CALGON CARBON CORPORATION Form 10-K April 25, 2007

# **UNITED STATES** SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

## **FORM 10-K**

(Mark One)

Annual Report Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934. Х

For the fiscal year ended December 31, 2006 or

Transition Report Pursuant to Section 12 or 15(d) of the Securities Exchange Act of 1934. 0

to

For the transition period from

**Commission file number 1-10776** 

# **Calgon Carbon Corporation**

(Exact name of registrant as specified in its charter)

Delaware

(State or other jurisdiction of incorporation or organization)

400 Calgon Carbon Drive

Pittsburgh, Pennsylvania (Address of principal executive offices)

Registrant s telephone number, including area code: (412) 787-6700

Securities registered pursuant to Section 12(b) of the Act:

Title of each class

Common Stock, par value \$0.01 per share

New York Stock Exchange Securities registered pursuant to Section 12(g) of the Act:

> None (Title of class)

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act.

Yes No Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Exchange Act.

Yes х Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.

Yes No х 0 Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrant s knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form

25-0530110 (I.R.S. Employer Identification No.)

15205

(Zip Code)

Name of each exchange on which registered

0

No

0

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10-K or any amendment to this Form 10-K. o

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, or a non-accelerated filer. See definition of accelerated filer and large accelerated filer in Rule 12b-2 of the Exchange Act.

Large accelerated filer o Accelerated filer x Non-accelerated filer o Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act).

Yes o No x As of March 23, 2007, there were outstanding 40,190,973 shares of Common Stock, par value of \$0.01 per share.

The aggregate market value of the voting stock held by non-affiliates as of June 30, 2006 was \$214,751,463.

## The following documents have been incorporated by reference:

Document	Form 10-K Part Number
Proxy Statement filed pursuant to Regulation 14A in connection with registrant s Annual Meeting of Shareholders to be held on May 17, 2007	III
2	

INDEX

## PART I

Item 1.	Business	2
Item 1A.	Risk Factors	10
Item 1B.	Unresolved Staff Comments	16
Item 2.	Properties	16
Item 3.	Legal Proceedings	17
Item 4.	Submission of Matters to a Vote of Security Holders	18
PART II		
Item 5.	Market for Registrant s Common Equity, Related Shareholder Matters and Issuer Repurchases of Equity Securities	19
Item 6.	Selected Financial Data	21
Item 7.	Management s Discussion and Analysis of Financial Condition and Results of Operations	22
Item 7A.	Quantitative and Qualitative Disclosures about Market Risk	37
Item 8.	Financial Statements and Supplementary Data	38
Item 9.	Changes in and Disagreements with Accountants on Accounting and Financial Disclosure	93
Item 9A.	Controls and Procedures	93
Item 9B.	Other Information	93
PART III		
Item 10.	Directors, Executive Officers, and Corporate Governance of the Registrant	94
Item 11.	Executive Compensation	94
Item 12.	Security Ownership of Certain Beneficial Owners and Management and Related Shareholder Matters	94
Item 13.	Certain Relationships, Related Transactions, and Director Independence	94
Item 14.	Principal Accounting Fees and Services	94
PART IV		
Item 15.	Exhibits and Financial Statement Schedules	95
SIGNATURES		100

## <u>CERTIFICATIONS</u> Forward-Looking Information Safe Harbor

This Annual Report contains historical information and forward-looking statements. Forward-looking statements typically contain words such as expect, believes, estimates, anticipates, or similar words indicating that future outcomes are uncertain. Statements looking forward in time, including statements regarding future growth and profitability, price increases, cost savings, broader product lines, enhanced competitive posture and acquisitions, are included in this Annual Report pursuant to the safe harbor provision of the Private Securities Litigation Reform Act of 1995. They involve known and unknown risks and uncertainties that may cause the Company s actual results in future periods to be materially different from any future performance suggested herein. Further, the Company operates in an industry sector where securities values may be

volatile and may be influenced by economic and other factors beyond the Company s control. Some of the factors that could affect future performance of the Company are higher energy and raw material costs, costs of imports and related tariffs, labor relations, capital and environmental requirements, changes in foreign currency exchange rates, borrowing restrictions, validity of patents and other intellectual property, and pension costs. In the context of the forward-looking information provided in this Annual Report, please refer to the discussions of risk factors and other information detailed in, as well as the other information contained in this Annual Report.

### PART I

## Item 1. Business:

#### The Company

The Company is a global leader in services, products, and solutions for purifying water and air. The Company has three reportable segments: Activated Carbon and Service, Equipment, and Consumer. These reportable segments are composed of global profit centers that make and sell different products and services.

The Activated Carbon and Service segment manufactures granular activated carbon for use in applications to remove organic compounds from water, air and other liquids and gases. The service aspect of the segment consists of the leasing, monitoring and maintenance of carbon adsorption equipment (explained below). The Equipment segment provides solutions to customers air and water purification problems through the design, fabrication and operation of systems that utilize a combination of the Company s enabling technologies: carbon adsorption, ultraviolet (UV) and advanced ion exchange separation (ISEP®) among others. The Consumer segment primarily consists of the manufacture and sale of carbon cloth and new consumer products based on the Company s technologies already proven in large-scale industrial applications.

