Certain Activated Carbon
From China

Investigation No. 731-TA-1103 (Final)

Publication 3913
April 2007

U.S. International Trade Commission
Certain Activated Carbon From China

Investigation No. 731-TA-1103 (Final)
# CONTENTS

<table>
<thead>
<tr>
<th>Topic</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Determination</td>
<td>1</td>
</tr>
<tr>
<td>Views of the Commission</td>
<td>3</td>
</tr>
<tr>
<td>Part I: Introduction</td>
<td>I-1</td>
</tr>
<tr>
<td>Background</td>
<td>I-1</td>
</tr>
<tr>
<td>Previous investigation</td>
<td>I-2</td>
</tr>
<tr>
<td>Summary data</td>
<td>I-2</td>
</tr>
<tr>
<td>Nature and extent of sales at LTFV</td>
<td>I-3</td>
</tr>
<tr>
<td>The subject product</td>
<td>I-5</td>
</tr>
<tr>
<td>Physical characteristics and uses</td>
<td>I-5</td>
</tr>
<tr>
<td>Manufacturing facilities</td>
<td>I-8</td>
</tr>
<tr>
<td>Interchangeability and customer and producer perceptions</td>
<td>I-9</td>
</tr>
<tr>
<td>Channels of distribution</td>
<td>I-10</td>
</tr>
<tr>
<td>Price</td>
<td>I-10</td>
</tr>
<tr>
<td>Domestic like product issues</td>
<td>I-10</td>
</tr>
<tr>
<td>Part II: Conditions of competition in the U.S. market</td>
<td>II-1</td>
</tr>
<tr>
<td>U.S. market segments</td>
<td>II-1</td>
</tr>
<tr>
<td>Channels of distribution</td>
<td>II-1</td>
</tr>
<tr>
<td>Supply and demand considerations</td>
<td>II-2</td>
</tr>
<tr>
<td>U.S. supply</td>
<td>II-2</td>
</tr>
<tr>
<td>U.S. demand</td>
<td>II-4</td>
</tr>
<tr>
<td>Substitutability issues</td>
<td>II-6</td>
</tr>
<tr>
<td>Factors affecting purchasing decisions</td>
<td>II-6</td>
</tr>
<tr>
<td>Comparisons of domestic products, subject imports, and nonsubject imports</td>
<td>II-12</td>
</tr>
<tr>
<td>Elasticity estimates</td>
<td>II-14</td>
</tr>
<tr>
<td>U.S. supply elasticity</td>
<td>II-14</td>
</tr>
<tr>
<td>U.S. demand elasticity</td>
<td>II-14</td>
</tr>
<tr>
<td>Substitution elasticity</td>
<td>II-14</td>
</tr>
<tr>
<td>Part III: U.S. producers’ production, shipments, and employment</td>
<td>III-1</td>
</tr>
<tr>
<td>U.S. producers</td>
<td>III-1</td>
</tr>
<tr>
<td>U.S. producers’ capacity, production, capacity utilization, shipment, inventory, and employment data</td>
<td>III-4</td>
</tr>
<tr>
<td>Part IV: U.S. imports, apparent consumption, and market shares</td>
<td>IV-1</td>
</tr>
<tr>
<td>U.S. importers</td>
<td>IV-1</td>
</tr>
<tr>
<td>U.S. imports</td>
<td>IV-2</td>
</tr>
<tr>
<td>Negligibility</td>
<td>IV-2</td>
</tr>
<tr>
<td>Apparent U.S. consumption</td>
<td>IV-3</td>
</tr>
<tr>
<td>U.S. market shares</td>
<td>IV-3</td>
</tr>
<tr>
<td>Ratio of imports to U.S. production</td>
<td>IV-3</td>
</tr>
</tbody>
</table>
CONTENTS–Continued

Part V: Pricing and related information ................................................................. V-1
  Factors affecting prices ...................................................................................... V-1
    Raw materials .................................................................................................. V-1
    Transportation costs to the U.S. market .......................................................... V-1
    U.S. inland transportation costs ........................................................................ V-1
    Exchange rates .................................................................................................. V-2
  Pricing practices .................................................................................................. V-3
    Pricing methods .................................................................................................. V-3
    Price data .......................................................................................................... V-3
      Price trends .................................................................................................... V-4
      Price comparisons .......................................................................................... V-8
  Lost sales and lost revenues ................................................................................ V-9

Part VI: Financial experience of U.S. firms .......................................................... VI-1
  Background ......................................................................................................... VI-1
  Operations on CAC ............................................................................................ VI-1
  Capital expenditures and research and development expenses ....................... VI-3
  Assets and return on investment ......................................................................... VI-3
  Capital and investment ....................................................................................... VI-3
    Actual negative effects ..................................................................................... VI-3
    Anticipated negative effects ............................................................................. VI-3

Part VII: Threat considerations .............................................................................. VII-1
  The industry in China ......................................................................................... VII-1
  Nonsubject producers/exporters .......................................................................... VII-3
  U.S. importers’ inventories .................................................................................. VII-4
  Imports subsequent to December 31, 2006 ....................................................... VII-4
  Antidumping duty orders in third-country markets ........................................... VII-5

Appendices

A. Federal Register notices ..................................................................................... A-1
B. Calendar of the public hearing .......................................................................... B-1
C. Summary data .................................................................................................... C-1
D. Producer, importer, and purchaser comments regarding differences and similarities between reactivated carbon and certain activated carbon. ........................................................................... D-1
E. Trade and financial information on reactivated carbon .................................. E-1

Note. – Information that would reveal confidential information of individual concerns may not be published and, therefore, has been identified by the use of asterisks.
On the basis of the record developed in the subject investigation, the United States International Trade Commission (Commission) determines, pursuant to section 735(b) of the Tariff Act of 1930 (19 U.S.C. § 1673d(b)) (the Act), that an industry in the United States is materially injured by reason of imports from China of certain activated carbon, provided for in subheading 3802.10.00 of the Harmonized Tariff Schedule of the United States, that have been found by the Department of Commerce (Commerce) to be sold in the United States at less than fair value (LTFV).
BACKGROUND

The Commission instituted this investigation effective March 8, 2006, following receipt of a petition filed with the Commission and Commerce by Calgon Carbon Corporation, Pittsburgh, PA, and Norit Americas, Inc., Marshall, TX. The final phase of the investigation was scheduled by the Commission following notification of a preliminary determination by Commerce that imports of certain activated carbon from China were being sold at LTFV within the meaning of section 733(b) of the Act (19 U.S.C. § 1673b(b)). Notice of the scheduling of the final phase of the Commission’s investigation 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 of November 16, 2006 (71 FR 66793). The hearing was held in Washington, DC, on February 27, 2007, and all persons who requested the opportunity were permitted to appear in person or by counsel.
VIEWS OF THE COMMISSION

Based on the record in this investigation, we determine that an industry in the United States is materially injured by reason of imports of certain activated carbon imported from China that have been found by the Department of Commerce to be sold in the United States at less than fair value ("LTFV").

I. BACKGROUND

Certain activated carbon is black carbon material obtained by “activating” various materials containing high levels of carbon, including coal, wood, and coconut shells, by heating in the presence of steam or carbon dioxide.1 The thermal treatments remove organic materials and create an internal pore structure in the carbon material. The pores adsorb (trap) contaminants in liquids or gasses. Adsorption of contaminants removes organic compounds from the surrounding air, gas, or liquid streams, thus helping to purify the stream.2 Coal-based certain activated carbon is used widely by municipal water treatment authorities to remove undesirable tastes and odors from drinking water and to eliminate contaminants from industrial waste water.3 Other uses of coal-based certain activated carbon include removing color and impurities from food and chemicals, as well as removing mercury and dioxins from flue gas emissions.4 Certain activated carbon is non-toxic and has no adverse environmental effects, although once activated carbon has been used, it may take on the toxicity of adsorbed materials.5 Certain activated carbon is sold in three basic forms: powdered, granular, and pelletized.6

The antidumping duty petition in this investigation was filed on March 8, 2006.7 Petitioners are Calgon Carbon Corporation ("Calgon") and Norit Americas Inc. ("Norit"). No respondents appeared at the hearing in the final phase of this investigation.8

1 Confidential Report ("CR") at I-6 and I-11-I-12, Public Report ("PR") at I-5 and I-8-I-9. Activated carbon also may be produced via chemical activation; such activated carbon is excluded from the scope of this investigation. Chemical activation generally is used to produce a high pore volume in cellulose-based raw material such as wood or peat. Chemically activated carbon primarily is used in vapor phase applications such as automobile emissions canisters, and in certain solvent recovery applications. CR at I-8-I-9, PR at I-6-I-7.

2 CR at I-8, PR at I-6.

3 CR at I-8, PR at I-6.

4 CR at I-8-I-10, PR at I-6-I-8. Coconut-based certain activated carbon is used primarily in the gold mining and cigarette filter industries, as well as being a price premium product for home water filters. Petitioners’ Posthearing Brief at Exh. 1, p. 32 and Exh. 10.

5 CR at I-10, PR at I-7.

6 CR at I-6, PR at I-5.

7 On January 26, 2006, Petitioners in the instant investigation 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 “activated carbon” from China, which included both steam activated and chemically activated carbon in the proposed scope of investigation. As a result of that filing, the Commission instituted investigation No. 731-TA-1102 (Preliminary): Activated Carbon from China. See Notice of Initiation, Activated Carbon from China, 71 Fed. Reg. 5688 (Feb. 2, 2006). Subsequently, on February 15, 2006, Petitioners withdrew their petition at Commerce. Commerce had not initiated an investigation by that date, and the Commission discontinued its investigation effective that date. See Notice of Withdrawal of Petition, Activated Carbon from China, 71 Fed. Reg. 9155 (Feb. 22, 2006).

8 Only Cherishmet Inc., a U.S. importer of subject merchandise from China, filed a brief in the final phase of this investigation. In that brief, Cherishmet discussed only domestic like product issues.
II. DOMESTIC LIKE PRODUCT

A. In General

In determining whether an industry in the United States is materially injured or threatened with material injury by reason of imports of the subject merchandise, the Commission first defines the “domestic like product” and the “industry.”9 Section 771(4)(A) of the Tariff Act of 1930, as amended (“the Act”), defines the relevant domestic industry as the “producers as a whole of a domestic like product, or those producers whose collective output of a domestic like product constitutes a major proportion of the total domestic production of the product.”10 In turn, 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 . . . .”11

The decision regarding the appropriate domestic like product(s) in an investigation is a factual determination, and the Commission has applied the statutory standard of “like” or “most similar in characteristics and uses” on a case-by-case basis.12 No single factor is dispositive, and the Commission may consider other factors it deems relevant based on the facts of a particular investigation.13 The Commission looks for clear dividing lines among possible like products and disregards minor variations.14 Although the Commission must accept the determination of Commerce as to the scope of the imported merchandise allegedly sold at LTFV, the Commission determines what domestic product is like the imported articles Commerce has identified.15

---

12 See, e.g., NEC Corp. v. Department of Commerce, 36 F. Supp. 2d 380, 383 (Ct. Int’l Trade 1998); Nippon Steel Corp. v. United States, 19 CIT 450, 455 (1995); Torrington Co. v. United States, 747 F. Supp. 744, 749 n.3 (Ct. Int’l Trade 1990), aff’d, 938 F.2d 1278 (Fed. Cir. 1991) (“every like product determination ‘must be made on the particular record at issue’ and the ‘unique facts of each case’”). The Commission generally considers a number of factors including: (1) physical characteristics and uses; (2) interchangeability; (3) channels of distribution; (4) customer and producer perceptions of the products; (5) common manufacturing facilities, production processes and production employees; and, where appropriate, (6) price. See Nippon, 19 CIT at 455 n.4; Timken Co. v. United States, 913 F. Supp. 580, 584 (Ct. Int’l Trade 1996). No single factor is dispositive, and the Commission may consider other factors relevant to a particular investigation. The Commission looks for clear dividing lines among possible like products, and disregards minor variations. See, e.g., S. Rep. No. 249, 96th Cong., 1st Sess. 90-91 (1979); Torrington Co., 747 F. Supp. at 748-49.
14 Nippon Steel, 19 CIT at 455; Torrington, 747 F. Supp. at 748-49. See also S. Rep. No. 96-249 at 90-91 (1979) (Congress has indicated that the like product standard should not be interpreted in ‘such a narrow fashion as to permit minor differences in physical characteristics or uses to lead to the conclusion that the product and article are not ‘like’ each other, nor should the definition of ‘like product’ be interpreted in such a fashion as to prevent consideration of an industry adversely affected by the imports under consideration.”).
15 Hosiden Corp. v. Advanced Display Mfrs., 85 F.3d 1561, 1568 (Fed. Cir. 1996) (Commission may find single like product corresponding to several different classes or kinds defined by Commerce); Torrington, 747 F. Supp. at 748-752 (affirming Commission determination of six like products in investigations where Commerce found five classes or kinds).
B. **Product Description**

Commerce’s final determinations define the imported merchandise within the scope of this investigation as:

The merchandise subject to this investigation 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 (CO₂) in place of steam in this process. The vast majority of the internal porosity developed during the high temperature steam (or CO₂ gas) activation 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 investigation covers all forms of activated carbon that are activated by steam or CO₂, regardless of 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 investigation 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 investigation 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 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 CO₂) gas activated carbons are within this 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 this 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. The products under investigation are currently classifiable under Harmonized Tariff System of the United States (“HTSUS”) subheading 3802.10.00. Although HTSUS subheadings are provided for convenience and customs purposes, the written description of the scope of this proceeding is dispositive.\(^\text{16}\)

C. Domestic Like Product

In general there are three types of activated carbon: (1) carbon that has been activated using thermal processing (“certain activated carbon”); (2) carbon that has been reactivated (“reactivated carbon”), typically using thermal processing; and (3) carbon that has been activated chemically. Only the first of these, certain activated carbon, is covered by the scope of this investigation.

In the preliminary phase of this investigation, the Commission found one domestic like product consisting of certain activated carbon, coextensive with Commerce’s scope of investigation. Petitioners argue that the Commission should once again find one domestic like product consisting of certain activated carbon.\(^\text{17}\) Cherishmet argues that the Commission should define the domestic like product to include certain activated carbon, reactivated carbon, and chemically activated carbon.\(^\text{18}\)

---


\(^{17}\) Petitioners’ Posthearing Brief at 4.

\(^{18}\) ***, an importer of subject merchandise from China, did not enter an appearance in this case ***. ***. ***.

Id. The Commission is unable ***. The Commission has repeatedly stated that when an item is within Commerce’s scope, the domestic like product must include the domestically produced counterpart, or the most similar counterpart to that imported item. See *Artists’ Canvas from China*, Inv. No. 731-TA-1091 (Preliminary), USITC Pub. 3777 (May 2005) at 5-6 (“Because kits are included within the scope, even if there were no domestic production the Commission would still have to find the next ‘most similar’ article to such kits that is domestically produced . . . .”); *Certain Lined Paper School Supplies*, Inv. Nos. 701-TA-442-443 (Preliminary) and 731-TA-1095-1097 (Preliminary), USITC Pub. 3811 (October 2005) at 15 n.50; *Certain Cold-Rolled Steel Products from Australia, India, Japan, Sweden, and Thailand*, Inv. Nos. 731-TA-965, -971-72, -979, and -981 (Final), USITC Pub. 3536 (September 2002) at 10, n.31 and USITC Pub. 3437 (November 2001) (Preliminary) at 5 & n.20 (“...it is the role of Commerce, not the Commission, to determine the scope of the subject merchandise.”) and


See also, e.g., *Carbon and Certain Alloy Steel Wire Rod from China, Germany, and Turkey*, Inv. Nos. 731-TA- (continued...)
1. Whether the Domestic Like Product Should Be Defined More Broadly Than the Scope to Include Reactivated Carbon

For purposes of the preliminary determination, no party argued that the domestic like product should be defined more broadly than the scope to include reactivated carbon. Nevertheless, because both Petitioners and Respondents presented arguments during the preliminary phase of this investigation regarding whether reactivated carbon is within the domestic like product, the Commission applied its traditional six factor domestic like product analysis and found a clear dividing line between certain activated carbon and reactivated carbon. The Commission collected additional data on reactivated carbon for the final phase of this investigation. No new information has emerged in the final phase of this investigation that calls into question our earlier decision not to broaden the like product to include reactivated carbon. Based on our traditional six factor like product analysis, we define the domestic like product to be certain activated carbon, coextensive with Commerce’s scope of investigation.

Physical Characteristics and Uses

Reactivated carbon is made by thermally or chemically removing chemical species adsorbed onto used activated carbon. It appears that reactivated carbon and activated carbon cannot be physically distinguished within the same type or form of carbon (i.e., pelletized, powdered, granulated, etc.), and that both have the same general end use: to trap contaminants in liquids or gases through adsorption.

Interchangeability

Interchangeability between certain activated carbon and reactivated carbon is limited. Due to contamination and liability concerns, most reactivated carbon can be used only in its original application. Moreover, while some reactivated carbon is pooled for use in the same types of applications to which virgin product is directed, most purchasers are unwilling to buy reactivated carbon made from activated carbon that had been previously used by another end user. When asked to compare CAC and reactivated carbons, a majority of responding purchasers confirmed that either they were not interchangeable at all, or were not interchangeable for that purchaser’s desired end uses. Additionally, third-party reactivated carbons can never be used in certain beverage applications and food grade applications. Although activated carbons can be used in any applications that use reactivated carbons, reactivated carbons are frequently limited to their original application, and are used only as a cost-saving measure.

---

18 (...)continued

19 See, e.g., CIAC’s Postconference Brief at 9.

20 CR at I-15, PR at I-12.

21 CR at II-8, PR at II-5.

22 CR at II-9, PR at II-5. Third-party reactivated carbon is never used in drinking water applications.
Channels of Distribution

Even though almost all domestic producers of certain activated carbon market and sell reactivated carbon, the channels of distribution for the two products differ. Over *** percent of domestically produced certain activated carbon and reactivated carbon is sold to end users. However, certain activated carbon is sold on the commercial market to a variety of end users; in contrast, a significant amount of reactivation is performed for, and the end product returned to, the original user of the product, or produced (reactivated) and consumed internally by end users who have their own on-site reactivation facilities.

Customer and Producer Perceptions

While some customers perceive reactivated carbon to be identical to low-grade virgin activated carbons, as previously discussed, some end users accept only virgin activated carbon, and numerous other end users use only their own reactivated carbons due to contamination concerns. Many customers do not perceive reactivated carbons to be the equivalent of virgin activated carbons, hence their reluctance or inability to accept reactivated carbons. Moreover, although both Petitioners activate and reactivate carbons, they produce the two in separate facilities and market activated and reactivated carbons as distinct products. In practice, customers specify whether they want activated carbon or reactivated carbon, and no producer would provide reactivated carbon as a substitute for virgin activated carbon without the permission of the customer.

Common Manufacturing Facilities, Production Processes and Production Employees

No significant producer of activated carbon reactivates in the same facility or on the same equipment due to concerns that spent carbon could contaminate the virgin activated carbon. Generally, CAC and reactivated carbon do not use the same employees, although *** reported that some of its production personnel will occasionally work on reactivating carbon.

The evidence is mixed with regard to differences in the production processes. Petitioners state that reactivated carbon does not require the production of char from the raw materials, and that the organic compounds removed during activation are different than the adsorbed compounds removed during reactivation. Cherishmet argues that the processes are almost identical, although it acknowledges minor differences between the two processes regarding what is being carbonized, and that reactivated carbon needs to be blended with virgin activated carbon to make up for carbon lost in the reactivated carbon production process.

---

23 CR at I-14, PR at I-10.
25 CR at D-17-D-20, PR at D-3 (summarizing questionnaire response data).
26 CR at II-5, PR at II-3.
27 Transcript of the Commission’s February 27, 2007 hearing (“Hearing Tr.”) at 43 (Luberda).
29 CR at II-5, PR at II-3. *** reported that reactivated carbon accounts for *** percent of production by the personnel that produces certain activated carbon.
Price

There are also significant differences in price between the two products. Reactivated carbon sells at much lower prices than does certain activated carbon, approximately 10 to 20 percent cheaper than virgin CAC, according to several purchasers.

Conclusion

Despite similarities in physical characteristics and uses, we continue to find, on balance, a clear dividing line between certain activated carbon and reactivated carbon based on limited interchangeability, and differences in channels of distribution, manufacturing facilities and equipment, customer and producer perceptions, and price. The record in the final phase of this investigation has not changed so as to warrant a departure from the definition we adopted in the preliminary phase, that is, a single domestic like product corresponding to Commerce’s scope of investigation.

2. Whether the Domestic Like Product Should Be Defined More Broadly Than the Scope to Include Chemically Activated Carbon

In the preliminary phase of this investigation, the Commission declined to define the domestic like product more broadly than the scope to include chemically activated carbon. In its preliminary determination, the Commission applied its traditional six-factor like product analysis and determined that certain activated carbon and chemically activated carbon, within the same type or form, possess similar physical characteristics and share the same basic end use: to trap contaminants in liquids or gases through adsorption. However, differences in chemical and steam activation, and the raw material activated, create
differences in pore structure and pore size. Chemically activated carbon is more effective in vapor phase applications in the automobile industry, its primary market.

Interchangeability is limited. Certain activated carbon does not currently compete with chemically activated carbons in the domestic automobile market, despite the much higher prices paid for chemically activated carbon in that market. Although chemically activated carbon is theoretically interchangeable with certain activated carbon for certain applications, as a practical matter, the higher price of chemically activated carbon severely limits competition. While both types of carbon are sold primarily to end users, certain activated and chemically activated carbon cannot be said to share the same channels of distribution because the products are generally sold to different end users in different industries. Although the record was mixed with respect to customer and producer perceptions, it indicated that the products do not share the same manufacturing facilities, equipment, employees, and production processes. Prices for certain activated carbon and chemically activated carbon differ substantially. On these bases, in our preliminary determination, we defined the domestic like product as certain activated carbon, coextensive with the scope of the investigation.

There is no new information on the record in the final phase of this investigation to warrant a departure from the definition we adopted in the preliminary phase of this investigation. Accordingly, for the reasons stated in our preliminary determination, we continue to find in the final phase of this investigation a single like product corresponding to Commerce’s scope of investigation.

III. DOMESTIC INDUSTRY

The domestic industry is defined as the “producers as a [w]hole 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.” In defining the domestic industry, the Commission’s general practice has been to include in the industry all domestic production of the domestic like product, whether toll-produced, captively consumed, or sold in the domestic merchant market. Based on our finding that the domestic like product is certain activated carbon, we find that the domestic industry consists of all known domestic producers of certain activated carbon. The five firms that comprise the domestic industry are Calgon; Norit; California Carbon; Acticarb Tailored Products, LLC; and Cal Pacific Carbon. Calgon and Norit reportedly account for *** domestic production of certain activated carbon.

A. Related Parties

We must determine whether any producer of the domestic like product should be excluded from the domestic industry pursuant to 19 U.S.C. § 1677(4)(B). Subsection 1677(4)(B) allows the Commission, if appropriate circumstances exist, to exclude from the domestic industry producers that are related to an exporter or importer of subject merchandise or which are themselves importers. Exclusion of such a producer is within the Commission’s discretion based upon the facts presented in each investigation.

36 As discussed infra, Acticarb ceased production in 2005, while Cal Pacific Carbon ***.
In the preliminary phase of this investigation, the Commission addressed whether appropriate circumstances existed to exclude domestic producers Calgon, Norit, and California Carbon. Although the Commission found that the three were related parties, the Commission determined not to exclude any domestic producer from the domestic industry.

In the final phase of this investigation, Petitioners continue to argue that appropriate circumstances do not exist to exclude any domestic producer from the domestic industry. Petitioners, which in the aggregate, account for over 50 percent of domestic production of activated carbon, maintain that their primary interests lie in domestic production rather than importation of subject merchandise, and that their imports are insubstantial in comparison to their U.S. production. Respondents presented no arguments regarding related parties in the final phase of this investigation.

Calgon, Norit, *** reported that they imported certain activated carbon over the period of investigation. Moreover, Calgon *** affiliated with Chinese producers of certain activated carbon. These *** domestic producers accounted for 100 percent of the reported domestic production of certain activated carbon in 2006.

Calgon is a related party due to its imported subject merchandise. Calgon accounted for *** percent of reported domestic production of certain activated carbon in 2006. It is a Petitioner and the *** domestic producer of certain activated carbon. Calgon is also affiliated with ***. Calgon stated that it began importing subject merchandise from China after customers urged it to do so in the face of low prices from China. Its ratio of subject imports to domestic production was *** percent in 2006. Calgon’s operating *** as a ratio of net sales ***.

Based on the data, Calgon’s interests appear to lie more in domestic production than in importation. Calgon’s financial performance was *** during most of the POI; however, it had a more pronounced *** in its financial performance during the period of investigation. Therefore, we do not find that Calgon’s domestic production operations derived such significant financial benefit from subject imports as to warrant excluding it from the domestic industry. Moreover, no party has argued that Calgon should be excluded from the domestic industry. On these grounds, we do not find that appropriate circumstances exist to exclude Calgon from the domestic industry.

Norit is a related party due to its imported subject merchandise. Norit accounted for *** percent of reported domestic production of certain activated carbon in 2006. It is a Petitioner and the *** domestic producer of certain activated carbon. The ratio of its subject imports to its production never
rose above *** percent during the period of investigation, and was *** percent in 2006. Norit’s operating ***.

Based on the data, Norit’s interests appear to lie in domestic production. Its domestic production operations do not appear to have benefitted financially from the subject imports, as it imported *** while experiencing ***. Moreover, no party has argued that Norit should be excluded from the domestic industry. We do not find that appropriate circumstances exist to exclude Norit from the domestic industry.

California Carbon accounted for only *** percent of domestic production of certain activated carbon in 2006. Additionally, it is ***. We determine to exclude California Carbon from the domestic industry due to its ***. We conclude that California Carbon’s principal interest lies in ***. However, because ***, our decision to exclude California Carbon from the domestic industry does not materially affect the data set that we analyzed in reaching our determination.

In sum, we do not find that appropriate circumstances exist to exclude Calgon or Norit from the domestic industry. We exclude California Carbon from the domestic industry. Accordingly, we conclude that the domestic industry consists of all known producers of certain activated carbon, except California Carbon.

IV. MATERIAL INJURY BY REASON OF LESS THAN FAIR VALUE IMPORTS FROM CHINA

In the final phase of antidumping duty investigations, the Commission determines whether an industry in the United States is materially injured by reason of the imports under investigation. In making this determination, the Commission must consider the volume of imports, their effect on prices for the domestic like product, and their impact on domestic producers of the domestic like product, but only in the context of U.S. production operations. The statute defines “material injury” as “harm which

---

47 CR at III-4, PR at III-3.
48 CR/PR at Table VI-2.
49 Norit states that it did not benefit from its imports of subject merchandise, which were ***; rather, Norit claims to have benefitted from the filing of the antidumping case in 2006. Petitioners’ Prehearing Brief at 21-22.
51 CR at III-4 n. 22, PR at III-3, n. 22. *** percent of California Carbon’s operations were used for ***. CR at III-4, PR at III-3.
52 We note that no party has argued that California Carbon should have been excluded from the domestic industry.
53 Negligibility, pursuant to 19 U.S.C. § 1677(24), is not an issue in this investigation. The petition was filed on March 8, 2006. Based on official Commerce statistics, subject imports from China accounted for approximately 58.7 percent of total imports of certain activated carbon between March 2005 and February 2006, the most recent 12-month period for which data were available that preceded the filing of the petition. CR/PR at Table IV-4.
54 In the final phase of this investigation, Respondents presented no arguments addressing whether the domestic industry is being materially injured “by reason of” the imports under investigation.
56 19 U.S.C. § 1677(7)(B)(i). The Commission “may consider such other economic factors as are relevant to the determination” but shall “identify each [such] factor . . . and explain in full its relevance to the determination.” 19 U.S.C. § 1677(7)(B). See also Angus Chemical Co. v. United States, 140 F.3d 1478 (Fed. Cir. 1998).
is not inconsequential, immaterial, or unimportant."57 In assessing whether the domestic industry is materially injured by reason of subject imports, we consider all relevant economic factors that bear on the state of the industry in the United States.58 No single factor is dispositive, and all relevant factors are considered “within the context of the business cycle and conditions of competition that are distinctive to the affected industry.”59

A. Conditions of Competition and the Business Cycle

The following conditions of competition are pertinent to our analysis of the impact of certain activated carbon imports from China on the domestic industry.

1. Demand Conditions

Apparent U.S. consumption of certain activated carbon increased by *** percent by quantity over the period of investigation.60 Apparent U.S. consumption of certain activated carbon increased from *** in 2003, to *** in 2004, and to *** in 2005, before declining *** in 2006.61 Market participants that responded to the Commission’s questionnaires generally agreed that demand for certain activated carbon rose over the period of investigation.62 63 Petitioners state that demand for certain activated carbon is expected to grow moderately over the next several years due to new regulations governing clean air and water, the increased popularity of bottled waters and other beverages, and new mercury emissions standards for coal utilities.64

2. Supply Conditions

The Commission received questionnaire responses from three domestic producers of certain activated carbon, two of which are Petitioners, Calgon and Norit. Petitioners account for approximately

59 Id.
60 CR/PR at Table C-1.
61 CR/PR at Table C-1. Because official Commerce import statistics include chemically activated carbon, which is outside the scope of this investigation, staff netted out the chemically activated carbon using proportions gathered from questionnaire data to derive total apparent consumption of certain activated carbon.
62 CR at II-7-II-8, PR at II-4-II-5.
63 While Commissioner Okun concurs that demand for certain activated carbon increased over the period of investigation, she notes that this demand may have been driven in part by the availability of low priced virgin certain activated carbon. This may have resulted in end users deciding to purchase increased quantities of virgin product instead of reactivating used product. CR at E-16, PR at E-7. The price increases achieved in 2006 also may explain the *** decline in apparent U.S. consumption for certain activated carbon as reactivation of used carbon is a viable alternative for many customers. CR at II-7, PR at II-4. See also Petitioners’ Posthearing Brief at Exh. 7 (page 1) (noting that virgin carbon price increases make reactivated carbon an economical alternative).
64 See Petitioners’ Prehearing Brief at 28. In general, Petitioners state that new mercury emissions standards could have a significant effect on the demand for certain activated carbon, but posit that it is unlikely that this effect will be felt in the foreseeable future as the first stage of the implementation of the new standard will not occur until 2010 with the final implementation not occurring until 2018. CR at II-8, PR at II-3; Hearing Tr. at 143 (Thompson).
The petition identified five firms that produced activated carbon during 2003-2006. In addition to Petitioners, California Carbon, ***, produced *** pounds of certain activated carbon in 2006, accounting for *** percent of domestic production. CR at III-4, PR at III-3. The petition also lists Acticarb Tailored Products, LLC, which stopped producing certain activated carbon in October 2005 and is not currently in operation, and Cal Pacific Carbon, ***.

