity

The U.S. demand elasticity for CAC measures the sensitivity of the overall quantity demanded to a change in the U.S. market price of CAC. 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 the CAC in the production of any downstream products. Due to the lack of close substitutes in most uses, the aggregate demand for CAC is probably relatively inelastic; a range of -0.5 to -0.8 is likely.

Substitution Elasticity

The elasticity of substitution depends upon the extent of product differentiation between the domestic and imported products.[15] Product differentiation, in turn, depends upon such factors as quality (e.g., chemistry, appearance, etc.) and conditions of sale (availability, sales terms, discounts, promotions, etc.). Based on available information, the elasticity of substitution between U.S.-produced CAC and imported CAC from China is likely to be in the range of 3 to 5.

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

PART III: CONDITION OF THE U.S. INDUSTRY

OVERVIEW

Information related to CAC presented in this section is based on the questionnaire responses of three firms (Calgon, Norit, and ADA) that accounted for virtually all of U.S. production of CAC during the period for which data were collected. Calgon is the largest producer of CAC in the United States, accounting for *** percent of 2011 production, and also has operations around the world, including China.[1] Norit accounted for *** percent of U.S. CAC production in 2011. ADA commenced production of CAC in Coushatta, LA, during ***, and accounted for *** percent of U.S. CAC production in 2011. During the original investigation, three firms (Calgon, Norit, and California Carbon) also accounted for all U.S. production of CAC.[2] Table III-1 summarizes important industry events that have taken place in the United States since January 1, 2007.

Table III-1
CAC: Survey of industry events since January 1, 2007

Period	Company	Description of event (acquisition, bankruptcy, merger, shutdown)
2008	***	***
mid-2009	***	***
May 2010	***	***
June 2010	***	***
August 2011	***	***
January 2011	***	***
November 2011	***	***
July 2012	***	***
2012	***	***

Source: Compiled from data submitted in response to Commission U.S. producer questionnaire responses (section II-2).

With respect to anticipated changes in operations, ***.[3]

According to an October 12, 2012 press release, ADA stated that "we aim to leverage our industry leading expertise in emission control and the reliability afforded by our assets to deliver superior emission control solutions." According to a November 27, 2012 press release, ADA also estimated that it expects to maintain a combined market share of at least 35 percent of activated carbon injection ("ACI") and Dry Sorbent Injection ("DSI") systems emission control systems, which would generate over $300 million in revenues for ADA over the next three years.[4]

[1] Calgon Carbon (Tianjin) Co., Ltd., a Chinese producer/exporter of subject product, is a subsidiary of Calgon.

[2] ***.

[3] ***'s U.S. producer questionnaire response (section II-4).

[4] Carbon Activated's and CarGo's prehearing brief, exh. 3.

With respect to anticipated changes in its operations, ***.[5]
***.[6]

U.S. CAPACITY, PRODUCTION, AND CAPACITY UTILIZATION

U.S. producers' capacity, production, and capacity utilization data for CAC are presented in table III-2. As discussed above, ADA began production after the order was published;[7] ***. *** reported production of other products on the same equipment and machinery used in the production of CAC and/or using the same production and related workers employed to produce activated carbon company, ***.[8] Constraints on production capacity were reported as follows: ***.[9] *** reported toll production or production of CAC in a foreign trade zone.[10]

Table III-2
CAC: U.S. capacity, production, and capacity utilization, 2007-11, January-June 2011, and January-June 2012

* * * * * * *

U.S. PRODUCERS' SHIPMENTS

Data on U.S. producers' shipments of activated carbon are presented in table III-3. Commercial U.S. shipments increased irregularly, by *** percent during calendar years 2007-11, and were *** percent higher in interim 2012 than in interim 2011. Higher levels of U.S. commercial shipments in 2010, 2011, and January-June 2012 reflect the commencement of activated carbon production by ADA. U.S. commercial shipments for 2011 were reported as follows: Calgon *** percent; Norit *** percent; and ADA *** percent. Transfers to related firms decreased irregularly during 2007-11, by *** percent. *** reported transfers to related firms; ***'s transfers ceased in 2010, while *** reported transfers ***. Transfers to related firms *** in interim 2012. The *** transfers to related firms during the period for which data were gathered were ***.[11]
***.[12]

U.S. shipments increased irregularly from 2007 to 2011 by *** percent. ***. U.S. shipments for 2011 were reported as follows: Calgon *** percent; Norit *** percent; and ADA *** percent. U.S. shipments were *** percent higher in interim 2012 as compared with interim 2011. Export shipments increased irregularly from 2007-11 by *** percent. Export shipments for 2011 were reported as follows: Calgon *** percent; Norit *** percent; and ADA *** percent. Export shipments were *** percent higher in interim 2012 as compared with interim 2011. *** during the period for which data were gathered. Export markets were reported as follows: ***.

[5] ***'s U.S. producer questionnaire response (section II-4).

[6] ***'s U.S. producer questionnaire response (section II-4).

[7] *Domestic Industry Response to the Commission's Notice of Institution,* April 2, 2012, p. 3.

[8] U.S. producer questionnaire responses (section II-5).

[9] U.S. producer questionnaire responses (section II-6).

[10] U.S. producer questionnaire responses (section II-12) and (section II-13).

[11] ***'s U.S. producer questionnaire response (section II-19).

[12] ***'s U.S. producer questionnaire response (section II-10).

Table III-3
CAC: U.S. producers' shipments, by types, 2007-11, January-June 2011, and January-June 2012

* * * * * * *

According to ***, and as presented in table III-4, in 2011 U.S. demand for activated carbon broadly defined was concentrated in the *** market applications.[13] U.S. demand for activated carbon was also apparent in the *** market applications.[14]

Table III-4
Activated carbon: U.S. demand, by application, 2011

* * * * * * *

Table III-5 presents data for reported commercial U.S. shipments of CAC for calendar year 2011 by market application and firm. ADA's commercial U.S. shipments in 2011 were ***. Commercial U.S. shipments in 2011 for Calgon and Norit ***. Both firms also directed *** commercial U.S. shipment volumes to ***; however, ***.

Table III-5
CAC: U.S. producers' U.S. commercial shipments, by application, 2011

* * * * * * *

U.S. PRODUCERS' INVENTORIES

Table III-6, which presents end-of-period inventories for CAC, shows that inventories of CAC decreased *** from 2007 to 2008 before *** from 2009 to 2011. ***. In 2011, the U.S. producers' share of inventories were as follows: *** percent; *** percent; and *** percent. ***'s inventories were higher in interim January-June 2012 as compared with interim January-June 2011, while ***'s inventories were lower in interim January-June 2012 as compared with interim January-June 2011.

Table III-6
CAC: U.S. producers' end-of-period inventories, 2007-11, January-June 2011, and January-June 2012

* * * * * * *

[13] ***.

[14] Ibid.

U.S. PRODUCERS' IMPORTS AND PURCHASES

U.S. producers' imports of CAC are presented in table III-7. *** reported imports of CAC products manufactured in China because it facilitated *** maximizing its U.S.-based production capacity on products that provide the highest return to the company. In other instances, *** imports CAC that it does not manufacture.[15] *** reported purchasing imports from *** to source product not manufactured in its U.S. facilities.[16]

*** reported that it imported *** and also imported certain products from ***. *** also reported that it imported *** from ***.[17] *** reported purchases of certain activated carbon products from ***.[18]

*** reported purchases of certain activated carbon products from ***.[19]

Table III-7
CAC: U.S. producers' imports and purchases, 2007-11, January-June 2011, and January-June 2012

* * * * * * *

U.S. EMPLOYMENT, WAGES, AND PRODUCTIVITY

The U.S. producers' aggregate employment data for CAC are presented in table III-8. The number of PRWs increased in each year betweeen 2007 and 2011, rising by *** percent. ***. The share of PRWs reported in 2011 was as follows: Calgon *** percent; Norit *** percent; and ADA *** percent. The number of PRWs was *** percent higher in interim 2012 as compared with interim 2011.

Table III-8
CAC: U.S. producers' employment-related data, 2007-11, January-June 2011, and January-June 2012

* * * * * * *

[15] ***'s U.S. producer questionnaire response (section II-6).

[16] ***'s U.S. producer questionnaire response (section II-11). ***.

[17] ***'s U.S. producer questionnaire response (section II-6).

[18] ***'s U.S. producer questionnaire response (section II-11).

[19] ***'s U.S. producer questionnaire response (section II-11).

FINANCIAL EXPERIENCE OF THE U.S. PRODUCERS

Background

Three U.S. firms provided financial data on their operations on CAC.[20] These data are believed to account for the vast majority of U.S. operations on CAC since 2007. No firms reported internal consumption or tolling operations; however, *** firms reported transfers to related firms. Transfers to related firms accounted for less than *** percent of total net sales quantity and value during the period for which data were requested, and therefore are not shown separately in this section of the report. All firms reported a fiscal year end of December 31.

Operations on Certain Activated Carbon

Income-and-loss data for U.S. firms on their operations on CAC are presented in table III-9, while selected financial data, by firm, are presented in table III-10. The domestic industry experienced increasing annual operating income from 2007 to 2010, followed by a decline in 2011. Operating income was also lower in January-June 2012 as compared to January-June 2011. With the exception of a decline in total net sales quantity in 2008, both total net sales quantity and value increased from 2007 to 2011, and were higher in January-June 2012 than in January to June 2011.[21] From 2007 to 2009, net sales value increased more than net sales quantity or operating costs (cost of goods sold ("COGS") and selling, general, and administrative ("SG&A") expenses, combined), which led to increased per-unit revenue and increased operating income on a per-unit basis and as a ratio to net sales. In 2010, the increase in net sales quantity outpaced net sales value, while the difference between increases in net sales value and operating costs narrowed. Accordingly, per-unit revenue declined and operating income declined on a per-unit basis and as a ratio to net sales. In 2011, the increase in net sales value outpaced net sales quantity, while operating costs increased more than net sales value. Therefore, per-unit revenue increased, but operating income declined on a per-unit basis and as a ratio to net sales. In January-June 2012 as compared to January-June 2011, net sales quantity increased more than net sales value, while operating costs increased more than net sales value. Thus, per-unit revenue was lower and operating income was lower on a per-unit basis and as a ratio to net sales.

Table III-9
CAC: Results of operations of U.S. producers, 2007-11, January-June 2011, and January-June 2012

* * * * * * *

Table III-10
CAC: Results of operations of U.S. producers, by firm, 2007-11, January-June 2011, and January-June 2012

* * * * * * *

[20] The U.S. firms are ADA, Calgon, and Norit.

[21] The overall increase in net sales in 2011 and the higher level of net sales in January-June 2012 as compared to January-June 2011 primarily reflect ***.

Of the three reporting firms, *** reported profitable operations throughout the period for which data were requested, while ***.[22] [23]

Variance Analysis

A variance analysis for CAC is presented in table III-11.[24] The information for the variance analysis is derived from table III-9. The analysis shows that the increase in operating income in 2011 as compared with 2007 is attributable to favorable price and volume variances that more than offset an unfavorable net cost/expense variance (that is, price and volume increases offset an increase in net costs/expenses). Comparing the interim periods, the analysis shows that the lower operating income is attributable to unfavorable price and net cost/expense variances (that is, prices were lower while net costs/expenses were higher).