#### Acquisitions

On February 18, 2004, the Company acquired substantially all of the assets of Waterlink, Inc. s (Waterlink) United States-based subsidiary Barnebey Sutcliffe Corporation, and 100% of the outstanding common shares of Waterlink (UK) Limited, a holding company that owns 100% of the outstanding common shares of Waterlink s operating subsidiaries in the United Kingdom (collectively Specialty Products). The results of Waterlink have been included in the Company s consolidated statement of income and comprehensive income from the date of acquisition through December 31, 2006.

The aggregate purchase price, including direct acquisition costs, and net of cash, was \$35.3 million, plus the assumption of certain non-working capital liabilities amounting to \$14.2 million. The Company funded approximately \$33.3 million of the purchase through borrowings.

Additionally, in December 2004 the Company entered into an agreement to purchase the additional 20% interest of the then 80% owned Datong Carbon Corporation.

In May 2005, the Company formed a joint venture with C. Gigantic Carbon to provide carbon reactivation services to the Thailand market. The joint venture was named Calgon Carbon (Thailand) Ltd., and is 20% owned by the Company after an initial investment of \$0.2 million.

#### **Discontinued Operations**

On February 4, 2005, the Company s Board of Directors approved a re-engineering plan. The plan included the divestiture of two non-core businesses in order to allow the Company to increase focus on its core activated carbon and service-related businesses. In the fourth quarter of 2005, management concluded such divestitures were probable, and the Company reclassified the following businesses from continuing operations to discontinued operations and assets held for sale for all periods presented: Charcoal/Liquid in Bodenfelde, Germany and Solvent Recovery in Columbus, Ohio; Vero Beach, Florida; and Ashton, United Kingdom. The Charcoal/Liquid and Solvent Recovery businesses were reported in the Company s Consumer and Equipment segments, respectively.

On February 17, 2006, Calgon Carbon Corporation, through its wholly owned subsidiary Chemviron Carbon GmbH, executed an agreement (the Charcoal Sale Agreement ) with proFagus GmbH, proFagus Grundstuecksverwaltungs GmbH and proFagus Beteiligungen GmbH (as Guarantor) to sell, and sold, substantially all the assets, real estate, and specified liabilities of the Bodenfelde, Germany facility (the Charcoal/Liquid business). The facility includes the production of charcoal for consumer use and liquids that are recovered during charcoal production. The products are sold to retail and industrial markets. The aggregate sales price, based on an exchange rate of 1.19 Dollars per Euro, consisted of \$20.4 million of cash which included a final working capital adjustment of \$1.3 million. The Company provided guarantees to the buyer related to pre-divestiture tax liabilities, future environmental remediation costs related to pre-divestiture activities and other contingencies. Management believes the ultimate cost of such guarantees is not material. An additional \$5.0 million could be received dependent upon the business meeting certain earnings targets over the next three years. As of the year ended December 31, 2006, the Company has recorded a pre-tax gain of \$4.8 million or \$1.7 million, net of tax, on the sale of the Charcoal/Liquid divestiture.

On April 24, 2006, the Company completed the sale of the assets of its Solvent Recovery business to MEGTEC Systems, Inc. (MEGTEC), a subsidiary of Sequa Corporation. The Solvent Recovery unit provides turnkey on-site regenerable solvent recovery systems, distillation systems, on-site regenerable volatile organic compound concentrators, vapor-phase biological oxidation systems, and related services on a worldwide basis. The purchase price of \$1.8 million included cash proceeds of approximately \$0.8 million and \$0.7 million of assumed liabilities, primarily accounts payable. The transaction was also subject to a pre-tax working capital adjustment of \$0.4 million, which management finalized and recorded in the fourth quarter of 2006. As of the year ended December 31, 2006, the Company recorded a pre-tax gain of \$63 thousand or \$41 thousand, net of tax, on the sale of the Solvent Recovery business.

The pro forma effects of these dispositions are reflected on the Consolidated Balance Sheets and Consolidated Statements of Income and Comprehensive Income through their treatment as discontinued businesses.

## Products and Services

The Company offers a diverse range of products, services, and equipment specifically developed for the purification, separation and concentration of liquids and gases through its three business segments. The Activated Carbon and Service segment primarily consists of activated carbon products, field services, and reactivation. The Equipment segment designs and builds systems that include multiple technologies. The Consumer segment supplies carbon products for everyday use by consumers.

Activated Carbon and Service. The sale of activated carbon is the principal component of this business segment. The Company produces and sells a broad range of activated, impregnated or acid washed carbons, in granular, powdered, or pellet form. Activated carbon is a porous material that removes organic compounds from liquids and gases by a process known as adsorption. In adsorption, organic molecules contained in a liquid or gas are attracted and bound to the surface of the pores of the activated carbon as the liquid or gas is passed through. The Company also has a patented manufacturing process which enhances the catalytic functionality of activated carbon, expanding its capability to remove inorganic compounds; the product was introduced in 1994 and is called Centaur®.