Approximately *** percent of U.S. producers’ U.S. shipments of certain activated carbon went to end users in each year of the period of investigation, with the rest going to distributors. A higher share of importers’ U.S. shipments of subject certain activated carbon went to distributors, with shipments to end users accounting for between 66 percent and 74 percent of U.S. imports from China during the period of investigation.

Throughout the period of investigation, the principal suppliers of activated carbon to the U.S. market were the domestic producers. The next largest suppliers were importers of subject merchandise. The remaining portion of the market was supplied by imports of certain activated carbon from nonsubject countries. Based on official Commerce data, Sri Lanka, the Philippines, Indonesia, and Thailand were the largest sources for non-subject imports of activated carbon over the period examined, accounting for nearly *** percent of U.S. certain activated carbon imports in 2006.

During the period of investigation, all of the certain activated carbon produced domestically, and virtually all of the certain activated carbon imported from China, were coal-based. Almost all of the certain activated carbon imports from nonsubject countries, *** percent in 2006, were coconut-based.

Domestic producer *** produces mainly *** certain activated carbon, *** domestic producer *** produces mainly *** certain activated carbon. Shipments of subject imports and nonsubject imports are mainly *** certain activated carbon.

As a share of total U.S. consumption, domestically produced certain activated carbon fell from *** percent in 2003, to *** percent in 2004, and to *** percent in 2005, before increasing to *** percent in 2006.

Calgon is the *** producer of certain activated carbon, and Norit is the ***, accounting for *** and *** percent of reported domestic production in 2006, respectively.

Approximately *** percent of U.S. producers’ U.S. shipments of certain activated carbon went to end users in each year of the period of investigation, with the rest going to distributors. A higher share of importers’ U.S. shipments of subject certain activated carbon went to distributors, with shipments to end users accounting for between 66 percent and 74 percent of U.S. imports from China during the period of investigation.

Throughout the period of investigation, the principal suppliers of activated carbon to the U.S. market were the domestic producers. The next largest suppliers were importers of subject merchandise. The remaining portion of the market was supplied by imports of certain activated carbon from nonsubject countries. Based on official Commerce data, Sri Lanka, the Philippines, Indonesia, and Thailand were the largest sources for non-subject imports of activated carbon over the period examined, accounting for nearly *** percent of U.S. certain activated carbon imports in 2006.

During the period of investigation, all of the certain activated carbon produced domestically, and virtually all of the certain activated carbon imported from China, were coal-based. Almost all of the certain activated carbon imports from nonsubject countries, *** percent in 2006, were coconut-based.

Domestic producer *** produces mainly *** certain activated carbon, *** domestic producer *** produces mainly *** certain activated carbon. Shipments of subject imports and nonsubject imports are mainly *** certain activated carbon.

As a share of total U.S. consumption, domestically produced certain activated carbon fell from *** percent in 2003, to *** percent in 2004, and to *** percent in 2005, before increasing to *** percent in 2006.

---

65 CR at III-1, PR at III-1. The petition identified five firms that produced activated carbon during 2003-2006. In addition to Petitioners, California Carbon, ***, produced *** pounds of certain activated carbon in 2006, accounting for *** percent of domestic production. CR at III-4, PR at III-3. The petition also lists Acticarb Tailored Products, LLC, which stopped producing certain activated carbon in October 2005 and is not currently in operation, and Cal Pacific Carbon, ***.

66 CR/PR at Tables III-2-III-3.

67 CR/PR at Table II-1.

68 CR/PR at Table II-1.

69 CR/PR at Table IV-6.

70 CR/PR at Table IV-6.

71 CR/PR at Table IV-6.

72 CR at IV-4, n. 6, PR at IV-2, n.6.

73 CR at I-6, IV-1, PR at I-5, IV-1.

74 CR at IV-1, n.4, PR at IV-1, n.4. *** percent of nonsubject imports were coal- and peat-based and were produced by domestic producer *** operations in Europe. CR/PR at Table IV-1, Hearing Tr. at 118 (Wruble).

75 Calgon’s U.S. shipments of certain activated carbon in 2006 were distributed as follows: ***. CR at III-2, n.9, PR at III-2, n.9. Norit’s U.S. shipments of certain activated carbon in 2006 were distributed as follows: ***. CR at III-3, n.18, PR at III-3, n.18.

76 Shipments of subject certain activated carbon from China in 2006 were distributed as follows: 58.6 percent granular, 23.5 percent powdered, and 17.9 percent pelletized. CR at IV-1, PR at IV-1. Shipments of nonsubject certain activated carbon in 2006 were distributed as follows: 89.5 percent granular, 9.6 percent powdered, and 0.9 percent pelletized. CR at IV-2, PR at IV-1.
Subject imports from China, as a share of total U.S. consumption, rose from *** percent in 2003 to *** percent in 2004, before declining *** to *** percent in 2005, and falling to *** percent in 2006. As a share of total U.S. consumption, total nonsubject imports increased from *** percent in 2003, to *** percent in 2004, and to *** percent in 2005, before declining to *** percent in 2006. Approximately *** of domestic producers’ production capacity was dedicated to export during the period.

U.S. producers’ reported capacity utilization for certain activated carbon rose from *** percent in 2003 to *** percent in 2006. Given the capital intensive nature of certain activated carbon production and the highly integrated nature of the production process, Petitioners assert that activated carbon plants are designed for, and depend on, running at full capacity, 24 hours a day, seven days a week, except for scheduled maintenance shutdowns.

Another supply condition relevant to the domestic industry is the increasing cost of raw materials and energy. Coal is the principal input in the production of domestic producers’ certain activated carbon, accounting for *** percent of Norit’s total costs and *** percent of Calgon’s total costs. The price of coal rose significantly over the period. Electricity and natural gas, also used in the production process of certain activated carbon, accounted for an increasing share of total cost of goods sold because of rising energy costs over the period.

3. Substitutability

The majority of responding market participants reported that domestically produced certain activated carbon and subject imports are generally interchangeable. *** domestic producers originally responded that they are “always” interchangeable, while a large majority of responding purchasers, and half of the responding importers reported that they are “always” or “frequently” interchangeable. Petitioners assert that subject imports have been able to penetrate virtually all markets for coal-based

---

77 CR/PR at Table C-1.
78 CR/PR at Table C-1. In 2006, domestic producer Calgon was *** importer of subject merchandise, accounting for *** percent of subject imports. CR/PR at Table IV-1.
79 CR/PR at Table C-1. In 2006, domestic producer Calgon was *** importer of nonsubject merchandise, accounting for *** percent of nonsubject imports. CR/PR at Table IV-1. *** of Calgon’s imports from nonsubject sources were coconut-based. CR at IV-1, PR at IV-1.
80 CR/PR at Table C-1.
81 CR/PR at Table III-2.
82 Petitioners’ Prehearing Brief at 30; Hearing Tr. at 30 (Hudgens), 71 (Thompson), 141 and 173 (O’Brien). Calgon states that a ***. CR at II-4, PR at II-4.
83 CR at V-1, PR at V-1.
84 CR at V-1, PR at V-1.
85 CR at V-1, PR at V-1.
86 CR at II-17-18, PR at II-10.
87 CR/PR at Table II-6. Eighteen of 26 responding purchasers, and 13 of 26 responding importers reported that they are “always” or “frequently” interchangeable. ***. *** U.S. Importers’ Questionnaire Response at 5.
steam-activated carbon.\textsuperscript{88} \textsuperscript{89} The majority of coal-based activated carbon, either domestically produced or imported from China, is used in the United States for water treatment (drinking and waste water), while the remaining coal-based certain activated carbon is used in a variety of applications in food, chemical, pharmaceutical, gas/air, and other industries.\textsuperscript{90}

Reports were mixed as to the extent to which domestically produced certain activated carbon and nonsubject imports are interchangeable. *** domestic producers reported that they are “always” interchangeable, while a majority of responding purchasers and importers reported that they are only “sometimes” or “never” interchangeable.\textsuperscript{91} The most commonly stated reason for this lack of interchangeability was the unavailability in the United States of domestically produced coconut-based certain activated carbon.\textsuperscript{92}

Notwithstanding *** that nonsubject imports were “always” interchangeable with domestically produced certain activated carbon, Petitioners subsequently argued that nonsubject coconut-based certain activated carbon and coal-based certain activated carbon are not direct substitutes for one another, and are not “completely” interchangeable.\textsuperscript{93} The record indicates that they have different physical structures.\textsuperscript{94} Specifically, coconut-based activated carbon usually has greater hardness and smaller pore sizes, making coconut-based carbons better suited than coal-based carbons for certain applications like gold mining, cigarette filters, and specialty-oriented home water filter producers that price their filters as premium products.\textsuperscript{95} Additionally, ***.\textsuperscript{96}

\section{Volume of Subject Imports}

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

\textsuperscript{88} Hearing Tr. at 48 (O’Brien). The only application in which subject imports do not participate is in some specialty respirator applications for the U.S. military. \textsuperscript{Id.}

\textsuperscript{89} Moreover, it does not appear that subject imports have been unable to penetrate certain markets due to municipalities enacting their own “Buy American” regulations for certain activated carbon. When asked about this issue, only three of 32 purchasers stated that some of their sales (representing five percent to 20 percent of their total purchases) were limited to domestically produced certain activated carbon by law, while four purchasers also stated that a certain percentage of their purchases were limited to domestically produced certain activated carbon due to the requirements of their customers. CR at II-11, PR at II-7.

\textsuperscript{90} Petitioners’ Prehearing Brief at Exh. 1, p.1. (Response to Commissioner Okun’s Question), and Exh. 6.

\textsuperscript{91} CR/PR at Table II-6. Six out of 11 responding purchasers, and nine out of 17 responding importers reported that they are “sometimes” or “never” interchangeable.

\textsuperscript{92} CR at II-18, PR at II-10-II-11. In 2006, coconut-based certain activated carbon accounted for *** percent of all reported nonsubject imports. CR at IV-1, n. 4, PR at IV-1, n. 4.

\textsuperscript{93} Petitioners’ Prehearing Brief at 31-33.

\textsuperscript{94} CR at I-9, PR at I-7.

\textsuperscript{95} CR at I-9, PR at I-7, Hearing Tr. at 53 (Rester) and 54-55 (O’Brien). Petitioners testified that coal-based carbons are not used in the gold mining and cigarette filter markets, and there is little competition with coal-based carbons in the upscale home filter market due to the premium nature and price of the coconut-based product. Hearing Tr. at 54-55 (O’Brien). These three markets account for approximately *** percent of ***. Petitioners’ Posthearing Brief at Exh. 10.

\textsuperscript{96} CR at IV-2, PR at IV-1. Less than *** percent of Calgon’s sales of coconut-based certain activated carbon was sold to customers that also purchased coal-based certain activated carbon. CR at IV-2, PR at IV-1.
We find that subject import volume was significant during the period examined both in absolute terms and relative to consumption and production in the United States, and that the increase in volume was also significant.97

The Commission collected annual data for the period January 2003 to December 2006. As indicated above, the petition in this investigation was filed on March 8, 2006. The 2006 data indicate that the domestic industry’s condition improved *** as domestic prices increased almost immediately after the petition was filed, while the volume of subject imports declined rapidly after preliminary duties were announced by Commerce in October 2006. We find that the improvements in the domestic industry in 2006 were related to the pendency of this investigation. While the 2006 data are pertinent and continue to show injury, we find that the trends from 2003 through 2005, prior to the pendency of this investigation and the imposition of preliminary duties by Commerce in 2006, more clearly reflect the impact of unrestrained subject imports on the domestic industry. We therefore give less weight to the 2006 data for purposes of our material injury analysis.98 99

In absolute terms, the volume of subject imports increased by *** percent from 2003 to 2005, from *** pounds in 2003 to *** pounds in both 2004 and 2005, before declining *** to *** pounds in

---

97 19 U.S.C. § 1677(7)(I); SAA at 854.
99 Vice Chairman Aranoff has considered “whether any change in the volume, price effects, or impact of [subject] imports . . . is related to the pendency of the investigation . . . .” 19 U.S.C. § 1677(7)(I). Like her colleagues, she observes that various indicators of the domestic industry’s trade and financial performance generally declined from 2003 through 2005, but improved in 2006, concurrent with the filing of the petition. See CR and PR at Table C-1 (providing data as to the quantity, value, and average unit value of U.S. producers’ U.S. shipments, as well as the industry’s market share, COGS to net sales ratio, and operating income (or loss) to net sales ratio). The Vice Chairman concludes that the changes are related to the pendency of the investigation. Not only do the changes observed in 2006 represent a reversal of the trends exhibited over the previous three years, but there is record evidence that the investigation was considered an important market factor in industry circles. The petition was the subject of various articles in the trade press, including some expressly warning that higher prices would result. Petitioners’ Posthearing Brief at Exhibit 7. The record also includes ***. Petitioners’ Posthearing Brief at Exhibit 7. Furthermore, the quantity of subject merchandise from China ***. Petitioners’ Prehearing Brief at Exhibit 1. Based on this record evidence, the Vice Chairman joins her colleagues in determining that changes in the volume, price effects, and impact of subject imports in 2006 are related to the pendency of the investigation.

The Vice Chairman declines, however, to “reduce the weight accorded to [the post-petition] data,” as she might have in her discretion under the statute. 19 U.S.C. § 1677(7)(I). In her view, the *** improvement of the domestic industry in 2006, after declines in previous years, confirms other record evidence of the causal link between the volume and price effects of subject imports and the material injury experienced by the domestic industry. Moreover, the 2006 data are indicative of the continuing injurious effect of subject imports, even if the effect is somewhat less than in some prior years. While various industry performance indicators improved in 2006 over 2005, several critical measures remained depressed in 2006 compared to 2003, including the domestic industry’s market share, its COGS to net sales ratio, and its operating income (or loss) to net sales ratio. CR/PR at Table C-1. Consistent with those indicators, subject import volumes declined to *** in 2006 compared to 2005 and 2004, subject imports generally continued to undersell the domestic product, prices for the domestic product generally remained flat, and confirmed instances of lost sales due to competition from subject imports continued ***. CR/PR at Tables IV-5 and V-6 and Figures V-2 to V-4.
2006. As a ratio to U.S. production, subject imports increased from *** percent in 2003 to *** percent in 2005, before declining to *** percent in 2006.101

The share of the quantity of U.S. apparent consumption held by subject imports increased by *** percentage points from 2003 to 2005, rising from *** percent in 2003 to *** percent in 2004, before decreasing *** percent in 2005, and falling to *** percent in 2006.102 As the market share held by subject imports rose from the start of the period of investigation, the share held by the domestic industry fell. While total apparent U.S. consumption increased by *** percent from 2003 to 2005, the share of the quantity of apparent U.S. consumption represented by U.S. producers’ U.S. shipments declined from *** percent in 2003 to *** percent in 2004, and then to *** percent in 2005, an overall decrease of *** percentage points from 2003 to 2005.103 The share of the quantity of apparent U.S. consumption represented by U.S. producers’ U.S. shipments rose to *** percent in 2006.104

The volume of nonsubject imports and their U.S. market share also increased over the period examined.105 The volume of nonsubject imports of certain activated carbon measured by quantity increased from *** pounds in 2003 to *** pounds in 2004 and further to *** pounds in 2005, before falling to *** pounds in 2006.106 Nonsubject imports’ share of total apparent consumption increased from *** percent in 2003, to *** percent in 2004, and rose to *** percent in 2005, an overall increase of *** percentage points from 2003 to 2005, before declining to *** percent in 2006.107

While nonsubject imports increased absolutely and as a share of the quantity of apparent U.S. consumption, these increases do not diminish the significance of the increase of subject imports both absolutely and relative to consumption. In absolute terms, the volume of subject imports was at least 150 percent of the volume of nonsubject imports over the entire period. Moreover, as explained above, there is limited substitutability of nonsubject coconut-based imports with the coal-based domestic production and subject imports. Thus, while the increases in subject import volumes and market share came primarily at the expense of the domestic industry, increases in the nonsubject imports reflect increased demand for the coconut-based product for its specific end uses. Accordingly, we find that the volume, and the increase in volume, of subject imports are significant both in absolute terms and relative to consumption and production in the United States.

C. Price Effects of the Subject Imports

Section 771(C)(ii) of the Act provides that, in evaluating the price effects of subject imports, the Commission shall consider whether –

---

100 CR/PR at Table C-1. Official Commerce import statistics include chemically activated carbon, which is outside the scope of this investigation. In order to derive imports of certain activated carbon, Commission staff revised these figures downward using as a guide the proportions of certain activated carbon and chemically activated carbon reported in importer questionnaires. See, e.g., CR/PR at Table C-1.

101 CR/PR at Table IV-7.
102 CR/PR at Table IV-10.
103 CR/PR at Table IV-10.
104 CR/PR at Table C-1.
105 CR/PR at Table IV-10.
106 CR/PR at Table C-1.
107 CR/PR at Table C-1. Nonsubject imports’ share of the quantity of total apparent consumption was *** percent in 2003.
(I) there has been significant price underselling by the imported merchandise as compared with the price of domestic like products of the United States, and (II) the effect of imports of such merchandise otherwise depresses prices to a significant degree or prevents price increases, which otherwise would have occurred, to a significant degree.108

The record indicates that subject imports of certain activated carbon from China were generally substitutable for the domestic like product.109 It is generally agreed that as long as certain activated carbon meets the specifications required for an end use in question, price is the largest single factor affecting purchasing decisions.110 Price was identified by numerous purchasers as either the most important or second most important factor affecting purchasing decisions.111 A large majority of responding purchasers also listed price as “very important” in their purchasing decisions.112 By and large, purchasers found product from China and the United States to be fairly comparable, except in price, where almost all purchasers reported that the domestic product was inferior – higher in price – to imports from China.113

A majority of responding purchasers reported that they “always” or “usually” purchase the lowest-priced product.114 Twelve of fourteen responding producers indicated that they had increased shipments of certain activated carbon from China over the last four years, while six of these purchasers indicated that purchases of domestically produced certain activated carbon have decreased during this same time period.115 Price was the most commonly given reason for these trends.116 U.S. producers and importers provided quarterly pricing data for three types of certain activated carbon.117 Three U.S. producers and 21 importers provided usable pricing data, although not all firms

---

109 CR/PR at Table II-6.
110 CR at II-10, PR at II-6. Despite the importance of price, the record does indicate that non-price factors can affect purchasing decisions. Other factors listed by the majority of purchasers as very important in their purchasing decisions include product availability, delivery terms and times, product consistency, quality, and reliability of supply. CR/PR at Table II-3.
111 CR/PR at Table II-2. Eight purchasers reported that price was the third most important factor in purchasing decisions. Twenty out of 32 purchasers reported that quality/meets specifications was the most important factor.
112 CR/PR at Table II-3.
113 CR/PR at Table II-4 (18 of 21 purchasers).
114 CR at II-15, PR at II-11. Seventeen of 30 responding purchasers reported that they “always” or “usually” purchase the lowest-priced product.
115 CR at II-15, PR at II-11.
116 CR at II-15, PR at II-11.
117 The Commission collected data on the following types of certain activated carbon: (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; (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 (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. CR at V-5, PR at V-3.
reported pricing for all three products. By quantity, pricing data reported by responding firms accounted for approximately *** percent of U.S. commercial shipments of U.S.-produced certain activated carbon and approximately 41.8 percent of U.S. commercial shipments of certain activated carbon produced in China.

The quarterly price comparison data for Products 1 through 3 showed substantial and consistent underselling by subject imports throughout the period. From 2003-2005, subject imports undersold the domestic like product in 34 of the 36 quarters. In 2006, during the pendency of this investigation, subject imports undersold the domestic like product in 11 of the 12 quarters, albeit at smaller margins in the last two quarters after the filing of the petition. For all three products, the margins of underselling were almost all in double digits, and ranged as high as 58.3 percent. Based on the foregoing, we find that there has been significant price underselling of the domestic like product by subject imports.

We have also considered movements in certain activated carbon domestic prices over the period of investigation. The Commission’s pricing data for Products 1 and 3 show fluctuations within a band, while pricing data for Product 2 show a decrease in domestic prices. We find pricing movements have varied with no clear trend. Therefore, we do not find evidence that subject imports are depressing domestic prices to a significant degree.

We do find, however, that subject imports have prevented domestic price increases that otherwise would have occurred to a significant degree. The domestic industry’s cost of goods sold (“COGS”) as a share of net sales increased steadily throughout the period of investigation from *** percent in 2003 to *** percent in 2005, before falling somewhat to *** percent in 2006. We would have expected domestic producers to raise prices as costs increased in a market with rising demand over the period of investigation. However, these data indicate that as the domestic industry’s costs increased, and significant volumes of lower priced subject imports entered the U.S. market, the domestic producers were unable to raise their prices to cover increasing costs. We therefore find evidence of price suppression in the form of a cost-price squeeze.

---

118 CR at V-6, PR at V-4. Certain activated carbon is sold on both a spot and a contract basis. CR at V-4, PR at V-3.
119 CR at V-6, PR at V-4.
120 CR/PR at Tables V-1, V-2, V-3.
121 CR/PR at Tables V-1, V-2, V-3.
122 CR/PR at Tables V-1, V-2, V-3.
123 Commissioner Lane disagrees that there is no clear trend in price movement and finds that there is an indication of meaningful price depression particularly in the pricing data for 2003 through 2005, before the pendency of this investigation. Although quarterly pricing data shows variability both upward and downward from quarter to quarter, prices still trended downward and weighted average annual prices displayed a reasonably steady downward trend. Prices of product 2 ***. Product 1 is the ***. Even though there is both upward and downward price movement on a quarterly basis, Commissioner Lane believes that the data show a downward trend in prices which is reflective of price depression.
124 CR/PR at Table VI-1.
125 We note that the price of subject imports rose significantly during 2006, particularly in the last two quarters. The Chinese price for Product 1 was $*** per pound in the last quarter of 2006 compared to $*** per pound in the last quarter of 2005; the Chinese price for Product 2 was $*** per pound in the last quarter of 2006 compared to $*** per pound in the last quarter of 2005; and the Chinese price for Product 3 was $*** per pound in the last quarter of 2006 compared to $*** per pound in the last quarter of 2005. CR/PR at Tables V-1, V-2, V-3. As discussed in volume, we give less weight to the 2006 data for purposes of our material injury analysis as we find that the improvement evident in the pricing data for 2006 are related to the pendency of the investigation.
Confirmed lost sales and lost revenues provide additional support for our finding that subject imports have taken sales from U.S. producers and have suppressed prices to a significant degree. Petitioners provided *** lost sales allegations and *** lost revenue allegations from 2003-2005. Commission staff confirmed $*** in total lost sales and $*** in annual lost revenue. Petitioners alleged an additional *** lost sales that took place during 2006. Commission staff confirmed $*** of those lost sales. By and large, price was the reason given for choosing the Chinese product. Many of the lost sales were to municipal water treatment facilities which, in many cases, must accept the lowest-priced product that meets its required standards. These confirmed lost sales and revenues support a finding that competition from subject imports prevented domestic producers from raising prices to cover increases in costs, even as demand increased over the period of investigation.

For the foregoing reasons, we find that subject imports have had a significant adverse price effect on the U.S. industry.

D. Impact of the Subject Imports

Section 771(7)(C)(iii) provides that the Commission, in examining the impact of the subject imports on the domestic industry, “shall evaluate all relevant economic factors which have a bearing on the state of the industry.” These factors include output, sales, inventories, capacity utilization, market share, employment, wages, productivity, profits, cash flow, return on investment, ability to raise capital, research and development, and factors affecting domestic prices. No single factor is dispositive and all relevant factors are considered “within the context of the business cycle and conditions of competition that are distinctive to the affected industry.”

Consistent with our findings that the volume of subject imports and the increases in that volume were significant, and that there was significant underselling and price suppression, we find that subject imports are having a significant adverse impact on the domestic certain activated carbon industry.

---

126 CR at V-12, PR at V-9.
128 CR at V-13, PR at V-9. In its final affirmative determination for subject certain activated carbon from China, Commerce calculated a weighted-average dumping margin of 62.08 percent for Jacobi Carbons AB, 73.60 percent for 20 specific exporters, 78.89 percent for Calgon Carbon Tianjin Co., Ltd., and a China-wide rate of 228.11 percent applicable to all other exporters. Notice of Final Determination of Sales at Less Than Fair Value, Certain Activated Carbon from China, 72 Fed. Reg. 9508 (March 2, 2007).
129 19 U.S.C. § 1677(7)(C)(iii); see also SAA at 851 and 885 (“In material injury determinations, 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 also may demonstrate that an industry is facing difficulties from a variety of sources and is vulnerable to dumped or subsidized imports.”). SAA at 885.
Industry data show declining overall trends, which are most evident in the financial data, until 2006, after the petition in this investigation was filed.\textsuperscript{132,133}

Regarding trade data, we note that performance indicators were mixed over the period examined. U.S. producers’ production of certain activated carbon decreased irregularly from 2003 to 2005, but increased in 2006.\textsuperscript{134} Even though domestic consumption of certain activated carbon increased *** percent from 2003 to 2005, domestic producers’ total shipments of certain activated carbon declined by *** percent by quantity and *** percent by value, before both increased in 2006.\textsuperscript{135} Overall industry capacity fell from 2003 to 2005, before increasing in 2006, while capacity utilization rose irregularly from *** percent in 2003 to *** percent in 2005, and then increased to *** percent in 2006.\textsuperscript{136} The average number of production and related workers and hours worked for certain activated carbon experienced an overall decline from 2003 to 2006.\textsuperscript{137} Wages paid increased *** from 2003 to 2005.\textsuperscript{138}

Many of the domestic industry’s consolidated financial indicators declined overall from 2003-2005, before recovering only somewhat in 2006. *** fell steadily by *** percent from 2003 to 2005, and was *** percent lower in 2006 than in 2003.\textsuperscript{139} The domestic industry’s *** fell by *** percentage points from 2003 to 2005, and was *** percentage points lower in 2006 than in 2003. Operating margins declined from *** percent in 2003 to *** percent in 2004, and fell further to *** percent in 2005, before increasing to *** percent in 2006.\textsuperscript{140}

\textsuperscript{132} As discussed above, under the post-petition effects provision we give less weight to the data for 2006.

\textsuperscript{133} ***, Calgon contends that it was forced to begin importing certain activated carbon from China because its customers urged it to do so in the face of extremely low prices from China. Hearing Tr. at 22 (O’Brien). Calgon has stated that it was conscious not to undercut prices for its domestic production to the extent possible, and notes that its subject imports ***. Petitioners’ Prehearing Brief at 56. Moreover, ***. Petitioners’ Prehearing Brief at Exh. 2.

\textsuperscript{134} Production increased from *** pounds in 2003 to *** pounds in 2004, fell to *** pounds in 2005, before increasing to *** pounds in 2006. CR/PR at Table III-2.

\textsuperscript{135} U.S. producers’ U.S. shipments by quantity declined from *** pounds in 2003 to *** pounds in 2004, and then to *** pounds in 2005, before increasing to *** pounds in 2006. U.S. producers’ U.S. shipments by value declined from $*** in 2003 to $*** in 2004, and then to $*** in 2005, before increasing to $*** in 2006. CR/PR at Table III-2.

\textsuperscript{136} CR/PR at III-2. Due to the capital-intensive nature of the production process, certain activated carbon plants are designed to run continuously at full capacity, except for scheduled maintenance shutdowns. Petitioners’ Prehearing Brief at 30; Hearing Tr. at 30 (Hudgens), and 173 (O’Brien). Despite increasing demand for certain activated carbon throughout the period of investigation, low-priced competition from Chinese imports has forced U.S. producers to reduce prices (or not raise them) to maintain volumes, rather than cut sales. Hearing Tr. at 30 (Hudgens). By 2005, contract prices could not ***. In 2006, due to the pendency of this investigation, the domestic industry was ***. Compare Tables V-1-V-3 with Table VI-1.

\textsuperscript{137} The average number of production workers decreased irregularly from *** in 2003 to *** in 2005, before increasing *** to *** in 2006. Hours worked decreased irregularly from *** in 2003 to *** in 2005, and continued to fall to *** in 2006. CR/PR at Table III-2.

\textsuperscript{138} CR/PR at Table III-3.

\textsuperscript{139} CR/PR at Table C-1. *** decreased from $*** in 2003 to $*** in 2004, then fell to *** in 2005, before increasing to $*** in 2006. CR/PR at Table VI-1.

\textsuperscript{140} CR/PR at Table VI-1.
Net sales measured by quantity and value decreased by *** percent and *** percent, respectively, from 2003 to 2005.\textsuperscript{141} From 2005 to 2006, net sales by quantity increased by *** percent, and increased by value by *** percent. Despite domestic consumption declining *** from 2005 to 2006, the domestic industry was able to increase both its prices and quantities of sales as the volume of low-priced subject imports declined.\textsuperscript{142}

As discussed previously, COGS as a ratio to net sales increased steadily from 2003 to 2005. COGS was *** percent of net sales in 2003, and increased steadily to *** percent of net sales in 2005, before declining to *** percent of sales in 2006.\textsuperscript{143} Declines in U.S. industry performance indicators occurred as subject imports entered the U.S. market in increased and significant volumes, and gained market share almost exclusively at the expense of the domestic industry.\textsuperscript{144} At the same time, subject imports undersold the domestic like product, typically by double-digit margins, and suppressed domestic prices to a significant degree. In a period of rising raw material and energy costs, domestic producers were not able to raise prices sufficiently to cover these costs.