Table III-11
CAC: Variance analysis on operations of U.S. producers, 2007-11, and January-June 2011-12

* * * * * * *

Capital Expenditures and Research and Development Expenses

The responding firms' aggregate data on capital expenditures and research and development ("R&D") expenses are shown in table III-12. All three firms provided data on both capital expenditures and R&D expenses. *** reported the majority of reported capital expenditures during the period for which data were requested. ***.[25] [26] Reported R&D expenses *** primarily reflect ***.[27]

Table III-12
CAC: Capital expenditures and research and development expenses of U.S. producers, 2007-11, January-June 2011, and January-June 2012

* * * * * * *

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[22] E-mail correspondence from ***, November 2, 2012.

[23] ***.

[24] A variance analysis is calculated in three parts, sales variance, cost of sales variance, and SG&A expense variance. Each part consists of a price variance (in the case of the sales variance) or a cost variance (in the case of the cost of sales and SG&A expense variance) and a volume variance. The sales or cost variance is calculated as the change in unit price times the new volume, while the volume variance is calculated as the change in volume times the old unit price. Summarized at the bottom of the table, the price variance is from sales; the cost/expense variance is the sum of those items from COGS and SG&A variances, respectively; and the volume variance is the sum of the volume variance lines under price and cost/expense variance.

[25] E-mail correspondence from ***, November 9, 2012. Additional details on the domestic industry's capital investments ****** were provided in the prehearing brief of the domestic interested parties, pp. 54-59, and the posthearing brief of the domestic interested parties, exhibit 1, p. 80.

[26] At the hearing and in the domestic industry's posthearing brief, ADA provided information on the factors behind the decision to establish production operations for CAC, including assumptions regarding continued fair market conditions and developing demand for mercury emission applications. ***. Hearing transcript, pp. 25-28 (Leen), and posthearing brief of the domestic interested parties, exhibit 1, pp. 38-39.

[27] E-mail correspondence from ***, November 9, 2012.

Assets and Return on Investment

The Commission's questionnaire requested data on assets used in the production, warehousing, and sale of CAC to compute return on investment ("ROI"). Data on the U.S. producers' total assets and their ROI are presented in table III-13. From 2007 to 2011, the total CAC assets increased from $*** in 2007 to $*** in 2011. The ROI increased by *** percentage points from 2007 to 2010, but then declined by *** percentage points in 2011.

Table III-13
CAC: Asset values and return on investment of the U.S. producers, 2007-11

* * * * * * *

PART IV: U.S. IMPORTS AND THE FOREIGN INDUSTRY

U.S. IMPORTS

Overview

The Commission issued questionnaires to 37 firms believed to have imported CAC between January 1, 2007 and June 30, 2012. *** firms provided data and information in response to the questionnaires.[1] Based on official Commerce statistics for imports of activated carbon, importers' questionnaire response data accounted for 81.3 percent of quantity of U.S. imports from all sources during January 1, 2007-June 30, 2012 and 87.1 percent of quantity of U.S. imports from China during January 1, 2007-June 30, 2012.[2] In light of the data coverage by the Commission's questionnaires discussed in Part I of this report and the level of out-of-scope material included in official import statistics, import data in this report are based on questionnaire responses for CAC.

*** reported that it had entered CAC into, and withdrawn CAC from, foreign trade zones and bonded warehouses. *** reported that it had imported CAC under the temporary importation under bond program.

Table IV-1 presents importers' reported changes in operations since January 1, 2007.

Table IV-1
CAC: Changes in operations since January 1, 2007[1]

Period	Company	Description of event (acquisition, bankruptcy, merger, shutdown)
2008	***	***
August 2010	***	***
September 2010	***	***
August 2011	***	***
Undated	***	***
September 2011	***	***
January 2012	***	***
Undated	***	***
July 2012	***	***

[1] See table III-1 for changes in domestic production operations since January 1, 2007.

Source: Compiled from data submitted in response to Commission U.S. importer questionnaire responses (section II-2).

[1] Of the other seven firms: ***.

[2] Not all imports of activated carbon from China are dutiable; some are out of scope material.

Imports from Subject and Nonsubject Countries

Table IV-2 presents data for U.S. imports of CAC from China and all other sources.[3]

Table IV-2
CAC: U.S. imports, by sources, 2007-11, January-June 2011, and January-June 2012

Source	Calendar year					January-June	
	2007	2008	2009	2010	2011	2011	2012
Quantity (*1,000 pounds*)							
China	36,130	38,541	21,503	26,729	36,581	17,013	16,686
Other sources	59,864	83,149	100,234	107,094	113,978	59,525	63,768
Total	95,994	121,690	121,737	133,823	150,558	76,538	80,454
Value[1] (*$1,000*)							
China	18,632	29,277	17,068	19,941	31,345	14,033	14,993
Other sources	44,396	66,077	82,583	94,211	113,767	55,534	72,613
Total	63,028	95,354	99,651	114,152	145,113	69,566	87,606
Unit value[1] (*per pound*)							
China	$0.52	$0.76	$0.79	$0.75	$0.86	$0.82	$0.90
Other sources	0.74	0.79	0.82	0.88	1.00	0.93	1.14
Total	0.66	0.78	0.82	0.85	0.96	0.91	1.09
Share of quantity (*percent*)							
China	37.6	31.7	17.7	20.0	24.3	22.2	20.7
Other sources	62.4	68.3	82.3	80.0	75.7	77.8	79.3
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Share of value (*percent*)							
China	29.6	30.7	17.1	17.5	21.6	20.2	17.1
Other sources	70.4	69.3	82.9	82.5	78.4	79.8	82.9
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Ratio of imports to U.S. production quantity (*percent*)							
China	***	***	***	***	***	***	***
Other sources	***	***	***	***	***	***	***
Total	***	***	***	***	***	***	***

[1] Landed, duty-paid.

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

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

[3] According to official Commerce import statistics, the top ten "all other source" countries for U.S. imports of activated carbon are as follows: Australia, Canada, Germany, India, Indonesia, Japan, the Netherlands, Philippines, Sri Lanka, and Thailand.

U.S. Importers' U.S. Shipments by Application

The Commission requested that the six largest responding importers of CAC from China (***) and the four largest importers of CAC from all other sources (***) provide data for their U.S. shipments of imports from China and all other sources by market application for 2011.[4] Table IV-3 and table IV-4 present the responding selected U.S. importers' U.S. shipments for 2011 by market application.

Table IV-3
CAC: U.S. importers' U.S. shipments of imports from China, by application, 2011

* * * * * * *

Table IV-4
CAC: U.S. importers' U.S. shipments of imports from all other sources, by application, 2011

* * * * * * *

With regard to U.S. shipments of imports from China, ***'s U.S. shipments of imports from both China and all other sources were directed to ***. *** reported its U.S. shipments of imports of CAC from China primarily allocated to *** whereas its U.S. shipments of imports of CAC from all other sources were primarily allocated to ***. *** reported its U.S. shipments of imports of CAC from China primarily allocated to *** whereas its U.S. shipments of imports of CAC from all other sources were concentrated in ***. *** reported its U.S. shipments of imports of CAC from China *** whereas its U.S. shipments of imports from all other sources were primarily directed to ***. *** CAC from China and reported its U.S. shipments of imports of CAC from all other sources were primarily directed to ***.

U.S. IMPORTERS' IMPORTS SUBSEQUENT TO JUNE 30, 2012

The Commission requested importers to indicate whether they had imported or arranged for the importation of CAC from China for delivery after June 30, 2012. Of the *** responding importers, *** firms reported imports of CAC expected after June 30, 2012 as follows:

* * * * * * *

U.S. IMPORTERS' INVENTORIES

Table IV-5 presents data for inventories of U.S. imports of CAC from China and all other sources held in the United States. The *** importers responsible for the majority of inventories of U.S. imports of CAC from China are ***. In the aggregate, these companies are responsible for *** percent of inventories of CAC from China in 2011; individually, each firm's share of 2011 inventories of CAC from China is as follows: ***.

[4] *** replied that it was unable to provide the requested breakdown of its U.S. shipments of imports by market application. Email correspondence, ***.

Table IV-5
CAC: U.S. importers' end-of-period inventories of imports, by source, 2007-11, January-June 2011, and January-June 2012

Item	Calendar year					Jan.-June	
	2007	2008	2009	2010	2011	2011	2012
Imports from China:							
Inventories (*1,000 pounds*)	12,661	15,337	7,836	7,801	10,414	9,525	9,634
Ratio to U.S. imports (*percent*)	35.0	39.8	36.4	29.2	28.5	28.0	28.9
Ratio to U.S. shipments of imports (*percent*)	33.8	43.5	23.9	27.9	30.4	30.1	28.5
Imports from all other sources:							
Inventories (*short tons*)	18,300	22,020	35,512	34,689	38,136	38,819	41,924
Ratio to U.S. imports (*percent*)	30.6	26.5	35.4	32.4	33.5	32.6	32.9
Ratio to U.S. shipments of imports (*percent*)	30.4	28.0	42.3	32.9	34.4	35.4	36.9
Imports from all sources:							
Inventories (*short tons*)	30,961	37,357	43,348	42,490	48,550	48,344	51,558
Ratio to U.S. imports (*percent*)	32.3	30.7	35.6	31.8	32.2	31.6	32.0
Ratio to U.S. shipments of imports (*percent*)	31.7	32.8	37.2	31.9	33.5	34.2	35.0

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

TRADE RESTRICTIONS IN THIRD-COUNTRY MARKETS

In its questionnaires, the Commission asked whether the firms' exports of CAC are subject to tariff or non-tariff barriers to trade in any countries other than the United States. Pursuant to European Commission ("EC") Regulation No. 1011/2002 of June 10, 2002, there is an antidumping duty on "powdered activated carbon" from China. This antidumping duty was continued by ED Regulation No. 649/2008 of July 8, 2008. The European antidumping duty is only on powdered activated carbon; there is no European antidumping duty on other types of activated carbon.

SUBJECT COUNTRY PRODUCERS

China is the sole subject country to which the antidumping duty order on CAC pertains. The Commission issued questionnaires for this five-year review to approximately 45 producers of CAC in China and received usable responses from four firms.