The primary raw material used in the production of the Company s activated carbons is bituminous coal which is crushed, mixed with pitch, sized, and processed in low temperature bakers followed by high temperature furnaces. This heating process is known as activation and develops the pore structure of the carbon. Through adjustments in the activation process, pores of the required size for a particular purification application are developed. The Company s technological expertise in adjusting the pore structure in the activation process has been one of the factors that has enabled the Company to develop many special types of activated carbon. Currently, the Company offers many types of activated carbon with most available in several particle sizes. The Company also markets activated carbons from other raw materials, including coconut or wood which it purchases from industry partners and independent suppliers.

The Company sells granular, pelletized, and powdered activated carbons. Granular activated carbon is generally used in fixed filter beds for continuous flow purification processes, while powdered activated carbon is often used in batch purification processes, or dosed in air purification and municipal water applications. Use of fixed filter beds of activated carbon for continuous flow processing of a liquid or gas usually achieves a lower cost of operation and, through reactivation, avoids the disposal costs associated with powdered carbon.

The other component of the Activated Carbon and Service business segment is various services associated with the supply of products and systems for purification, separation, and concentration, including such products as activated carbon, ion exchange resins, and anthracite or other products required to accomplish purification, separation, or concentration.

For activated carbon, these services include carbon reactivation, handling, and transportation as well as the supply of equipment through leasing arrangements. The principal activated carbon service sold is the Calgon Carbon Service which supplies customers with a complete process and treatment service, particularly suited for treating fluids at the customer s facility containing hazardous organic compounds. The service is based primarily on reactivation of spent carbon and transportation of activated carbon to and from the reactivation facility, but also includes feasibility testing, process design, on-site equipment, initial activated carbon supply, performance monitoring and major maintenance of Company-owned equipment (such equipment is referred to as customer capital ). Reactivation is a process by which organic compounds are driven off activated carbon particles that have been loaded with organic materials by passing the spent activated carbon through a high temperature furnace. Granular activated carbon is reactivated for economic reasons or to destroy hazardous adsorbed organic compounds. Services are provided under contract at a fixed minimum monthly fee subject to additional charges for increased carbon usage. The Company provides services in packages ranging from a fifty-five-gallon drum to truckload quantities.

The Company also provides a perchlorate removal service for groundwater treatment which utilizes ion exchange resins and equipment. The Company also provides resin exchange service along with disposal of the spent resins.

In addition to offering services to purify water from contaminated aquifers and surface impoundments and to clean accidental spills on a fee basis, the Company also leases a line of adsorption and filtration equipment to clean water from contaminated aquifers and industrial wastewater and surface impoundments, and other equipment to purify gases and liquids in industrial process applications.

Purification services provided by the Company are used to improve the quality of food, chemical, pharmaceutical, and petrochemical products. Such services may be utilized in permanent installations or in temporary applications, as pilot studies for new manufacturing processes or recovery of off-specification products.

Sales from continuing operations for the Activated Carbon and Service segment were \$265.3 million, \$241.9 million, and \$245.5 million for the years ended December 31, 2006, 2005, and 2004, respectively.

**Equipment.** The Company designs and sells equipment which employs activated carbon and ion exchange resins for purification, separation, and concentration and proprietary ISEP® (Ionic Separator) continuous ion exchange units for the purification of many products in the food, pharmaceutical and biotechnology industries. The carbon equipment is used for vapor phase applications such as volatile organic compound (VOC) emissions control, air stripper off-gases, and landfill gas emissions, and for liquid phase applications such as process purification, wastewater treatment, groundwater remediation, and dechlorination. The ISEP® units are also used to remove nitrate and perchlorate contaminants from drinking water.

The Company also produces and sells UV equipment. UV light is effective in disinfecting both drinking water and wastewater. In drinking water, UV light alters the DNA of pathogens, killing them or making it impossible for them to reproduce and infect humans. The Company s Sentinel® UV drinking water disinfection product line is designed to protect municipal drinking water supplies from pathogens such as cryptosporidium and giardia. The Company also provides the C<sup>3</sup> Series open-channel wastewater disinfection product line for municipal wastewater disinfection. In combination with hydrogen peroxide, UV light is effective in destroying many contaminants common in groundwater remediation applications. The Company provides Rayox® UV advanced oxidation equipment for treatment of contaminants such as 1, 4-Dioxane, MTBE, and Vinyl Chloride in groundwater, process water, and industrial wastewater.

The Company also produces a wide range of odor control equipment that utilizes catalytic or activated carbon to control odors at municipal wastewater treatment facilities and pumping stations.

Sales from continuing operations for the Equipment segment were \$37.9 million, \$36.9 million, and \$39.9 million for the years ended December 31, 2006, 2005, and 2004, respectively.