We conclude that subject imports had an adverse impact on the condition of the domestic industry during the period of investigation. We find that the absolute and relative volume, and the increase in volume of subject imports, as well as the underselling by the subject imports, are significant. As subject imports captured market share, they suppressed domestic prices to a significant degree, causing declines in the domestic industry’s financial performance.\textsuperscript{145} From 2003-2005, *** and net sales measured by both quantity and value, declined as the domestic industry lost market share, and it was not until 2006 that any of these financial indicators began to improve. This modest improvement in 2006 occurred when the domestic industry was able to (1) raise prices after the filing of the petition in this investigation, and (2) gain market share because of the reduction of the volume of low-priced Chinese imports after the imposition of the preliminary duty deposits by Commerce.

We find that the record contains substantial evidence showing that subject imports had a causal connection to the injury experienced by the domestic industry. While we have given reduced weight to post-petition data in 2006 for the purpose of evaluating levels and trends of unrestrained subject imports and their relationship to levels and trends of injury to the domestic industry, record evidence for the period of time after the petition was filed and after preliminary duties were imposed further supports the finding that subject imports were a cause of material injury to the domestic industry. After the filing of the petition, prices in the domestic market increased. Moreover, after the preliminary affirmative determination was made by Commerce, the quantity of subject imports declined. The combination of

\textsuperscript{141} CR/PR at Table VI-1. Net sales measured by quantity decreased from *** pounds in 2003 to *** pounds in 2004, and to *** pounds in 2005, before increasing to *** pounds in 2006. Net sales measured by value decreased from $*** in 2003 to $*** in 2004, and to $*** in 2005, before increasing to $*** in 2006. CR/PR at Table VI-1.

\textsuperscript{142} As we have noted previously, the decline in the volume of subject imports coincided with the imposition of preliminary duties and the modest improvement in the financial condition of the domestic industry coincided with the decline in subject imports.

\textsuperscript{143} CR/PR at Table C-1.

\textsuperscript{144} We note that capital expenditures for the domestic industry increased from $*** in 2003 to $*** in 2005, before increasing to $*** in 2006. CR/PR at Table VI-5. This level of capital expenditures is relatively low considering the embedded investment in plant and equipment of this industry and its related depreciation expenses. With the exception of 2006, capital expenditures were ***. CR/PR at Tables VI-1 and VI-5. Moreover, a portion of the domestic industry’s capital expenditures was for the purposes of ***. CR at VI-9-VI-10, PR at VI-3. Research and development expenses decreased from $*** in 2003 to $*** in 2005 and increased *** to $*** in 2006. CR/PR at Table VI-5.

\textsuperscript{145} Commissioner Lane has found that domestic prices also exhibited a small but measurable degree of price depression from 2003 through 2005, prior to the filing of the petition initiating this investigation.
these two events brought about significant improvements for the domestic industry. Domestic producers not only were able to increase prices but also were able to expand production and sales volume, and the financial position of the domestic industry improved.146

Nonsupplement imports were in the U.S. market throughout the period of investigation. However, nonsupplement import volume actually declined in 2006, even as subject imports declined in the U.S. market due to the pendency of this investigation.147 The simultaneous drop in the volume of both subject imports and nonsupplement imports in 2006 is explained by the fact that subject imports and nonsupplement imports primarily are sold for different end uses. Likewise, the AUV and pricing data on the record show that the prices of the nonsupplement imports typically are much higher, **. Given that the primary cause of material injury to the domestic industry was the intense price suppression caused by low-priced subject imports, this suggests that nonsupplement imports were not a factor affecting prices. Thus, removing subject imports from the U.S. market allowed the domestic industry to capture both higher prices and additional sales volumes. This pattern further indicates that subject imports were a significant factor suppressing prices over the period of investigation.

We find that an industry in the United States is materially injured by reason of subject imports of certain activated carbon from China that are found to be sold in the United States at less than fair value.

V. Application of the Bratsk Aluminum Smelter v. United States Replacement/Benefit Test

Having reached an affirmative determination by application of the statutorily-mandated factors, the Federal Circuit’s decision in Bratsk Aluminum Smelter v. United States requires that we turn to an additional analysis which can, in some circumstances, negate an affirmative determination.148 The Federal Circuit directed the Commission to undertake an “additional causation inquiry” whenever certain triggering factors are met: “whenever the antidumping investigation is centered on a commodity product, and price competitive non-subject imports are a significant factor in the market.”149 The additional inquiry required by the Bratsk panel, which we refer to as the Bratsk replacement/benefit test, is “whether non-subject imports would have replaced the subject imports without any beneficial effect on domestic producers.”150

We respectfully disagree with the Bratsk panel that the statute requires any analysis beyond that already included in our discussion of volume, price, and impact above.151 The statutory scheme contemplates that an industry may be facing difficulties from a variety of sources, including nonsupplement imports and other factors, but the existence of injury caused by other factors does not compel a negative determination if the subject imports themselves are making more than a minimal or tangential

---

146 CR/PR at Table C-1.
147 CR/PR at Table C-1.
148 444 F.3d at 1369 (Fed. Cir. 2006).
149 Bratsk, 444 F.3d at 1375.
150 Bratsk, 444 F.3d at 1375.
151 For a full discussion of our views on the applicability of Bratsk, see our Views in the Remand Determination for Silicon Metal from Russia, Inv. No. 731-TA-991 (Final) (Second Remand), USITC Pub. 3910 (March 2007). For a full discussion of Chairman Pearson’s views on the applicability of Bratsk, see his Separate and Additional Views in Silicon Metal from Russia. For a full discussion of Commissioner Okun’s views of the applicability of Bratsk, see her Separate and Dissenting Views in Certain Lined Paper School Supplies from China, India, and Indonesia, Inv. Nos. 701-TA-442-443, 731-TA-1095-1097 (Final), USITC Pub. 3884 (Sept. 2006).
contribution to material injury.\textsuperscript{152} The legislative history further clarifies that the dumped imports need not be the “principal” cause of material injury and that the “by reason of” standard does not contemplate that injury from dumped imports be weighed against injury from other factors, such as nonsubsidized imports, which may be contributing to overall injury to an industry.\textsuperscript{153} Thus, once the Commission establishes the existence of a causal link between subject imports and material injury, the existence of other concurrent causes is legally irrelevant to its determination.

Similarly, the statute does not permit the Commission to reach a negative determination based on the likely ineffectiveness of an order. Indeed, the purpose of the statute is not to bar or eliminate subject imports from the U.S. market or award subject import market share to U.S. producers, but is meant instead to “level [] competitive conditions” by imposing a duty on subject imports and thus enabling the domestic industry to compete against fairly traded imports.\textsuperscript{154} The statutory scheme in fact contemplates that subject imports may remain in the U.S. market after an order is imposed and even that the industry afterwards may continue to suffer material injury.\textsuperscript{155} As the Commission has previously explained,

\begin{quote}
[\textbf{N}othing in the statute or case law requires (or allows) us to consider the likely effectiveness of a dumping order in making our injury determination. The possibility that non-subject imports will increase in the future after an antidumping order is imposed is ... not relevant to our analysis of whether subject imports are currently materially injuring the industry.\textsuperscript{156}]
\end{quote}

The Commission has a well established approach to addressing causation.\textsuperscript{157} However, we apply the Bratsk replacement/benefit test to our analysis because the Federal Circuit has directed us to do so, notwithstanding that, in our considered view, this test is not required by, or consistent with, the statute.\textsuperscript{158}

\begin{footnotes}
\item[152] See SAA at 851-52, 885.
\item[153] H.R. Rep. No. 317, 96\textsuperscript{th} Cong., 1\textsuperscript{st} Sess. at 47 (“Any such requirement has the undesirable result of making relief more difficult to obtain for those industries facing difficulties from a variety of sources, precisely those industries that are most vulnerable to subsidized or dumped imports.”).
\item[154] Huaiyin Foreign Trade Corp. v. United States, 322 F.3d 1369, 1380 (Fed. Cir. 2003)
\item[155] SAA at 883-85, 889-90.
\item[156] Wooden Bedroom Furniture From China, Inv. No. 731-TA-1058 (Final), USITC Pub. 3742 (Dec. 2004) at 27, n. 222.
\item[157] See Silicon Metal from Russia, Inv. No. 731-TA-991 (Second Remand), USITC Pub. 3910 (Mar. 2007), at 3-8 (articulating the standard).
\item[158] Chairman Pearson and Commissioner Okun discern two possible interpretations of the Bratsk opinion, which differ substantially. The so-called “replacement/benefit test” is noted above. The second one is that Bratsk is a further restatement of the causation approach prescribed by Gerald Metals. Under this interpretation, the Bratsk decision stands to remind the Commission of its obligation under Gerald Metals that the Commission may not satisfy the “by reason of” causation requirement by showing that subject imports contributed only “minimally or tangentially to the material harm.” In other words, the Bratsk Court’s relatively short discussion of the underlying determination may not have established a new and rigid replacement/benefit test. Rather, the Court may have discussed the triggering factors as a reminder that the Commission, before it makes an affirmative determination, must satisfy itself that it has not attributed material injury to factors other than subject imports. See Separate and Additional Views of Chairman Daniel R. Pearson and Commissioner Deanna Tanner Okun Concerning Bratsk Aluminum v. United States in, Sodium Hexametaphosphate from China, Inv. No. 731-TA-1110 (Preliminary), USITC Pub. 3912 (April 2007). We have included this analysis in the Commission’s affirmative causation analysis.
\end{footnotes}
Only Petitioners have provided arguments regarding the applicability of the Bratsk replacement/benefit test to this investigation. As a threshold matter, Petitioners stated that the Bratsk analysis is not required under the statute. Nevertheless, Petitioners argue that, in this investigation, neither of the triggering factors are met. Even assuming that the triggering factors are met, Petitioners state that nonsubject imports would not replace subject imports and that the domestic industry will benefit from the imposition of an antidumping duty order on imports from China.

A. The First Triggering Factor – Commodity Product

The Bratsk panel referred to a “commodity product” as “meaning that it is generally interchangeable regardless of its source.” The record in this investigation indicates that all types of activated carbon, as defined by the scope, are not “interchangeable regardless of . . . source.” As discussed in Conditions of Competition, all domestic production of certain activated carbon and virtually all Chinese imports of certain activated carbon are coal-based. The vast majority, *** percent, of nonsubject imports are of coconut-based certain activated carbon. Although it appears that coal-based certain activated carbon is generally interchangeable, and that coconut-based certain activated carbon is generally interchangeable, the record indicates that there is very little interchangeability between coal-based and coconut-based activated carbon.

Information on the record indicates that coal-based and coconut-based activated carbons have different physical structures. The smaller pore size, pore distribution, and the greater hardness of coconut-based certain activated carbon make it most useful in applications that require removing very small size impurities. As a result, coal-based and coconut-based activated carbon are generally directed to different uses. The bulk of coal-based activated carbon is used in the processing of drinking water, industrial wastewater and certain foods, as well as the filtration of air and gas, whereas coconut-based activated carbon is *** to cigarette filters, home water filters, and gold mining. There is little

---

159 Petitioners’ Prehearing Brief at 30-35. In its preliminary determination, the Commission invited the parties in any final phase determination to comment on the applicability of Bratsk to the facts of this investigation.
160 Petitioners’ Prehearing Brief at 35.
161 No producers/exporters from nonsubject countries responded to the Commission’s request for information. CR at VII-3, PR at VII-3.
162 The most significant source of nonsubject coconut-based certain activated carbon is Southeast Asia, specifically Sri Lanka, the Philippines, Indonesia, India and Thailand. *** percentage of nonsubject imports were coal- and peat-based and were produced by domestic producer *** operations in Europe. CR/PR at Table IV-1, Hearing Tr. at 118 (Wruble).
163 It is improper to assume that because goods are interchangeable for defining the domestic like product, they are “commodities” for purposes of assessing causation, which is the function of the Bratsk test. See Bic Corp v. United States, 964 F. Supp. 391, 397, 399 (Ct. Int’l Trade 1997) (“[L]ike product, cumulation and causation are functionally different inquiries because they serve different statutory purposes . . . . As a result, each inquiry requires a different level of fungibility. Hence the record may contain substantial evidence that two products are fungible enough to support a finding in one context (e.g., one like product), but not in another (e.g., cumulation or causation.”).
164 CR at I-9, PR at I-7.
165 CR at I-9 - I-10, PR at I-7, Petitioners’ Posthearing Brief at Exhs. 6 & 10.
166 Hearing Tr. at 55 (O’Brien). The process of recovering gold from mined ore involves the adsorption of gold on activated carbon. The extra hardness of coconut-based activated carbon helps to reduce the loss of gold that may occur when the activated carbon particles break into smaller pieces. CR at I-9-I-10, PR at I-7. In cigarette filters, (continued...)
competition with coal-based carbons in the upscale home filter market due to the premium nature and price of the coconut-based product.椰子基活性炭因其比煤基活性炭对影响香烟风味的化学物质的吸附能力更强而更适合。

The limited interchangeability of coconut-based and coal-based activated carbons is further confirmed by record evidence indicating a lack of customer overlap for the two products.椰子基和煤基活性炭是被销售给不同的市场，表明了这两种产品的有限替代性。

B. The Second Triggering Factor – Whether Price Competitive Nonsubject Imports Are a Significant Factor in the Market

We find that the second triggering factor, price competitive nonsubject imports, is also not present, providing additional support for our view that the Bratsk replacement/benefit test is not applicable to this investigation.

With respect to the issue of whether nonsubject imports were a significant factor in the market, we note that nonsubject imports were present in the market in each year of the period of investigation. Imports from nonsubject sources increased from *** percent of apparent U.S. consumption by quantity in 2003, to *** percent in 2004, and then to *** percent in 2005, before declining to *** percent in 2006.椰子基活性炭在非主体进口中的份额在2003年到2004年逐渐增加，然后在2005年达到***%，在此之后开始下降。

As a share of total imports, nonsubject imports increased from *** percent in 2003 to *** percent in 2004, and then to *** percent in 2005, before declining to *** percent in 2006.椰子基活性炭的非主体进口份额在2003年到2004年逐渐增加，然后在2005年达到***%，在此之后开始下降。

Based on the foregoing, we find that nonsubject imports were significant in the market for purposes of the Bratsk replacement/benefit test.椰子基活性炭的非主体进口重要性在Bratsk替代效益测试中是有明显的。

However, we find that nonsubject imports were not price-competitive in the market.椰子基活性炭的非主体进口在市场中并未达到价格竞争力。

Given the record evidence that activated carbon is not a “commodity” product, and that coconut-based activated carbon is used primarily in specialty applications for which customers are willing to pay a price premium, coconut-based and coal-based activated carbon do not compete on the basis of price. Moreover, the average unit values (“AUVs”) of nonsubject imports were consistently higher than both the AUVs of subject imports and domestic producers’ U.S. shipments of certain activated carbon in every year of the

---

166 (…continued)

167 CR at I-9, n. 30, PR at I-7, n. 30. Coconut-based carbons intrinsically have finer pore structures that lead to better trace removal capacities if one is targeting specific organic compounds. Also, coconut-based activated carbon would typically have lower levels of leachables (water soluble ash) than coal-based activated carbon, which is desirable to home water filter manufacturers.椰子基活性炭相比煤基活性炭，其更易从不同的有机化合物中去除微量残留物，且其水溶性灰分含量更低，这对家用净水器制造商很有吸引力。

168 Hearing Tr. at 56 (O’Brien).

169 CR at IV-2, PR at IV-1.

170 CR/PR at Table C-1.

171 No importer with the exception of *** provided the Commission with usable pricing data on nonsubject imports. Calgon accounted for more than *** of certain activated carbon nonsubject imports in 2006, ***, and provided the Commission with information related to its nonsubject imports, including pricing data.
The AUVs of imports from nonsubject countries ranged from *** than the AUVs of subject imports. Additionally, these nonsubject AUVs were higher than the AUVs of domestic producers’ U.S. shipments of certain activated carbon by *** over the period of investigation. The differences in AUVs reflect the market reality that coconut-based certain activated carbon is priced significantly higher in the United States than coal-based activated carbon.

Moreover, a comparison of Calgon’s prices for sales of its imported nonsubject coconut-based certain activated carbon to prices for domestic producers’ U.S. shipments and imported certain activated carbon from China confirms the differences shown by the AUVs. These data indicate that the selling prices of Calgon’s coconut-based certain activated carbon from nonsubject countries were ***. Moreover, for Product 1, the price of Calgon’s coconut-based certain activated carbon from nonsubject countries ***. For product 3, the price of Calgon’s coconut-based certain activated carbon from nonsubject countries ***. For product 2, the price of Calgon’s coconut-based certain activated carbon from nonsubject countries ***. Although Product 2 accounts for *** of Calgon’s sales of nonsubject certain activated carbon, Product 2 accounted for *** of sales of domestically produced certain activated carbon.

Moreover, as discussed above, and consistent with our finding that certain activated carbon is not a “commodity” product, as the Bratsk panel defined that term, Calgon has provided evidence that there is *** between its customers that purchase its coal-based certain activated carbon and its customers that purchase its coconut-based certain activated carbon. This indicates that customers are purchasing either coconut-based or coal-based activated carbon for a specific application, for which one or the other is better suited based on their physical structures, and are not choosing between the two based on price. Accordingly, we do not find that the second triggering factor identified in Bratsk to be present.

---

172 CR/PR at Table IV-2 and Table C-1. We are mindful that the use of AUVs for establishing price trends may present product mix issues in that values may reflect different merchandise rather than differences in price. See Allegheny Ludlum Corp. v. United States, 287 F.3d 1365, 1373-74 (Fed. Cir. 2002). In this investigation, the higher AUVs for coconut-based activated carbon supports our finding that coal-based and coconut-based activated carbons are not commodities, and shows that customers are willing to pay a price premium for the coconut-based activated carbon because it is better suited than coal-based activated carbon for their required applications. The AUV comparison is confirmed by ***, allowing us to give the AUV data additional weight in this investigation.

173 In determining whether nonsubject imports are price competitive in this investigation, Commissioner Pinkert has primarily analyzed whether nonsubject imports are price competitive with the domestic like product, although he has also taken into account relative pricing levels for nonsubject and subject imports.

174 CR at V-1, n. 1, PR at V-1, n. 1, Petitioners’ Posthearing Brief at Exh. 4.

175 CR/PR at V-1.
Because we find that neither Bratsk triggering factor is present in this investigation, we therefore are not required to address “whether non-subject imports would have replaced subject imports without any beneficial effect on domestic producers.” 176 177 178

CONCLUSION

For the reasons stated above, we determine that an industry in the United States is materially injured by reason of subject imports of certain activated carbon from China that are found to be sold in the United States at less than fair value.

176 Bratsk, 444 F.3d 1375. Nevertheless, even if both triggering factors were present, we would not find that nonsubject imports “would have replaced subject imports without any beneficial effect on domestic producers.” Bratsk, 444 F.3d at 1375. Throughout the period, imports of certain activated carbon from China exceeded nonsubject imports by a significant amount. To replace subject imports in the U.S. market, nonsubject imports would have needed to increase between 50 percent to 83 percent per year of the period of investigation. The limited information on the record regarding capacity utilization rates of activated carbon producers in nonsubject countries, as well as the capital intensive nature of the industry, does not indicate that nonsubject imports have the additional capacity to replace subject imports. CR/PR at Table IV-2, CR at VII-3, n. 6, PR at VII-3, n. 6. Currently, China and the United States supply nearly all of the imports of coal-based certain activated carbon world-wide, and the only other significant exporter of coal-based certain activated carbon, Australia, exported no activated carbon to the United States in 2006, and does not have the capacity to replace the portion of Chinese production currently dedicated to the U.S. market. CR at VII-4, PR at VII-4.

As discussed previously, the Commission gave reduced weight to post-petition data in 2006 for the purpose of evaluating levels and trends of unrestrained subject imports and their relationship to levels and trends of injury to the domestic industry. This does not mean that we find the 2006 data to be unreliable. In fact, the 2006 data support our finding of a causal link between subject imports and injury to the domestic industry. After the filing of the petition and imposition of preliminary duties, the quantity of subject imports fell, prices increased, and the financial position of the domestic industry improved. Moreover, even after subject imports declined in the U.S. market in 2006 due to the pendency of this case, nonsubject imports in the United States not only did not increase to replace the subject imports, but declined as well. CR/PR at Table C-1. The simultaneous drop in the volume of both subject imports and nonsubject imports in 2006 is not surprising, given that they are sold primarily for different end uses.

Finally, the record demonstrates that even if some replacement of subject imports by nonsubject imports could occur, the domestic industry would still benefit from the order. The AUV and pricing data on the record show that if nonsubject imports replaced the volume of Chinese imports, the prices of the nonsubject imports would likely be much higher, *** based on data reported during the period of investigation. Given that the primary cause of material injury to the domestic industry was the intense price suppression caused by low-priced subject imports, the record evidence shows that if all of the subject imports were replaced by nonsubject imports, the domestic industry would benefit from ***.

177 Chairman Pearson and Commissioners Okun and Williamson do not join the previous footnote. They do not apply the replacement/benefit test of Bratsk given their conclusion that neither of the two triggering factors is met.

178 Vice Chairman Aranoff joins her colleagues’ analysis as to the replacement/benefit test, as expressed in footnote 176. She finds, in addition, that the partial recovery of the domestic industry in 2006, concurrent with the filing of the petition is further evidence that nonsubject imports would not have replaced subject imports without any beneficial effect on domestic producers. Her views as to reasons for that partial recovery are explained in footnote 99 above.
PART I: INTRODUCTION

BACKGROUND

This investigation results 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 certain activated carbon (“CAC”)\(^1\) from China. Information relating to the background of the investigation is presented in the tabulation on the following page.\(^2\)

---

\(^1\) For purposes of this investigation, the Department of Commerce has defined the subject merchandise 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 investigation 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 investigation 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 investigation 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. 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 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. The products under investigation are currently classifiable under the Harmonized Tariff Schedule of the United States (“HTS”) subheading 3802.10.00. Although HTS subheadings are provided for convenience and customs purposes, the written description of the scope of this investigation is dispositive.” 72 F.R. 9508, March 2, 2007.

\(^2\) Federal Register notices cited in the tabulation are presented in app. A.
**PREVIOUS INVESTIGATION**

On January 26, 2006, petitioners in the instant investigation (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 activated carbon from China. As a result of that filing, the Commission instituted investigation No. 731-TA-1102 (Preliminary): Activated Carbon from China. Subsequently, on February 15, 2006, petitioners withdrew their petition at Commerce and the Commission. Commerce had not initiated its investigation by that date and the Commission discontinued its investigation effective that date.

**SUMMARY DATA**

A summary of data collected in the investigation concerning CAC is presented in appendix C, table C-1. For table C-1, except as noted, CAC U.S. industry data are based on questionnaire responses of three firms that accounted for virtually all of U.S. production during 2003-06. U.S. imports are based on official import statistics.

---

3 The list of witnesses appearing at the hearing is presented in app. B.

4 The term activated carbon refers to both CAC (which can also be referred to as steam-activated carbon) and chemically activated carbon (“CHAC”).

5 71 FR 5688, February 2, 2006.


7 ***.

8 In the preliminary phase investigation, the Commission collected data concerning CHAC and considered respondent parties’ arguments that CHAC should be included in the “domestic like product.” Ultimately, after due consideration, the Commission determined that CHAC was not included in the “domestic like product.” Certain Activated Carbon from China, Investigation No. 731-TA-1103 (Preliminary), USITC Publication 3852, May 2006, pp. 7-11.

9 In addition to collecting CAC data in the final phase of this investigation, the Commission collected data concerning reactivated carbon (“RAC”). Comments from producer, importer, and purchaser questionnaire respondents in this investigation concerning the differences and similarities between CAC and RAC are presented in app. D. Trade and financial data concerning RAC are presented in app. E. Only one importer reported imports of RAC during 2003-06. Details regarding these imports of RAC are presented in Part IV of this report, U.S. Imports, Apparent Consumption, and Market Shares.
Commerce’s final LTFV margins are presented in table I-1. Final margins for individual exporter/supplier(s) ranged from 62.08 percent to 78.89 percent, with the PRC-wide rate being 228.11 percent.

<table>
<thead>
<tr>
<th>Exporter</th>
<th>Supplier(s)</th>
<th>Weighted-average margin (percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beijing Pacific Activated Carbon Products Co., Ltd.</td>
<td>Alashan Yongtai Activated Carbon Co., Ltd.</td>
<td>73.60</td>
</tr>
<tr>
<td></td>
<td>Changji Hongke Activated Carbon Co., Ltd.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Datong Forward Activated Carbon Co., Ltd.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Datong Locomotive Coal &amp; Chemicals Co., Ltd.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Datong Yunguang Chemicals Plant</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ningxia Guanghua Cherishment Activated Carbon Co., Ltd.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ningxia Luyuangheng Activated Carbon Co., Ltd.</td>
<td></td>
</tr>
<tr>
<td>Calgon Carbon Tianjin Co., Ltd.</td>
<td>Calgon Carbon Tianjin Co., Ltd.</td>
<td>78.89</td>
</tr>
<tr>
<td></td>
<td>Datong Carbon Corp.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Datong Changtai Activated Carbon Co., Ltd.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Datong Forward Activated Carbon Co., Ltd.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Datong Fuping Activated Carbon Co., Ltd.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Datong Hongtai Activated Carbon Co., Ltd.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Datong Huajing Activated Carbon Co., Ltd.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Datong Huihao Activated Carbon Co., Ltd.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Datong Kangda Activated Carbon Factory</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Datong Runmei Activated Carbon Factory</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Dushanzhi Chemical Factory</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fangyuans Carbonization Co., Ltd.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Hongke Activated Carbon Co., Ltd.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Huaren Jinbei Chemical Co., Ltd.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Jiaocheng Xinxi Purification Material Co., Ltd.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ningxia Guanghua Cherishment Activated Carbon Co., Ltd.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ningxia Guanghua A/C Co., Ltd.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ningxia Honghong Carbon Industrial Corp.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ningxia Luyuangheng Activated Carbon Co., Ltd.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ningxia Pingluo Yafu Activated Carbon Factory</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ningxia Tianfu Activated Carbon Co., Ltd.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ningxia Yinchuan Lianjia Activated Carbon Co., Ltd.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Nuclear Ningxia Activated Carbon Co., Ltd.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pingluo Xuanzhong Activated Carbon Co., Ltd.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Shanxi Xuanzhong Chemical Industry Co., Ltd.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Xingtai Coal Chemical Co., Ltd.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Yuyang Activated Carbon Co., Ltd.</td>
<td></td>
</tr>
<tr>
<td>Datong Juqiang Activated Carbon Co., Ltd.</td>
<td>Datong Juqiang Activated Carbon Co., Ltd.</td>
<td>73.60</td>
</tr>
<tr>
<td>Datong Locomotive Coal &amp; Chemicals Co., Ltd</td>
<td>Datong Locomotive Coal &amp; Chemicals Co., Ltd.</td>
<td>73.60</td>
</tr>
<tr>
<td>Datong Municipal Yunguang Activated Carbon Co., Ltd</td>
<td>Datong Municipal Yunguang Activated Carbon Co., Ltd</td>
<td>73.60</td>
</tr>
<tr>
<td>Datong Yunguang Chemicals Plant</td>
<td>Datong Yunguang Chemicals Plant</td>
<td>73.60</td>
</tr>
<tr>
<td>Hebei Foreign Trade and Advertising Corp.</td>
<td>Da Neng Zhen Da Activated Carbon Co., Ltd.</td>
<td>73.60</td>
</tr>
<tr>
<td></td>
<td>Shanxi Bluesky Purification Material Co., Ltd.</td>
<td></td>
</tr>
<tr>
<td>Jacobi Carbons AB</td>
<td>Datong Forward Activated Carbon Co., Ltd.</td>
<td>62.08</td>
</tr>
<tr>
<td></td>
<td>Datong Hongtai Activated Carbon Co., Ltd.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Datong Huajing Activated Carbon Co., Ltd.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ningxia Guanghua Cherishment Activated Carbon Co., Ltd.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ningxia Huahui Activated Carbon Co., Ltd.</td>
<td></td>
</tr>
<tr>
<td>Jilin Bright Future Chemicals Co., Ltd.</td>
<td>Shanxi Xinhua Activated Carbon Co., Ltd.</td>
<td>228.11</td>
</tr>
<tr>
<td></td>
<td>Tonghua Bright Future Activated Carbon Plant</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Zuoyun Bright Future Activated Carbon Plant</td>
<td></td>
</tr>
</tbody>
</table>

Table continued on next page.
Table I-1–Continued

<table>
<thead>
<tr>
<th>CAC: Commerce’s final LTFV margins</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Jilin Province Bright Future Industry and Commerce Co., Ltd.</strong></td>
</tr>
<tr>
<td><strong>Ningxia Guanghua Cherishmet Activated Carbon Co., Ltd.</strong></td>
</tr>
<tr>
<td><strong>Ningxia Huahui Activated Carbon Co., Ltd.</strong></td>
</tr>
<tr>
<td><strong>Ningxia Mineral and Chemical, Ltd.</strong></td>
</tr>
<tr>
<td><strong>Shanxi DMD Corp. China Nuclear</strong></td>
</tr>
<tr>
<td><strong>Shanxi DMD Corp.</strong></td>
</tr>
<tr>
<td><strong>Shanxi Industry Technology Trading Co., Ltd.</strong></td>
</tr>
<tr>
<td><strong>Shanxi Newtime Co., Ltd.</strong></td>
</tr>
<tr>
<td><strong>Shanxi Qixian Foreign Trade Corp.</strong></td>
</tr>
<tr>
<td><strong>Shanxi Sincere Industrial</strong></td>
</tr>
<tr>
<td><strong>Shanxi Xuanzhong Chemical Industry Co., Ltd.</strong></td>
</tr>
<tr>
<td><strong>Tangshan Solid Carbon Co., Ltd.</strong></td>
</tr>
<tr>
<td><strong>Tianjin Majin Industries Co., Ltd.</strong></td>
</tr>
<tr>
<td><strong>United Manufacturing International (Beijing), Ltd.</strong></td>
</tr>
<tr>
<td><strong>Xi’an Shuntong International Trade &amp; Industrials Co., Ltd.</strong></td>
</tr>
<tr>
<td><strong>PRC-wide rate</strong></td>
</tr>
</tbody>
</table>

THE SUBJECT PRODUCT

The imported CAC covered by the scope of this investigation is described in detail in the “Background” section earlier in Part I.