THE INDUSTRY IN CHINA

Overview

The four firms that responded to the Commission's questionnaire are as follows: Calgon Carbon (Tianjin) Co., Ltd. ("Calgon Tianjin"); Jacobi Carbons Industry (Tianjin) Co., Ltd. ("Jacobi Tianjin"); Shanxi Sincere Industrial Co., Ltd. ("Shanxi Sincere"); and Tangshan Solid Carbon Co., Ltd. ("Tangshan Solid"). ***. Respondent firms reported that, in the aggregate, they were responsible for an estimated *** percent of total production of CAC in China in 2011 and *** percent of total exports to the United States in 2011 of activated carbon production in China.[5] Respondent firms also indicated that activated carbon represented *** percent *** of their total sales in their most recent fiscal year.[6] *** responding firm reported any changes in its operations in relation to the production of activated carbon since January 1, 2007. *** report anticipated changes in the character of its operations or organization relating to the production of activated carbon in the future. *** reported that it is ***.[7] *** reported *** production capacity and *** reported *** as limits on its production capacity.[8] *** reported production or anticipated production in the future, of other products on the same equipment and machinery used in the production of activated carbon *** the ability to switch production between activated carbon and other products in response to a relative change in the price of activated carbon vis-a-vis the price of other products, using the same equipment and/or labor.[9]

Certain Activated Carbon Operations

During the original investigation, eight firms that exported CAC to the United States provided useable data.[10] The exports to the United States of these firms were equivalent to 34.3 percent of U.S. imports of CAC from China in 2006. Data reported by these firms is presented in table IV-6.

During January 1, 2007 - June 30, 2012, four firms provided useable data.[11] Of these four firms, three, (***), responded to the Commission's questionnaire in the original investigation. Data reported by these firms and *** are presented in table IV-7.

Capacity, production, capacity utilization, exports to the United States, and exports to the European Union ("EU") all decreased irregularly during 2007-11 as follows: capacity by *** percent;

---

[5] Foreign producer questionnaire responses (section II-14). ***.

[6] Foreign producer questionnaire responses (section II-8); ***.

[7] ***'s foreign producer questionnaire response (section II-3).

[8] Foreign producer questionnaire responses (section II-6).

[9] Foreign producer questionnaire responses (section II-5 and section II-7).

[10] Of the eight firms, seven are producer/exporters, while one is an exporter only. The respondent firms are as follows: (***). During the original investigation, ***. INV-EE-028, *Confidential Staff Report, Investigation No. 731-TA-1103 (Final): Certain Activated Carbon from China*, March 16, 2007, p. VII-1.

[11] Of the four firms, three are producer/exporters, while one is an exporter only. The respondent firms are as follows: ***. ***. ***.

Table IV-6
CAC: Responding Chinese producers/exporters' capacity, production, shipments, and inventories, 2003-06

Item	Calendar year			
	2003	2004	2005	2006
	Quantity (*1,000 pounds*)			
Capacity	36,755	58,300	55,900	55,100
Production	36,155	47,296	52,095	50,551
End of period inventories	7,436	7,749	12,151	15,064
Shipments: Internal consumption	0	4,951	6,991	8,478
Home market	5,389	8,158	6,701	12,325
Exports to: United States	20,839	32,854	27,038	27,209
European Union	19,940	22,426	21,378	13,055
Asia other than China	11,388	14,674	13,318	22,110
All other markets	3,152	3,235	3,223	3,181
Total exports	55,320	73,188	64,957	65,555
Total shipments	60,709	86,298	78,649	86,358
	Ratios and shares (*percent*)			
Capacity utilization	98.4	81.1	93.2	91.7
Inventories to production	20.6	16.4	23.3	29.8
Inventories to total shipments	12.2	9.0	15.4	17.4
Share of total quantity of shipments: Internal consumption	0.0	5.7	8.9	9.8
Home market	8.9	9.5	8.5	14.3
Exports to-- United States	34.3	38.1	34.4	31.5
European Union	32.8	26.0	27.2	15.1
Asia other than China	18.8	17.0	16.9	25.6
All other markets	5.2	3.7	4.1	3.7
All export markets	91.1	84.8	82.6	75.9

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

Source: Compiled from data submitted in response to Commission questionnaires. Responding firms: (***).

Table IV-7
CAC: Responding Chinese producers/exporters' capacity, production, shipments, and inventories, 2007-11, January-June 2011, and January-June 2012

* * * * * * *

production by *** percent; capacity utilization by *** percentage points; exports to the United States by *** percent; and exports to the EU by *** percent. All of these indicators were higher in interim January-June 2012 as compared to interim January-June 2011 as follows: capacity by *** percent; production by *** percent; capacity utilization by *** percentage points; exports to the United States by *** percent; and exports to the EU by *** percent.

*** were responsible for the majority of the irregular decreases in capacity and production during 2007-11. *** pounds during this period. ***'s net capacity and net production remained steady during 2007-11. With respect to exports to the United States, *** is responsible for the majority of the irregular decrease, with a net decrease of *** pounds during 2007-11, while *** reported a net increase of *** pounds in its exports to the United States during 2007-11. *** export brokered material to the United States; their volume of fluctuation for exports to the United States during 2007-11 were ***.

*** reported its export markets as ***; *** reported exports to ***; *** reported exports to ***; and *** did not report its export markets.[12]

The Commission requested that foreign producers/exporters identify export markets other than the United States that the firms had developed or where sales of activated carbon have increased since 2007. *** reported that it had developed markets for or increased sales of activated carbon to ***; *** reported market development or sales increases in ***; *** reported market development and/or increased sales in ***; and *** reported that it ***.[13]

According to ***, and as presented in table IV-8, in 2011 demand for activated carbon (broadly defined) in China was concentrated in the *** market applications.[14] Chinese demand for activated carbon was also apparent in the *** market applications.[15]

Table IV-8
Activated carbon: Demand in China, by application, 2011

* * * * * * *

According to domestic interested parties, there is a massive capacity in China to supply the U.S. market with activated carbon, with over 80 Chinese producers/exporters identified that remain actively engaged in the production and/or export of activated carbon.[16] Domestic interested parties indicated that these producers are believed to have substantial unused capacity to produce activated carbon and many have increased capacity since the original investigation. Domestic interested parties further opined that based on past practices and present market conditions, it is likely that the Chinese producers would export

[12] Foreign producer/exporter questionnaire responses (section II-14).

[13] Foreign producer/exporter questionnaire responses (section II-11).

[14] ***.

[15] Ibid.

[16] *Domestic Interested Parties' Response to the Commission's Notice of Institution,* April 2, 2012, p. 5 and Exhibits 2 and 3.

large and increasing volumes of low-priced activated carbon to the United States if the order were revoked.[17]

Domestic interested parties reported that at least five producers of activated carbon in China have initiated or completed aggregated capacity expansions of 452 million pounds during 2010-12.[18] Noting the volume of activated carbon exported from China since the imposition of the order, domestic interested parties postulated that China remained export-oriented and able to continue to export significant volumes of activated carbon to the U.S. market.[19]

Conversely, respondent interested parties postulate that imports of activated carbon from China are likely to remain stable in the near future due to the short supply of coal raw material, which constrains the production of activated carbon in both the United States and China.[20] Respondents further opined that worldwide demand (including India and China) for activated carbon is high and expected to continue to be high due to the uses of activated carbon for water purification and air purification.[21] Respondents also noted that increased shipping costs require importers to be careful about the quantity and quality of activated carbon imported so that the importer does not incur shipping costs or inventory carrying costs for activated carbon that is not saleable or that must be kept in inventory.[22]

According to the China Coal Research Institute, China's activated carbon industry emerged in the 1950s and achieved rapid growth after the 1990s with advancements in equipment introduction, technology assimilation, transformation, and manufacturing technologies. Thus, China's activated carbon industry increased to more than 300 producers from just dozens in the 1980s and its production capacity for activated carbon from all sources reached more than 500 million metric tons.[23]

Over time, China's reliance on coal-based activated carbon production became greater with more than 200 producers of activated carbon in China now mainly producing coal-based activated carbon. In 2011, China's total activated carbon production reached 350 million metric tons, including about 240 million metric tons (68.6 percent) of coal-based activated carbon. Production of coal-based activated carbon in China is primarily in Shanxi Province and Ningxia Province, which together account for about 90 percent of China's national output of coal-based activated carbon products.[24] According to ***.[25]

In recent years, research and development for processing raw coal for activated carbon production and the development of raw coal deep de-ashing technology have helped produce super-low ash coals which in turn produce low impurity content and high value added activated carbon. Activated carbon production from single type coal was initially adopted in China, but the limited amount of raw material restricted the quality improvement potential of the end product such that China developed activated carbon production techniques from blended coals and from catalyst and activation methods. These

[17] Ibid.

[18] Ibid., p. 6 and Exhibit 2.

[19] Ibid., p. 7 and Exhibit 4.

[20] *Respondent Interested Parties' (Carbon Activated and Car Go) Response to the Commission's Notice of Institution*, April 2, 2012, p. 13 and Exhibit 10.

[21] Ibid.

[22] Ibid.

[23] Domestic Interested Parties' posthearing brief, January 8, 2013, exh. 5. *International and Domestic Coal Industry Status and China's Activated Carbon Industry Development Prospect*, Yanfang Li and Zhongchao Sun, China Coal Research Institute: Beijing Research Institute of Coal and Chemistry, No. 11, 2012, pp. 1-2.

[24] Ibid., p. 2.

[25] *** Exhibit 4 of Domestic Interested Parties' prehearing brief, p. 58.

techniques rely on different mixtures of different kinds of coals to produce end products with different functions and characteristics.[26]

In recent years, China's activated carbon industry has reportedly achieved significant progress through downstream users' support and producers' efforts, but it still lags behind competitors in developed countries in product quality and product mixes. China's activated carbon industry reportedly is beginning to capitalize on certain development trends: increases in production scope and scale through increases in large activated carbon producer's scale of production such that the number of activated carbon producers in China will be gradually reduced; production equipment modernization and upgrade; diversification of products; shift of marketing emphasis to the domestic Chinese market as domestic demands increase over ten to twenty years; promotion of energy saving and waste disposal reduction; and strengthened technological innovations.[27]

Global Trade Atlas ("GTA") statistics for exports of activated carbon from China are presented in table IV-9. These statistics are somewhat overstated as they contain all activated carbon regardless of method of activation or form. However, the GTA exports from China to the United States are closely analogous to Commerce official import statistics for *eo nomine* HTS subheading 3802.10.00, which is also somewhat overstated and contains products specifically excluded by the scope of the review. Nonetheless, since the four respondent producers/exporters of activated carbon in China estimated accounting for *** percent of production of CAC in China in 2011, and *** percent of exports to the United States in 2011, the GTA statistics are presented as a measurement of exports of activated carbon from China during 2007-11. Exports to the United States reported by respondent producers/exporters of CAC in China accounted for *** percent of GTA exports to the United States in 2011.

[26] Ibid.

[27] Ibid., pp. 10-11.