**Consumer.** The primary product offered in the Consumer segment is carbon cloth. Carbon cloth, which is activated carbon in cloth form, is manufactured in England and sold to the medical and specialty markets.

Activated carbon and carbon cloth are used as the primary raw material in the Company s consumer home products group. The Company currently has two primary product lines that it markets to the retail channel. The first product line, PreZerve® storage products, uses carbon cloth to protect and preserve jewelry and keepsakes from deterioration. The PreZerve® line currently offers over 40 different items. The second product line, AllGone®, is an odor elimination system that utilizes activated carbon discs to adsorb odors and impurities from the air safely and naturally.

Sales from continuing operations for the Consumer segment were \$13.0 million, \$12.0 million and \$10.4 million for the years ended December 31, 2006, 2005 and 2004, respectively.

For further information, see Note 22 to the Financial Statements.

#### Markets

The Company participates in five primary areas: Potable Water, Industrial Process, Environmental Water and Air, Food, and Specialty Markets. Potable Water applications include municipal drinking water purification as well as point of entry and point of use devices. Applications in the Industrial Process markets include catalysis, product recovery and purification of chemicals, pharmaceuticals as well as process water treatment. Food applications include brewing, bottling, and sweetener purification. Remediation of water and VOC removal from vapor are the major subsegments for the Environmental Markets. Medical, personal protection, cigarette, automotive, consumer, and precious metals applications comprise the Specialty Markets.

**Potable Water Market.** The Company sells activated carbons, equipment, services, and ion exchange technologies to municipal customers for the treatment of potable water to remove pesticides and other dissolved organic and inorganic material to meet current regulations and to remove tastes and odors to make the water acceptable to the public. The Company also sells to OEM manufacturers of home water purification systems. The Company sells granular and powdered activated carbon products to this market and in many cases the granular carbon functions both as the primary filtration media as well as an adsorption media to remove the contaminants from the water. In addition, the Company sells UV light systems for the destruction or inactivation of waterborne contaminants and organisms.

**Industrial Process Market.** The Company s products are used in this market either for purification, separation or concentration of customers products in the manufacturing process or for direct incorporation into customers products. The Company sells a wide range of activated carbons and reactivation services to the chemical, petroleum refining, and process industries for the purification of organic and inorganic chemicals, amine, soda ash, antibiotics and vitamins. Activated carbon products and services are also used to decolorize chemicals such as hydrochloric acid and remove pollutants from wastewater. Further, activated carbon is used in treatment of natural gas and other vapor streams for removal of carbon dioxide, acetylene, hydrogen, sulfur, and mercury compounds. The liquefied natural gas industry uses activated carbons to remove mercury compounds which would otherwise corrode process equipment. Activated carbons are also sold for gasoline vapor recovery equipment.

The Company offers its products and services to private industry to meet wastewater discharge requirements imposed by various governmental entities. Most of the Company s sales to this market are sales of the Calgon Carbon Service for wastewater treatment. The reactivation portion of this service is an especially important element if the contaminants in the wastewater are hazardous organic chemicals. The hazardous organic chemicals, which are adsorbed from the water by the activated carbons, are decomposed at the high temperatures of the reactivation furnace and thereby removed from the environment. Reactivation saves customers the difficulty of having to find a method of long-term containment (such as a landfill) for hazardous organic chemicals removed from their industrial wastewater.

**Environmental Water and Air Market.** The Company s products are used for the cleanup of contaminated groundwater, surface impoundments and accidental spills, which comprises a significant market. The Company provides carbon, services and carbon equipment for these applications, as well as emergency and temporary cleanup services for public and private entities, employing both activated carbon adsorption and UV oxidation technologies.

Activated carbon is also used in the chemical, pharmaceutical, and refining industry for purification of air discharges to remove contaminants such as benzene, toluene, and other volatile organics. Reduction of mercury emissions from power plants is a growing market for the Company and will increase sales of powdered activated carbon.

Municipal sewage treatment plants purchase the Company s odor control systems and activated carbon products to remove objectionable odors emanating from the plants and to treat the wastewater to meet operating requirements. Granular activated carbon is used in odor control applications, but both granular and powdered activated carbons are used to treat wastewater. The granular activated carbon is used as a filtration/adsorption medium, and the powdered activated carbon is used to enhance the performance of existing biological waste treatment processes. The Company is expanding sales of powdered carbon in this market segment.

The Company also offers UV systems for disinfection of municipal wastewater before it is discharged to rivers and streams.

**Food Market.** Sweetener manufacturers are the principal purchasers of the Company s products in the Food Market. The Company is the major supplier of activated carbons used in the purification of dextrose and high fructose corn syrup. Activated carbons are also sold for use in the purification of cane sugar. Other food processing applications include decolorization and purification of many different foods and beverages and for purifying water, liquids and gas prior to usage in brewing and bottling. Continuous ion exchange systems are also used in this market for the production of lysine and vitamin E, as well as purification of dextrose and high fructose corn syrup.