Physical Characteristics and Uses\(^{10}\)

Activated carbon is a solid material comprised 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. The primary raw material for the production of activated carbon can be most any solid material that has a high carbon content. Common raw materials for making activated carbon are coal, wood, coconut shells, olive stones, and peat.\(^{11}\) In the United States and China, coal is the most often used raw material.\(^{12}\)

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.\(^{13}\) 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).\(^{14}\) Pelletized activated carbon consists of uniformly sized cylinders with typical diameters of 2 mm and lengths of 0.5 to 2 cm.\(^{15}\) The primary benefit of pelletized activated carbon is that it produces a lower pressure drop over a fixed bed than GAC.\(^{16}\)

Along with the size and shape of the activated carbon particles, factors that influence the efficiency of activated carbon in a given application are surface area, pore size distribution, ash content, and hardness.\(^{17}\) 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 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.\(^{18}\) Since iodine is a small molecule, the iodine number indicates the abundance of small diameter pores 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

\(^{10}\) In this section, the term activated carbon refers to both CAC (also referred to as steam-activated carbon) and CHAC.

\(^{11}\) Petition, p. 13.

\(^{12}\) Ibid.

\(^{13}\) Mesh numbers refer to holes 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. See, Petition, p. 12.

\(^{14}\) Petition, p. 12.

\(^{15}\) ***.

\(^{16}\) Ibid.

\(^{17}\) Ibid.

\(^{18}\) 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. Ibid.
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. 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.

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

There are two activation processes for producing activated carbon: thermal processing and chemical processing. (See subsequent section for a discussion of the production processes.) Petitioners claim that the different processing methods produce different products that are used in separate applications. In general, CHACs are wood-based carbons and have more large- and medium-sized pores than coal-based CACs. According to the petitioners, this property makes CHACs more suitable for certain applications, including emissions canisters that capture gasoline vapors from automobile fuel tanks. CHACs may also retain some of the activating agent (usually phosphoric acid or zinc chloride).
that could leach out during processing and may make them unacceptable for certain applications such as aquarium filters or pharmaceutical purification.28

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.29 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.30 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.31 In cigarette filters, coconut-based carbon may be better than coal-based activated carbon at adsorbing chemicals that affect the flavor of the cigarette.32 In other applications, these property differences may not be meaningful and either coconut- or coal-based activated carbon could be used.33

One use of activated carbon that may increase in the future is the control of mercury emissions from coal-fired power plants. In 2005, the U.S. Environmental Protection Agency (EPA) issued the Clean Air Mercury Rule to cap and reduce mercury emissions from coal-fired power plants. When fully implemented in 2018, this regulation will reduce mercury emissions by nearly 70 percent.34 Many states are also enacting limits for mercury emissions.35 To meet the final mercury emissions cap, it is likely that a new mercury control technology will be needed.36 While still in the demonstration stage of development, injection of powdered activated carbon into the flue gas from coal-fired plants has to this point shown the most promise for meeting the mercury emissions cap,37 although other technologies will compete for this demand.38

Activated carbon is non-toxic and has no adverse environmental effects.39 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.\textsuperscript{40}

**Manufacturing Facilities\textsuperscript{41}\**

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 the petitioners, Calgon and Norit, use, and chemical activation of wood.\textsuperscript{42} A small amount of wood-based CAC, ***, is produced domestically.\textsuperscript{43}

Two commonly used processes for thermally activating coal are direct activation and reagglomeration. These processes only differ in the initial treatment of the coal. In direct activation, the coal is simply 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.\textsuperscript{44}

For both direct activation and reagglomeration, the crushed material is added to one or more rotary kilns\textsuperscript{45} for the carbonization step. The raw material is heated in the kiln, in the absence of oxygen, to approximately 400 degrees Celsius.\textsuperscript{46} 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.\textsuperscript{47} The kiln is maintained at a temperature of approximately 1,000 degrees Celsius.\textsuperscript{48} An oxidizing agent, usually steam,\textsuperscript{49} 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 the kiln, it can be milled and screened to final size and packaged for sale.

\textsuperscript{40} Conference transcript, p. 99 (Wruble).

\textsuperscript{41} In this section, the term activated carbon refers to both CAC (also referred to as steam-activated carbon) and CHAC.

\textsuperscript{42} MeadWestvaco produces CHAC from wood. Norit also produced wood-based CHAC until January 2005.

\textsuperscript{43} Petition, p. 71.

\textsuperscript{44} ***.

\textsuperscript{45} 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.

\textsuperscript{46} Petition, p. 14.

\textsuperscript{47} 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.

\textsuperscript{48} Petition, p. 14.

\textsuperscript{49} Carbon dioxide, CO\textsubscript{2}, may also be used as an oxidizing agent.
In the chemical activation of wood, an activating agent, typically phosphoric acid, 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. 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.

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. 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.” Spent carbon is reactivated by heating it in a kiln until the adsorbed species are desorbed 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 done by the end user and then reused by the same user. However, there are some firms who take spent carbon from the end user, reactivate it, and return it to the original user. In processes where environmentally regulated chemicals 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.

Interchangeability and Customer and Producer Perceptions

Nearly all producer and importer questionnaire respondents reported that there was at least some interchangeability between Chinese and U.S.-produced CAC. reported that there are no direct substitutes for CAC. For importers, the most commonly mentioned substitute was RAC, which sells at a lower price than CAC. In the preliminary phase of the investigation, six importers suggested CHAC as a substitute in certain applications (e.g., water purification, decolorization, air treatment, etc.), although it is perceived as commanding a higher price than CAC or RAC. More detailed information on

---

50 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. Petition, p. 16.
52 Petition, p. 17.
54 Ibid.
55 Desorption is the process in which a molecule leaves the surface to which it is adsorbed.
56 Conference transcript, p. 193 (Enninking).
57 ***, reported that RAC is a substitute for CAC.
58 As noted earlier, only one importer reported imports of RAC during 2003-06. Details regarding these imports of RAC are presented in Part IV of this report, U.S. Imports, Apparent Consumption, and Market Shares.
interchangeability and customer and producer perceptions can be found in Part II of this report, *Conditions of Competition in the U.S. Market*.

**Channels of Distribution**

For the most part, shipments of CAC by both U.S. producers and importers went to end users. Over 90 percent of shipments by U.S. producers of CAC went to end users during the period examined, while 66 to 74 percent of shipments of Chinese product by U.S. importers went to end users. More detailed information on channels of distribution can be found in Part II of this report, *Conditions of Competition in the U.S. Market*.

**Price**

Information with regard to prices of CAC is presented in Part V of this report, *Pricing and Related Information*.

**DOMESTIC LIKE PRODUCT ISSUES**

As noted earlier, in the preliminary phase investigation, the Commission collected data concerning CHAC and considered respondent parties’ arguments that CHAC should be included in the “domestic like product.” Ultimately, after due consideration, the Commission determined that CHAC was not included in the domestic like product, and defined the domestic like product as CAC, coextensive with the scope of the investigation. For purposes of the preliminary determination, no party took the position that the Commission should expand the domestic like product to include RAC. Nevertheless, respondents argued that the reality is that RAC is part of the same domestic like product as CAC and CHAC. In its views in the preliminary phase investigation, the Commission offered the following concerning RAC:

“Reactivated carbon is made by thermally or chemically removing chemical species adsorbed onto used activated carbon. It appears that reactivated carbon and activated carbon cannot be physically distinguished within the same type or form of carbon (i.e., pelletized, powdered, granulated, etc.), and that both have the same use: to trap contaminants in liquids or gases through adsorption. Nonetheless, interchangeability between certain activated carbon and reactivated carbon is limited. Due to contamination and liability concerns, most reactivated carbon can be used only in its original application. Moreover, while some reactivated carbon is pooled for use in the same application for which the virgin product was directed, many purchasers are unwilling to buy reactivated carbon previously used by any other end-user. Additionally, reactivated

---

59 For RAC, more than 90 percent of shipments by U.S. producers and the lone importer went to end users.


61 Coalition of Importers of Activated Carbon (“CIAC”) postconference brief, p. 9.

62 Ibid.

Although activated carbons can be used in any applications that use reactivated carbons, reactivated carbons are frequently limited to their original application, and are used only as a cost-saving measure. Even though almost all domestic producers of certain activated carbon market and sell reactivated carbon, the channels of distribution for the two products differ. Certain activated carbon is sold on the commercial market to a variety of end-users, much reactivated carbon is produced (reactivated) and consumed internally by end-users. Moreover, because of contamination concerns, activation and reactivation are performed in different facilities using different equipment.

At the hearing in this investigation, the Commission raised questions as to whether the domestic like product should be expanded to include RAC. In response, petitioners, in their domestic like product analysis, stated:

“That analysis shows that under the Commission’s six-part test, reactivated carbon is not like the subject imports. Reactivated carbon is made from different raw materials than CAC (virgin coal vs. contaminated CAC), has different important physical
characteristics than CAC (contamination), is produced on different equipment in different facilities than CAC, has limited interchangeability with CAC, is perceived as different from CAC due to the potential for contamination, is distributed differently than CAC, and is priced differently than CAC.

Reactivated carbon was excluded from the scope because there are no imports of reactivated carbon from China and the product does not directly compete with CAC other than in exceptional circumstances. As a result, the Commission should follow its practice of not expanding the like product to include a non-scope downstream product like reactivated carbon."70

70 Petitioners’ posthearing brief, pp. 3-4. See also, exh. 1, pp. 17-22 and pp. 25-29, petitioners’ postconference brief, pp. 19-25, and petitioners’ prehearing brief, pp. 3-18.
PART II: CONDITIONS OF COMPETITION IN THE U.S. MARKET

U.S. MARKET SEGMENTS

U.S. producers’ U.S. commercial shipments of CAC and RAC, as well as U.S. shipments of imported CAC from China, are made primarily to end users. Types of end users include municipal water treatment facilities for both drinking and waste water, food processing plants, chemical processing plants, filter manufacturers, and reactivators. Data provided in the petitioners’ posthearing brief indicate that ***, Citron reported that ***, and the rest of the respondents also produced RAC. In this section, they are discussed as producers of CAC. The discussion of producers of RAC refers to the six additional responding commercial producers.

Eight of the responding purchasers also reported purchasing RAC. Most end users use CAC to filter contaminants, color impurities, and odors out of water (potable and waste); food (for example, corn syrup); and chemicals. Reactivators use virgin CAC to mix with their reactivated product. Staff received usable questionnaire responses from 34 purchasers of CAC. These purchasers span the types of end users mentioned above.

The two largest responding purchasers of CAC, ***, as well as several other purchasers, are also reactivators of used CAC. As such they compete directly with each other and sometimes with producers of CAC. As noted above, municipal water treatment plants account for a large share of the CAC market. In the municipal water treatment industry, sales are often determined by a bidding process where the lowest bidder wins the contract (assuming that this bidder’s product can pass through the prequalification process). Some of these plants limit their purchases to domestic products and others do extensive performance-cost analyses. By and large, however, the lowest cost supplier will win the bid. Quality-related issues are often more important for other types of purchasers, including those in the food processing industry and those in the filter manufacturing industry. According to ***, filters are ***, and some end users prefer to purchase from domestic suppliers.

Due to the large municipal water treatment segment, some minor seasonality is present in the market for CAC. Specifically, while purchases are made year-round, municipal water treatment plants generally try not to have CAC replaced during the summer months which see a high level of water usage. Markets do not appear to be limited geographically, with *** responding producers of CAC and four of six responding producers of RAC reporting nationwide sales. One remaining producer of RAC reported sales to *** while the other reported selling ***. Seventeen of 27 responding importers also reported nationwide sales of CAC, with another four reporting sales to at least four regions.

CHANNELS OF DISTRIBUTION

*** two responding U.S. producers of RAC, and eight of 18 responding importers of CAC reported sales to both distributors and end users of CAC. Nine importers of CAC and the remaining three responding U.S. producers of RAC, as well as the third responding producer of CAC, reported sales only to end users. One importer of CAC reported sales only to distributors. *** of U.S. producers’ U.S. shipments of CAC were shipped directly to end users throughout the period for which data were collected. Approximately *** percent of U.S. producers’ U.S. shipments of CAC, and *** percent of U.S. producers’ U.S. shipments of RAC, went to end users in each year between 2003 and 2006. A comparatively higher share of importers’ U.S. shipments of CAC went to distributors, with shipments to end users accounting for between 66 and 74 percent of U.S. imports from China during the period 2003.

---

1 ***.
2 Ibid.
3 Eight of the responding purchasers also reported purchasing RAC.
4 ***’s purchaser questionnaire response, section IV-5.
5 *** also produce RAC. In this section, they are discussed as producers of CAC. The discussion of producers of RAC refers to the six additional responding commercial producers.
to 2006. *** suggested that sales to distributors are often made at a discount due to the lower cost of sales involved in such transactions. To the extent that this is true, it may place a downward bias on the observed price of imported CAC, which is more frequently sold to distributors. Table II-1 presents information on channels of distribution for U.S. producers of CAC and RAC as well as for U.S. importers of CAC from China.

Table II-1

<table>
<thead>
<tr>
<th>Shipments</th>
<th>Calendar year</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S. producers’ U.S. shipments of CAC (in short tons)</td>
<td></td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>To distributors</td>
<td></td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>To end users</td>
<td></td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>U.S. producers’ U.S. shipments of RAC (in short tons)</td>
<td></td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>To distributors</td>
<td></td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>To end users</td>
<td></td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>U.S. importers’ U.S. shipments of subject CAC (in short tons)</td>
<td></td>
<td>16,021</td>
<td>20,065</td>
<td>23,327</td>
<td>20,851</td>
</tr>
<tr>
<td>To distributors</td>
<td></td>
<td>37,298</td>
<td>45,863</td>
<td>45,439</td>
<td>59,135</td>
</tr>
<tr>
<td>To end users</td>
<td></td>
<td>Share of U.S. producers’ U.S. shipments of CAC (in percent)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>To distributors</td>
<td></td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>To end users</td>
<td></td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>Share of U.S. producers’ U.S. shipments of RAC (in percent)</td>
<td></td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>To distributors</td>
<td></td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>To end users</td>
<td></td>
<td>Share of U.S. importers’ U.S. shipments of subject CAC (in percent)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>To distributors</td>
<td></td>
<td>30.0</td>
<td>30.4</td>
<td>33.9</td>
<td>26.1</td>
</tr>
<tr>
<td>To end users</td>
<td></td>
<td>70.0</td>
<td>69.6</td>
<td>66.1</td>
<td>73.9</td>
</tr>
</tbody>
</table>

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

SUPPLY AND DEMAND CONSIDERATIONS

U.S. Supply

Domestic Production

Based on available information, staff believes that U.S. producers of CAC are likely to respond to changes in demand with moderate changes in shipments of U.S.-produced CAC to the U.S. market. A small amount of unused capacity as well as limited ability to shift production to and from alternative products suggest a low degree of responsiveness, while the existence of alternative markets, ***, and moderately high inventories suggest a higher degree of responsiveness.
Industry capacity

Total U.S. capacity fell *** from *** million pounds in 2003 to *** million pounds in 2006. U.S. producers’ reported capacity utilization for CAC rose from *** percent in 2003 to *** percent in 2006. Overall, the level of capacity utilization indicates that U.S. producers of CAC have *** currently available capacity with which they could increase production of CAC in the event of a price change. However, according to petitioners’ postconference brief, ***. According to testimony at the hearing, high levels of capacity utilization are necessary to keep costs low.

Alternative markets

Overall, domestic producers’ exports fell *** between 2003 and 2005 but ***. *** level of exports during the period indicates that domestic producers ***.

Inventory levels

Moderate inventories relative to total shipments indicate that U.S. producers are able to respond to changes in demand simply by increasing shipments from inventory. According to questionnaire responses, U.S. producers’ aggregate beginning inventories were *** percent of total shipments in 2006. Table III-2 presents complete inventory data for U.S. producers.

Production alternatives

*** reported producing other products on the same equipment or machinery used to produce CAC. *** reported that some production personnel will occasionally work on reactivating carbon. *** reported that RAC accounts for *** percent of production by the personnel that produce CAC. *** reported producing a small amount of CAC on the same machinery and using the same employees as does production of RAC. This producer reported that RAC accounted for *** percent of production using this machinery and these employees. Aside from this producer, no U.S. producers of RAC reported producing any other product using the same equipment, machinery, or personnel as is used in the production of RAC. Testimony by witnesses for the respondent parties during the staff conference indicated that the same equipment (specifically, the furnace) can be used to both activate virgin carbon and reactivate previously activated carbon with some cleaning and adjustment between production of the two products.

Subject Imports

According to official Commerce statistics, U.S. imports of CAC from China as a share of total U.S. imports of CAC (in terms of quantity) fell from *** percent in 2003 to *** percent in 2006. U.S. imports of CAC from China rose from *** million pounds in 2003 to *** million pounds in 2006. As a share of total U.S. consumption, U.S. imports from China rose from *** percent in 2003 to *** percent in 2006. Based on available information, importers of CAC from China are likely to respond to changes.

---

6 See table III-2 for additional details concerning capacity and capacity utilization.
7 Petitioners’ postconference brief, p. 31.
8 Hearing transcript, p. 71 (Thompson).
9 See table III-2.
10 Conference transcript, p. 110 (Kovach).
in demand with moderate to large changes in the quantity shipped to the U.S. market. A large response is supported by the existence of alternative markets and moderate levels of inventory, while the response is limited by a high capacity utilization rate and an inability to produce other products using the same equipment with which CAC is produced.

Industry capacity

From 2003 to 2006, reported Chinese capacity grew from 36.8 million pounds to 55.1 million pounds (see table VII-1). Production growth lagged slightly behind growth in capacity as capacity utilization fell from 98.4 percent in 2003 to 91.7 percent in 2006. These data indicate that Chinese suppliers of CAC have limited excess capacity with which they could increase production of CAC in the event of a price change.

Alternative markets

According to questionnaire responses from Chinese producers of CAC, exports to the United States accounted for 41.5 percent of all exports of CAC from China in 2006, up from 37.7 percent in 2003. Total exports accounted for 75.9 percent of total shipments of Chinese-produced CAC in 2006, down from 91.1 percent in 2003. Due to large existing export markets, Chinese producers have the ability to divert product to or from other markets in response to relative changes in the price of CAC between the United States and these other markets.

Inventory levels

Chinese producers’ inventories, as a share of total shipments, rose from 12.2 percent in 2003 to 17.4 percent in 2006. These data indicate that responding Chinese producers of CAC have some ability to use inventories as a means of increasing shipments of CAC to the U.S. market.

Production alternatives

Only one of 11 responding Chinese producers of CAC indicated that it produced other products using the same equipment used to produce CAC.11 This foreign producer reported that CAC accounted for 90 percent of production using this equipment. It appears that Chinese producers are constrained in their ability to switch capacity to or from alternative products in the event of a change in demand for CAC.

U.S. Demand

Based on available information, CAC consumers are likely to respond to changes in the price of CAC with moderate to large changes in their purchases of CAC. The main contributing factor to the responsiveness of demand is the availability of substitute products that can compete with CAC in many end uses. Specifically, since reactivation of used carbon is a viable alternative for many customers, an increase in the price of virgin CAC may lead to more widespread use of reactivated product. However, the ability of end users to use reactivated product is not universal and many end users can use only virgin CAC. In addition, a substantial increase in the price of CAC may lead to more direct competition with the higher-priced CHAC which is a viable substitute for a number of end uses.

---

11 In the preliminary phase of this investigation, one of 24 responding Chinese producers reported producing other products using the same machinery, equipment, and/or employees as are used to produce CAC.
Demand Characteristics

Available data indicate that apparent U.S. consumption of CAC rose from *** million pounds in 2003 to *** million pounds in 2006, an increase of *** percent.

When asked if demand for CAC had changed since 2003, *** responding *** producers of CAC, four responding producers of RAC, 22 of 24 responding importers of CAC, and 12 of 23 responding purchasers of CAC (including five of seven purchasers of RAC) reported that demand had increased between 2003 and 2006. Two importers of CAC and 10 purchasers stated that demand had been unchanged between 2003 and 2006 and one purchaser stated that demand had decreased. One U.S. producer of CAC and one importer of CAC stated that demand has been growing consistently at 3 to 5 percent per year. The most commonly cited reason for the increase is stricter EPA regulations regarding the treatment of water as well as the emission of pollutants. *** U.S. producers of CAC, as well as three of four responding U.S. producers of RAC, 17 of 24 responding importers of CAC, and ten of 30 responding purchasers (including five of eight purchasers of RAC) anticipate further growth in demand due to more stringent regulations on drinking water and the future restrictions on mercury emissions by power plants. In general, all parties who had an opinion on the issue indicated that new mercury emissions standards could have a significant effect on demand for CAC. While one importer reported that the effect of the new standards is already being seen in higher demand and prices in the CAC market,12 as noted at the hearing, the first stage of implementation will not occur until 2010 with the final implementation of the new standards not occurring until 2018.13 It is therefore unlikely that a large effect will be felt in the near future.

Substitute Products

*** reported that no direct substitutes exist. ***. Two U.S. producers of RAC reported that substitutes exist. These producers of RAC listed biofiltration, thermal oxidizers, and air strippers as potential substitutes. Fifteen of 28 responding importers of CAC reported that there are substitutes for CAC. The most widely reported substitute was RAC, which was mentioned by 12 responding importers of CAC. Six importers of CAC listed CHAC as a substitute. Thirteen of 34 responding purchasers of CAC (including four of eight that also purchase RAC) reported that there are substitutes for CAC. Only two of these 13 mentioned RAC.14 Other substitutes listed by responding parties were ion exchange resins, zeolite, clay, activated alumina, activated coke, phosphoric acid, zinc chloride, decolorizing resin, alum and anthracite (together), oxidants, ozone, potassium permanganate, and ferric chloride.

While many potential substitutes were listed, it is clear that only RAC and the more expensive CHAC are realistic substitutes for most end uses. Both RAC and CHAC are reported by importers of CAC to be adequate substitutes in many applications in which CAC is used. However, as noted in Part I of this report, reactivation is normally performed on granular or pelletized CAC and is rarely used on powdered CAC. In addition, for end users such as potable water treatment facilities, only RAC resulting from the reactivation of carbon from that specific customer can be used. Other customers can purchase “pooled” RAC which can originate from a variety of sources. When asked to compare CAC to RAC, purchasers had varying opinions. While some reported that the two were, by and large, interchangeable, most reported either that they could not use RAC for their end uses or that the two were not interchangeable. For end uses in the food, potable water, or medical industries, either virgin or customer-specific RAC is needed and pooled RAC cannot be used. When asked about the price differences,
several purchasers suggested that RAC is approximately 10 to 20 percent cheaper than virgin CAC. However, as one purchaser pointed out, the less-effective RAC must be replaced more often in many applications, thereby increasing the replacement costs associated with using RAC.\textsuperscript{15} In addition to the factors discussed above, petitioners state that the production of reactivated carbon more closely resembles a service rather than the production of a new product.\textsuperscript{16}

While CHAC can often be used in the same applications as CAC, the price is substantially higher. In addition, for most applications that use CHAC (such as applications within the automotive industry), CAC does not meet the required specifications.\textsuperscript{17}

**Cost Share**

One producer reported that CAC accounts for ***. Other responding U.S. producers did not provide any information on this issue. Responding importers of CAC reported a wide range of estimates concerning the share of CAC costs in all end-use related costs. These estimates ranged from less than 1 percent to 90 percent for a variety of end uses. For the largest end use (water treatment), estimates of the cost share attributable to CAC supplied by the treatment facilities themselves were normally in the range of 5 to 10 percent of treatment costs (excluding any cost of the water itself). One purchaser in the food products industry reported that CAC accounted for *** of the total cost of the products produced using CAC.

**SUBSTITUTABILITY ISSUES**

**Factors Affecting Purchasing Decisions**

It is generally agreed that as long as CAC meets the specifications required for the particular end use in question, then price is the largest single factor affecting purchase decisions. There may, however, be some differences in quality between domestically produced CAC and CAC imported from China. During the staff conference for the preliminary phase of this investigation, representatives for the respondent interested parties reported that U.S.-produced CAC is often more effective and therefore requires less product for the same end use than Chinese-produced product.\textsuperscript{18} This sentiment was echoed by some purchasers in their questionnaire responses. Some end users require CAC with a lower ash content than is available with unwashed Chinese product. In such cases, the Chinese product must be acid-washed to remove ash and meet the required specifications. According to an industry witness appearing on behalf of respondent interested parties at the staff conference, such washing may increase costs by 30 to 40 percent.\textsuperscript{19} Finally, many orders of granular CAC (***)\textsuperscript{20} include removal of old product along with installation of new product. Service costs, therefore, may influence the purchase decision along with the cost of the CAC itself.

\textsuperscript{15} See app. E for more information concerning the price of RAC, and app. D for complete purchaser statements concerning the comparability of CAC and RAC.

\textsuperscript{16} Hearing transcript, pp. 44-45 (Luberda), and p. 111 (O’Brien).

\textsuperscript{17} One purchaser, ***, reported that it purchases a high-grade Chinese-produced steam-activated CAC that competes directly with domestic CHAC. According to **’s purchaser questionnaire response, this grade is substantially more expensive than most other grades of CAC. ***.

\textsuperscript{18} Conference transcript, p. 174 (Nelson).

\textsuperscript{19} Ibid., p. 119 (Jordan).

\textsuperscript{20} Petitioners’ postconference brief, exh. 1, p. 16.
While not Federally mandated in this industry, municipalities may enact their own “Buy American” regulations to CAC. Respondents claim that a substantial portion (20 to 30 percent) of municipal water treatment facilities purchase only U.S.-produced product. Petitioners state that they believe these estimated percentages to be “overblown.” In addition, they report that many of these “Buy American” policies are informal and could be ignored should price differences between domestic and imported product become too great. When asked about the issue, three of 34 purchasers stated that some of their sales were limited to domestic CAC by law. For these purchasers, such purchases accounted for 5-20 percent of their total purchases. Four purchasers also stated that a certain percentage of their purchases was limited to domestic CAC due to the requirements of their customers. Such purchases accounted for 90 percent of all purchases for one purchaser and less than 10 percent for the remaining three. Finally, five purchasers reported that some or all of their purchases were limited to domestic CAC for “other” reasons. For four of these five purchasers, such purchases accounted for 100 percent of their CAC purchases. For two of these four purchasers, the “other” reason given to limit their purchases to domestic sources was the superior quality of domestic CAC.

Purchasers were asked to identify the three major factors considered by their firm in deciding from whom to purchase CAC (table II-2). Twenty of the 32 responding firms reported that quality or meeting specifications was the most important factor, whereas nine of the 32 reported that price was the most important factor. No other factor was listed as “most important” by more than one purchaser. Price was also listed as second most important by 14 purchasers and third by another eight, while quality was listed as second by nine purchasers and third by one. Availability was listed as the most important factor by one purchaser, the second most important factor by three purchasers, and the third most important factor by 10 purchasers. Delivery or removal performance was listed as second most important by two purchasers and as third most important by four more and product reliability/consistency was listed second by two purchasers and third by two purchasers. No other factor received more than one vote.

When asked what factors determine the quality of CAC, purchasers provided a wide variety of answers. Nine of 30 stated that the CAC must meet either firm or industry standards and specifications; 16 mentioned physical characteristics such as particle size, bulk density, moisture content, ash content, hardness, iodine number, adsorption capacity, and dustiness; and six mentioned product performance (often based on in-house testing).

Purchasers were asked if they always, usually, sometimes, or never purchased the lowest-priced CAC. Four purchasers reported always purchasing the lowest-priced product; 14 reported that they usually purchased the lowest-priced product; nine reported only sometimes purchasing the lowest-priced product; and four reported never purchasing the lowest-priced product.

---

22 Petitioners’ postconference brief, p. 34.
23 None of these four purchasers reported purchasing RAC, which is almost always domestically produced.
**Table II-2**
CAC: Most important factors in selecting a supplier, as reported by purchasers

<table>
<thead>
<tr>
<th>Factor</th>
<th>First</th>
<th>Second</th>
<th>Third</th>
</tr>
</thead>
<tbody>
<tr>
<td>Price</td>
<td>9</td>
<td>14</td>
<td>8</td>
</tr>
<tr>
<td>Quality/meets specifications</td>
<td>20</td>
<td>9</td>
<td>1</td>
</tr>
<tr>
<td>Availability</td>
<td>1</td>
<td>3</td>
<td>10</td>
</tr>
<tr>
<td>Delivery/removal performance</td>
<td>0</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Domestic supplier</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Customer requires specific supplier</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Reliability/consistency</td>
<td>0</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Customer/technical service</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Packaging</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Extension of credit</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Traditional supplier</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>References</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>

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

Purchasers were asked to rate the importance of 15 factors in their purchasing decisions (table II-3). Meeting industry standards was listed as very important by all 33 responding purchasers, while product consistency was listed as very important by 32 of the responding purchasers, and reliability of supply was listed as very important by 31 firms. Twenty-nine listed product availability as being very important, while 26 reported that price was very important and 25 reported that delivery time was very important. Price was listed as somewhat important by the remaining seven purchasers.
## Table II-3

**CAC: Importance of purchase factors, as reported by purchasers**

<table>
<thead>
<tr>
<th>Factor</th>
<th>Very important</th>
<th>Somewhat important</th>
<th>Not important</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Number of firms responding</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Product availability</td>
<td>29</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>Delivery terms</td>
<td>19</td>
<td>12</td>
<td>2</td>
</tr>
<tr>
<td>Delivery time</td>
<td>25</td>
<td>7</td>
<td>1</td>
</tr>
<tr>
<td>Discounts offered</td>
<td>2</td>
<td>15</td>
<td>16</td>
</tr>
<tr>
<td>Extension of credit</td>
<td>6</td>
<td>13</td>
<td>14</td>
</tr>
<tr>
<td>Price</td>
<td>26</td>
<td>7</td>
<td>0</td>
</tr>
<tr>
<td>Minimum quantity requirements</td>
<td>4</td>
<td>14</td>
<td>14</td>
</tr>
<tr>
<td>Packaging</td>
<td>15</td>
<td>14</td>
<td>4</td>
</tr>
<tr>
<td>Product consistency</td>
<td>32</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Quality meets industry standards</td>
<td>33</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Quality exceeds industry standards</td>
<td>11</td>
<td>16</td>
<td>6</td>
</tr>
<tr>
<td>Product range</td>
<td>4</td>
<td>21</td>
<td>8</td>
</tr>
<tr>
<td>Reliability of supply</td>
<td>31</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Technical support/service</td>
<td>8</td>
<td>17</td>
<td>8</td>
</tr>
<tr>
<td>U.S. transportation costs</td>
<td>10</td>
<td>14</td>
<td>9</td>
</tr>
</tbody>
</table>

Note.--Not all purchasers responded for each factor.