Table IV-9
Activated carbon: Exports from China, by market, 2007-11

Market	2007	2008	2009	2010	2011
Quantity (*1,000 pounds*)					
United States	57,095	50,261	29,136	31,692	39,957
Japan	135,833	136,233	123,759	116,281	139,124
Korea	58,089	52,125	48,341	47,362	57,005
Netherlands	61,875	60,280	35,391	51,479	46,099
Belgium	33,525	26,185	18,255	24,788	26,062
Italy	35,814	32,995	24,498	27,313	24,276
Taiwan	22,928	21,524	14,311	18,362	17,657
Germany	12,142	14,772	14,114	19,183	17,569
India	6,675	6,578	7,894	11,131	13,746
United Kingdom	15,741	15,895	8,649	13,854	11,797
Thailand	5,914	5,700	5,508	7,465	9,972
All other markets	133,344	128,959	101,450	117,940	128,319
Total	578,975	551,506	431,306	486,850	531,583
Unit value (*per pound*)					
United States	$0.37	$0.45	$0.54	$0.62	$0.70
Japan	0.41	0.53	0.58	0.59	0.71
Korea	0.29	0.43	0.39	0.45	0.47
Netherlands	0.31	0.43	0.41	0.44	0.55
Belgium	0.40	0.53	0.59	0.57	0.66
Italy	0.30	0.38	0.42	0.46	0.54
Taiwan	0.29	0.33	0.39	0.44	0.56
Germany	0.34	0.52	0.48	0.53	0.66
India	0.41	0.56	0.53	0.54	0.64
United Kingdom	0.32	0.44	0.50	0.50	0.61
Thailand	0.39	0.50	0.51	0.78	0.53
All other markets	0.34	0.45	0.47	0.50	0.58
Average	0.35	0.46	0.49	0.52	0.61

Source: Global Trade Atlas (HS 3802.10).

GLOBAL MARKET

Information regarding capacity, exports, demand, and prices in markets outside the United States - to the extent that meaningful data are available - are presented below. With respect to foreign nonsubject industry information, publicly available information regarding international producers of activated carbon in Australia, Canada, Germany, India, Indonesia, Japan, the Netherlands, the Philippines, and Sri Lanka follows. Capacity to produce activated carbon in these select countries is presented in table IV-10.

Table IV-10
Activated carbon: Capacity in select nonsubject countries

Country	Capacity	
	Quantity (*million pounds*)	Quantity (*1,000 metric tons*)
Australia	([1])	([1])
Canada	120.2	54.5
Germany	22.0	10.0
India	52.8	24.0
Indonesia	121.7	55.2
Japan	225.3	102.2
Netherlands	79.4	36.0
Philippines	94.1	42.7
Sri Lanka	([2])	([2])
Select country total	715.5	324.6

[1] Not available; however, at least two firms produce activated carbon in Australia (Iluka Resources and Tronox). Australia exported more than 42.9 million pounds (19,500 metric tons) of activated carbon in 2011.
[2] Not available; however, at least three firms produce activated carbon in Sri Lanka (Bieko Link Carbons, Haycarb PLC, and Jacobi Carbons), all in Colombo. Sri Lanka exported more than 72.8 million pounds (33,000 metric tons) of activated carbon in 2011.

Source: Cited articles for individual country sections that follow.

According to the China Coal Research Institute, as of 2012, world activated carbon production has begun to shift from western developed countries to developing countries and the shift will continue to the middle of the twenty-first century; globally tightened environmental protection regulations will further increase demand for activated carbon and water treatment, already a large market for activated carbon consumption. In addition, the gas treatment market is forecast to experience long term growth. Additional growth is expected for nuclear, bacteria, and chemical protective filters.[28]

According to ***, China accounted for *** percent of global activated carbon exports in 2011. China, India and several other small but substantial exporting countries, such as the Philippines,

[28] Domestic interested parties posthearing brief, January 8, 2013, exh. 5. *International and Domestic Coal Industry Status and China's Activated Carbon Industry Development Prospect*, Yanfang Li and Zhongchao Sun, China Coal Research Institute: Beijing Research Institute of Coal and Chemistry, No. 11, 2012, p. 9.

Indonesia, Malaysia, Sri Lanka, and Thailand, all export ***.[29] These countries specialize in one or two types of activated carbon, i.e., Philippines, Indonesia, and Sri Lanka export a large portion of the world's coconut shell derived activated carbon.

Australia

Australia has at least two producers of activated carbon: Iluka Resources[30] and Tronox (formerly Tiwest Joint Venture),[31] both located in Perth. Total production capacity for Australia is unknown, but exports of activated carbon from Australia were 42.9 million pounds (19,500 metric tons) in 2011.[32] According to hearing testimony, Australia is a viable competitor to China for coal-based CAC, both in terms of price and the amount available for export.[33]

Canada

A joint venture of Norit Canada and Sherritt International operates Canada's only activated carbon plant, located in Bienfait, Saskatchewan. The plant began production of activated carbon in June 2010[34] and is expected to reach a total production capacity of 120.2 million pounds (54,500 metric tons) per year.[35] Activated carbon at the plant is produced from lignite coal.

Germany

Germany has one producer of activated carbon: CarboTech AC GmbH of Essen. CarboTech AC has an annual production capacity of 22.0 million pounds (10,000 metric tons) and primarily uses coal as the raw material for producing activated carbon.[36] [37] According to hearing testimony, Germany is a viable competitor to China for coal-based CAC, both in pricing and in the amount of CAC available for export.[38] The German producer of CAC makes a specialized powdered product that competes with domestically produced CAC in the mercury removal market.[39]

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[29] ***.

[30] Iluka Resources Web site, http://www.iluka.com/products/activated-carbon (accessed January 10, 2013).

[31] Tronox Web site, http://www.tronox.com/our-company/global-operations/kwinana-australia/ (accessed January 10, 2013).

[32] Global Trade Information Service, Inc., World Trade Atlas Database (accessed November 13, 2012).

[33] Hearing transcript, p. 184 (Perera).

[34] Sherritt International, "Sherritt Reports 2010 Second-Quarter Results," July 28, 2010.

[35] Sherritt International, "Sherritt Signs Agreement to Build Canada's First Activated Carbon Plants," July 28, 2008.

[36] ***.

[37] According to ***.

[38] Hearing transcript, p. 184 (Perera).

[39] Hearing transcript, p. 175 (Allen).

India

India has at least six producers of activated carbon: Active Char Products of Cochin (annual capacity 11.0 million pounds; 5,000 metric tons),[40] Adsorbent Carbons of Chennai (unknown annual capacity),[41] Core Carbons of Coimbatore (13.2 million pounds; 6,000 metric tons),[42] Genuine Shell Carb of Coimbatore (7.7 million pounds; 3,500 metric tons),[43] Indo German Carbons of Cochin (13.2 million pounds; 6,000 metric tons),[44] and Raj Carbon of Tuticorin (7.7 million pounds; 3,500 metric tons).[45] Total annual production capacity for India exceeds 34.2 million pounds (24,000 metric tons). Indian producers primarily make activated carbon by steam activation of coconut shells.

Indonesia

Indonesia has more than 10 companies producing activated carbon, primarily using coconut shells as a raw material. Total annual production capacity in Indonesia exceeds 121.7 million pounds (55,000 metric tons).[46] Indonesia is also beginning to produce and export more coal-based CAC.[47]

Japan

Japan has at least 13 companies producing activated carbon. Total annual capacity for the activated carbon industry in Japan exceeds 225.3 million pounds (100,000 metric tons).[48] Japanese producers use coal, coconut shell, and sawdust as raw materials in the production of activated carbon.[49] In 2011, exports of activated carbon from Japan were 18.2 million pounds (9,000 metric tons).[50]

Netherlands

The Netherlands has one producer of activated carbon: NORIT Nederland B.V., ***.[51] NORIT Nederland's two plants in Klazienaveen and Zaandam have a combined annual production capacity of 79.4 million pounds (36,000 metric tons).[52] These plants use peat as the primary raw material for producing activated carbon.[53]

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[40] Active Char Products Web site, http://www.activechar.com/php/plant.php (accessed November 9, 2012).

[41] Adsorbent Carbons Web site, http://adsorbentcarbons.com/aboutus_cor_profile.php (accessed November 9, 2012).

[42] Core Carbons Web site, http://www.corecarbons.com/profile.html (accessed November 9, 2012).

[43] Genuine Shell Carb Web site, http://www.genuineshellcarb.com/php/technology.php (accessed November 9, 2012).

[44] Indo German Carbons Limited Web site, http://www.igcl.com/php/profile.php (accessed November 9, 2012).

[45] Raj Carbon Web site, http://www.rajcarbon.com/profile.php (accessed November 9, 2012).

[46] ***.

[47] Hearing transcript, p. 151 (Allen) and p. 183 (Perera).

[48] ***.

[49] Ibid., 57–58.

[50] Global Trade Information Service, Inc., World Trade Atlas Database (accessed November 13, 2012).

[51] ***.

[52] ***.

[53] Ibid.

Philippines

The Philippines has at least six companies producing activated carbon: BF Industries of Davao,[54] Cenapro Chemical Corporation of Mandaue City,[55] Davao Central Chemical Corporation of Davao,[56] Pacific Activated Carbon Company of Tagoloan,[57] Philippine-Japan Active Carbon Corporation of Davao,[58] and Premium A.C. Corporation of Davao.[59] The activated carbon industry in the Philippines has a combined capacity of over 94.1 million pounds (42,000 metric tons) and primarily produces activated carbon from coconut shells.[60] Many of the activated carbon firms in the Philippines are owned in whole or in part by Japanese firms.

Sri Lanka

Sri Lanka has at least three companies producing activated carbon: Bieko Link Carbons of Colombo,[61] Haycarb PLC of Colombo,[62] and Jacobi Carbons of Colombo.[63] These firms primarily produce CAC from coconut shells. Total production capacity in Sri Lanka is unknown, but the activated carbon industry in Sri Lanka exported more than 72.8 million pounds (33,000 metric tons) of activated carbon in 2011.[64]

Exports from Select Nonsubject Countries

The six-digit Global Trade Atlas exports (HS 3802.10; based on all forms of carbon) to the United States from the above select countries accounted for over 85 percent of activated carbon imports from nonsubject select countries for 2007-11 (HTS 3802.10.00; based on official statistics for all forms of activated carbon). Exports of activated carbon from select nonsubject countries, by market, are presented in table IV-11.

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[54] BF Industries Web site, http://www.bfi.com.ph/company.php (accessed November 13, 2012).

[55] ***.

[56] Davao Central Chemical Corporation Web site, http://www.dccc-activatedcarbon.com.ph/Home/ (accessed November 13, 2012).

[57] PACCO International Web site, http://www.pacco-intl.com/about.html (accessed November 13, 2012).

[58] Philippine-Japan Active Carbon Corporation Web site, http://www.pjac-corp.com/index.htm (accessed November 13, 2012).

[59] Premium A.C. Corporation Web site, http://www.premiumaccorp.com/profile/ (accessed November 13, 2012).

[60] ***.

[61] Bieko Link Carbons Web site, http://www.biecolink.com/index.php?option=com_content&view=article&id=45&Itemid=53 (accessed November 13, 2012).

[62] Haycarb Web site, http://www.haycarb.com/ (accessed November 13, 2012).

[63] Jacobi Carbons Web site, http://www.jacobi.net/index.php?/site/location-details/manufacturing-plant/sri-lanka (accessed November 13, 2012).

[64] Global Trade Information Service, Inc., World Trade Atlas Database (accessed November 13, 2012).