**Specialty Markets.** Manufacturers of various equipment and products purchase activated carbons for incorporation in their products. The Company is a major supplier of activated carbons to manufacturers of gas masks used by the United States and European military, as well as protective respirators and collective filters for first responders and private industry. The markets for collective filters for military equipment, indoor air quality and air containment in incineration and nuclear applications are also served.

Cigarette manufacturers use activated carbons in charcoal filters, carbon cloth is used in medical applications, and precious metals producers use activated carbons to recover gold and silver from low-grade ore.

#### Sales and Marketing

The Company has a direct sales force in the United States with offices located in Pittsburgh, Pennsylvania; Santa Fe Springs, California; Houston, Texas; and Marlton, New Jersey. The Company conducts activated carbon related sales in Canada, Brazil, and Mexico through distributor relationships and maintains offices in Sao Paulo, Brazil and Mexico City, Mexico. The Company maintains offices in Singapore; Beijing and Shanghai, China; Taipei, Taiwan; and Tokyo, Japan to manage sales in the Asia Pacific Region.

In Europe, the Company has sales offices in Feluy, Belgium; Ashton, United Kingdom; Houghton Le Spring, United Kingdom; and Beverungen, Germany. The Company also has a network of agents and distributors that conduct sales in certain countries in Europe, the Middle East, Africa, Latin America, the Far East, Australia and New Zealand.

All offices can play a role in sales of products or services from any of the Company s segments.

Geographic sales information can be found in Note 22 to the Financial Statements.

Over the past three years, no single customer accounted for more than 10% of the total sales of the Company in any year.

### Backlog

The Company had a sales backlog from continuing operations of \$17.1 million and \$15.2 million as of January 31, 2007 and 2006, respectively, in the Equipment segment. The Company expects to carry less than one-third of the 2007 balance into 2008.

### Competition

The Company has several major competitors in the worldwide market with respect to the production and sale of activated carbon-related products: Norit, N.V., a Dutch company, Mead/Westvaco Corporation, a United States company, and Siemens Water, a United States company, are the primary competitors. Chinese producers of coal-based activated carbon and certain East Asian producers of coconut-based activated carbon participate in the market on a worldwide basis and sell principally through numerous resellers. Competition in activated carbons, carbon equipment and services is based on price, quality, and performance. Other sources of competition for the Company s activated carbon services and systems are alternative technologies for purification, filtration, and extraction processes that do not employ activated carbons.

A number of other smaller competitors engage in the production and sale of activated carbons in local markets, but do not compete with the Company on a worldwide basis. These companies compete with the Company in the sale of specific types of activated carbons, but do not generally compete with a broad range of products in the worldwide activated carbon business.

In the United States and Europe, the Company also competes with several small regional companies for the sale of its reactivation services and carbon equipment.

The Company s competitors for its UV technology product line include Trojan Technologies, Inc., a Canadian company owned by Danaher Corporation, a United States company and Wedeco Ideal Horizons, a German company now owned by ITT Industries, a United States company.

#### **Raw Materials**

The principal raw material purchased by the Company for its Activated Carbon and Service segment is bituminous coal from mines in the Appalachian Region and mines outside the United States including Datong, Shanxi province in China, mainly under both long-term and annual supply contracts.

The Company purchases natural gas from various suppliers for use in its Activated Carbon and Service segment production facilities. In both the United States and Europe, substantially all natural gas is purchased pursuant to various annual and multi-year contracts with natural gas companies.

The Company purchases hydrogen peroxide via an annual supply contract for its UV Technologies business.

The only other raw material that is purchased by the Company in significant quantities is pitch, which is used as a binder in the carbon manufacturing process. The Company purchases pitch from various suppliers in the United States, and potentially from countries outside of the U.S., under annual supply contracts and spot purchases.

The purchase of key equipment components is coordinated through agreements with various suppliers.

The Company does not presently anticipate any problems in obtaining adequate supplies of any of its raw materials or equipment components.

#### **Research and Development**

The Company s research and development activities are conducted at a research center in Pittsburgh, Pennsylvania. This facility is used for the evaluation of experimental activated carbon and equipment and application development. Experimental systems are also designed and evaluated at this location. Facilities in Ashton, England, which were part of the Waterlink acquisition, supplement the work performed in Pittsburgh.

The principal goals of the Company s research program are to improve the Company s position as a technological leader in solving customers problems with its products, services and equipment; develop new products and services; and provide technical support to customers and operations of the Company.

The Company s research programs include new and improved methods for manufacturing and utilizing new and enhanced activated carbons. New activated carbons are developed to address specific needs for a given market such as a new line of activated carbons for use in the next generation of respirators for the military. Also, in response to the needs of power plants for a carbon for mercury removal from flue gas, a new line of activated carbons was created. Research and development activities also include the Company s Ion Exchange and UV technologies. A regenerable resin for perchlorate removal is currently being piloted using a licensed technology. A key technology in the UV reporting unit is the Sentinel® UV Disinfection system that has been developed and patented for the disinfection and inactivation of cryptosporidium in drinking water. Improvements to the equipment design continue and additional patent applications have been filed.