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

Purchasers were asked for a country-by-country comparison of U.S.-produced CAC compared to CAC from China. Results are shown in table II-4. By and large, product from China and product from the United States are fairly comparable. However, it is clear that the Chinese CAC is generally less expensive, while the U.S. product is accompanied by superior technical support and may have more reliable supply and lower delivery times. The U.S. product may also exhibit a greater degree of product consistency. These patterns are consistent with statements made by suppliers concerning the differences between U.S. and Chinese CAC.
Producers, importers, and purchasers were asked if certain grades, types, or sizes of CAC were available from a single source. While *** of the three U.S. producers of CAC stated that certain grades were only available from a single source or country, three of five responding U.S. producers of RAC and 14 of 28 responding importers of CAC stated that certain grades were only available from a single source or country. 24 Eight of the 32 responding purchasers of CAC also reported that certain grades of CAC were not universally available. In general, purchasers that responded in the affirmative to this question reported that coal-based pellets are only available from China and that coconut-based CAC (pelletized, powdered, and granular) are not available in the United States and must be imported (primarily from

---

24 *** are not produced in the United States, but are available from China.
According to testimony given at the hearing, “Coconut-based products are typically more expensive than coal-based products and are largely sold to a different customer base.” (Hearing transcript, p. 17 (Thompson)). These assertions are supported in the petitioners’ posthearing brief by data presented in exh. 1, p. 32, which shows that ***.

In most cases, new suppliers of CAC must obtain certification before their product can be purchased. When purchasers were asked if they required certification or prequalification for CAC, 28 of the 32 responding purchasers reported that they required certification or prequalification for all of their suppliers, one reported that it required certification for 75 percent of its purchases, and the remaining three reported that they do not require certification or prequalification. According to purchaser responses, prequalification normally entails certification from the National Sanitation Foundation and/or the American Waste Water Association in addition to, in many cases, passing a series of in-house performance tests. Due to the health-related nature of many of the end uses of CAC, maintaining minimum standards of product quality and performance is essential in this industry.

Thirty of 32 responding purchasers of CAC reported factors they considered in qualifying a new supplier. The most common factors considered included meeting required specifications, quality, price, reliability of supply, customer service, and references regarding performance with other customers. The time required to qualify a new supplier was reported by 14 purchasers and ranged from one month to one year, with six purchasers reporting that qualification of new suppliers takes at least 6 months. A lengthy prequalification process increases the cost of changing suppliers in the short term. Purchasers were asked if any suppliers had failed to qualify their product or lost their approved status. Eleven responding purchasers reported that suppliers had failed to qualify, mostly due to quality-related issues. Those that failed included both domestic and Chinese suppliers.

Purchasers were asked whether they or their customers were aware of, or based their purchases on, the producer or the country of origin of CAC (table II-5). Overall, the manufacturer and country of origin are commonly known by purchasers. In addition, country of origin appears to matter to a sizeable share of their customers. However, the identity of the manufacturer normally does not make a difference in purchasing decisions made by the customers of responding purchasers.

---

25 According to testimony given at the hearing, “Coconut-based products are typically more expensive than coal-based products and are largely sold to a different customer base.” (Hearing transcript, p. 17 (Thompson)). These assertions are supported in the petitioners’ posthearing brief by data presented in exh. 1, p. 32, which shows that ***.

26 In the cases of failure to qualify by domestic producers, it is not clear whether the product in question was produced in the United States or imported from China.
According to questionnaire responses, 18.1 percent of CAC imported from China is pelletized while only *** percent of U.S.-produced CAC is pelletized. Pelletized CAC is similar in use to granular CAC and would normally be used by low-volume users using smaller filters. With smaller filters, less pressure is required to pass the medium through pelletized CAC than through granular CAC.

Table II-5

<table>
<thead>
<tr>
<th>CAC: The role of producer and country of origin in purchaser and customer decisions</th>
<th>Always</th>
<th>Usually</th>
<th>Sometimes</th>
<th>Never</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purchaser is aware of country of origin</td>
<td>28</td>
<td>3</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Purchaser is aware of manufacturer</td>
<td>17</td>
<td>9</td>
<td>6</td>
<td>2</td>
</tr>
<tr>
<td>Purchaser’s customers are aware of/interested in the country of origin</td>
<td>9</td>
<td>7</td>
<td>10</td>
<td>5</td>
</tr>
<tr>
<td>Purchaser’s customers make purchasing decision based on manufacturer of CAC</td>
<td>2</td>
<td>2</td>
<td>13</td>
<td>9</td>
</tr>
</tbody>
</table>

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

Nineteen of the 33 responding purchasers reported that they contacted at least two suppliers before making a purchase, with five reporting that they send out bid packages to anywhere from 5 to 12 potential suppliers and one reporting that it publicly advertises for bids. Twelve purchasers reported that they only contact the one supplier with which they have a long-term contract or relationship. Seventeen of 33 responding purchasers reported changing suppliers since January 1, 2003. There is no distinct pattern regarding country of origin in the reported changes. The annual bid process involved with many sales of CAC means that suppliers are often changed to the new lowest bidder (assuming that the lowest bidder passes prequalification).

Comparisons of Domestic Products, Subject Imports, and Nonsubject Imports

U.S. producers, importers, and purchasers were asked to report how frequently CAC from different countries was used in the same applications (table II-6).

*** responding U.S. producers of CAC, two of five responding U.S. producers of RAC, four of 26 responding importers of CAC, and 10 of 26 purchasers who reported having knowledge of both Chinese and U.S.-produced CAC reported that Chinese and U.S. CAC are always interchangeable. Nine importers of CAC, two producers of RAC, and eight purchasers reported that product from the two countries is frequently interchangeable, while 13 importers of CAC and five purchasers reported that product from China is sometimes interchangeable with U.S.-produced CAC. Three purchasers reported that these products were never interchangeable. Importers of CAC, purchasers of CAC and RAC, and producers of RAC also reported imperfect interchangeability between the United States, China, and nonsubject countries (primarily Sri Lanka, the Philippines, and India). The most-commonly stated reasons for a lack of interchangeability include the unavailability in the United States of coconut-based CAC and pelletized CAC.27 One importer of CAC also cited quality issues as the reason for imperfect interchangeability (in that the Chinese product is of lower quality), and one purchaser cited inferior delivery and availability on the part of the Chinese suppliers.

---

27 According to questionnaire responses, 18.1 percent of CAC imported from China is pelletized while only *** percent of U.S.-produced CAC is pelletized. Pelletized CAC is similar in use to granular CAC and would normally be used by low-volume users using smaller filters. With smaller filters, less pressure is required to pass the medium through pelletized CAC than through granular CAC.
Table II-6
CAC: U.S. producers' and importers' perceived degree of interchangeability of products produced in the United States and other countries

<table>
<thead>
<tr>
<th>Country comparison</th>
<th>U.S. producers of CAC</th>
<th>U.S. producers of RAC</th>
<th>U.S. importers</th>
<th>U.S. purchasers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A F S N 0</td>
<td>A F S N 0</td>
<td>A F S N 0</td>
<td>A F S N 0</td>
</tr>
<tr>
<td>U.S. vs. China</td>
<td>*** *** *** *** ***</td>
<td>2 2 0 0 1</td>
<td>4 9 13 0 0</td>
<td>10 8 5 3 0</td>
</tr>
<tr>
<td>U.S. vs. Nonsubject</td>
<td>*** *** *** *** ***</td>
<td>0 3 0 0 2</td>
<td>3 5 8 1 9</td>
<td>3 2 4 2 15</td>
</tr>
<tr>
<td>China vs. Nonsubject</td>
<td>*** *** *** *** ***</td>
<td>0 2 1 0 2</td>
<td>4 5 7 1 9</td>
<td>2 2 5 2 15</td>
</tr>
</tbody>
</table>

1 Producers, importers, and purchasers were asked if CAC produced in the United States and in other countries is used interchangeably.

Note: "A" = Always, "F" = Frequently, "S" = Sometimes, "N" = Never, and "0" = No familiarity.

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

Producers of CAC and RAC and importers of CAC were also asked to assess how often differences other than price were significant in sales of CAC from the United States, China, or nonsubject countries (table II-7).

Table II-7
CAC: U.S. producers' and importers' perceptions concerning the importance of non-price differences in purchases of CAC from the United States and other countries

<table>
<thead>
<tr>
<th>Country comparison</th>
<th>U.S. producers of CAC</th>
<th>U.S. producers of RAC</th>
<th>U.S. importers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A F S N 0</td>
<td>A F S N 0</td>
<td>A F S N 0</td>
</tr>
<tr>
<td>U.S. vs. China</td>
<td>*** *** *** *** ***</td>
<td>2 1 1 0 1</td>
<td>4 11 6 4 1</td>
</tr>
<tr>
<td>U.S. vs. Nonsubject</td>
<td>*** *** *** *** ***</td>
<td>0 1 2 0 2</td>
<td>6 5 2 4 9</td>
</tr>
<tr>
<td>China vs. Nonsubject</td>
<td>*** *** *** *** ***</td>
<td>0 1 2 0 2</td>
<td>3 6 2 4 11</td>
</tr>
</tbody>
</table>

1 Producers and importers were asked if differences other than price between CAC produced in the United States and in other countries are a significant factor in their firm's sales of the product.

Note: "A" = Always, "F" = Frequently, "S" = Sometimes, "N" = Never, and "0" = No familiarity.

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

*** responding producers of CAC, as well as four of 26 responding importers of CAC, reported that non-price differences are never a factor in sales of CAC from the United States and China. Four importers of CAC and two of five U.S. producers of RAC reported that such differences are always a factor; 11 importers of CAC and one producer of RAC reported that such differences are frequently a factor; and six importers of CAC and one producer of RAC reported that non-price differences were sometimes a factor. Quality, availability, particular product characteristics, service, and technical support were listed as factors other than price that may influence their purchase decisions. One importer of CAC stated that U.S.-produced CAC is of higher quality. Several others stated that availability for “specialty” products is superior for importers of Chinese CAC. The unavailability of pelletized CAC...
from the United States was mentioned by three importers of CAC. With regard to nonsubject countries, several importers of CAC noted that CAC made from coconut shells was available from only nonsubject sources.

ELASTICITY ESTIMATES

U.S. Supply Elasticity

The domestic supply elasticity for CAC measures the sensitivity of the quantity of CAC 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 production, producers’ ability to shift to production of other products, the existence of inventories, and the availability of alternative markets for U.S.-produced product. Earlier analysis of these factors, specifically the modest amount of unused capacity, exports, and sizeable inventories, indicates that the U.S. industry has some ability to increase shipments to the U.S. market; an estimate in the range of 2 to 4 is suggested.

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 CAC in the production of any downstream products. The only realistic substitute for CAC in most end uses is RAC. While RAC is not as effective as CAC in many end uses, a large rise in the price in CAC may bring about an increase in the use of RAC. While a movement into RAC in response to a price increase is likely, total usage of all activated carbon and RAC will not be responsive to price changes as there are few alternatives and the products are essential to many end uses (most notably, water treatment). For these reasons staff suggests an elasticity of demand in the range of -0.8 to -1.2. In other words, due to the availability of a close substitute, purchasers may be sensitive to changes in the price of CAC.

Substitution Elasticity

The elasticity of substitution measures the extent to which the ratio of subject-country imports to the domestic like product changes in response 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. The elasticity of substitution depends upon the extent of product differentiation between the domestic and imported products. Product differentiation, in the case of CAC, depends upon such factors as quality, consistency, availability, and reliability of supply. According to responding parties in this investigation, domestic and subject CAC are interchangeable in most end uses. While some end users prefer or insist upon domestic product, the elasticity of substitution is thought to be high—in the range of 4 to 6.
PART III: U.S. PRODUCERS’ PRODUCTION, SHIPMENTS, AND EMPLOYMENT

The Commission analyzes a number of factors in making injury determinations (see 19 U.S.C. §§ 1677(7)(B) and 1677(7)(C)). Information on the margins of dumping was presented earlier in this report and information on the volume and pricing of imports of the subject merchandise is presented in Parts IV and V. Information, as it relates to CAC, on the other factors specified is presented in this section and/or Part VI and (except as noted) is based on the questionnaire responses of three firms that accounted for virtually all of U.S. production during 2003-06.

U.S. PRODUCERS

The petition identified five firms that produced CAC during 2003-06. In addition to Calgon and Norit, California Carbon,1 Acticarb Tailored Products, LLC (Acticarb),2 and Cal Pacific Carbon (Cal Pacific)3 were listed as producers of the subject product. Petitioners estimated the 2005 production of the latter three firms to be nearly *** pounds compared with the combined Calgon and Norit production of more than *** pounds.4 Petitioners noted that they determined the “universe” of domestic producers in the following manner.

“Principally as domestic producers of certain activated carbon, petitioners are aware of the other producers in the market by virtue of directly competing with them in bids. Many companies that hold themselves out as domestic producers of certain activated carbon are actually engaging in reactivation of used activated carbon or other post-production processing of activated carbon that is imported or produced by other domestic producers.”5 6

Calgon is headquartered in Pittsburgh, PA, with separate CAC and RAC production facilities located in Catlettsburg, KY7 and a CAC production facility in Pearlington, MS.8 It is *** of CAC in the

---

1 California Carbon ***.
2 Acticarb stopped producing in October 2005 and is not currently in operation. Petition, p. 3, n. 6. ***.
3 Cal Pacific ***.
4 Petition, exh. General-1.
5 Petition, p. 3.
6 In response to a question from Commission staff as to whether the five firms named in the petition are the only firms that actually activate carbon, counsel for CIAC stated:

“To our knowledge, that’s correct. Some of our clients also do what’s being characterized as further processing, but they don’t include the activation step. There are others that are not represented in the proceeding that also do some further processing that does not involve activation.” Conference transcript, p. 158 (Heckendorn).
7 ***. Calgon’s questionnaire.
8 Calgon’s Pearlington facility was closed from August 29, 2005, through November 7, 2005, due to damage caused by Hurricanes Katrina and Rita. In its postconference submission, CIAC argued that petitioner’s (Calgon) claim that it is being materially injured by Chinese imports is “flatly unfounded,” noting that Calgon’s CEO, John Stanik’s statements in conference calls held on October 26, 2005, and March 29, 2006, concerning the company’s earnings in the third and fourth quarters of 2005, addressed the impact of Hurricanes Katrina and Rita on Calgon’s financial performance without mentioning subject imports. In part, Mr. Stanik stated:

(continued...)

III-1
United States, accounting for *** percent of 2006 production,9 and also has operations around the world, including China.10 According to its website, Calgon, along with its European operation Chemviron Carbon, is a “global manufacturer and supplier of granular activated carbon, innovative treatment systems, value added technologies and services for optimizing production processes and safely purifying the environment.”11 During the staff conference in the preliminary phase investigation, counsel for CIAC stated that it was “appropriate to at least probe the issue of exclusion of Calgon as a related party” in view of its imports from and operations in China;12 however, CIAC provided no further discussion of this potential issue in its postconference submission. In its preliminary determination, the Commission chose not to exclude Calgon as a related party.13 During 2003-06, Calgon’s imports of CAC from China were the equivalent of ***, ***, ****, and *** percent, respectively, of its U.S. production.14 15 With respect to its decision to import CAC from China, Calgon stated:

“Our customer base in the United States was encouraging us to purchase Chinese material to supply them. They wanted to get the advantages of the low prices for Chinese material while having Calgon’s technical support and quality assurance. We had established relationships with a number of Chinese producers and we would fulfill our customers’ requests, but it was very clear to us that whatever advantages we might have in service and quality were secondary to price. If we did not sell them Chinese material, we would lose the sale and other importers of Chinese carbon would get the sale.”16

Norit is headquartered in Marshall, TX, with CAC production facilities located there as well as in Pryor, OK.17 In 2006, Norit accounted for *** percent of U.S. production.18 Norit’s parent company,
Norit NV, is located in the Netherlands and has production facilities there. According to its website, Norit is:

“...the world’s largest producer of activated carbon and related services. With over 80 years of experience, NORIT has grown to produce well over 150 different types of activated carbon products, enabling them to offer the most choices, precise fit and best performance for any application. NORIT also offers activated carbon reactivation, carbon change out services, and both granular and powdered carbon systems & equipment.”

Norit is also an importer of CAC from China. During 2003-06, Norit’s imports from China were the equivalent of ***, ***, ***, and *** percent, respectively, of its U.S. production of CAC.

California Carbon is located in Wilmington, CA, where it operates a small production facility for CAC as well as a facility for RAC production. According to its *** percent of its operations were used for the production of ***. In 2006, California Carbon’s production of CAC amounted to *** pounds, or *** percent of total U.S. production.

Presented in table III-1 is a list of the U.S. CAC producers that responded to the Commission’s producer questionnaire. Also presented is information concerning each company’s position on the petition, production locations, and its share of reported 2006 domestic production of CAC.

---

19 Conference transcript, p. 27 (Thompson).
21 Norit ***.
22 California Carbon ***.
23 California Carbon ***. California Carbon accounted for less than *** percent of U.S. producers’ U.S. shipments of CAC. Of California Carbon’s shipments of its U.S.-produced product, ***. California Carbon also ***. During 2003-06, its *** pounds, respectively, which were the equivalent of ***. Additionally, California Carbon is ***. Ibid.

III-3
Table III-1
CAC: U.S. producers, positions on the petition, U.S. production locations, and shares of reported 2006 production

<table>
<thead>
<tr>
<th>Firm</th>
<th>Position</th>
<th>Production location(s)</th>
<th>Share of 2006 reported production (percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calgon</td>
<td>Supports (Petitioner)</td>
<td>Kentucky, Mississippi</td>
<td>***</td>
</tr>
<tr>
<td>Norit</td>
<td>Supports (Petitioner)</td>
<td>Oklahoma, Texas</td>
<td>***</td>
</tr>
<tr>
<td>California Carbon</td>
<td>***</td>
<td>California</td>
<td>***</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>Total</strong></td>
<td><strong>California</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

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

U.S. PRODUCERS’ CAPACITY, PRODUCTION, CAPACITY UTILIZATION, SHIPMENT, INVENTORY, AND EMPLOYMENT DATA

Table III-2 presents U.S. producers’ capacity, production, capacity utilization, shipment, inventory, and employment data, for CAC. Capacity was below apparent U.S. consumption of CAC in each of the years 2003-06. In testimony at the hearing in this investigation, petitioners indicated that given the nature of the CAC production process, it behooves producers to operate at, or near, full capacity. In this regard, they stated:

“. . . the nature of the production process requires high capacity utilization for the domestic producers. Given the very high capital intensive nature of activated carbon production and the highly integrated nature of the production process, the domestic producers are designed for and depend on running at very high capacity utilization rates to spread the high fixed cost over as much production volume as possible.

The domestic producers operate 24 hours a day, seven days a week, except for scheduled maintenance shutdowns. This condition of competition is particularly relevant to the Commission’s analysis because as U.S. producers have experienced low priced competition from Chinese imports they have been forced to reduce prices significantly to maintain volumes rather than cut production.”

With respect to their ability to add to capacity by restarting an idled production line, Calgon stated:

“As I mentioned we have closed some of our production lines. One of them we could restart. We’d have to make some capital investment to get it completely back into operation. There are some environmental additions we need to make on the furnaces. If we could see that the demand was going to be there and we could sell it at prices that were attractive we would certainly consider investing to restart one of our production lines. So we could, with that, absorb the growing demand that is in the U.S. Certainly that would be something we would be considering. But as Ron mentioned, our Board of

---

24 Hearing transcript, pp. 29-30 (Hudgens).
Directors obviously would be looking for some assurance that if we made that investment we’d be able to generate a return.\textsuperscript{25}

Table III-2
CAC: U.S. capacity, production, capacity utilization, shipments, end-of-period inventories, and employment-related indicators, 2003-06

\begin{tabular}{cccccccc}
\hline
* & * & * & * & * & * & * & * \\
\hline
\end{tabular}

\textsuperscript{25} Hearing transcript, pp. 137-138 (O’Brien). Norit indicated that any capacity it might consider adding in the future would be new capacity rather than the restart of an idled production line that would take roughly 18 months from the time an environmental permit is obtained. Hearing transcript, p. 150 (Thompson) and petitioners’ posthearing brief, p. 6, fn. 5.
PART IV: U.S. IMPORTS, APPARENT CONSUMPTION, AND MARKET SHARES

U.S. IMPORTERS

The Commission sent importer questionnaires to 61 firms believed to be importers of CAC, as well as to all U.S. producers.1 Usable questionnaire responses were received from 25 companies that imported CAC from China for all, or part, of the period 2003-06.2 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 ***, collectively accounting for 61.0 percent of reported imports of activated carbon from China in 2006. In 2006, GAC, PAC, and pelletized product accounted for 58.6, 23.5, and 17.9 percent, respectively, of shipments of Chinese CAC. Nearly all of the CAC imports from China were coal-based.

Of the 25 companies reporting imports of CAC from China during 2003-06, nine also reported imports from nonsubject sources. The nine firms accounted for virtually all of CAC imports (based on official statistics) from nonsubject sources. With the exception of ***,3 all of the CAC imports from nonsubject sources were coconut-based.4 *** of CAC imports from nonsubject sources in 2006. In response to Commission questions at the hearing in this investigation concerning end uses of coconut-based CAC, Calgon stated:

“According to internal data from Calgon, cigarette filters and gold mining account for ***, there is very little overlap in the ultimate end users of coconut- and coal-based CAC.

An analysis of Calgon’s sales of coal and coconut based carbons illustrates the point. As indicated in these data, *** purchase exclusively coal-based CAC and *** purchase exclusively coconut-based CAC. Of the remaining *** purchasers, *** are distributors that purchase both coconut- and coal-based CAC. These distributors, like Calgon, in turn resell to end users that generally purchase exclusively one or the other CAC. Thus, of the *** customers that purchase CAC from Calgon, only *** of these customers purchase both coconut- and coal-based CAC. Based on sales volume, only *** of coconut-based CAC is sold to customers that also purchase coal-based CAC. Consequently, there is extremely limited overlap in the end uses of coconut- and coal-based CAC in the U.S. market. Hence, it would be unlikely that imports of coconut-based CAC would prevent the domestic industry from obtaining a benefit under the order.”

In 2006, GAC, PAC, and pelletized product accounted for 89.5, 9.6, and 0.9 percent, respectively, of shipments of nonsubject CAC. A list of responding U.S. importers of CAC, the countries they import

---

1 The Commission sent questionnaires to those firms identified in the petition and firms identified by U.S. Customs and Border Protection (“Customs”) as possible importers.
2 One importer, ***, reported imports of RAC. ***.
3 Norit’s nonsubject CAC imports were coal- and peat-based and were produced at its operations in Europe. Hearing transcript, p. 118 (Wruble).
4 For 2003, 2004, 2005, and 2006, coconut-based imports from nonsubject sources accounted for ***,***, *** percent, respectively, of all nonsubject imports reported by questionnaire respondents.
5 Petitioners’ posthearing brief, exh. 1, pp. 32-33. See also, exh. 10 of petitioners’ posthearing brief.

IV-1
Collectively, Sri Lanka, the Philippines, Indonesia, India, and Thailand accounted for *** percent of U.S. CAC imports in 2006. Table IV-1

**Table IV-1**
CAC: U.S. importers, countries they import from, and shares (in percent) of 2006 imports

<table>
<thead>
<tr>
<th>*</th>
<th>*</th>
<th>*</th>
<th>*</th>
<th>*</th>
<th>*</th>
<th>*</th>
<th>*</th>
</tr>
</thead>
</table>

**U.S. IMPORTS**

U.S. imports (based on official statistics) of CAC are presented in table IV-2. In 2006, China was the largest exporter of subject CAC to the United States, accounting for *** percent of total imports (on a quantity basis) of CAC, followed (in order) by Sri Lanka, the Philippines, Indonesia, India, and Thailand.6 U.S. imports of CAC and shipments of those imports, as reported by importer questionnaire respondents, are presented in table C-2.

**Table IV-2**
CAC: U.S. imports, by sources, 2003-06, based on adjusted official Commerce statistics

<table>
<thead>
<tr>
<th>*</th>
<th>*</th>
<th>*</th>
<th>*</th>
<th>*</th>
<th>*</th>
<th>*</th>
<th>*</th>
</tr>
</thead>
</table>

Changes in importers’ operations since January 1, 2003 were reported by six firms and are presented in table IV-3.

**Table IV-3**
CAC: U.S. importers and changes in operations since January 1, 2003

<table>
<thead>
<tr>
<th>*</th>
<th>*</th>
<th>*</th>
<th>*</th>
<th>*</th>
<th>*</th>
<th>*</th>
<th>*</th>
</tr>
</thead>
</table>

**NEGLIGIBILITY**

The Tariff Act provides for the termination of an investigation if imports of the subject product from a subject country are less than 3 percent of total imports, or, if there is more than one such country, their combined share is less than or equal to 7 percent of total imports, during the most recent 12 months for which data are available preceding the filing of the petition—in this case March 2005 to February 2006. The shares (in percent) of the total quantity of U.S. imports, by sources, are presented in table IV-4.

---

6 Collectively, Sri Lanka, the Philippines, Indonesia, India, and Thailand accounted for *** percent of U.S. CAC imports in 2006.
Table IV-4
CAC: U.S. imports, by sources, and shares of total imports (in percent), March 2005-February 2006

<table>
<thead>
<tr>
<th></th>
<th>Imports (1,000 pounds)</th>
<th>Share of total imports (percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>China</td>
<td>77,943</td>
<td>58.7</td>
</tr>
<tr>
<td>Nonsubject countries</td>
<td>54,839</td>
<td>41.3</td>
</tr>
<tr>
<td>Total</td>
<td>132,782</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: Compiled from official Commerce statistics, using proportions gathered from questionnaire data to exclude imports of CHAC.

APPARENT U.S. CONSUMPTION

Data on U.S. consumption of CAC are presented in table IV-5. The quantity of U.S. consumption of CAC increased by *** percent from 2003 to 2006. The value of U.S. consumption of CAC increased by *** percent from 2003 to 2006.

Table IV-5

* * * * * * * *

U.S. MARKET SHARES

Market shares for CAC are presented in table IV-6. The U.S. producers’ market share of CAC decreased irregularly from 2003 through 2006, both by quantity and value.

Table IV-6
CAC: U.S. consumption and market shares, 2003-06

* * * * * * * *

RATIO OF IMPORTS TO U.S. PRODUCTION

Information concerning the ratio of imports to U.S. production of CAC is presented in table IV-7.

Table IV-7
CAC: Ratio of U.S. imports to U.S. production, by sources, 2003-06

* * * * * * * *
PART V: PRICING AND RELATED INFORMATION

FACTORS AFFECTING PRICES

Raw Materials

The production of CAC begins with materials that contain a high level of carbon. Such materials include, but are not limited to, coal (bituminous, lignite, and anthracite), wood, coconut shells, olive stones, and peat.\(^1\) According to petitioners, coal is the raw material most widely used by both U.S. and Chinese producers of CAC.\(^2\) In the petitioners’ posthearing brief, Calgon reported that coal accounted for *** percent of total costs while Norit *** reported that coal accounted for *** percent of total costs.\(^3\) As shown in figure V-1, the price of coal has risen over the period for which data were collected (although the price has leveled off in 2006). Prices in the third quarter of 2006 were 59 percent higher than they were in the first quarter of 2003. During the hearing, however, petitioners pointed out that they use a very specialized type of coal in the production of CAC.\(^4\) The coal prices presented here, therefore may not capture their true raw material costs. In addition, producers of CAC often engage in long-term contracts for coal inputs. Such contracts will cause the actual price paid for coal inputs to differ from the market price. Other raw materials used in the production of CAC include pitch, phosphoric acid, oxygen, steam, and water.\(^5\) Overall, raw materials accounted for *** percent of the cost of goods sold for CAC in 2006, up from *** percent in 2005 and *** percent in 2003. Electricity and natural gas are also used in the production process of CAC and accounted for *** percent of the total costs of goods sold in 2006, up *** from *** percent in 2003.

Transportation Costs to the U.S. Market

Transportation costs for CAC from China to the United States (excluding U.S. inland costs) in 2006 are estimated to be equivalent to approximately 20.0 percent of the customs value for product from China, down from 24.4 percent in 2005. These estimates are derived from official import data and represent the transportation and other charges on imports valued on a c.i.f. basis, as compared with customs value.\(^6\)

U.S. Inland Transportation Costs

Reported U.S. inland transportation costs for CAC were approximately *** percent for Calgon and *** percent for Norit.\(^7\) ***.\(^8\) Reported U.S. inland transportation costs ranged from 0 to 30 percent for the 27 responding importers of CAC from China, with all but one reporting transportation costs of 20 percent or less, and 16 reporting costs of less than 10 percent.