Table IV-11
Activated carbon: Exports from select nonsubject countries, by market, 2007-11

Country	2007	2008	2009	2010	2011
			Quantity (*1,000 pounds*)		
Australia, exports to:					
United States[1]	35	960	5,063	2,920	2,899
All other markets	12,731	16,263	20,387	32,218	40,072
Total exports	12,766	17,223	25,450	35,138	42,971
Canada, exports to:					
United States	1,424	3,084	579	7,055	16,819
All other markets	313	395	65	192	130
Total exports	1,737	3,479	644	7,248	16,949
Germany, exports to:					
United States	7,951	4,719	9,537	4,448	3,168
All other markets	36,931	38,612	38,735	73,872	88,537
Total exports	44,882	43,331	48,272	78,320	91,705
India, exports to:					
United States	7,450	13,424	15,134	15,407	19,670
All other markets	29,242	40,948	50,817	61,508	78,665
Total exports	36,692	54,372	65,952	76,916	98,335
Indonesia, exports to:					
United States	14,172	16,654	15,948	19,305	14,924
All other markets	153,743	42,758	34,081	35,236	32,711
Total exports	167,915	59,413	50,029	54,541	47,635
Japan, exports to:					
United States	2,395	2,662	1,780	2,592	2,782
All other markets	18,624	18,851	13,829	15,420	15,405
Total exports	21,019	21,513	15,609	18,012	18,188
Netherlands, exports to:					
United States	4,028	7,062	15,968	18,212	7,656
All other markets	116,252	112,042	82,988	106,671	117,812
Total exports	120,281	119,104	98,956	124,883	125,468
Philippines, exports to:					
United States	11,602	10,864	9,488	9,009	6,914
All other markets	68,876	40,014	44,608	61,972	55,684
Total exports	80,478	50,878	54,096	70,981	62,598
Sri Lanka, exports to:					
United States	20,709	27,694	28,117	31,858	31,334
All other markets	28,554	29,284	33,601	37,520	42,331
Total exports	49,263	56,979	61,717	69,378	73,665

Table IV-11--*Continued*
Activated carbon: Exports from select nonsubject countries, by market, 2007-11

Country	2007	2008	2009	2010	2011
			Unit value (*per pound*)		
Australia, exports to:					
United States[1]	$0.27	$0.61	$0.49	$0.52	$0.51
All other markets	0.27	0.30	0.35	0.39	0.41
Total exports	0.27	0.32	0.38	0.40	0.42
Canada, exports to:					
United States	2.73	1.52	5.55	1.55	1.17
All other markets	1.01	1.31	1.42	1.67	1.94
Total exports	2.42	1.49	5.13	1.56	1.18
Germany, exports to:					
United States	1.95	2.20	2.18	5.49	5.53
All other markets	1.05	1.20	0.99	0.65	0.76
Total exports	1.21	1.31	1.23	0.93	0.92
India, exports to:					
United States	0.51	0.55	0.59	0.62	0.81
All other markets	0.49	0.50	0.57	0.59	0.76
Total exports	0.50	0.51	0.58	0.60	0.77
Indonesia, exports to:					
United States	0.42	0.37	0.40	0.46	0.60
All other markets	0.10	0.42	0.50	0.53	0.70
Total exports	0.13	0.41	0.46	0.51	0.67
Japan, exports to:					
United States	3.94	3.73	4.20	4.72	5.50
All other markets	2.22	2.56	3.25	4.08	4.14
Total exports	2.42	2.70	3.36	4.17	4.35
Netherlands, exports to:					
United States	1.41	1.13	0.69	0.66	0.89
All other markets	0.89	1.11	1.32	1.21	1.24
Total exports	0.91	1.11	1.22	1.13	1.22
Philippines, exports to:					
United States	0.69	0.60	0.68	0.61	0.76
All other markets	0.47	0.53	0.55	0.60	0.69
Total exports	0.50	0.54	0.57	0.60	0.70
Sri Lanka, exports to:					
United States	0.60	0.59	0.65	0.70	0.87
All other markets	0.53	0.61	0.73	0.78	1.01
Total exports	0.56	0.60	0.69	0.75	0.95

[1] Global Trade Atlas does not provide Australian export values and quantities to individual countries. Official U.S. statistics (HTS 3802.10) are used for Australian exports to the United States and to calculate unit values.

Source: Global Trade Atlas (HS 3802.10).

Demand Outside of the United States

The Commission asked market participants to indicate how demand for activated carbon outside of the United States has changed since January 1, 2007. A slight majority of questionnaire respondents reported that demand outside the United States had increased. None reported that demand outside the United States had decreased. Both responding producers reported that demand outside the United States had increased. Among 19 responding importers, 11 reported that demand outside the United States had increased, 5 reported no change in demand outside the United States, and 3 reported that demand outside the United States had fluctuated. Among 12 responding purchasers, 5 reported that demand outside the United States had increased, 5 reported no change, and 2 reported that demand outside the United States had fluctuated. Firms reporting increases in demand outside of the United States cited such factors as stricter environmental regulations in some countries and increasing applications of activated carbon in gold mining applications.

When asked to anticipate future demand trends outside the United States, both responding producers reported that demand was likely to increase. Of the 19 responding importers, 12 expect that demand outside the United States will increase, 5 expect no change, and 2 expect fluctuations in demand outside of the United States. Among 12 responding purchasers, 3 expect demand outside the United States to increase, 6 expect no change, 2 expect fluctuations in demand, and 1 expects demand to decrease.

According to ***, and as presented in table IV-12, in 2011, specific country demand for all forms of activated carbon was highest in ***, which together accounted for *** percent of world demand for all forms of activated carbon.

Table IV-12
Activated carbon: World demand, 2011

* * * * * * *

According to ***.[65] ***.[66] ***[67].

Price Comparisons Between the United States and Other Markets

The Commission requested respondents to compare prices for activated carbon in the United States with prices in other markets. Two responding U.S. producers reported that prices for activated carbon in other markets are generally lower than in the United States, while importer responses varied. *** reported that prices for activated carbon in China are lower than in the United States and comparable to the United States in Europe. *** reported that U.S. prices for activated carbon are higher than prices in Asian markets. Of the 11 responding importers, four importers reported that U.S. prices for activated carbon are higher than in other markets because of antidumping duties; two reported that U.S. prices for activated carbon are lower than in other markets, and one reported that U.S. prices for activated carbon

[65] ***.

[66] ***.

[67] ***.

are on par with the rest of the world or slightly lower. Three importers reported that prices for activated carbon in the U.S. market are comparable with prices in other markets. One importer presented a price list for January-June 2012 indicating that it charged the same price for comparable activated carbon products in the United States, Canada, Europe and the Middle East before tariffs are taken into account. Another importer reported that prices for activated carbon are high in China compared to other markets.

According to ***, world prices increased an average of *** percent between 2006 and 2011. The report stated that future world prices should continue to increase due to rising material costs and increasing demand but at a slower rate than during 2006-11. According to this report, average prices in the United States in 2006 were higher than the world average and the average in the Asia/Pacific region, but were slightly lower than average prices in Western Europe. By 2011, increasing average prices in the United States continued to be higher than the world average and in the Asia/Pacific region and were also higher than prices in Western Europe. According to *** projections, U.S. prices will continue to be higher than prices in those markets in 2016.[68]

At the hearing the respondent interested parties' stated that the U.S. price is higher than in other markets because of the antidumping duty. They stated that the delivered price of imported CAC from China to the U.S. border is the same as to the Canadian border until the U.S. duties are applied. [69]

[68] *** Domestic Interested Parties' prehearing brief, exhibit 4, pp. 58-59.

[69] Hearing transcript, pp. 203-204 (Allen).

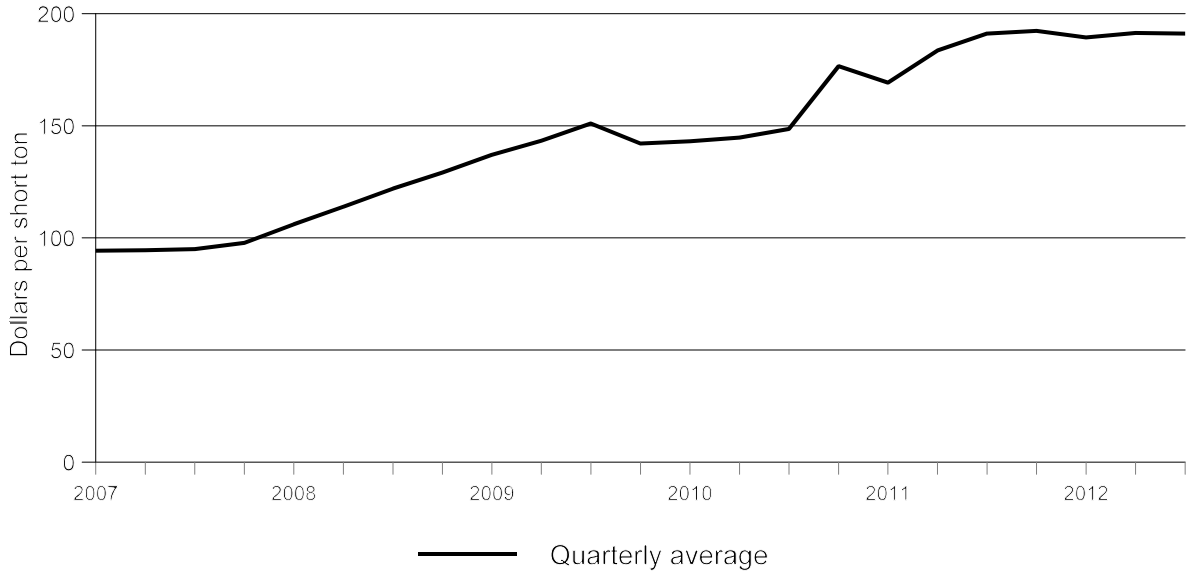
PART V: PRICING AND RELATED INFORMATION

FACTORS AFFECTING PRICING

Raw Material Costs

Raw materials accounted for between *** percent (in 2007) and *** percent (in 2009) of the cost-of-goods sold annually for CAC during 2007-11. During January-June 2012, the cost share was *** percent as compared to *** percent in January-June 2011. The primary raw material used in the production of CAC by U.S. producers is metallurgical coal.[1] As shown in figure V-1, the average price of metallurgical coal priced at coke plants in the United States has increased irregularly from $94 per short ton in the first quarter of 2007 to $191 per short ton in the third quarter of 2012.

Figure V-1
Coal: Average cost of metallurgical coal priced at coke plants, quarterly, January-March 2007 through July-September 2012



Source: Quarterly Coal Reports (various issues, January-March 2007 through July-September 2012), Tables 22 and 24-Average Price of Coal Receipts at Coke Plants. Energy Information Administration, Office of Coal, Nuclear, Electric, and Alternative Fuels, U.S. Department of Energy. Available at http://www.eia.doe.gov/FTPROOT/coal/qcrhistory.htm.

[1] Hearing transcript, p. 52 (O'Brien).