Research and development expenses were \$4.2 million, \$4.5 million, and \$3.8 million in 2006, 2005 and 2004, respectively.

## Patents and Trade Secrets

The Company possesses a substantial body of technical knowledge and trade secrets and owns 63 United States patent applications and/or patents and 167 patent applications and/or patents in other countries, the issued United States and foreign patents expiring in various years from 2007 through 2028. The expiration of the patents occurs as follows:

Expiration	Number of U.S. Patents	Number of Foreign Patents
2007-2009	4	
2010-2015	32	40
2016-2020	20	73
2021-2025	7	48
2026-2028		6
2026-2028		

The technology embodied in these patents, trade secrets and technical knowledge applies to all phases of the Company s business including production processes, product formulations and application engineering. The Company considers this body of technology important to the conduct of its business.

#### **Regulatory Matters**

USA. The Company is subject to extensive environmental laws and regulations concerning emissions to the air, discharges to waterways and the generation, handling, storage, transportation, treatment and disposal of waste materials and is also subject to other federal and state laws regarding health and safety matters. The Company believes it is presently in substantial compliance with these laws and regulations. These laws and regulations are constantly evolving, and it is impossible to predict the effect these laws and regulations may have on the Company in the future.



The U.S. Environmental Protection Agency (EPA) has issued certain regulations under the Resource Conservation and Recovery Act (RCRA) dealing with the transportation, storage and treatment of hazardous waste that impact the Company in its carbon reactivation services. When activated carbon supplied to a customer can no longer adsorb contaminants, it is returned to the Company's facilities for reactivation and subsequent reuse. If the substance(s) adsorbed by the spent carbon is (are) considered hazardous, under these EPA regulations the activated carbon used in the treatment process is also considered hazardous. Therefore, a permit is required to transport the hazardous carbon to the Company's facility for reactivation. The Company possesses the necessary federal and state permits to transport hazardous waste. At the Company's reactivation site, the hazardous spent activated carbon is placed in temporary storage tanks. Under the EPA regulations, the Company is required to have a hazardous waste storage permit. The Company has obtained RCRA Part B permits to store hazardous waste at its Pittsburgh and Catlettsburg facilities. The process of reactivating the spent activated carbon, which destroys the hazardous organic substances, is subject to permitting as a thermal treatment unit under RCRA. The Company has filed for these permits at its Pittsburgh and Catlettsburg facilities and is working toward obtaining the permits with the respective government agencies. The Company does not accept carbons containing certain hazardous materials for reactivation.

Each of the Company s U.S. production facilities has permits and licenses regulating air emissions and water discharges. All of the Company s U.S. production facilities are controlled under permits issued by local, state and federal air pollution control entities. The Company is presently in compliance with these permits. Continued compliance will require administrative control and will be subject to any new or additional standards. In May 2003, the Company partially discontinued operation of one of its three activated carbon lines at its Catlettsburg, Kentucky facility. The Company will need to install pollution abatement equipment estimated at approximately \$7.0 million in order to remain in compliance with state requirements regulating air emissions before resuming full operation of this line. In the fourth quarter of 2006, management approved funding for preliminary engineering work to be performed to more accurately assess the costs and length of time to make the idled activated carbon line operational again due to the favorable ruling by the International Trade Commission (ITC) on the Company s anti-dumping petition for steam activated carbon imported into the United States from China and subsequent potential increased demand of U.S. manufactured products. Management expects to complete its assessment regarding the start-up of this idled activated carbon line to address potential future market opportunities in 2007. If at any point it is determined that a shutdown of the full operation of the activated carbon line for other than a temporary period is warranted, the impact on current operating results would be insignificant.

In conjunction with the February 2004 purchase of substantially all of Waterlink s operating assets and the stock of Waterlink s U.K. subsidiary, several environmental studies were performed on Waterlink s Columbus, Ohio property by environmental consulting firms which identified and characterized areas of contamination. In addition, these firms identified alternative methods of remediating the property, identified feasible alternatives and prepared cost evaluations of the various alternatives. The Company concluded from the information in the studies that a loss at this property is probable and recorded the liability as a component of noncurrent other liabilities in the Company s consolidated balance sheet. At December 31, 2005, the balance recorded was \$5.3 million. Liability estimates are based on an evaluation of, among other factors, currently available facts, existing technology, presently enacted laws and regulations, and the remediation experience of other companies. During the first four months of 2006, the Company undertook a process of evaluating contractors and securing bids to perform the remediation work on the Columbus, Ohio property. As a result of the evaluation of the additional information gathered during that process, the Company reduced its estimate of its liability by \$1.3 million to \$4.0 million as of March 31, 2006. The reduction of the liability was recorded as a reduction of selling, general and administrative expenses on the Company s consolidated statement of operations and retained earnings for the year ended December 31, 2006. The Company has not incurred any environmental remediation expense for the year ended December 31, 2006 and has incurred a total of \$0.2 million of environmental remediation expense to date. It is reasonably possible that a change in the estimate of this obligation will occur as remediation preparation and remediation activity commences over the upcoming months. The ultimate remediation costs are dependent upon, among other things, the requirements of any state or federal environmental agencies, the remediation methods employed, the final scope of work being determined, and the extent and types of contamination which will not be fully determined until experience is gained through remediation and related activities. The accrued amounts are expected to be paid out over the course of several years once work has commenced. The Company has yet to make a determination that it will proceed with remediation efforts in 2007.