---

\(^1\) ***
\(^2\) Petition, p. 13.
\(^3\) Petitioners’ posthearing brief, exh. 1, p. 2.
\(^4\) Hearing transcript, p. 58 (Thompson).
\(^5\) Petition, pp. 51-61.
\(^6\) These estimates are based on HTS subheading 3802.10.00.
\(^7\) *** also produce RAC. In this section, they are discussed only as producers of CAC. The discussion of producers of RAC refers to the six additional responding commercial producers. *** is treated as a producer of both CAC and RAC even though CAC ***.
\(^8\) The four responding producers of RAC that arrange for shipment of the product reported that transportation costs accounted for 13-15 percent of total costs.
Producers and importers also were asked to estimate the percentage of their sales that occurred within certain distance ranges. Norit reported shipping *** percent of its sales under 100 miles and Calgon reported that *** percent of its sales were shipped less than 100 miles. California Carbon reported that *** percent of its sales were shipped under 100 miles. Calgon reported shipping *** percent of sales between 100 and 1,000 miles, Norit reported that *** percent of its sales were shipped between 100 and 1,000 miles, and California Carbon reported that *** percent of its sales were shipped between 100 and 1,000 miles. Finally, *** reported shipping *** percent of its sales more than 1,000 miles, *** reported that *** percent of its sales were shipped more than 1,000 miles, and California Carbon reported that *** percent of its sales were shipped over 1,000 miles. One of six responding U.S. producers of RAC reported no shipments made outside of 100 miles while the remaining five reported that the majority (from 60 to 95 percent) of their shipments were further than 100 miles, with three reporting that 30 percent or more were shipped outside of 1,000 miles. Six of 27 responding importers of CAC reported shipping at least 50 percent of their sales more than 1,000 miles; 11 reported shipping at least 50 percent of their sales between 100 and 1,000 miles; and 9 reported shipping at least 50 percent of their sales less than 100 miles, with 3 of those shipping 100 percent of their sales less than 100 miles.

Exchange Rates

From 2000 to June of 2005, the Chinese currency was pegged at 8.28 yuan per U.S. dollar. There was a small revaluation in the third quarter of 2005, raising the value of the Chinese currency to 8.14 yuan per dollar, after which the yuan was moved to a crawling peg against the dollar. The yuan appreciated further into the fourth quarter of 2006, averaging 7.86 yuan per dollar during that quarter.9

Pricing Practices

CAC is sold on both a spot and a contract basis. *** U.S. producers of CAC reported that at least *** percent of their sales were on a spot basis, with the remaining sales *** long- and short-term contracts. Short-term contracts last *** while long-term contracts range from *** in length. The third responding U.S. producer of CAC reported that *** sales were made on a spot basis. Five of six responding U.S. producers of RAC reported that a majority of their commercial sales were on a contract basis, with two reporting that over *** percent of their sales were on a long-term contract basis. The remaining U.S. producer of RAC reported that *** percent of its sales were made on a spot basis. Seven of 27 responding importers of CAC reported that 100 percent of their sales were on a spot basis, with six more reporting that at least 50 percent of their sales were on a spot basis. Fourteen of the 27 responding importers of CAC reported that more than half of their sales were made on a contract basis. Of those 14 importers of CAC, seven reported that most of their sales were on a long-term contract basis and seven reported that most of their sales were on a short-term contract basis.

While *** reported having a price list for new customers, *** responding producers of CAC reported that prices are determined primarily on a transaction-by-transaction basis and that many factors influence the final price. *** reported that they ***. ***. *** reported ***. *** reported determining price based on costs and standard margins while two reported basing prices on the market and the remaining *** reported using either transaction-by-transaction negotiations or contracts for multiple shipments. One U.S. producer of RAC reported that ***, while the remaining five reported no discount policy. While a majority (18 of 28) of responding importers of CAC reported determining price on at least some of their sales on a transaction-by-transaction basis, five reported using a price list for some (usually the smaller) or all of their customers. Other importers of CAC determine prices based on costs and standard margins or on previous bid prices. Fifteen responding importers of CAC reported giving discounts based on, among other things, quantity, long-term orders, and early payment. The remaining 13 importers of CAC reported that they either do not give discounts or have no formalized discount policy.

Price Data

The Commission requested U.S. producers and importers of CAC to provide quarterly data for the total quantity and f.o.b. (U.S. point of shipment) value of CAC that was shipped to unrelated customers in the U.S. market. Data were requested for the period January 2003 to December 2006. The products for which pricing data were requested are defined as follows:

Product 1.—Granular activated carbon that is steam activated from coal (bituminous, lignite, and anthracite), 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, lignite, and anthracite), 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, lignite, and anthracite), unwashed, particle size 90% min, 325 mesh, iodine no. 700 mg/g min, moisture 5% max.
Three U.S. producers of CAC and 21 importers of CAC from China provided usable pricing data for sales of the requested products, although not all firms reported pricing for all quarters.\textsuperscript{10} Tables V-1 through V-3 and figures V-2 through V-4 present f.o.b. (U.S. point of shipment) selling prices for the three CAC products defined above produced and sold in the United States as well as for products produced in China and imported into the United States. By quantity, pricing data reported by responding firms in 2003 through 2006 accounted for *** percent of reported U.S. commercial shipments of U.S.-produced CAC and 41.8 percent of reported U.S. commercial shipments of Chinese-produced CAC.

**Price Trends**

U.S. producers’ average prices for product 1 showed no discernable trend over the period for which data were collected. While prices moved from quarter to quarter, no sustained rise or fall is evident. Overall, prices for product 1 fell by *** percent between January-March 2003 and October-December 2006. Prices for product 2 fell by *** percent between January-March 2003 and October-December 2006. This decrease was punctuated by a ***-percent drop in July-September 2006 followed by a ***-percent rise in the final quarter of the period. The outlying quarter corresponds to *** in that quarter. ***. Prices for product 3, *** of the three pricing products, show little movement over the sample until showing a *** upward trend in the fourth quarter of 2006. Overall, prices in October-December 2006 were *** percent higher than in January-March 2003. *** of this increase is due to the price increase observed in the final quarter of 2006. ***. ***. ***.\textsuperscript{11}

\textsuperscript{10} *** In addition, five U.S. producers of RAC also supplied prices for the reactivated counterparts to the products listed here. These data are available in app. E.

\textsuperscript{11} See Part VI of this report for more details concerning the ***.
Table V-1
CAC: Weighted-average f.o.b. prices and quantities of domestic and imported product 1 and margins of underselling/(overselling), by quarters, January 2003-December 2006

<table>
<thead>
<tr>
<th>Period</th>
<th>United States</th>
<th></th>
<th>China</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Price</td>
<td>Quantity</td>
<td>Price</td>
<td>Quantity</td>
<td>Margin</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(per pound)</td>
<td>(pounds)</td>
<td>(per pound)</td>
<td>(pounds)</td>
<td>(percent)</td>
<td></td>
</tr>
<tr>
<td>2003:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jan.-Mar.</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>34.2</td>
<td></td>
</tr>
<tr>
<td>Apr.-June</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>26.7</td>
<td></td>
</tr>
<tr>
<td>July-Sept.</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>30.1</td>
<td></td>
</tr>
<tr>
<td>Oct.-Dec.</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>27.1</td>
<td></td>
</tr>
<tr>
<td>2004:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jan.-Mar.</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>25.1</td>
<td></td>
</tr>
<tr>
<td>Apr.-June</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>25.4</td>
<td></td>
</tr>
<tr>
<td>July-Sept.</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>28.8</td>
<td></td>
</tr>
<tr>
<td>Oct.-Dec.</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>27.7</td>
<td></td>
</tr>
<tr>
<td>2005:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jan.-Mar.</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>24.1</td>
<td></td>
</tr>
<tr>
<td>Apr.-June</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>15.4</td>
<td></td>
</tr>
<tr>
<td>July-Sept.</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>(7.8)</td>
<td></td>
</tr>
<tr>
<td>Oct.-Dec.</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>43.5</td>
<td></td>
</tr>
<tr>
<td>2006:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jan.-Mar.</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>58.3</td>
<td></td>
</tr>
<tr>
<td>Apr.-June</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>39.2</td>
<td></td>
</tr>
<tr>
<td>July-Sept.</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>37.7</td>
<td></td>
</tr>
<tr>
<td>Oct.-Dec.</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>18.2</td>
<td></td>
</tr>
</tbody>
</table>

1 Product 1.—Granular activated carbon that is steam activated from coal (bituminous, lignite, and anthracite), 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.
2 Based on unrounded data.

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 2¹ and margins of underselling/overselling, by quarters, January 2003-December 2006

<table>
<thead>
<tr>
<th>Period</th>
<th>United States</th>
<th></th>
<th></th>
<th>China</th>
<th></th>
<th></th>
<th></th>
<th>Margin (percent)²</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Price (per pound)</td>
<td>Quantity (pounds)</td>
<td>Price (per pound)</td>
<td>Quantity (pounds)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2003:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jan.-Mar.</td>
<td>$***</td>
<td>***</td>
<td>$***</td>
<td>***</td>
<td></td>
<td></td>
<td></td>
<td>49.9</td>
</tr>
<tr>
<td>Apr.-June</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td></td>
<td></td>
<td></td>
<td>52.5</td>
</tr>
<tr>
<td>July-Sept.</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td></td>
<td></td>
<td></td>
<td>48.7</td>
</tr>
<tr>
<td>Oct.-Dec.</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td></td>
<td></td>
<td></td>
<td>42.7</td>
</tr>
<tr>
<td>2004:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jan.-Mar.</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td></td>
<td></td>
<td></td>
<td>50.5</td>
</tr>
<tr>
<td>Apr.-June</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td></td>
<td></td>
<td></td>
<td>49.7</td>
</tr>
<tr>
<td>July-Sept.</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td></td>
<td></td>
<td></td>
<td>36.7</td>
</tr>
<tr>
<td>Oct.-Dec.</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td></td>
<td></td>
<td></td>
<td>41.3</td>
</tr>
<tr>
<td>2005:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jan.-Mar.</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td></td>
<td></td>
<td></td>
<td>45.4</td>
</tr>
<tr>
<td>Apr.-June</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td></td>
<td></td>
<td></td>
<td>47.1</td>
</tr>
<tr>
<td>July-Sept.</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td></td>
<td></td>
<td></td>
<td>38.7</td>
</tr>
<tr>
<td>Oct.-Dec.</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td></td>
<td></td>
<td></td>
<td>29.4</td>
</tr>
<tr>
<td>2006:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jan.-Mar.</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td></td>
<td></td>
<td></td>
<td>52.5</td>
</tr>
<tr>
<td>Apr.-June</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td></td>
<td></td>
<td></td>
<td>57.7</td>
</tr>
<tr>
<td>July-Sept.</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td></td>
<td></td>
<td></td>
<td>0.6</td>
</tr>
<tr>
<td>Oct.-Dec.</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td></td>
<td></td>
<td></td>
<td>18.8</td>
</tr>
</tbody>
</table>

¹ Product 2.— Granular activated carbon that is steam activated from coal (bituminous, lignite, and anthracite), 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.

² Based on unrounded data.

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 31 and margins of underselling/(overselling), by quarters, January 2003-December 2006

<table>
<thead>
<tr>
<th>Period</th>
<th>United States</th>
<th></th>
<th>China</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Price (per pound)</td>
<td>Quantity (pounds)</td>
<td>Price (per pound)</td>
<td>Quantity (pounds)</td>
<td>Margin (percent)²</td>
</tr>
<tr>
<td>2003:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jan.-Mar.</td>
<td>$***</td>
<td>***</td>
<td>$***</td>
<td>***</td>
<td>36.9</td>
</tr>
<tr>
<td>Apr.-June</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>29.1</td>
</tr>
<tr>
<td>July-Sept.</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>33.1</td>
</tr>
<tr>
<td>Oct.-Dec.</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>(3.3)</td>
</tr>
<tr>
<td>2004:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jan.-Mar.</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>17.9</td>
</tr>
<tr>
<td>Apr.-June</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>23.7</td>
</tr>
<tr>
<td>July-Sept.</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>23.4</td>
</tr>
<tr>
<td>Oct.-Dec.</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>9.4</td>
</tr>
<tr>
<td>2005:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jan.-Mar.</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>19.9</td>
</tr>
<tr>
<td>Apr.-June</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>16.6</td>
</tr>
<tr>
<td>July-Sept.</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>14.9</td>
</tr>
<tr>
<td>Oct.-Dec.</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>11.9</td>
</tr>
<tr>
<td>2006:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jan.-Mar.</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>36.6</td>
</tr>
<tr>
<td>Apr.-June</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>15.1</td>
</tr>
<tr>
<td>July-Sept.</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>(3.2)</td>
</tr>
<tr>
<td>Oct.-Dec.</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>0.1</td>
</tr>
</tbody>
</table>

¹ Powder activated carbon that is steam activated from coal (bituminous, lignite, and anthracite), unwashed, particle size 90% min, 325 mesh, iodine no. 700 mg/g min, moisture 5% max.
² Based on unrounded data.

Source: Compiled from data submitted in response to Commission questionnaires.
After rising unevenly by *** percent from January-March 2003 to July-September 2005, prices of U.S. shipments of product 1 imported from China fell by *** percent in the ensuing two quarters. Prices then rebounded quickly through 2006 and in October-December 2006 were *** percent higher than they were in January-March 2003. Prices of U.S. shipments of product 2 imported from China rose irregularly from January-March 2003 to October-December 2005, increasing *** percent in that time. These prices declined in the next two quarters before rising through the end of 2006; overall, these prices were *** percent higher at the end of the period as compared to the beginning. Prices of U.S. sales of product 3 imported from China rose irregularly throughout the period and ended the period at a level *** percent higher than they were in the beginning of the period.

Price Comparisons

Prices of imports from China were lower than prices of U.S.-produced product 1 in all but one quarter during the period for which data were collected; margins of underselling for product 1 ranged from 15.4 to 58.3 percent. The average margin of underselling over the period for product 1 was 29.6 percent. In one quarter, the price of Chinese product 1 was 7.8 percent higher than the price of U.S.-produced product 1. For product 2, prices of imports from China were lower than the prices of U.S.-produced product in all quarters during the period for which data were collected. Margins of underselling for product 2 ranged from 0.6 percent in July-September 2006 (a quarter in which the price of the U.S.-produced product was *** due to ***) to 57.7 percent in April-June 2006. Margins for product 2 were over 40 percent in 10 of the first 11 quarters of the period for which data were collected, but shrank significantly in the last half of 2006. The average margin of underselling for product 2 over the entire period was 41.4 percent. For product 3, the prices of product imported from China were below prices for the U.S. product in 14 of 16 quarters. Over the entire period, margins of underselling ranged from 0.1 to 36.9 percent; the average margin of underselling for product 3 was 20.6 percent. In two quarters, the Chinese product was priced 3.2 and 3.3 percent above the U.S. product. U.S.-produced product 3 accounted for *** percent of sales of product 3 in the United States over the period for which data were collected.
During the preliminary phase of this investigation, the petitioners provided a list of *** alleged lost sales to Chinese competitors totaling $*** between January 2003 and December 2005. Staff attempted to contact customers associated with $***, or approximately *** percent, of those lost sales. In addition, petitioners alleged another $*** per year of lost revenues attributable to lower prices on retained contracts caused by competition from Chinese producers. Staff was able to confirm $*** of the alleged $*** in total lost sales, and $ *** of the alleged $*** in annual lost revenue. Customers rejected the allegation for various reasons in $*** of the total lost sales. In the largest of the rejected allegations (accounting for $*** in lost sales), the purchaser stated that while a Chinese supplier did win the initial bid, the supplied product did not pass quality tests and was replaced by domestically supplied CAC. Of those contacted, staff was unable to obtain information on $*** in alleged lost sales and $*** in lost revenue. In questionnaire responses submitted for the final phase of this investigation, domestic producers alleged an additional 31 lost sales totaling $*** that took place during 2006. Staff was able to confirm $*** of those lost sales while purchasers disagreed with $ *** alleged lost sales totaling $***. Staff was unable to obtain responses pertaining to $*** in alleged lost sales. Despite the large number of “no” responses, the alleged lost sales in 2006 were overwhelmingly confirmed.12

By and large, price was the reason for choosing the Chinese product. Many of the lost sales were to municipal water treatment facilities which, in many cases, must accept the lowest-priced product provided that it meets the required standards. A few respondents indicated that while the lowest-priced option was of Chinese product, the product did not pass initial tests or performed poorly upon use. As a result, these purchasers have switched or plan to switch back to domestically produced CAC. Since most of the alleged lost sales are from accounts with open annual bids, any bid lost to a supplier of Chinese product, regardless of who won the contract the previous year, was counted as a lost sale. Information on alleged lost sales and lost revenues can be seen in tables V-4, V-5, and V-6.

Table V-4
CAC: U.S. producers’ lost revenue allegations, 2003-05

* * * * * * *

Table V-5
CAC: U.S. producers’ lost sales allegations, 2003-05

* * * * * * *

Table V-6
CAC: U.S. producers’ lost sales allegations, 2006

* * * * * * *

---

12 Petitioners provided information on *** (Petitioners posthearing brief, Responses to Commissioners questions, pp. 7-8.) Petitioner notes that in each case, ***.
PART VI: FINANCIAL EXPERIENCE OF U.S. FIRMS

BACKGROUND

Two firms, Calgon1 and Norit, provided production, shipment, and financial data on their operations on CAC. Each of them reported on a calendar-year basis, and these data accounted for *** U.S. production of CAC in 2006.2

OPERATIONS ON CAC

The results of U.S. firms’ operations on CAC (table VI-1) are briefly summarized here. Total net sales quantities decreased irregularly between 2003 and 2006 although sales values and sales unit values (representing the combined data of Calgon and Norit) increased *** between the two years. All three metrics declined from 2003 to 2005, and then all three rebounded and approximated or exceeded 2003 values. The cost of raw materials and other factory costs (factory overhead) accounted for much of the overall increase in the industry’s cost of goods sold (“COGS”) between 2003 and 2006 even though labor and energy costs also rose. Selling, general, and administrative (“SG&A”) expenses declined irregularly between 2003 and 2006. The industry’s operating *** between 2005 and 2006, attributable to an increase in the ***.3

Table VI-1
CAC: Results of operations of U.S. firms, 2003-06

* * * * * * * *

In table VI-1, the data of *** differ in several important respects from those of ***: ***. These differences were ascribed to several factors, including *** between the two firms.4 ***. The raw material input for the granular product reportedly is a harder (bituminous) coal that costs more than the

---

1 Staff verified Calgon’s questionnaire response, and the changes have been incorporated into the report. See Memorandum to the Commission, INV-EE-014, February 15, 2007.

2 A third firm, ***, stated that it could not provide financial data on CAC, but did provide data for production, shipment, and pricing. Differences between the aggregated data on shipments and sales were *** in 2006. *** data are included in app. E, operations on RAC.

3 At the Commission’s hearing, personnel from Norit and Calgon testified that the firms were able to raise prices and win back customers after the petition was filed and the preliminary duties were established. Hearing transcript, pp. 68-69, 93-94 (Thompson and O’Brien). They cautioned that the improvement in financial results in 2006 was “slight-to-modest” (hearing transcript, p. 70 (O’Brien)), partly because of the time lag between winning a bid and shipment of material against the sale. Hearing transcript, p. 95 (O’Brien). Petitioners stated that their operating profits have declined *** although the domestic industry experienced “modest improvement as a result of the antidumping case” in 2006. Also, see petitioners’ posthearing brief, p. 13, exh. 1, pp. 4-5 (operating results), p. 11 (2006 improvement), and exh. 2 (operating results by firm). There would be an expected lag between winning bids and gaining higher prices and improvement in operating results because such revenues would only be recognized at the time of shipment in accordance with accounting principles of revenue recognition generally accepted in the United States.

4 Petitioners’ postconference brief, exh. 1, p. 19. Also, see petitioners’ posthearing brief, exh. 1, p. 41.
soft (lignite) coal used to produce the powdered product;\(^5\) **. Norit and Calgon consume natural gas during the production process, which has increased in cost,\(^7\) and **.

Sales and cost data for operations on CAC on a firm-by-firm basis are shown in table VI-2.

Table VI-2
CAC: Results of operations of U.S. producers, by firm, 2003-06

<p>| | | | | | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
</tr>
</tbody>
</table>

Raw materials and energy represent a large component of total COGS. The raw material costs of CAC are chiefly composed of the costs of coal.\(^8\) The ratio of raw material costs to total COGS, the ratio of raw material costs to sales, and the average unit value of raw materials rose between 2003 and 2005, but fell between 2005 and 2006. The ratio of energy costs to total COGS, the ratio of energy costs to sales, and the average unit value of energy costs rose between 2003 and 2006. These data are shown in table VI-3.

Table VI-3
CAC: Raw material and energy costs, by firm, 2003-06

<p>| | | | | | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
</tr>
</tbody>
</table>

Changes in the operating income of these firms are further evidenced by a variance analysis that shows the effects of prices and volume on net sales and of costs and volume on their total costs. Because the usefulness of the analysis may be diminished by the product mix and cost differences ** at the end of table VI-4.

Table VI-4
CAC: Variance analysis on results of operations, 2003-06

<p>| | | | | | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
</tr>
</tbody>
</table>

This analysis shows that the decrease in the industry’s operating income between 2003 and 2006 of $** generally was attributable to combined net cost/expense ** and lower sales volume that were greater than the favorable price variance **. However, the mix of favorable and unfavorable variances ** differed considerably and shifted between the full calendar years, as depicted by the data in table VI-4.

---

\(^5\) Both Mr. O’Brien and Mr. Thompson testified regarding coal costs. They stated that Calgon and Norit purchase coal on long-term and shorter-term (one-to-two-year) contracts, and that coal purchase contracts increasingly have price escalator clauses. Hearing transcript, pp. 56-58 (O’Brien and Thompson). Compare petitioners’ posthearing brief, exh. 1, p. 23 ** with exh. 9 (EIA price series for Eastern coals by type of coal). Hence, any comparison with reported spot market prices is not likely to be apt.

\(^6\) Hearing transcript, pp. 59 and 99 (Thompson), pp. 60 and 99 (O’Brien), and p. 98 (Rester).

\(^7\) Hearing transcript, pp. 124-125 (Thompson) and pp. 126-127.

\(^8\) For a discussion and price series of coal and natural gas, see petitioners’ postconference brief, pp. 35-36 and exh. 5. Also, see petitioners’ posthearing brief, exh. 1, p. 2 (ratios of coal costs to total raw materials and COGS in 2006 by firm) and p. 23 (** coal costs by type of coal). With respect to natural gas and electricity costs, see petitioners’ posthearing brief, exh. 1, p. 40.

VI-2
CAPITAL EXPENDITURES AND RESEARCH AND DEVELOPMENT EXPENSES

*** reported capital expenditures and research and development (“R&D”) expenses for CAC that are shown in table VI-5. It appears that the primary purpose of ***.9

Table VI-5
CAC: Capital expenditures and R&D expenses, by firm, 2003-06

<p>| | | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
</table>
| 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”) for 2003 to 2006. The data for total net sales and operating income are from table VI-1. Operating income was divided by total net sales, resulting in the operating income ratio. Total net sales was divided by total assets, resulting in the asset turnover ratio. The operating income ratio was then multiplied by the asset turnover ratio, resulting in ROI; the expanded form of this equation shows how the profit margin and assets turnover ratio interact to determine the return on investment. These data and calculations are shown in table VI-6.

Table VI-6
CAC: Value of assets used in the production, warehousing, and sale, and return on investment, 2003-06

<p>| | | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
</table>
| CAPITAL AND INVESTMENT

The Commission requested U.S. producers to describe any actual or anticipated negative effects of imports of CAC from China on their firms’ growth, investment, and ability to raise capital or development and production efforts (including efforts to develop a derivative or more advanced version of the product). U.S. producer responses are presented on the following page.

Actual Negative Effects10

Calgon: ***.11 ***.
Norit: ***.

Anticipated Negative Effects12

Calgon: ***.
Norit: ***.

---

9 Petitioners’ postconference brief, exh. 14. Also, see hearing transcript, pp. 16-18 (Thompson) and p. 21 (O’Brien).
10 ***.
11 Also, see hearing transcript, pp. 21 and 25 (O’Brien).
12 ***.
PART VII: THREAT CONSIDERATIONS

The Commission analyzes a number of factors in making threat determinations (see 19 U.S.C. § 1677(7)(F)(i)). Information on the volume and pricing of imports of the subject merchandise is presented in Parts IV and V; and information on the effects of imports of the subject merchandise on U.S. producers’ existing development and production efforts is presented in Part VI. Information on inventories of the subject merchandise; foreign producers’ operations, including the potential for “product-shifting;” any other threat indicators, if applicable; and any dumping in third-country markets, follows.

THE INDUSTRY IN CHINA

Table VII-1 presents data provided by Chinese producers/exporters with respect to their CAC operations in China. Eight firms, which exported CAC to the United States, provided useable data. The exports to the United States of these firms were equivalent to *** percent of CAC U.S. imports from China in 2006. One firm noted that CAC represented 100 percent of its firm’s total sales in 2005, four stated that CAC accounted for more than 90 percent of their sales, one firm reported CAC as 60 percent of its sales, and one stated that CAC accounted for 30 percent of its sales.

---

1 Of the eight firms, seven are producer/exporters, while one is an exporter only. ***.

2 Twenty-four firms, 19 of which exported CAC to the United States, provided useable data in the preliminary phase of this investigation. The exports to the United States of these firms were equivalent to 56.4 percent of CAC U.S. imports from China in 2005. ***. Seventeen firms noted that CAC represented 100 percent of their firm’s total sales in 2005, with only two noting that it represented less than 50 percent.
<table>
<thead>
<tr>
<th>Item</th>
<th>Actual experience</th>
<th>Projections</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2003</td>
<td>2004</td>
</tr>
<tr>
<td><strong>Quantity (1,000 pounds)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Capacity</td>
<td>36,755</td>
<td>58,300</td>
</tr>
<tr>
<td>Production</td>
<td>36,155</td>
<td>47,296</td>
</tr>
<tr>
<td>End of period inventories</td>
<td>7,436</td>
<td>7,749</td>
</tr>
<tr>
<td>Shipments:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Internal consumption</td>
<td>0</td>
<td>4,951</td>
</tr>
<tr>
<td>Home market</td>
<td>5,389</td>
<td>8,158</td>
</tr>
<tr>
<td>Exports to:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The United States</td>
<td>20,839</td>
<td>32,854</td>
</tr>
<tr>
<td>European Union</td>
<td>19,940</td>
<td>22,426</td>
</tr>
<tr>
<td>Asia</td>
<td>11,388</td>
<td>14,674</td>
</tr>
<tr>
<td>All other markets</td>
<td>3,152</td>
<td>3,235</td>
</tr>
<tr>
<td>Total exports</td>
<td>55,320</td>
<td>73,188</td>
</tr>
<tr>
<td>Total shipments</td>
<td>60,709</td>
<td>86,298</td>
</tr>
<tr>
<td><strong>Ratios and shares (percent)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Capacity utilization</td>
<td>98.4</td>
<td>81.1</td>
</tr>
<tr>
<td>Inventories to production</td>
<td>20.6</td>
<td>16.4</td>
</tr>
<tr>
<td>Inventories to total shipments</td>
<td>12.2</td>
<td>9.0</td>
</tr>
<tr>
<td>Share of total quantity of shipments:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Internal consumption</td>
<td>0.0</td>
<td>5.7</td>
</tr>
<tr>
<td>Home market</td>
<td>8.9</td>
<td>9.5</td>
</tr>
<tr>
<td>Exports to:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The United States</td>
<td>34.3</td>
<td>38.1</td>
</tr>
<tr>
<td>European Union</td>
<td>32.8</td>
<td>26.0</td>
</tr>
<tr>
<td>Asia</td>
<td>18.8</td>
<td>17.0</td>
</tr>
<tr>
<td>All other markets</td>
<td>5.2</td>
<td>3.7</td>
</tr>
<tr>
<td>All export markets</td>
<td>91.1</td>
<td>84.8</td>
</tr>
</tbody>
</table>

Note.—Because of rounding, figures may not add to the totals shown.
Source: Compiled from data submitted in response to Commission questionnaires.
NONSUBJECT PRODUCERS/EXPORTERS

As noted earlier in the report, the nine firms that reported imports of CAC from nonsubject countries accounted for virtually all of CAC imports (based on official statistics) from those sources. With the exception of ***, all of the CAC imports from nonsubject sources were coconut-based.*** of CAC imports from nonsubject sources in 2006. No producers/exporters from nonsubject sources responded to the Commission’s request for information.5 6 With respect to the possibility of nonsubject imports replacing Chinese imports in the event of an antidumping order, petitioners stated:

“The Commission should not assume that the imposition of antidumping duties will necessarily lead to the replacement of Chinese imports by any third country source of activated carbon. Petitioners’ assumption is that dumped Chinese imports will largely be replaced by non-dumped Chinese imports at higher prices dictated by the discipline of the order . . . To the extent that some replacement occurs from third countries, as discussed in the body of the brief, it will be at higher, non-dumped prices or will be more expensive coconut-based CAC. In either case, the industry will continue to benefit from any order.

In fact, the availability of such replacement material, particularly coal-based carbons, is limited. NORIT and Calgon have world-wide sales networks and their products are exported and sold to various countries. Those countries that require coal-based CAC and do not produce their own in sufficient quantity generally will purchase it from either the United States or China, the two largest coal-based CAC producing countries. To the extent that China exports more CAC to third countries rather than to the United States as a result of this case, it will free current U.S. export production for the U.S. market.

Currently, China and the United States supply nearly all of the import needs for coal-based CAC world-wide . . . coal-based products are basically produced in the United States and China, and really, not any significance in volume outside of that, at least from a bituminous coal standpoint.