Inland Transportation Costs

When asked to estimate the cost of U.S. inland shipments of CAC as a share of the total delivered price, U.S. producers' estimates ranged from *** to *** percent. Estimates by responding importers ranged from 1 to 15 percent.

Among U.S. producers, the majority of U.S. inland shipments are for distances of greater than 100 miles. Among the three producers, *** percent of shipments are in the range of 101 to 1,000 miles and *** percent are for distances of more than 1,000 miles. Among 12 responding importers, five reported that the majority or all of their shipments were for distances of 100 miles or less and six reported that the majority of their shipments were between 100 and 1,000 miles from their facilities. One importer reported that all of its shipments were for distances of more than 1,000 miles.

PRICING PRACTICES

Prices of CAC are determined by transaction-by-transaction negotiations, contracts, set price lists, and bids. All three U.S. producers reported the use of both transaction-by-transaction negotiations and contracts in determining prices. *** also use set price lists, and one uses bids. Nineteen of the 20 responding importers use transaction-by-transaction negotiations in arriving at prices. Several also reported the use of contracts and set price lists, and two reported the use of bids.

Sales of CAC by U.S. producers and importers are commonly made on a short-term, long-term, or spot basis. Among the three U.S. producers, the share of sales made under either short-term or long-term contracts ranges from *** to *** percent of the total. Among 16 responding importers, nine reported that they sell entirely on a spot basis,[2] one reported that the majority of its sales are on a spot basis, and six reported that all or a majority of their sales are on either a short-term or long-term contract basis. The larger importers of CAC from China, including ***.

Among the three U.S. producers, short-term contracts ranged from *** to *** days, and long-term contracts ranged from *** years or more. All three firms reported that prices were fixed during either short-term or long-term contract periods. All three of the firms reported that quantities were also fixed during the period of long-term contracts and *** reported fixed quantities during short-term contracts. *** reported that meet-or-release terms apply during long-term contracts. Among importers, short-term contract periods ranged as low as 90 days and long-term contracts ranged as long as two years. Importers reported that prices and in many cases quantities are fixed during the contract period. None reported the use of meet-or-release provisions.

Sales Terms and Discounts

The majority of U.S. producers and importers quote prices for CAC on a delivered basis rather than on an f.o.b. basis. Two of the three producers quote delivered prices and one quotes f.o.b. prices. Among 20 responding importers, 14 quote delivered prices, four quote f.o.b. prices, one quotes both f.o.b. and delivered prices, and one quotes prices on a C.I.F. basis.

Discount policies vary among U.S. producers and importers on sales of CAC. All three U.S. producers reported that they provide quantity discounts, *** annual total volume discounts, and *** discounts to strategic customers in certain markets. Among 19 responding importers, nine reported the use of one or more kinds of discounts based on quantity, annual total volume, or early payment of accounts.

[2] Two of the firms selling entirely on a spot basis have only imported from China since 2007, while seven have imported from both China and nonsubject sources during this period.

PRICE DATA

The Commission requested U.S. producers and importers of CAC to provide quarterly data for the quantity and value of selected products that were shipped to unrelated customers in the U.S. market. Data were requested for three forms of CAC steam activated from bituminous or lignite coal for the period January 2007 through June 2012. The products for which pricing data were requested are as follows:

Product 1.–Granular activated carbon that is steam activated from coal (bituminous or lignite), unwashed, no more than 15 percent greater than 8 mesh and no more than 4 percent under 30 mesh, iodine no. 900 mg/g min, moisture 2% max;

Product 2.– Granular activated carbon that is steam activated from coal (bituminous or lignite), unwashed, no more than 5 percent greater than 12 mesh and no more than 4 percent under 40 mesh, iodine no. 1000 mg/g min, moisture 2% max; and

Product 3.–Powder activated carbon that is steam activated from coal (bituminous or lignite), unwashed, particle size 90% min, 325 mesh, iodine no. 700 mg/g min, moisture 5% max.

Three U.S. producers and nine importers of product from China provided usable pricing data for sales of the requested products, although not all firms reported pricing for all products for all quarters. Pricing data reported by these firms accounted for approximately 56.8 percent of U.S. producers' U.S. shipments of CAC, and 19.0 percent of U.S. shipments of imports of CAC from China during January 2007 through June 2012. In the final report for the original investigation, coverage for the domestic industry for these three products was 41.6 percent of U.S. producer's U.S. shipments, while price data for CAC from China for the three products was 41.8 percent of U.S. shipments of imports. In comparing Chinese shipment quantities for each of the three products for all of 2006, the last year of price data collected in the original investigation, with shipment quantities of these products for 2011, substantial declines occurred in all cases.[3] The largest decline was in Chinese shipments of product 3 which declined by *** percent from *** pounds in 2006 to just *** pounds in 2011.

Of the three largest importers of CAC during 2011, ***[4] ***.

Price Trends

Quarterly weighted-average prices of the three products are presented in tables V-1 through V-3 and in figure V-2 for January 2007 through June 2012. The data show that U.S. producer prices and prices of imports from China all increased irregularly during the period where data were reported. A summary of price ranges and percentage changes in prices is presented in table V-4. Shipment quantities for all three U.S.-produced and imported products from China fluctuated from quarter to quarter throughout the period. U.S. producer shipment quantities were larger than importer shipments in all but one quarter for product 1, and in all quarters for products 2 and 3.

[3] Confidential staff report from original investigation, INV-EE-028, pp. V-7 through V-9.

[4] ***.

Table V-1
CAC: Weighted-average f.o.b. prices and quantities of domestic and imported product 1[1] and margins of underselling/(overselling), by quarters, January 2007-June 2012

Period	United States		China		
	Price (*per pound*)	Quantity *(pounds)*	Price (*per pound*))	Quantity (*pounds*)	Margin (*percent*)
2007:					
Jan.-Mar.	$***	***	$***	***	***
Apr.-June	***	***	0.52	718,495	***
July-Sept.	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***
2008:					
Jan.-Mar.	***	***	0.64	432,570	***
Apr.-June	***	***	***	***	***
July-Sept.	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***
2009:					
Jan.-Mar.	***	***	0.98	292,109	***
Apr.-June	***	***	***	***	***
July-Sept.	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***
2010:					
Jan.-Mar.	***	***	***	***	***
Apr.-June	***	***	***	***	***
July-Sept.	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***
2011:					
Jan.-Mar.	***	***	***	***	***
Apr.-June	***	***	0.90	940,836	***
July-Sept.	***	***	0.88	1,469,379	***
Oct.-Dec.	***	***	0.82	683,007	***
2012:					
Jan.-Mar.	***	***	***	***	***
Apr.-June	***	***	0.83	1,546,736	***

[1] Product 1- Granular activated carbon that is steam activated from coal (bituminous or lignite), unwashed, no more than 15 percent greater than 8 mesh and no more than 4 percent under 30 mesh, iodine no. 900 mg/g min, moisture 2% max.

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

Table V-2
CAC: Weighted-average f.o.b. prices and quantities of domestic and imported product 2[1] and margins of underselling/(overselling), by quarters, January 2007-June 2012

Period	United States		China		
	Price (*per pound*)	Quantity *(pounds)*	Price (*per pound*))	Quantity (*pounds*)	Margin (*percent*)
2007:					
Jan.-Mar.	$***	***	$***	***	***
Apr.-June	***	***	0.74	252,268	***
July-Sept.	***	***	0.83	223,383	***
Oct.-Dec.	***	***	***	***	***
2008:					
Jan.-Mar.	***	***	0.79	326,870	***
Apr.-June	***	***	0.84	249,968	***
July-Sept.	***	***	0.93	273,889	***
Oct.-Dec.	***	***	***	***	***
2009:					
Jan.-Mar.	***	***	1.34	61,775	***
Apr.-June	***	***	***	***	***
July-Sept.	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***
2010:					
Jan.-Mar.	***	***	***	***	***
Apr.-June	***	***	***	***	***
July-Sept.	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***
2011:					
Jan.-Mar.	***	***	***	***	***
Apr.-June	***	***	***	***	***
July-Sept.	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***
2012:					
Jan.-Mar.	***	***	***	***	***
Apr.-June	***	***	***	***	***

[1] Product 2 - Granular activated carbon that is steam activated from coal (bituminous or lignite), unwashed, no more than 5 percent greater than 12 mesh and no more than 4 percent under 40 mesh, iodine no. 1000 mg/g min, moisture 2% max.

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

Table V-3
CAC: Weighted-average f.o.b. prices and quantities of domestic and imported product 3 and margins of underselling/(overselling), by quarters, January 2007-June 2012

* * * * * * *

Table V-4
CAC: Summary of weighted-average f.o.b. prices for products 1-3 from the United States and China

* * * * * * *

Figure V-2
CAC: Weighted-average prices and quantities of domestic and imported product, by quarters, January 2007-June 2012

* * * * * * *

Price Comparisons

Margins of underselling and overselling by product are presented in table V-5. Prices for CAC imported from China were below those for U.S.-produced product in 60 of the 66 quarterly comparisons for the three products, by margins ranging from 1.1 to 45.9 percent.[5]

Table V-5
CAC: Instances of underselling/overselling and the range and average of margins, January 2007-June 2012

Product	Number of quarters		Underselling margins (*percent)*			Overselling margins (*percent)*		
	Underselling	Overselling	Average	Min	Max	Average	Min	Max
U.S. vs. China								
1	21	1	26.3	14.6	39.7	(7.3)	(7.3)	(7.3)
2	22	0	27.6	10.8	45.9	-	-	-
3	17	5	17.8	1.1	37.4	(12.4)	(0.6)	(34.8)
Total	60	6	25.0	1.1	45.9	(11.6)	(0.6)	(34.8)

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

[5] In the final phase of the original investigation, imports from China were priced lower than U.S.-produced CAC in 45 of 48 quarterly comparisons during 2003-06. For product 1, underselling occurred in 15 of 16 comparisons with margins of underselling ranging from 15.4 to 58.3 percent; for product 2, underselling occurred in all 16 quarters with margins ranging from 0.6 to 57.7 percent; and for product 3 underselling occurred in 14 of 16 quarters with margins ranging from 0.1 to 36.9 percent. See *Certain Activated Carbon from China, Investigation No. 731-TA-1103 (Final)*, USITC Publication 3913, April 2007, p. V-8.

APPENDIX A

FEDERAL REGISTER NOTICES AND THE COMMISSION'S STATEMENT ON ADEQUACY

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

Citation	Title	Link
77 FR 12614, March 1, 2012	*Activated Carbon From China; Institution of a Five-Year Review*	http://www.gpo.gov/fdsys/pkg/FR-2012-03-01/pdf/2012-4979.pdf
77 FR 12562, March 1, 2012	*Initiation of Five-Year ("Sunset") Review*	http://www.gpo.gov/fdsys/pkg/FR-2012-03-01/pdf/2012-5010.pdf
77 FR 33420, June 6, 2012	*Certain Activated Carbon From the People's Republic of China: Final Results of Expedited Sunset Review of the Antidumping Duty Order*	http://www.gpo.gov/fdsys/pkg/FR-2012-06-06/pdf/2012-13379.pdf
77 FR 38082, June 26, 2012	*Certain Activated Carbon from China; Notice of Commission Determination To Conduct a Full Five-year Review and Scheduling of a Full Five-Year Review Concerning the Antidumping Duty Order on Certain Activated Carbon From China*	http://www.gpo.gov/fdsys/pkg/FR-2012-06-26/pdf/2012-15523.pdf
Note.–The Commission's adequacy determination can be found at http://pubapps2.usitc.gov/sunset/caseProfSuppAttmnt/download/11488. The record of the Commission's vote can be found at http://pubapps2.usitc.gov/sunset/caseProfSuppAttmnt/download/11487.		