In January 2007, the Company received a Notice of Violation (NOV) from the EPA, Region 4, alleging multiple violations of the federal Resource Conservation and Recovery Act and corresponding EPA and Kentucky Department of Environmental Protection (KYDEP) hazardous waste management rules and regulations. The alleged violations are based on information provided by the Company during and after a Multi Media Compliance Evaluation inspection of the Company s Big Sandy Plant, located in Catlettsburg, Kentucky, conducted by EPA and KYDEP in September 2005, and concern the hazardous waste spent activated carbon regeneration facility located at the Big Sandy Plant. The Company is evaluating the NOV. The EPA has not yet indicated whether or not it will take formal enforcement action, or whether such action would involve the assessment of civil penalties, and has not specified a monetary amount of any such civil penalties it might pursue in connection with this matter. At this time, the Company cannot predict with any certainty the outcome of this matter.

Europe. The Company is also subject to various environmental health and safety laws and regulations at its facilities in Belgium, England and Germany. These laws and regulations address substantially the same issues as those applicable to the Company in the United States. The Company believes it is presently in substantial compliance with these laws and regulations.

Indemnification. The Company has a limited indemnification agreement with the previous owner of the Company which will fund certain environmental costs if they are incurred at the Company s Catlettsburg, Kentucky plant. The Company believes that the amount of the indemnification is sufficient to fund these liabilities if they arise.

## **Employee Relations**

As of December 31, 2006, the Company employed 847 persons on a full-time basis, 564 of whom were salaried production, office, supervisory and sales personnel. The 226 hourly personnel in the United States are represented by the United Steelworkers of America. The current contracts with the United Steelworkers of America expire on February 1, 2008, April 1, 2009, and February 15, 2010, at the Pittsburgh, Pennsylvania, Catlettsburg, Kentucky, and Columbus, Ohio facilities, respectively. The 57 hourly personnel at the Company s Belgian facility are represented by two national labor organizations with contracts expiring on July 31, 2007. The Company also has hourly employees at three non-union United Kingdom facilities, one United States facility located in Mississippi, and at two non-union China facilities.

## **Copies of Reports**

The periodic and current reports of the Company filed with the SEC pursuant to Section 13(a) of the Securities Exchange Act of 1934 are available free of charge, as soon as reasonably practicable after the same are filed with or furnished to the SEC, at the Company s website at www.calgoncarbon.com. All other filings with the SEC are available on the SEC s website at www.sec.gov.

### **Copies of Corporate Governance Documents:**

The following Company corporate governance documents are available free of charge at the Company s website at www.calgoncarbon.com and such information is available in print to any shareholder who requests it by contacting the Secretary of the Company at 400 Calgon Carbon Drive, Pittsburgh, PA 15205.

Corporate Governance Guidelines Audit Committee Charter Compensation Committee Charter Governance Committee Charter Code of Ethical Business Conduct Code of Ethical Business Conduct Supplement for Chief Executive and Senior Financial Officers

9

### Item 1A. Risk Factors:

#### Risks relating to our business

## Our pension plans are currently underfunded, and we expect to be subject to significant increases in pension contributions to our defined benefit pension plans, thereby restricting our cash flow.

We sponsor various pension plans in the United States and Europe that are underfunded and require significant cash payments. We contributed \$9.2 million and \$2.4 million to our U.S. Pension plans and \$2.2 million and \$2.1 million to our European pension plans in 2006 and 2005, respectively. We currently expect to be required to contribute approximately \$3.2 million to our U.S. pension plans and \$2.3 million to our European pension plans in 2007. If our cash flow from operations is insufficient to fund our worldwide pension liability, we may be forced to reduce or delay capital expenditures, seek additional capital or restructure or refinance our indebtedness.

The funding status of our pension plans is determined using many assumptions, such as inflation, investment rates, mortality, turnover and discount rates, any of which could prove to be different than projected. If the performance of the assets in our pension plans does not meet our expectations, or if other actuarial assumptions are modified, we may be required to contribute more to our pension plans than we currently expect. For example, an approximate 25-basis point decline in the current liability interest rate, which is used under the Employee Retirement Income Security Act of 1974, or ERISA, for funding purposes, would increase our minimum required contribution to our U.S. pension plans by a total of approximately \$0.9 million over the next three years.