NORIT also has a coal based operation in Germany from which it imports CAC to the U.S. The only remaining coal-based operations in the world that export to a significant degree is Australia, which has not been a large participant in the United States market and does not have the capacity to replace the Chinese producers here. The record does not identify any other major exporters of coal-based CAC, and there are no other such coal-based CAC industries on the scale of those in the United States and China in the world.

---

3 Norit’s nonsubject CAC imports were coal- and peat-based and were produced at its operations in Europe. Hearing transcript, p. 118 (Wruble).
4 For 2003, 2004, 2005, and 2006, coconut-based imports from nonsubject sources accounted for ***, ***, ***, and *** percent, respectively, of all nonsubject imports reported by questionnaire respondents.
5 Questionnaires were sent to ***.
6 ***.
Production of activated carbon is non-existent in the Middle East, and production in South and Central America is wood- and coconut-based. Production of activated carbon in the Philippines, Indonesia, Malaysia, Thailand, India and Sri Lanka is also coconut-based – which is consistent with the data collected showing that all U.S. imports from those countries reported by importers were coconut-based.\textsuperscript{7, 8}

**U.S. IMPORTERS’ INVENTORIES**

Inventories of CAC as reported by U.S. importers are presented in table VII-2.

<table>
<thead>
<tr>
<th>Item</th>
<th>Calendar year</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2003</td>
</tr>
<tr>
<td><strong>Imports from China:</strong></td>
<td></td>
</tr>
<tr>
<td>Inventories (1,000 pounds)</td>
<td>20,331</td>
</tr>
<tr>
<td>Ratio to imports (percent)</td>
<td>34.6</td>
</tr>
<tr>
<td>Ratio to U.S. shipments of imports (percent)</td>
<td>35.7</td>
</tr>
<tr>
<td><strong>Imports from all other sources:</strong></td>
<td></td>
</tr>
<tr>
<td>Inventories (1,000 pounds)</td>
<td>6,777</td>
</tr>
<tr>
<td>Ratio to imports (percent)</td>
<td>32.0</td>
</tr>
<tr>
<td>Ratio to U.S. shipments of imports (percent)</td>
<td>33.5</td>
</tr>
<tr>
<td><strong>Imports from all sources:</strong></td>
<td></td>
</tr>
<tr>
<td>Inventories (1,000 pounds)</td>
<td>27,108</td>
</tr>
<tr>
<td>Ratio to imports (percent)</td>
<td>33.9</td>
</tr>
<tr>
<td>Ratio to U.S. shipments of imports (percent)</td>
<td>35.2</td>
</tr>
</tbody>
</table>

Note.--Ratios are based on firms that provided both inventory data and import and/or shipment data.

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

**IMPORTS SUBSEQUENT TO DECEMBER 31, 2006**

Importer questionnaire respondents reported that there were more than 7.2 million pounds of Chinese CAC scheduled for delivery after December 31, 2006.

\textsuperscript{7} Petitioners’ posthearing brief, exh. 1, pp. 34-36.
\textsuperscript{8} Official Commerce statistics show that Australia accounted for 0.02 percent of total CAC imports in each year for 2003, 2004, and 2005. No imports from Australia were reported in 2006.
ANTIDUMPING DUTY ORDERS IN THIRD-COUNTRY MARKETS

An antidumping order was originally put into place covering imports of PAC from China (both certain activated and chemically activated) into the European Union (EU) in June 1996, with an antidumping rate of 66.8 percent. In June 2002, the EU set new antidumping duties of 323 Euros/ton (@$0.18/lb.) on PAC imports from China, replacing the 66.8-percent duty set in June 1996.  

---

9 Petitioners’ postconference brief, exh. 1, p. 5, responding to a question from the Commission staff. See also, petitioners’ postconference brief, exh. 11.
APPENDIX A

FEDERAL REGISTER NOTICES
INTERNATIONAL TRADE COMMISSION

[Investigation No. 731–TA–1103 (Final)]

Certain Activated Carbon From China


ACTION: Scheduling of the final phase of an antidumping investigation.

SUMMARY: The Commission hereby gives notice of the scheduling of the final phase of antidumping investigation No. 731–TA–1103 (Final) under section 735(b) of the Tariff Act of 1930 (19 U.S.C. 1673d(b)) (the Act) to determine whether an industry in the United States is materially injured or
threatened with material injury, or the establishment of an industry in the United States is materially retarded, by reason of less-than-fair-value imports from China of certain activated carbon, provided for in subheading 3802.10.00 of the Harmonized Tariff Schedule of the United States.¹

¹ For purposes of this investigation, the Department of Commerce has defined the subject merchandise 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 (CO₂) in place of steam in this process. The vast majority of the internal porosity developed during temperature treatment (or CO₂ gas) activated process is a direct result of oxidation of a portion of the solid carbon atoms in the raw material, transforming them into a gaseous form of carbon. The scope of this investigation covers all forms of activated carbon that are activated by steam or CO₂, regardless of the raw material, additives, further washing or post-activation chemical treatment (chemical or 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 investigation 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 dehydrating agent. Chemically activated carbons are typically used to activate raw materials with a lignocellulosic component such as cellulose, including wood, sawdust, paper, 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 CO₂ gas) activated carbons are within this scope, and those containing more than 50 percent chemically activated carbons are outside this scope.

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 making 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. The products under investigation are currently classifiable under the Harmonized Tariff Schedule of the United States (‘HTSUS’) 3802.10.00. Although HTSUS subheadings are provided for convenience and customs purposes, the written description of the scope of this investigation is dispositive.” 71 FR 59721, October 11, 2006.

For further information concerning the conduct of this phase of the investigation, hearing procedures, and rules of general application, consult the Commission’s Rules of Practice and Procedure, part 201, subparts A through E (19 CFR part 201), and part 207, subparts A and C (19 CFR part 207).

EFFECTIVE DATE: October 11, 2006.


General information concerning the Commission may also be obtained by accessing its internet server (http://www.usitc.gov). The public record for this investigation may be viewed on the Commission’s electronic docket (EDIS) at http://edis.usitc.gov.

SUPPLEMENTARY INFORMATION:

Background.—The final phase of this investigation is being scheduled as a result of an affirmative preliminary determination by the Department of Commerce that imports of certain activated carbon from China are being sold in the United States at less than fair value within the meaning of section 733 of the Act (19 U.S.C. 1673b). The investigation was requested in a petition filed on March 8, 2006, by Calgon Carbon Corporation, Pittsburgh, PA, and Norit Americas, Inc., Marshall, TX.

Participation in the investigation and public service list.—Persons, including industrial users of the subject merchandise and, if the merchandise is sold at the retail level, representative consumer organizations, wishing to participate in the final phase of this investigation as parties must file an entry of appearance with the Secretary to the Commission, as provided in section 201.11 of the Commission’s rules, no later than 21 days prior to the hearing date specified in this notice. A party that filed a notice of appearance during this final phase of the investigation need not reapply for such access. A separate service list will be maintained by the Secretary for those parties authorized to receive BPI under the APO.

Staff report.—The prehearing staff report for the final phase of the investigation will be placed in the public service list containing the names of all persons, including parties to the investigation. A party granted access to BPI in the preliminary phase of the investigation need not reapply for such access. A separate service list will be maintained by the Secretary for those parties authorized to receive BPI under the APO.

Written submissions.—Each party who is an interested party shall submit a prehearing brief to the Commission. Prehearing briefs must conform with the provisions of section 207.23 of the Commission’s rules; the deadline for filing is February 20, 2007. Parties may also file written testimony in connection with their presentation at the hearing, as provided in section 207.24 of the Commission’s rules, and posthearing briefs, which must conform with the provisions of section 207.25 of the Commission’s rules. The deadline for filing posthearing briefs is March 6, 2007; witness testimony must be filed...
no later than three days before the hearing. In addition, any person who
has not entered an appearance as a party to the investigation may submit a
written statement of information pertinent to the subject of the
investigation, including statements of support or opposition to the petition, on
or before March 6, 2007. On March 22, 2007, the Commission will make
available to parties all information on which they have not had an opportunity
to comment. Parties may submit final comments on this information on or
before March 26, 2007, but such final comments must not contain new factual
information and must otherwise comply with section 207.30 of the Commission’s
rules. All written submissions must conform with the provisions of section
201.8 of the Commission’s rules; any submissions that contain BPI must also
conform with the requirements of §§ 201.6, 207.3, and 207.7 of the
Commission’s rules. The Commission’s rules do not authorize filing of
submissions with the Secretary by facsimile or electronic means, except to
the extent permitted by section 201.8 of the Commission’s rules, as amended, 67
FR 68036 (November 8, 2002). Even where electronic filing of a document is
permitted, certain documents must also be filed in paper form, as specified in II
(C) of the Commission’s Handbook on Electronic Filing Procedures, 67 FR
68168, 68173 (November 8, 2002).

Additional written submissions to the Commission, including requests
pursuant to section 201.12 of the Commission’s rules, shall not be
accepted unless good cause is shown for accepting such submissions, or unless
the submission is pursuant to a specific request by a Commissioner or
Commission staff.

In accordance with §§ 201.16(c) and 207.3 of the Commission’s rules, each
document filed by a party to the investigation must be served on all other
parties to the investigation (as identified by either the public or BPI service list),
and a certificate of service must be timely filed. The Secretary will not
accept a document for filing without a certificate of service.

Authority: This investigation is being conducted under authority of title VII of the
Tariff Act of 1930; this notice is published pursuant to § 207.21 of the Commission’s
rules.

By order of the Commission.

Issued: November 9, 2006.

Marilyn R. Abbott,
Secretary to the Commission.

[FR Doc. E6–19404 Filed 11–15–06; 8:45 am]
Final Determination of Sales at Less Than Fair Value: Certain Activated Carbon from the People’s Republic of China

AGENCY: Import Administration, International Trade Administration, Department of Commerce.

DATES: March 2, 2007.

SUMMARY: On October 11, 2006, the Department of Commerce (“the Department”) published its preliminary determination of sales at less than fair value (“LTFV”) in the antidumping investigation of certain activated carbon from the People’s Republic of China (“PRC”). The period of investigation (“POI”) is July 1, 2005, through December 31, 2005. We invited interested parties to comment on our preliminary determination of sales at LTFV. Based on our analysis of the comments we received, we have made changes to our calculations for the mandatory respondents. The final dumping margins for this investigation are listed in the “Final Determination Margins” section below.

FOR FURTHER INFORMATION CONTACT: Catherine Bertrand or Anya Naschak, AD/CVD Operations, Office 9, Import Administration, International Trade Administration, U.S. Department of Commerce, 14th Street and Constitution Avenue, NW, Washington, DC, 20230; telephone: (202) 482–3207 or 482–6375, respectively.

Final Determination

We determine that certain activated carbon from the PRC is being, or is likely to be, sold in the United States at LTFV as provided in section 735 of the Tariff Act of 1930, as amended (“the Act”). The estimated margins of sales at LTFV are shown in the “Final Determination Margins” section of this notice.

SUPPLEMENTARY INFORMATION:

Case History

The Department published its preliminary determination of sales at LTFV on October 11, 2006. See Preliminary Determination of Sales at Less Than Fair Value and Postponement of Final Determination: Certain Activated Carbon from the People’s Republic of China, 71 FR 59721 (October 11, 2006) (“Preliminary Determination”). The Department conducted verification of Calgon Carbon (Tianjin) Co., Ltd. (“CCT”) and certain of its suppliers. As the Department determined in the Preliminary Determination that Jacobi Carbons AB (“Jacobi AB”) was the appropriate mandatory respondent in this case (see Preliminary Determination at 71 FR at 59725), the Department conducted verification of Jacobi AB and certain of its suppliers. The Department also conducted verification of Jilin Province Bright Future Chemicals Co. Ltd. (“JBF Chemical”) and its affiliated company Jilin Province Bright Future Industry & Commerce Co. Ltd. (“JBF Industry”) (collectively, “Jilin Bright Future”) and one of its suppliers, in both the PRC and the United States (where applicable), and Ningxia Huahui Activated Carbon Co., Ltd., one of the separate rate applicants. See the “Verification” section below for additional information.

We invited parties to comment on the Preliminary Determination. We received a case brief from Carbochem Inc. (“Carbochem”) on January 11, 2007. We received case briefs from respondents Jacobi AB and CCT on January 16, 2007. We also received a case brief from Calgon Carbon Corporation and Norit Americas Inc. (“Petitioners”), on January 12, 2007. We received rebuttal briefs on January 22, 2007, from the following companies: Jacobi AB, CCT, Jilin Bright Future, and Petitioners. All parties that timely requested a hearing in this case withdrew those requests prior to the submission of case briefs. Therefore, the Department did not hold a hearing in this case.

On February 2, 2007, we invited parties to comment on the revised NME wage rate, to be used in the final determination of this investigation. No parties submitted comments on this issue.

Analysis of Comments Received

All issues raised in the case and rebuttal briefs by parties to this investigation are addressed in the Issues and Decision Memorandum for the Final Determination in the Investigation of Certain Activated Carbon from the People’s Republic of China, dated February 23, 2007, which is hereby adopted by this notice (“Issues and Decision Memorandum”). A list of the issues which parties raised and to which we respond in the Issues and Decision Memorandum is attached to this notice as an Appendix. The Issue and Decision Memorandum is a public document and is on file in the Central Records Unit (“CRU”), Main Commerce Building, Room B–009, and is accessible on the Web at http://www.trade.gov/ia. The paper copy and electronic version of the memorandum are identical in content.

Changes Since the Preliminary Determination

Based on our analysis of comments received, we have made changes to the margin calculation for CCT, Jacobi AB and Jilin Bright Future as follows.

CCT:

We have made changes resulting from minor corrections and findings at CCT’s verifications. For a detailed analysis of CCT’s margin calculation see the Final Analysis Memorandum for CCT, dated February 23, 2007.

Jacobi:

We have made the following changes to Jacobi AB’s margin calculation:

We have determined that it is appropriate to apply partial adverse facts available (“AFA”) to Jacobi for its reported factors of production supplied by Ningxia Guanghua Activated Carbon Co., Ltd.’s (“NXGH”). See below and Issues and Decision Memorandum at Comment 7. We have revised the application of facts available for one of Jacobi AB’s suppliers. In addition, we have made changes to Jacobi AB’s U.S. sales and factors of production resulting from minor corrections and findings at Jacobi AB’s verifications. See Issues and Decision Memorandum at Comment 19 and Memorandum to the File from Anya L. Naschak; Jacobi Carbons AB, Tianjin Jacobi International Trading Co., Ltd., and Jacobi Carbons, Inc. Program Analysis for the Final Determination, dated February 23, 2007 (“Jacobi Final Analysis Memorandum”). For a detailed analysis of Jacobi AB’s margin calculation, see Jacobi Final Analysis Memorandum. Jilin Bright Future:

As discussed in Comment 27 of the Issues and Decision Memorandum, we have determined to apply total adverse facts available to Jilin Bright Future. We have assigned the PRC–wide margin of 228.11 percent to Jilin Bright Future.

In addition, the Department has made changes to its calculation of the truck freight surrogate value as described in the Issues and Decision Memorandum at Comment 3, and to the calculation of certain chemical inputs as described in the Issues and Decision Memorandum at Comment 18. See also, Jacobi and CCT’s Final Analysis Memoranda. The Department has also revised the surrogate value for labor to $0.63, a the revised expected wage rate posted on the Department’s website on February 2, 2007. Further, the Department determines that it is appropriate to apply the methodology described in the December 27, 2006 Federal Register.
Notice to this investigation. See Issues and Decision Memorandum at Comment 4 and Final Modification; Calculation of the Weighted-Average Dumping Margin During an Antidumping Investigation, 71 FR 77722 (December 27, 2006).

Affiliation

The Department preliminarily determined that Jacobi AB, Tianjin Jacobi International Trading Co., Ltd. ("Jacobi Tianjin"), and Jacobi Carbons, Inc. ("Jacobi US") (collectively, "Jacobi") are affiliated with each other, and that Jacobi AB is the appropriate mandatory respondent in this case. See Memorandum to the File: Certain Activated Carbon from the People’s Republic of China: Affiliation and Treatment of Sales of Jacobi Tianjin International Trading Co., Ltd., Jacobi Carbons AB, and Jacobi Carbons, Inc., dated October 4, 2006, for further details regarding this issue. No comments were received on this issue and no information was placed on the record that would call into question the Department’s determination in this regard. Therefore, the Department continues to find that Jacobi AB, Jacobi Tianjin, and Jacobi US are affiliated and Jacobi AB is the appropriate mandatory respondent in this case.

Scope of Investigation

The merchandise subject to this investigation 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 (CO₂) in place of steam in this process. The vast majority of the internal porosity developed during the high temperature steam (or CO₂ 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 investigation covers all forms of activated carbon that are activated by steam or CO₂, 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 investigation 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 investigation 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. 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 more than 50 percent steam (or CO₂ 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. The products under investigation are currently classifiable under the Harmonized Tariff Schedule of the United States ("HTSUS") subheading 3802.10.00. Although HTSUS subheadings are provided for convenience and customs purposes, the written description of the scope of this investigation is dispositive. Scope Comments

We have addressed comments to the Scope Issues and Decision Memorandum and have determined not to revise the scope of this investigation other than to clarify that the exclusion for certain blended activated carbon only applies to mixtures of steam and chemically activated carbons.

Facts Available

Section 776(a)(2) of the Act provides that if an interested party: (A) withholds information that has been requested by the Department; (B) fails to provide such information in a timely manner or in the form or manner requested, subject to subsections 782(c)(1) and (e) of the Act; (C) significantly impedes a determination under the antidumping statute; or (D) provides such information but the information cannot be verified, the Department shall, subject to subsection 782(d) of the Act, use facts otherwise available in reaching the applicable determination.

Section 776(b) of the Act states that if the administering authority finds that an interested party has not acted to the best of its ability to comply with a request for information, the administering authority may, in reaching its determination, use an inference that is adverse to that party. The adverse inference may be based upon: (1) the petition, (2) a final determination in the investigation under this title, (3) any previous review under section 751 or determination under section 753, or (4) any other information placed on the record.

CCT:

For this final determination, in accordance with section 776(a)(2) of the Act and 776(b) of the Act, we have determined that the use of adverse facts available (“AFA”) is appropriate for CCT’s suppliers that have been deemed uncooperative. See Issues and Decision Memorandum at Comment 20. As partial AFA, we are applying the weighted-average of the two highest calculated CONNUM–specific NVs selected from all of the cooperating suppliers of CCT and Jacobi to all sales made by CCT of these suppliers products. See Memorandum to the File from Anya Naschak: Calculation of Adverse Facts Available Rate dated February 23, 2007.

Jacobi:

For this final determination, in accordance with section 776(a)(2) of the Act and 776(b) of the Act, we have determined that the use of adverse facts available (“AFA”) is appropriate for Jacobi’s reported factors of production supplied by Ningxia Guanghua

1 We excluded the supplier NXGH of Jacobi as well as CCT’s suppliers who did not provide FOP information.
Activated Carbon Co., Ltd. ’s (“NXGH”), See Issues and Decision Memorandum at Comment 7. As partial AFA, we are applying the weighted-average of the two highest calculated CONNUM-specific NVs selected from all of the cooperating suppliers\(^2\) of CCT and Jacobi to all sales made by Jacobi of NXGH-produced products. See Memorandum to the File From Anya Naschak: Calculation of Adverse Facts Available Rate dated February 23, 2007.

**Jilin Bright Future:**

For the final determination, the Department is applying total adverse facts available to Jilin Bright Future. The Department is applying the facts otherwise available to Jilin Bright Future because it failed to provide verifiable factors of production data and misrepresented and misreported its production operations and factors of production, in accordance with sections 776(a)(2)(A), (C) & (D) of the Act. Furthermore, in accordance with section 776(b) of the Act, the Department found that Jilin Bright Future failed to cooperate to the best of its ability to comply with the Department’s request for information, and, therefore, finds an adverse inference in determining the facts otherwise available. For a complete discussion of this matter, see Comment 27 of the Issues and Decision Memorandum.

**Verification**

As provided in section 782(l) of the Act, we verified the information submitted by the respondents and one separate rate applicant for use in our final determination. See the Department’s verification reports on the record of this investigation in the CRU with respect to CCT, Jacobi, Jilin Bright Future, and Ningxia HuaHui Activated Carbon Co., Ltd. For all verified companies, we used standard verification procedures, including examination of relevant accounting and production records, as well as original source documents provided by respondents.

**Surrogate Country**

In the Preliminary Determination, we stated that we had selected India as the appropriate surrogate country to use in this investigation for the following reasons: (1) it is a significant producer of comparable merchandise; (2) it is at a similar level of economic development pursuant to 773(c)(4) of the Act; and (3) we have reliable data from India that we can use to value the factors of production. See Preliminary Determination. For the final determination, we received no comments and made no changes to our findings with respect to the selection of a surrogate country.

**Separate Rates**

In proceedings involving non-market-economy (“NME”) countries, the Department begins with a rebuttable presumption that all companies within the country are subject to government control and, thus, should be assigned a single antidumping duty deposit rate. It is the Department’s policy to assign all exporters of merchandise subject to an investigation in an NME country this single rate unless an exporter can demonstrate that it is sufficiently independent so as to be entitled to a separate rate. See Final Determination of Sales at Less Than Fair Value: Sparklers from the People’s Republic of China, 56 FR 20588 (May 6, 1991) (“Sparklers”), as amplified by Notice of Final Determination of Sales at Less Than Fair Value: Silicon Carbide from the People’s Republic of China, 59 FR 22585 (May 2, 1994) (“Silicon Carbide”), and Section 351.107(d) of the Department’s regulations.

In the Preliminary Determination, we found that CCT, Jacobi and Jilin Bright Future, and the separate rate applicants who received a separate rate (“Separate Rate Applicants”) in the Preliminary Determination demonstrated their eligibility for separate-rate status. For the final determination, we continue to find that the evidence placed on the record of this investigation by CCT, Jacobi and Jilin Bright Future, and the Separate Rate Applicants demonstrate both a de jure and de facto absence of government control, with respect to their respective exports of the merchandise under investigation, and, thus are eligible for separate rate status. We determined in the Preliminary Determination that Panshan Import and Export Corporation is not entitled to a separate rate. We received no comments on this issue in the Preliminary Determination. Notice of Final Determination of Sales at Less Than Fair Value, 65 FR 25706 (May 3, 2000). The PRC-wide rate applies to all entries of subject merchandise except for entries from the respondents which are listed in the “Final Determination Margins” section below (except as noted).

**The PRC–Wide Rate**

In the Preliminary Determination, the Department found that certain companies and the PRC–wide entity did not respond to our requests information. In the Preliminary Determination we treated these PRC producers/exporters as part of the PRC–wide entity because they did not demonstrate that they operate free of government control. No additional information has been placed on the record with respect to these entities after the Preliminary Determination. The PRC–wide entity has not provided the Department with the requested information; therefore, pursuant to section 776(a)(2)(A) of the Act, the Department continues to find that the use of facts available is appropriate to determine the PRC–wide rate. Section 776(b) of the Act provides that, in selecting from among the facts otherwise available, the Department may employ an adverse inference if an interested party fails to cooperate by not acting to the best of its ability to comply with requests for information. See Notice of Final Determination of Sales at Less Than Fair Value: Certain Cold–Rolled Flat–Rolled Carbon–Quality Steel Products from the Russian Federation, 65 FR 5510, 5518 (February 4, 2000). See also, “Statement of Administrative Action” accompanying the URRAA, H.R. Rep. No. 103–316, vol. 1, at 870 (1994) (“SAA”). We find that, because the PRC–wide entity did not respond to our request for information, it has failed to cooperate to the best of its ability. The PRC wide entity includes Datong Huibao Activated Carbon Co., Ltd and its affiliated company Beijing Hibridge Trading Co., Ltd., who we preliminary determined was part of the PRC–wide entity as it was selected as a mandatory respondent and then withdrew. Therefore, the Department finds that, in selecting from among the facts otherwise available, an adverse inference is appropriate for the PRC–wide entity.

Because we begin with the presumption that all companies within a NME country are subject to government control and because only the companies listed under the “Final Determination Margins” section below have overcome that presumption, we are applying a single antidumping rate - the PRC–wide rate - to all other exporters of subject merchandise from the PRC. Such companies did not demonstrate entitlement to a separate rate. See, e.g., Synthetic Indigo from the People’s Republic of China: Notice of Final Determination of Sales at Less Than Fair Value, 65 FR 25706 (May 3, 2000). The PRC–wide rate applies to all entries of subject merchandise except for entries from the respondents which are listed in the “Final Determination Margins” section below (except as noted).

**Corroboration**

At the Preliminary Determination, in accordance with section 776(c) of the Act, we corroborated our adverse facts available (“AFA”) margin using
information submitted by certain respondents. To assess the probative value of the total AFA rate it has chosen for the PRC–wide entity, the Department compared the final margin calculations of certain respondents in this investigation with the rate of 228.11 percent from the petition, as used in the Preliminary Determination. We continue to find that the rate is within the range of the highest margins we have determined in this investigation. See Memorandum to the File: Corroboration of the PRC–Wide Facts Available Rate for the Final Determination in the Antidumping Duty Investigation of Certain Activated Carbon from the People’s Republic of China, dated February 23, 2007 (“Final Corroboration Memo”). Since the record of this investigation contains margins within the range of 228.11 percent, the margin selected from the petition, we determine that the rate used in the Preliminary Determination continues to be relevant for use in this investigation. As discussed therein, we found that the margin of 228.11 percent has probative value. See Final Corroboration Memo. Accordingly, we find that the rate of 228.11 percent is corroborated within the meaning of section 776(c) of the Act.

Combination Rates

In its initiation notice, the Department stated that it would calculate combination rates for certain respondents that are eligible for a separate rate in this investigation. See Initiation of Antidumping Duty Investigation: Certain Activated Carbon From the People’s Republic of China, 71 FR 16757 (April 4, 2006) (“Initiation Notice”). Therefore, for the final determination, we have assigned a combination rate to respondents that are eligible for a separate rate.