APPENDIX B

CALENDAR OF THE PUBLIC HEARING

CALENDAR OF PUBLIC HEARING

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

Subject: Certain Activated Carbon from China

Inv. No.: 731-TA-1103 (Review)

Date and Time: December 18, 2012 - 9:30 a.m.

Sessions were held in connection with this review in the Main Hearing Room, 500 E Street (room 101), SW, Washington, D.C.

OPENING REMARKS:

In Support of Continuation of Order (**David A. Hartquist**,
Kelley Drye & Warren LLP)
In Support of Revocation of Order (**Nancy A. Noonan**,
Arent Fox LLP)

In Support of the Continuation of the Antidumping Duty Order:

Kelley Drye & Warren LLP
Washington, D.C.
on behalf of

Calgon Carbon Corporation
Norit Americas Inc.
ADA Carbon Solutions

Ronald Thompson, Chief Executive Officer,
Norit Americas Inc.

Brian Leen, President *and* Chief Executive Officer
ADA Carbon Solutions, LLC

Robert O'Brien, Executive Vice President *and*
Chief Operating Officer, Calgon Carbon
Corporation

In Support of the Continuation of
the Antidumping Duty Order (continued):

Peter Hansen, General Counsel, ADA Carbon Solutions LLC

William Aldridge, Business Analyst, Calgon Carbon Corporation

Brad Hudgens, Economist, Georgetown Economics Services

David A. Hartquist)
R. Alan Luberda)
) – OF COUNSEL
John M. Herrmann)
Benjamin Blase Caryl)

In Opposition to the Continuation of
the Antidumping Duty Order:

Arent Fox LLP
Washington, D.C.
on behalf of

Carbon Activated Corporation and
Car Go Worldwide, Inc. (collectively "CAC")

Lionel Perera, President, CAC

Hashi Samarayanake, Purchasing Manager, CAC

Chris Allen, Manager New York Branch, CAC

Nancy A. Noonan) – OF COUNSEL

REBUTTAL/CLOSING REMARKS:

In Support of Continuation of Order (**David A. Hartquist**, Kelley Drye & Warren LLP)
In Support of Revocation of Order (**Nancy A. Noonan**, Arent Fox LLP)

APPENDIX C

SUMMARY TABLE

Table C-1
Certain activated carbon: Summary data concerning the U.S. market, 2007-11, January-June 2011, and January-June 2012

(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)

	Reported data							Period changes					
						January-June							Jan.-June
Item	2007	2008	2009	2010	2011	2011	2012	2007-11	2007-08	2008-09	2009-10	2010-11	2011-12
U.S. consumption quantity:													
Amount	***	***	***	***	***	***	***	***	***	***	***	***	***
Producers' share (1)	***	***	***	***	***	***	***	***	***	***	***	***	***
Importers' share (1):													
China	***	***	***	***	***	***	***	***	***	***	***	***	***
All other sources	***	***	***	***	***	***	***	***	***	***	***	***	***
Total imports	***	***	***	***	***	***	***	***	***	***	***	***	***
U.S. consumption value:													
Amount	***	***	***	***	***	***	***	***	***	***	***	***	***
Producers' share (1)	***	***	***	***	***	***	***	***	***	***	***	***	***
Importers' share (1):													
China	***	***	***	***	***	***	***	***	***	***	***	***	***
All other sources	***	***	***	***	***	***	***	***	***	***	***	***	***
Total imports	***	***	***	***	***	***	***	***	***	***	***	***	***
U.S. shipments of imports from:													
China:													
Quantity	37,446	35,249	32,736	27,914	34,252	15,806	16,905	-8.5	-5.9	-7.1	-14.7	22.7	7.0
Value	31,576	41,023	44,657	34,750	42,099	18,749	20,225	33.3	29.9	8.9	-22.2	21.2	7.9
Unit value	$0.84	$1.16	$1.36	$1.24	$1.23	$1.19	$1.20	45.8	38.0	17.2	-8.7	-1.3	0.9
Ending inventory quantity	12,661	15,337	7,836	7,801	10,414	9,525	9,634	-17.7	21.1	-48.9	-0.4	33.5	1.1
All other sources:													
Quantity	60,151	78,619	83,868	105,304	110,734	54,779	56,844	84.1	30.7	6.7	25.6	5.2	3.8
Value	60,984	86,224	93,808	115,200	133,240	62,692	78,618	118.5	41.4	8.8	22.8	15.7	25.4
Unit value	$1.01	$1.10	$1.12	$1.09	$1.20	$1.14	$1.38	18.7	8.2	2.0	-2.2	10.0	20.8
Ending inventory quantity	18,300	22,020	35,512	34,689	38,136	38,819	41,924	108.4	20.3	61.3	-2.3	9.9	8.0
All sources:													
Quantity	97,597	113,868	116,604	133,217	144,985	70,586	73,749	48.6	16.7	2.4	14.2	8.8	4.5
Value	92,560	127,247	138,465	149,950	175,340	81,442	98,843	89.4	37.5	8.8	8.3	16.9	21.4
Unit value	$0.95	$1.12	$1.19	$1.13	$1.21	$1.15	$1.34	27.5	17.8	6.3	-5.2	7.4	16.2
Ending inventory quantity	30,961	37,357	43,348	42,490	48,550	48,344	51,558	56.8	20.7	16.0	-2.0	14.3	6.6
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.

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 show
Unit values and shares are calculated from the unrounded figures.

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

APPENDIX D

COMMENTS ON THE SIGNIFICANCE OF THE EXISTING ANTIDUMPING DUTY ORDER AND THE LIKELY EFFECTS OF REVOCATION

U.S. PRODUCER'S COMMENTS

Anticipated Changes In Operations in the Event the Order is Revoked (Section II-4)

The Commission requested U.S. producers to describe any anticipated changes in the character of their operations or organization relating to the production of activated carbon in the future if the antidumping duty (AD) order on imports of activated carbon from China were revoked.

ADA: "***."

Calgon: "***."

Norit: "***."

Effect of Order (Question II-15)

The Commission requested U.S. producers to describe the significance of the existing antidumping duty order on imports of activated carbon from China in terms of the effect of the 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. Their responses follow.

ADA: "***."

Calgon: "***."

Norit: "***."

Likely Effect of Revocation of Order (Section II-16)

The Commission requested the U.S. producers to describe any anticipated changes in 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 activated carton in the future if the antidumping duty order on activated carbon from China were to be revoked. Their responses follow.

ADA: "***."

Calgon: "***."

Norit: "***."

U.S. IMPORTERS' COMMENTS

Anticipated Changes in Operations in the Event the Order is Revoked (Section II-4)

The Commission requested the U.S. importers to describe any anticipated changes in the character of their operations or organization relating to the importation of activated carbon in the future if the antidumping duty order on imports of activated carbon from China were to be revoked. Their responses follow.

*****:** "No."

*****:** "Yes. *** is continually reexamining the market and would do so in the event of such a change and make a decision whether to alter its sourcing based on current market conditions."

*****:** "No."

*****:** "No."

*****:** "No."

*****:** "***."

*****:** "No, because as mentioned above we stopped importing activated carbon into the US in 2011."

*****:** "No."

*****:** "No."

*****:** "No."

*****:** "No."

*****:** "We would investigate the economies of importing carbon from China as the need for coal-based carbons because necessary by our US customers. ***% of the carbon that we sell is coconut shell based so the impact of lifting the tariff would not be too significant on our current operations."

*****:** "No."

*****:** "No."

*****:** "Yes. Would sell more product from China."

*****:** "No."

*****:** "No."

*****:** "Yes. We sell only coconut shell carbon, which is competing cheap Chinese coal carbon. If antidumping duty were revoked, this would be big disadvantage for us like coconut carbon distributor."

*****:** "No."

*****:** "No."

*****:** "No change, encourage more business with China"

*****:** "No."

*****:** "Yes. Due to the uncertainties concerning the ultimate impact of the federal regulations on mercury emissions, no major changes are anticipated in 2012 or 2013. Any changes would be beyond this period depending on whether rules on mercury emissions at coal fired utilities, which are being appealed, are overturned or delayed."

*****:** Not Applicable.

*****:** "No."

*****:** "Yes. We can market Chinese carbon again in US and without having worried to pay more dumping duty in the future."

*****:** "No."

*****:** "No."

*****:** "No."

*****:** "No."

Effect of Order (Section II-9)

The Commission requested the U.S. importers to describe the significance of the existing antidumping duty order on imports of activated carbon from China in terms of the effect on their imports, U.S. shipments of imports, and inventories. Their responses follow.

*****:** "The antidumping order has no effect on ***'s imports of activated carbon or inventories. *** does not ship activated carbon, but rather consumes it in the production of ***. This production requires activated carbon derived from coconut char obtained in South East Asia. It is not practicable to use lower grade activated carbon derived from coal made in China."

*****:** "*** began importing activated carbon from China to secure a supply of specialized activated carbon that was not generally available from domestic suppliers. The price of the imported activated carbon was not the determinative factor for ***. Rather, the determinative factor for importing was the quality of activated carbon. Due to the unpredictability of the antidumping duties calculated by the surrogate value method, *** has curtailed its activated carbon imports from China and is struggling to find other reliable suppliers for its specialized activated carbon that can be used in the production of ***-friendly material "

*****:** "No effect. *** does not import activated carbon from China."

*****:** "Low cost dumping of Chinese carbon will have an adverse affect on company margins."

*****:** "More opportunities for manufacturer/supplier from other regions."

*****:** "***.

*****:** "***."

*****:** "The antidumping duty order has not changed our U.S. shipments of imports and neither have our inventories changed with the advent of the antidumping duty order. This is because we had an obligation to service our customers requirements. Customer demand has not changed since the order was imposed and therefore there has not been any changes in the quantity of carbon that we are importing into the US."

*****:** "*** has never imported steam activated carbon from China (except for very small quantities of bamboo powder in last 10 years). We import mostly coconut shell activated carbon from other countries and coal based activated carbon not from China. The current anti-dumping duty has little impact on our sales or business in general."

*****:** "None."

*****:** "Although we sell the subject merchandise at the fair price, the final tariff after each 12 months review can be extremely unreasonable based on DOC's determination. The preliminary tariff under current period to my firm is 1.07/kg., which is about 26 times higher than our final tariff in first review. The change on the market price and our selling price is minor in the same period of time. My firm could face the huge tariff penalty. The business could be dead."

*****:** "Insignificant. *** imports coconut shell carbon from *** and *** and its customers use this type of carbon only. Availability of coconut shell based carbons is limited from China."

*****:** "We have switched a good portion of our imports to carbon manufacturers in the countries not subject to these duties."

*****:** "Not applicable."

*****:** "Activated carbon is only a small portion of *** business - about *** percent, so it would have very little effect."

*****:** "Existing antidumping duty order covering imports of activated carbon from China has no effect on our firms imports as our product (solely coconut shell activated carbons) are mainly used in different markets that are specific to quality and performance."

*****:** "The antidumping duty order on activated carbon from China really has not had much effect on ***'s imports, shipments and inventories. During 2006, the last full year before the imposition of the AD order, *** imported approximately *** pounds of activated carbon from China (excluding ***) and in calendar year 2012 (five years after the imposition of the AD order) *** will import *** pounds) of activated carbon from China. Very little difference in import quantities."

*****:** "In general, we do not import from China, but there is a competition between coal vs coconut. When price of coal carbon went up by duty, we had an advantage to sell coconut carbon to the market, since many people wanted to shift from coal to coconut."

*****:** "The applications of activated carbon we import and ship to US customers are different from the applications of activated carbon imported from China. So, the effect is limited."

*****:** "Non-applicable."

*****:** "No change"

*****:** "Two petitioners are also the biggest buyers of Chinese carbon which is hard for most of us to understand. In addition, nobody produces pellet carbon in US which is also subjected to AD. Carbon prices have increased as results of AD. But factories are making the same money and we are limited to buy from certain factories. We also lost some good vendors. For example, we used to buy from ***. Now we have to buy from *** in US. It not only costs more, but indirect correspondence with factory and slow response. It is also unfair that those big importers such as Calgon and Jacobi can buy from almost every factory in China to get the best price while we are only limited to a couple of factories. Our inventory has also increased because of long lead time."

****

"***."

****

"We had to raise our prices because of the increased cost but we are not able to determine the impact of that on our imports or inventories."

****

"No impact."

****

"We have increased our import from other countries such as ***."

****

"The sales price to our customers has increased."

****

"It makes business a bit more difficult."

****

"The market has decreased for all export shipments from the U.S.A as other countries buy directly from China"

****

"After imposition of the anti-dumping order, my client did not have orders for their special cleanup system, used in ***, for a period of 3 years. Our 2007 shipments are from existing order from before that. However, this may be due to the economic downturn."

Likely Effect of Revocation of Order (Section II-10)

The Commission requested the U.S. importers to describe any anticipated changes in their imports, U.S. shipments of imports, or inventories of activated carbon in the future if the antidumping order on activated carbon from China were to be revoked. Their responses are as follows.

*****:** "No."

*****:** " Yes. *** anticipates that if the antidumping duty order on activated carbon from China were revoked, *** would review the then-current market conditions to decide whether to change its purchase levels from China of the specialized activated carbon that it requires. While other forms of activated carbon are becoming more readily available domestically due to new production, the type and quality that *** requires is not readily available from U.S. suppliers. For this reason, the cost of the activated carbon, whether or not including antidumping duties, is not ***'s primary consideration"

*****:** "No. *** ceased importation of activated carbon from *** as of March 1, 2012."

*****:** "No."

*****:** "No."

*****:** "***."

*****:** "No, because as mentioned we only imported in a small amount of shipments in 2010-2011 and stopped soon after. We don't intend to import any more activated carbon shipments (from subject or nonsubject countries) even if the antidumping order was revoked.

*****:** "No. As explained in questions II-9 there has been no change in the demand of activated carbon since 2007 and we expect the demand of activated carbon to continue to remain stable. Therefore, we believe that no change would occur if the antidumping order were to be revoked."

*****:** "No."

*****:** "No."

*****:** "Yes. It will bring the competition back to the US market."

*****:** "No."

*****:** "Yes. We would likely import more carbon that was made in China."

*****:** "No."

*****:** "Yes. Would have chance to do more activated carbon business with China."

*****:** "No."

*****:** "No. As discussed in the immediate answer, the imposition of the AD order rally has had no effect on ***'s imports from China. Accordingly, *** does not believe that revocation of the AD order will have much effect on its imports and shipments."

*****:** "Yes. Again, if carbon price from China will be reduced, we will have a negative effect to sell our coconut shell carbon."

*****:** "No."

*****:** "No."

*****:** (No response)

*****:** "No."

*****:** "***."

*****:** "No."

*****:** "No."

*****:** "Yes. We will increase our import from China since the price is consider cheaper compare to other countries.

*****:** "No."

*****:** "It would make our business grow a little, increase our sales, and increase our employment as well as providing a level playing field for all participants."

*****:** "No."

*****:** "Yes. Difficult to say if the stopping of building of cleanup systems is due to the anti-dumping or due to the economic downturn. My client did finally have one order in a ***. Making the systems cheaper as a result of the cheaper activated carbon should be good for the environment."

U.S. PURCHASERS' COMMENTS

Effect of Revocation (Section III-29)

The Commission requested U.S. purchasers to comment on the likely effects of revocation of the antidumping duty order on imports of activated carbon from China on (1) the future activities of their firms and (2) the U.S. market as a whole. Their responses follow.

*****:**

(1) " We do not purchase coal based activated carbon from China and do not anticipate buying from them in the foreseeable future."

(2) " Since *** does not purchase activated carbon derived from Chinese coal, we are not in a position to speculate on how the revocation of the order would affect imports from China."

*****:**

(1) " Upon revocation of the antidumping duty order *** could potentially see lower costs but also a much lesser quality of product which could end up costing us much more in total annual costs."

(2) " The U.S. market will be affect by potentially decreased domestic costs due to added competition and a less qualified product on the market that domestic suppliers will need to compete with."

*****:**

(1) " Price, delivery and availability to improve market supply."

(2) " Price, delivery and availability to improve market supply."

*****:**

(1) " Our activities will remain unchanged because neither did we decrease or increase our buying activity since the advent of the Antidumping order. If anything the amount of coal activated carbon we import into the US would decrease due the fact that there is a severe shortage of bituminous coal (the raw material) in China and this decrease in availability is driving the pricing higher which in turn has begin to promote the customers to cut back on their consumption domestically."

(2) " We are unfortunately unable to comment on the entire US market. That being said it should be noted that in the last five years there have been some changes within China that will not change the amount of coal activated carbon being imported into the US. These changes are as follows:

1. Dwindling coal veins that supply bituminous coal (which is the raw material for coal activated carbon) in the coal mines found in China.

2. Dramatic increase of domestic consumption of activated carbon which is prompting the Chinese government to reduce the amount coal activated carbon being exported out of China to other global markets."

*****:**

(1) “Anticipate lower carbon costs due to increase in competition which will allow us to be more competitive on final products in domestic & international market.”

(2) “ more product coming into the US will help support the growing demands from the CAMR Act & water purification”

*****:**

(1) “ *** will continue to use carbon as it has in the past with no changes.”

(2) “ No response.”

*****:**

(1) “ Unknown.”

(2) “Unknown.”

*****:**

(1) “ Unknown.”

(2) “Unknown.”

*****:**

(1) “No immediate changes.”

(2) “ Potential increase supply, lower market pricing.”

*****:**

(1) “None.”

(2) “None.”

*****:**

(1) “Demand for activated carbon is independent of revocation.”

(2) “Don’t know.”

*****:**

(1) “None”

(2) No response

*****:**

(1) “N/A.”

(2) “Lower market cost and technical evolution.”

*****:**

(1) No response

(2) No response

*****:**

(1) “Unknown effects.”

(2) “Unknown effects.”

*****:**

(1) “Lower cost to end users.”

(2) “Lower cost to end users.”

*****:**

(1) “Not qualified to comment.”

(2) “Not qualified to comment.”

*****:**

(1) “As a bid specific purchaser with qualifying product requirements, there will be no predicted change in *** activity.”

(2) “Unknown.”

*****:**

(1) “Reduction in sales of powder carbon in select markets over the next three to five years.”

(2) “Possible reduction in sales revenue of domestic producers over the next five years.”

*****:**

(1) “ Will not change.”

(2) “ Will no change. The U.S. manufacturers already import from China.”

*****:**

(1) “Governmental Agency. No effect”

(2) “Unknown.”

*****:**

(1) “Potential to evaluate new sources of qualified activated carbon, as may become available in US”

(2) “Dependent on sustainable quality, availability and price.”

*****:**

(1) “Would hinder ability to compete based on low-cost, low quality imports-immediate.”

(2) “Would hinder ability to compete based on low-cost, low quality imports-immediate. ”

*****:**

(1) “With respect to the *** industry, *** is not certain that a revocation of the antidumping duty order on imports of activated carbon from China will have any effect. With respect to the *** industry, if the antidumping duty order on imports of activated carbon from China is revoked, *** will strive to optimize the value, service and performance it delivers as the distributor for its main supplier of non-chemically-activated activated carbon and vis a vis its customers. ”

(2) “If the antidumping duty order on imports of activated carbon from China is revoked, *** expects that market prices could potentially decrease, and that there would be commoditization of the product and market erosion.”

FOREIGN PRODUCER'S COMMENTS

Anticipated Changes in Operations in the Event the Order is Revoked (Section II-4)

The Commission requested the foreign producers to describe any anticipated changes in the character of their operations or organization relating to the production of activated carbon in the future if the antidumping duty order on imports of activated carbon from China were to be revoked. Their responses follow.

*****:** "Yes. If the order was revoked we would anticipate ***."

*****:** "No"

*****:** "No."

*****:** "No."

Significance of Antidumping Duty Order (Section II-12)

The Commission requested the foreign producers to describe the significance of the existing antidumping duty order covering imports of activated carbon from China in terms of its effect on their firm's production capacity, production, home market shipments, exports to the United States and other markets, and inventories. Their responses follow.

*****:** "***."

*****:** "*** exports to the United States are virtually unchanged before the imposition of antidumping tariffs (2007) until today, however, export volumes to the United States have remained flat while the rest of the company's sales have increased."

*****:** "Significance of antidumping duty order. The order decreased our exporting of activated carbon to USA. We had to develop other markets including domestic market. The domestic market is growing, so that producing continues. Also we opened market in Africa. These are stable and big requirement for activated carbon."

*****:** "None."

Anticipated Changes if Order Revoked (Section II-13)

The Commission requested the 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 activated carbon in the future if the antidumping duty order on activated carbon from China were to be revoked. Their responses follow.

*****:** "Yes. The revocation of the order would likely lead to an increase of exports from China to the U.S. and lower prices in the U.S. market."

*****:** "No."

*****:** "No. If the order revoked, the exporting to USA can't be grow much, because now Chinese coal price is high, and labors' cost is very high. So Chinese made activated carbon price is high now. In addition, supplying of special coal for activated carbon is limited. Also the home and other market demands are strong. So, the balance of supplying of activated carbon is limited."

*****:** "No."