Final Determination Margins

We determine that the following percentage weighted-average margins exist for the POI:

<table>
<thead>
<tr>
<th>Exporter</th>
<th>Supplier</th>
<th>WA Margin</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beijing Pacific Activated Carbon Products Co., Ltd.</td>
<td>Alashan Yongtai Activated Carbon Co., Ltd.</td>
<td>73.60</td>
</tr>
<tr>
<td>Beijing Pacific Activated Carbon Products Co., Ltd.</td>
<td>Changhong Activated Carbon Co., Ltd.</td>
<td>73.60</td>
</tr>
<tr>
<td>Beijing Pacific Activated Carbon Products Co., Ltd.</td>
<td>Datong Locomotive Coal &amp; Chemicals Co., Ltd.</td>
<td>73.60</td>
</tr>
<tr>
<td>Beijing Pacific Activated Carbon Products Co., Ltd.</td>
<td>Datong Yunguang Chemicals Plant</td>
<td>73.60</td>
</tr>
<tr>
<td>Beijing Pacific Activated Carbon Products Co., Ltd.</td>
<td>Ningxia Guanghua Cherishment Activated Carbon Co., Ltd.</td>
<td>73.60</td>
</tr>
<tr>
<td>Beijing Pacific Activated Carbon Products Co., Ltd.</td>
<td>Ningxia Luyuanheng Activated Carbon Co., Ltd.</td>
<td>73.60</td>
</tr>
<tr>
<td>Calgon Carbon Tianjin Co., Ltd.</td>
<td>Calgon Carbon Tianjin Co., Ltd.</td>
<td>78.89</td>
</tr>
<tr>
<td>Calgon Carbon Tianjin Co., Ltd.</td>
<td>Datong Carbon Corporation</td>
<td>78.89</td>
</tr>
<tr>
<td>Calgon Carbon Tianjin Co., Ltd.</td>
<td>Datong Changlai Activated Carbon Co., Ltd.</td>
<td>78.89</td>
</tr>
<tr>
<td>Calgon Carbon Tianjin Co., Ltd.</td>
<td>Datong Forward Activated Carbon Co., Ltd.</td>
<td>78.89</td>
</tr>
<tr>
<td>Calgon Carbon Tianjin Co., Ltd.</td>
<td>Datong Fuping Activated Carbon Co., Ltd.</td>
<td>78.89</td>
</tr>
<tr>
<td>Calgon Carbon Tianjin Co., Ltd.</td>
<td>Datong Hongtai Activated Carbon Co., Ltd.</td>
<td>78.89</td>
</tr>
<tr>
<td>Calgon Carbon Tianjin Co., Ltd.</td>
<td>Datong Huanqing Activated Carbon Co., Ltd.</td>
<td>78.89</td>
</tr>
<tr>
<td>Calgon Carbon Tianjin Co., Ltd.</td>
<td>Datong Huibao Activated Carbon Co., Ltd.</td>
<td>78.89</td>
</tr>
<tr>
<td>Calgon Carbon Tianjin Co., Ltd.</td>
<td>Datong Kangdia Activated Carbon Factory</td>
<td>78.89</td>
</tr>
<tr>
<td>Calgon Carbon Tianjin Co., Ltd.</td>
<td>Datong Runmei Activated Carbon Factory</td>
<td>78.89</td>
</tr>
<tr>
<td>Calgon Carbon Tianjin Co., Ltd.</td>
<td>Dushanzi Chemical Factory</td>
<td>78.89</td>
</tr>
<tr>
<td>Calgon Carbon Tianjin Co., Ltd.</td>
<td>Fangyuan Carbonization Co., Ltd.</td>
<td>78.89</td>
</tr>
<tr>
<td>Calgon Carbon Tianjin Co., Ltd.</td>
<td>Hongke Activated Carbon Co., Ltd.</td>
<td>78.89</td>
</tr>
<tr>
<td>Calgon Carbon Tianjin Co., Ltd.</td>
<td>Huaien Jinbei Chemical Co., Ltd.</td>
<td>78.89</td>
</tr>
<tr>
<td>Calgon Carbon Tianjin Co., Ltd.</td>
<td>Jiaocheng Xinxin Purification Material Co., Ltd.</td>
<td>78.89</td>
</tr>
<tr>
<td>Calgon Carbon Tianjin Co., Ltd.</td>
<td>Ningxia Guanghua Cherishment Activated Carbon Co., Ltd.</td>
<td>78.89</td>
</tr>
<tr>
<td>Calgon Carbon Tianjin Co., Ltd.</td>
<td>Ningxia Guanghua A/C Co., Ltd.</td>
<td>78.89</td>
</tr>
<tr>
<td>Calgon Carbon Tianjin Co., Ltd.</td>
<td>Ningxia Honghua Carbon Industrial Corporation</td>
<td>78.89</td>
</tr>
<tr>
<td>Calgon Carbon Tianjin Co., Ltd.</td>
<td>Ningxia Luyuanheng Activated Carbon Co., Ltd.</td>
<td>78.89</td>
</tr>
<tr>
<td>Calgon Carbon Tianjin Co., Ltd.</td>
<td>Ningxia Pingluo Yaofu Activated Carbon Factory</td>
<td>78.89</td>
</tr>
<tr>
<td>Calgon Carbon Tianjin Co., Ltd.</td>
<td>Ningxia Tianfu Activated Carbon Co., Ltd.</td>
<td>78.89</td>
</tr>
<tr>
<td>Calgon Carbon Tianjin Co., Ltd.</td>
<td>Ningxia Yinchuan Lanqia Activated Carbon Co., Ltd.</td>
<td>78.89</td>
</tr>
<tr>
<td>Calgon Carbon Tianjin Co., Ltd.</td>
<td>Nuclear Ningxia Activated Carbon Co., Ltd.</td>
<td>78.89</td>
</tr>
<tr>
<td>Calgon Carbon Tianjin Co., Ltd.</td>
<td>Pingluo Xuanzhong Activated Carbon Co., Ltd.</td>
<td>78.89</td>
</tr>
<tr>
<td>Calgon Carbon Tianjin Co., Ltd.</td>
<td>Shanxi Xuanzhong Chemical Industry Co., Ltd.</td>
<td>78.89</td>
</tr>
<tr>
<td>Calgon Carbon Tianjin Co., Ltd.</td>
<td>Xingtai Coal Chemical Co., Ltd.</td>
<td>78.89</td>
</tr>
<tr>
<td>Calgon Carbon Tianjin Co., Ltd.</td>
<td>Yuyang Activated Carbon Co., Ltd.</td>
<td>78.89</td>
</tr>
<tr>
<td>Calgon Carbon Tianjin Co., Ltd.</td>
<td>Datong Juqiang Activated Carbon Co., Ltd.</td>
<td>73.60</td>
</tr>
<tr>
<td>Calgon Carbon Tianjin Co., Ltd.</td>
<td>Datong Locomotive Coal &amp; Chemicals Co., Ltd.</td>
<td>73.60</td>
</tr>
<tr>
<td>Datong Municipal Yunguang Activated Carbon Co., Ltd.</td>
<td>Datong Municipal Yunguang Activated Carbon Co., Ltd.</td>
<td>73.60</td>
</tr>
<tr>
<td>Datong Yunguang Chemicals Plant</td>
<td>Datong Yunguang Chemicals Plant</td>
<td>73.60</td>
</tr>
<tr>
<td>Hebei Foreign Trade and Advertising Corporation</td>
<td>Da Neng Zheng Da Activated Carbon Co., Ltd.</td>
<td>73.60</td>
</tr>
<tr>
<td>Hebei Foreign Trade and Advertising Corporation</td>
<td>Shanxi Bluesky Purification Material Co., Ltd.</td>
<td>73.60</td>
</tr>
<tr>
<td>Jacobi Carbons AB</td>
<td>Datong Forward Activated Carbon Co., Ltd.</td>
<td>62.08</td>
</tr>
<tr>
<td>Jacobi Carbons AB</td>
<td>Datong Hongtai Activated Carbon Co., Ltd.</td>
<td>62.08</td>
</tr>
<tr>
<td>Jacobi Carbons AB</td>
<td>Datong Huibao Activated Carbon Co., Ltd.</td>
<td>62.08</td>
</tr>
<tr>
<td>Jacobi Carbons AB</td>
<td>Ningxia Guanghua Activated Carbon Co., Ltd.</td>
<td>62.08</td>
</tr>
<tr>
<td>Jacobi Carbons AB</td>
<td>Ningxia Huahui Activated Carbon Company Limited</td>
<td>62.08</td>
</tr>
<tr>
<td>Jilin Bright Future Chemicals Company, Ltd.</td>
<td>Shanxi Xinhua Activated Carbon Co., Ltd.</td>
<td>228.11</td>
</tr>
</tbody>
</table>
### Exporter | Supplier | WA Margin
--- | --- | ---
Jilin Bright Future Chemicals Company, Ltd. | Tonghua Bright Future Activated Carbon Plant | 228.11
Jilin Bright Future Chemicals Company, Ltd. | Zhuyoun Bright Future Activated Carbon Plant | 228.11
Jilin Province Bright Future Industry and Commerce Co., Ltd. | Shanxi Xinhua Activated Carbon Co., Ltd. | 228.11
Jilin Province Bright Future Industry and Commerce Co., Ltd. | Tonghua Bright Future Activated Carbon Plant | 228.11
Jilin Province Bright Future Industry and Commerce Co., Ltd. | Zhuyoun Bright Future Activated Carbon Plant | 228.11
Ningxia Guanhua Cherishmet Activated Carbon Co., Ltd. | Ningxia Guanhua Cherishmet Activated Carbon Co., Ltd. | 73.60
Ningxia Huahi Activated Carbon Co., Ltd. | Ningxia Huahi Activated Carbon Co., Ltd. | 73.60
Ningxia Mineral & Chemical Limited | Ningxia Baota Activated Carbon Co., Ltd. | 73.60
Shanxi DMD Corporation | Ningxia Activated Carbon Plant | 73.60
Shanxi DMD Corporation | Ningxia Guanhua Activated Carbon Co., Ltd. | 73.60
Shanxi DMD Corporation | Shanxi Xinhua Chemical Co., Ltd. | 73.60
Shanxi DMD Corporation | Tonghua Xinpeng Activated Carbon Factory | 73.60
Shanxi Industry Technology Trading Co., Ltd. | Actview Carbon Technology Co., Ltd. | 73.60
Shanxi Industry Technology Trading Co., Ltd. | Datong Forward Activated Carbon Co., Ltd. | 73.60
Shanxi Industry Technology Trading Co., Ltd. | Datong Tri-Star & Power Carbon Plant | 73.60
Shanxi Industry Technology Trading Co., Ltd. | Fu Yuan Activated Carbon Co., Ltd. | 73.60
Shanxi Industry Technology Trading Co., Ltd. | Jing Mao (Dongguan) Activated Carbon Co., Ltd. | 73.60
Shanxi Industry Technology Trading Co., Ltd. | Xi Li Activated Carbon Co., Ltd. | 73.60
Shanxi Industry Technology Trading Co., Ltd. | Datong Forward Activated Carbon Co., Ltd. | 73.60
Shanxi Newtime Co., Ltd. | Ningxia Guanhua Chemical Activated Carbon Co., Ltd. | 73.60
Shanxi Newtime Co., Ltd. | Ningxia Tianfu Activated Carbon Co., Ltd. | 73.60
Shanxi Newtime Co., Ltd. | Datong Locomotive Coal & Chemicals Co., Ltd. | 73.60
Shanxi Newtime Co., Ltd. | Datong Tiantzhao Activated Carbon Co., Ltd. | 73.60
Shanxi Newtime Co., Ltd. | Ningxia Huining Xingsheng Activated Carbon Co., Ltd. | 73.60
Shanxi Newtime Co., Ltd. | Ningxia Yirong Alloy Iron Co., Ltd. | 73.60
Shanxi Newtime Co., Ltd. | Ninxia Tongfu Coking Co., Ltd. | 73.60
Shanxi Sincere Industrial Co., Ltd. | Shanxi Xiaoyi Huanyu Chemicals Co., Ltd. | 73.60
Shanxi Sincere Industrial Co., Ltd. | Datong Guanghua Activated Co., Ltd. | 73.60
Shanxi Sincere Industrial Co., Ltd. | Ningxia Guanhua-Cherishmet Activated Carbon Co., Ltd. | 73.60
Shanxi Xuanzhong Chemical Industry Co., Ltd. | Ningxia Pingluo County YaoFu Activated Carbon Factory | 73.60
Tangshan Solid Carbon Co., Ltd. | Ningxia Pingluo Xuanzhong Activated Carbon Co., Ltd. | 73.60
Tangshan Solid Carbon Co., Ltd. | Datong Zuyoun Biyun Activated Carbon Co., Ltd. | 73.60
Tangshan Solid Carbon Co., Ltd. | Ningxia Guanhua Activated Carbon Co., Ltd. | 73.60
Tangshan Solid Carbon Co., Ltd. | Ningxia Xingsheng Coal and Active Carbon Co., Ltd. | 73.60
Tianjin Majin Industries Co., Ltd. | Pingluo Yu Yang Activated Carbon Co., Ltd. | 73.60
Tianjin Majin Industries Co., Ltd. | Hegongye Ninxia Activated Carbon Factory | 73.60
Tianjin Majin Industries Co., Ltd. | Ningxia Pingluo County YaoFu Activated Carbon Plant | 73.60
United Manufacturing International (Beijing) Ltd. | Yinchuan Lanqiu Activated Carbon Co., Ltd. | 73.60
United Manufacturing International (Beijing) Ltd. | Datong Fu Ping Activated Carbon Co., Ltd. | 73.60
United Manufacturing International (Beijing) Ltd. | Datong Locomotive Coal & Chemical Co. Ltd. | 73.60
Xi’an Shuntong International Trade & Industrials Co., Ltd. | Xinhua Chemical Company Ltd. | 73.60
Xi’an Shuntong International Trade & Industrials Co., Ltd. | DaTong Tri-Star & Power Carbon Plant | 73.60
Xi’an Shuntong International Trade & Industrials Co., Ltd. | Ningxia Huahi Activated Carbon Co., Ltd. | 73.60

### Disclosure
We will disclose the calculations performed within five days of the date of publication of this notice to parties in this proceeding in accordance with 19 CFR 351.224(b).

### Continuation of Suspension of Liquidation
Pursuant to section 735(c)(1)(B) of the Act, we will instruct U.S. Customs and Border Protection (“CBP”) to continue to suspend liquidation of all entries of subject merchandise from the PRC entered, or withdrawn from warehouse, for consumption on or after October 11, 2006, the date of publication of the Preliminary Determination. CBP shall continue to require a cash deposit or the posting of a bond equal to the estimated amount by which the normal value exceeds the U.S. price as shown above. These instructions suspending liquidation will remain in effect until further notice.

### ITC Notification
In accordance with section 735(d) of the Act, we have notified the International Trade Commission (“ITC”) of our final determination of sales at LTFV. As our final determination is affirmative, in accordance with section 735(b)(2) of the Act, within 45 days the ITC will determine whether the domestic industry in the United States is materially injured, or threatened with material injury, by reason of imports or sales (or the likelihood of sales) for importation of the subject merchandise. If the ITC determines that material injury or threat of material injury does not exist, the proceeding will be terminated and all securities posted will be refunded or canceled. If the ITC determines that material injury does exist, the Department will issue an antidumping duty order directing CBP...
to assess antidumping duties on all imports of the subject merchandise entered, or withdrawn from warehouse, for consumption on or after the effective date of the suspension of liquidation.

**Notification Regarding APO**

This notice also serves as a reminder to the parties subject to administrative protective order (“APO”) of their responsibility concerning the disposition of proprietary information disclosed under APO in accordance with 19 CFR 351.305. Timely notification of return or destruction of APO materials or conversion to judicial protective order is hereby requested. Failure to comply with the regulations and the terms of an APO is a sanctionable violation. This determination and notice are issued and published in accordance with sections 735(d) and 777(i)(1) of the Act.

This determination and notice are issued and published in accordance with sections 735(d) and 777(i)(1) of the Act.


**David M. Spooner,**
Assistant Secretary for Import Administration.

**Appendix I**

**Changes from the Preliminary Determination**

**General Issues**

Comment 1: Whether to Clarify the Scope With Respect to Blended Products

Comment 2: Whether to Exclude Carbochem Products from the Scope

Comment 3: Whether to Correct Freight Ministerial Error

Comment 4: Whether to Change the Department’s Zeroing Methodology

Comment 5: Whether to Grant a By–Product Offset for Activated Carbon Products

Comment 6: Treatment of Non–Production Electricity and Labor

**Company–Specific Issues**

**Jacobi Issues**

Comment 7: Whether to Apply Total Adverse Facts Available to Jacobi

Comment 8: Treatment of Powdered Activated Carbon Sold to the United States

Comment 9: Whether to Recalculate Jacobi’s FOPs to Include By–products in the Denominator

Comment 10: Whether to Apply Adverse Facts Available for DTFH

Comment 11: Whether to Apply Adverse Facts Available to Jacobi’s Electricity and Labor

Comment 12: Treatment of Impregnated Material at NXGH for which No Data Were Reported

Comment 13: Whether to Impute Verification Findings of NXGH and DTHB to Jacobi’s Other Suppliers

Comment 14: Treatment of Water

Comment 15: Treatment of Packing and Factory Labor

Comment 16: Valuation of Carbonized Material

Comment 17: Valuation of Coal

Comment 18: Valuation of Chemical Inputs

Comment 19: Calculation of Indirect Selling Expense

**CCT Issues**

Comment 20: Whether to Continue to Apply Adverse Facts Available to Certain CCT Suppliers

Comment 21: PXZ’s Pressroom Product

Comment 22: Whether to Impute the Verification Findings of NXGH to CCT

Comment 23: Production Denominator

Comment 24: Calculation of Indirect Selling Expense

Comment 25: U.S. Warehousing Expense

Comment 26: Marine Insurance

**Jilin Issues**

Comment 27: Whether to Apply Adverse Facts Available to Jilin Bright Future
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 (Final)
Date and Time: February 27, 2007 - 9:30 a.m.

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

In Support of the Imposition of Antidumping Duties:

Kelley Drye Collier Shannon
Washington, DC
on behalf of

Calgon Carbon Corporation
NORIT Americas, Inc.

Ronald Thompson, President, NORIT Americas, Inc.
Timothy Wruble, National Account Manager, NORIT Americas, Inc.
Dennis Rester, Consultant, NORIT Americas, Inc.
Robert O’Brien, Senior Vice President, Calgon Carbon Corporation
William Aldridge, Business Development Manager, Calgon Carbon Corporation
Brad Hudgens, Economist, Georgetown Economic Services

David A. Hartquist )
R. Alan Luberda ) – OF COUNSEL
Mary T. Staley )
APPENDIX C

SUMMARY DATA
<p>| | | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
</table>
Table C-2
CAC: U.S. imports and U.S. shipments, by sources, 2003-06, based on questionnaire responses

<table>
<thead>
<tr>
<th>Source</th>
<th>Calendar year</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Source</td>
<td>2003</td>
<td>2004</td>
<td>2005</td>
</tr>
<tr>
<td></td>
<td>Quantity (1,000 pounds)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>China</td>
<td>58,706</td>
<td>74,816</td>
<td>79,131</td>
<td>76,054</td>
</tr>
<tr>
<td>Nonsubject countries</td>
<td>21,188</td>
<td>39,789</td>
<td>51,939</td>
<td>49,350</td>
</tr>
<tr>
<td>Total</td>
<td>79,894</td>
<td>114,605</td>
<td>131,069</td>
<td>125,404</td>
</tr>
<tr>
<td></td>
<td>Value (1,000 dollars)1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>China</td>
<td>18,225</td>
<td>25,592</td>
<td>24,953</td>
<td>24,848</td>
</tr>
<tr>
<td>Nonsubject countries</td>
<td>17,692</td>
<td>30,717</td>
<td>33,106</td>
<td>33,549</td>
</tr>
<tr>
<td>Total</td>
<td>35,917</td>
<td>56,309</td>
<td>58,059</td>
<td>58,397</td>
</tr>
<tr>
<td></td>
<td>Unit value (per pound)1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>China</td>
<td>$0.31</td>
<td>$0.34</td>
<td>$0.32</td>
<td>$0.33</td>
</tr>
<tr>
<td>Nonsubject countries</td>
<td>0.84</td>
<td>0.77</td>
<td>0.64</td>
<td>0.68</td>
</tr>
<tr>
<td>Total</td>
<td>0.45</td>
<td>0.49</td>
<td>0.44</td>
<td>0.47</td>
</tr>
<tr>
<td></td>
<td>U.S. shipments quantity (1,000 pounds)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>China</td>
<td>56,896</td>
<td>70,475</td>
<td>75,709</td>
<td>84,264</td>
</tr>
<tr>
<td>Nonsubject countries</td>
<td>20,208</td>
<td>34,268</td>
<td>41,365</td>
<td>45,457</td>
</tr>
<tr>
<td>Total</td>
<td>77,104</td>
<td>104,743</td>
<td>117,073</td>
<td>129,721</td>
</tr>
<tr>
<td></td>
<td>U.S. shipments value (1,000 dollars)2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>China</td>
<td>24,479</td>
<td>30,546</td>
<td>33,156</td>
<td>38,289</td>
</tr>
<tr>
<td>Nonsubject countries</td>
<td>20,800</td>
<td>30,873</td>
<td>39,078</td>
<td>44,990</td>
</tr>
<tr>
<td>Total</td>
<td>45,279</td>
<td>61,420</td>
<td>72,234</td>
<td>83,279</td>
</tr>
<tr>
<td></td>
<td>U.S. shipments unit value (per pound)2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>China</td>
<td>$0.43</td>
<td>$0.43</td>
<td>$0.44</td>
<td>$0.45</td>
</tr>
<tr>
<td>Nonsubject countries</td>
<td>1.03</td>
<td>0.90</td>
<td>0.94</td>
<td>0.99</td>
</tr>
<tr>
<td>Total</td>
<td>0.59</td>
<td>0.59</td>
<td>0.62</td>
<td>0.64</td>
</tr>
</tbody>
</table>

1 Landed, duty-paid.
2 F.o.b. point of U.S. shipment.

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

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

PRODUCER, IMPORTER, AND PURCHASER COMMENTS REGARDING DIFFERENCES AND SIMILARITIES BETWEEN REACTIVATED CARBON AND CERTAIN ACTIVATED CARBON
The Commission requested producers, importers, and purchasers to describe the differences and similarities between RAC and CAC with respect to: characteristics and uses; interchangeability; manufacturing processes; channels of distribution; customer and producer perceptions; and price. The responses follow:

Characteristics and Uses

Interchangeability

Manufacturing Processes

Channels of Distribution

Customer and Producer Perceptions

Price
APPENDIX E

TRADE AND FINANCIAL INFORMATION ON REACTIVATED CARBON
Eight producers generally believed to account for nearly all production in the commercial RAC market and two non-commercial producers which reactivate for their own use provided useable data concerning their RAC production. Three of the eight firms producing RAC for the commercial market are also producers of CAC. Five of the firms producing for the commercial market also reported data on tolling operations. In this industry, the toller provides a reactivation service to a tollee who is the end user of the tolled product. Presented in table E-1 is a list of the U.S. RAC producers (both commercial and noncommercial) that responded to the Commission’s producer questionnaire. Also presented is information concerning each company’s position on the petition, production locations, and their share of reported 2006 domestic production of RAC.

Table E-2 presents commercial U.S. producers’ capacity, production, capacity utilization, shipment, inventory, and employment data for RAC. Table E-3 presents tolling capacity, capacity utilization, production, shipment, and employment data by U.S. producers of RAC. Table E-4 presents U.S. producers’ non-commercial RAC capacity, production, capacity utilization, and shipment data.

---

1 Nine firms reported they do not produce RAC. They are ***.
2 ***.
3 Calgon, Norit, and California Carbon. ***.
4 All noncommercial production was internally consumed and there were no noncommercial inventory or employment data reported.
Table E-1  
RAC: U.S. producers, positions on the petition, U.S. production locations, and shares of reported 2006 production

<table>
<thead>
<tr>
<th>Firm</th>
<th>Position</th>
<th>Production location(s)</th>
<th>Share of 2006 reported production (percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Calgon</td>
<td>Supports</td>
<td>Kentucky, Ohio</td>
<td>***</td>
</tr>
<tr>
<td>Norit</td>
<td>Supports</td>
<td>Texas</td>
<td>***</td>
</tr>
<tr>
<td>California Carbon</td>
<td>***</td>
<td>California</td>
<td>***</td>
</tr>
<tr>
<td>American Carbon Services</td>
<td>Supports</td>
<td>New Jersey</td>
<td>***</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td>100.0</td>
</tr>
<tr>
<td>Noncommercial:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: Compiled from data submitted in response to Commission questionnaires.
Table E-2
RAC: Commercial U.S. producers’ capacity, production, capacity utilization, shipments, end-of-period inventories, and employment-related indicators, 2003-06

<table>
<thead>
<tr>
<th>Item</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capacity (1,000 pounds)</td>
<td>115,500</td>
<td>118,500</td>
<td>119,300</td>
<td>119,400</td>
</tr>
<tr>
<td>Production (1,000 pounds)</td>
<td>87,739</td>
<td>87,676</td>
<td>96,484</td>
<td>97,406</td>
</tr>
<tr>
<td>Capacity utilization (percent)</td>
<td>76.0</td>
<td>74.0</td>
<td>80.9</td>
<td>81.6</td>
</tr>
<tr>
<td>Commercial shipments:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quantity (1,000 pounds)</td>
<td>79,958</td>
<td>89,289</td>
<td>92,783</td>
<td>93,362</td>
</tr>
<tr>
<td>Value (1,000 dollars)</td>
<td>29,252</td>
<td>32,293</td>
<td>34,187</td>
<td>37,736</td>
</tr>
<tr>
<td>Unit value (per pound)</td>
<td>$0.37</td>
<td>$0.36</td>
<td>$0.37</td>
<td>$0.40</td>
</tr>
<tr>
<td>Internal consumption:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quantity (1,000 pounds)</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>Value (1,000 dollars)</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>Unit value (per pound)</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>Company transfers:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quantity (1,000 pounds)</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>Value (1,000 dollars)</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>Unit value (per pound)</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>Total U.S. shipments:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quantity (1,000 pounds)</td>
<td>84,423</td>
<td>92,326</td>
<td>95,682</td>
<td>98,001</td>
</tr>
<tr>
<td>Value (1,000 dollars)</td>
<td>31,127</td>
<td>33,641</td>
<td>35,544</td>
<td>39,935</td>
</tr>
<tr>
<td>Unit value (per pound)</td>
<td>$0.37</td>
<td>$0.36</td>
<td>$0.37</td>
<td>$0.41</td>
</tr>
<tr>
<td>Export shipments:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quantity (1,000 pounds)</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>Value (1,000 dollars)</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>Unit value (per pound)</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>Total shipments:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quantity (1,000 pounds)</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>Value (1,000 dollars)</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>Unit value (per pound)</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>Inventories (1,000 pounds)</td>
<td>44,441</td>
<td>38,818</td>
<td>40,061</td>
<td>39,852</td>
</tr>
<tr>
<td>Ratio of inventories to total shipments (percent)</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>Production and related workers (PRWs)</td>
<td>160</td>
<td>185</td>
<td>176</td>
<td>163</td>
</tr>
<tr>
<td>Hours worked by PRWs (1,000 hours)</td>
<td>339</td>
<td>389</td>
<td>364</td>
<td>337</td>
</tr>
<tr>
<td>Hours worked per worker</td>
<td>2,119</td>
<td>2,103</td>
<td>2,068</td>
<td>2,067</td>
</tr>
<tr>
<td>Wages paid to PRWs (1,000 dollars)</td>
<td>8,369</td>
<td>9,959</td>
<td>11,021</td>
<td>10,235</td>
</tr>
<tr>
<td>Hourly wages</td>
<td>$24.69</td>
<td>$25.60</td>
<td>$30.28</td>
<td>$30.37</td>
</tr>
<tr>
<td>Productivity (pounds produced per hour)</td>
<td>242.4</td>
<td>215.6</td>
<td>254.4</td>
<td>276.5</td>
</tr>
<tr>
<td>Unit labor costs (per pound)</td>
<td>$0.10</td>
<td>$0.12</td>
<td>$0.12</td>
<td>$0.11</td>
</tr>
</tbody>
</table>

Source: Compiled from data submitted in response to Commission questionnaires.
Six U.S. firms provided usable financial data for each of their latest four fiscal years on their commercial non-toll and toll operations on RAC. These reported data are believed to represent nearly all of U.S. RAC production in 2006. Also, two firms provided usable data on their non-commercial operations wherein they reactivate and use RAC entirely within their own operations RAC.

OPERATIONS ON RAC

Income-and-loss data for the U.S. industry’s RAC operations are presented separately for commercial non-toll operations and tolling operations of RAC in tables E-5 and E-6, respectively, and such data are combined in table E-7.

---

5 The firms are: ***. ***. Differences between data reported in the trade and financial sections of the Commission’s producers’ questionnaire primarily are attributable to ***, which provided trade data but did not provide financial data.

6 These firms are: ***. ***.

7 Also, see petitioners’ posthearing brief, exh. 1, pp. 17-20.
The responding firms’ data on their total assets used in the production, warehousing, and sale of RAC, return on investment (ROI), and capital expenditures for RAC are shown in table E-8.

**Table E-8**  
RAC: Total assets, return on investment, and capital expenditures of U.S. producers, 2003-06

|            | * | * | * | * | * | * | * |

With respect to commercial operations, the Commission’s questionnaire requested firms to explain any price relationship between virgin activated carbon and reactivated carbon. Their comments are as follows:

### ***:
“***.”

Calgon: “***”.

Norit: “***.”

Both *** responded that there is a price relationship between CAC and RAC, and that a higher price of CAC results in a higher price of RAC as well as giving rise to the possibility of expanding the firms’ reactivation capacity.

With regard to toll conversion of RAC, the Commission’s questionnaire also requested information on the customers, whether reactivation was dedicated (i.e., the customer provides carbon for reactivation, and that material is segregated in storage, processed separately, and the same material is returned to the customer upon reactivation), and whether there is a price relationship between tolled-RAC and CAC. The firms responded follows: ***.

The Commission’s questionnaire requested firms that reactivate the carbon that is used entirely within their own operations (i.e., no commercial sales to or tolling performed on behalf of other firms) to report certain limited data. Useable questionnaire responses were received from two firms: ***. Data for the non-commercial operations on RAC are presented in table E-9. However, these data should be used with caution as they represent only estimates compiled for the specific purpose of responding to the Commission’s questionnaire.

**Table E-9**  
RAC: Non-commercial operations of U.S. firms, 2003-06

|            | * | * | * | * | * | * | * |

The Commission’s questionnaire requested firms and/or municipalities that filled out this section to provide the names of its suppliers of CAC, whether the firm or municipality has its CAC toll-processed, whether that toll-processing was dedicated, whether its RAC possessed a value, and whether there is a price relationship between CAC and RAC. Both ***. Purchases of CAC of the ***.
In addition to the pricing data for CAC presented in Part V, the Commission requested U.S. producers and importers of RAC to provide quarterly data for the total quantity and f.o.b. (U.S. point of shipment) value of RAC that was shipped to unrelated customers in the U.S. market. Data were requested for the period January 2003 to December 2006. The products for which pricing data were requested are defined as follows:

**Product 1.**–Granular reactivated carbon that is steam activated from coal (bituminous, lignite, and anthracite), 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 reactivated carbon that is steam activated from coal (bituminous, lignite, and anthracite), 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

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

Four U.S. producers of RAC, ****, provided usable pricing data for sales of the requested products, although not all firms reported pricing for all products or all quarters. No imports of RAC from China were reported. Table E-10 and figures E-1 through E-3 present f.o.b. (U.S. point of shipment) selling prices for the three RAC products defined above produced and sold in the United States. Figures E-1 through E-3 also show prices of domestic and imported CAC for comparison. By quantity, pricing data reported by responding firms in 2003 through 2006 accounted for 29.5 percent of U.S. commercial shipments of U.S.-produced RAC.

**Table E-10**
RAC: Weighted-average f.o.b. prices and quantities of domestic reactivated products 1, 2 and 3, January 2003-December 2006

**Figure E-1**
CAC and RAC: Weighted-average prices of domestic, imported, and reactivated product 1, by quarters, January 2003-December 2006

**Figure E-2**
CAC and RAC: Weighted-average prices of domestic, imported, and reactivated product 2, by quarters, January 2003-December 2006

**Figure E-3**
CAC and RAC: Weighted-average prices of domestic, imported and reactivated product 3, by quarters, January 2003-December 2006
Price Trends and Comparisons

U.S. producers’ average prices for reactivated product 1, ***, were *** and, aside from four quarters in which certain activated product 1 from China undersold reactivated product 1, were *** for both domestic CAC and subject imported CAC product 1. Overall, prices of reactivated product 1 rose by *** percent between January-March 2003 and October-December 2006. On average, prices for reactivated product 1 during the period were *** percent lower than domestic CAC product 1 and *** percent lower than subject imported CAC product 1. Prices for reactivated product 2 were *** and stood *** the price of U.S. shipments of CAC product 2 imported from China in *** during the period. Overall, prices for reactivated product 2 fell by *** percent between January-March 2003 and October-December 2006. On average, prices for reactivated product 2 during the period were *** percent lower than domestic CAC product 2 and *** percent lower than subject imported CAC product 2. Prices for reactivated product 3 show the greatest movement among reactivated products. After fluctuating in the first two-and-a-half years of the period, prices of reactivated product 3 rose fairly steadily through the second half of 2005 and 2006. Overall, prices in October-December 2006 were *** percent higher than in January-March 2003. However, almost all of this increase is due to the price increase observed in the final six quarters of the period. Prices for U.S.-produced reactivated product 3 were higher than subject imports of CAC product 3 in eight of 16 quarters in the period. On average, prices for reactivated product 3 during the period were *** percent lower than domestic CAC product 3 and *** percent higher than subject imported CAC product 3.