Our pension plans in the aggregate are underfunded by approximately \$35 million as of December 31, 2006 (based on the actuarial assumptions used for SFAS No. 87, Employers Accounting for Pensions, purposes and comparing our projected benefit obligation to the fair value of plan assets) and required a certain level of mandatory contributions as prescribed by law. Our U.S. pension plans, which are underfunded by approximately \$18 million as of December 31, 2006, are subject to ERISA. In the event our U.S. pension plans are terminated for any reason while the plans are less than fully funded, we will incur a liability to the Pension Benefit Guaranty Corporation that may be equal to the entire amount of the underfunding at the time of the termination. In addition, changes in required pension funding rules that were affected by the enactment of the Pension Protection Act of 2006 will significantly increase our funding requirements beginning in 2008, which will have an adverse effect on our cash flow and could require us to reduce or delay our capital expenditures, seek additional capital or restructure or refinance our indebtedness. See Note 14 to our consolidated financial statements contained in Item 8 of this Annual Report.

#### Our financial results could be adversely affected by an interruption of supply or an increase in coal prices.

We use bituminous coal as the main raw material in our granular activated carbon production process. We estimate that coal will represent approximately 37% of our carbon product costs in 2007. We have various annual and multi-year contracts in place for the supply of coal that expire at various intervals from 2007 to 2011. Interruptions in coal supply caused by mine accidents, labor disputes, transportation delays, or other events for other than a temporary period could have an adverse effect on our being able to meet our customer demand. In addition, increases in the prices we pay for coal under our supply contracts could adversely affect our financial results by significantly increasing production costs. During 2006, our aggregate costs for coal increased by \$2.1 million, or 15.6%, compared to 2005. Based upon the estimated usage of coal in 2007, a hypothetical 10% increase in the price of coal would result in \$1.1 million of additional pre-tax expenses to us. Historically, we have generally not been able to pass through raw materials price increases to our customers, and we may in the future continue to be generally unable to do so.

#### Our financial results could be adversely affected by shortages in energy supply or increases in energy costs.

The price for and availability of energy resources could be volatile as it is affected by political and economic conditions that are outside our control. We utilize natural gas as a key component in our activated carbon manufacturing process and have annual and multi-year contracts for the supply of natural gas at each of our major facilities. If shortages of or restrictions on the delivery of natural gas occur, production at our activated carbon facilities would be reduced, which could result in missed deliveries or lost sales. We also have exposure to fluctuations in energy costs as they relate to the transportation and distribution of our products. For example, natural gas prices have increased significantly in recent years. We may not be able to pass through natural gas and other fuel price increases to our customers.

#### Increases in U.S. and European imports of Chinese manufactured activated carbon could have an adverse effect on our financial results.

The Company historically has faced pressure and competition in our U.S. and European markets from brokers of low cost imported activated carbon products, primarily from China. We believe we offer the market technically superior products and related customer support. However, Chinese products have become accepted as viable alternatives to our products because they have been frequently sold at less than fair value in the market. As a result, the Company has had to deal with significant price compression which has contributed to a reduction in both sales and profitability in recent years.

To combat the low-cost Chinese products, in March 2006, the Company participated in filing a petition with the United States Department of Commerce (the DOC) requesting the imposition of anti-dumping duties on all steam activated carbon imports from China. That petition was provisionally approved and duties were imposed beginning in October 2006.

In March 2007, the DOC s decision was supported by the International Trade Commission (the ITC), when they determined that these unfairly priced steam activated carbon imports from China caused material injury to the U.S. activated carbon industry. This affirmative decision by the ITC triggered the imposition of significant anti-dumping duties in the form of cash deposits, ranging from 62% to 228%. The anti-dumping duties will be imposed for at least five years but are subject to periodic review and could be modified within that time frame. The significant anti-dumping duties imposed by the DOC and the affirmative decision by the ITC will have an adverse impact on the cost of Chinese manufactured activated carbon imported into the U.S. However, the anti-dumping duties could be reduced or eliminated in the future, which could adversely affect demand or pricing for our product.

## Our inability to successfully negotiate new collective bargaining agreements upon expiration of the existing agreements could have an adverse effect on our financial results.

We have collective bargaining agreements in place at four of our production facilities covering approximately 33% of our full-time workforce as of December 31, 2006. Those collective bargaining agreements expire from 2007 through 2010. Any work stoppages as a result of disagreements with any of the labor unions or our failure to renegotiate any of the contracts as they expire could disrupt production and significantly increase product costs as a result of less efficient operations caused by the resulting need to rely on temporary labor.

## We have operations in multiple foreign countries and, as a result, are subject to foreign exchange translation risk, which could have an adverse effect on our financial results.

We conduct significant business operations in several foreign countries. Of our 2006 net sales, approximately 44% were sales to countries other than the United States, and 2006 net sales denominated in non-U.S. dollars represented approximately 32% of our overall net sales. We conduct business in the local currencies of each of our foreign subsidiaries or affiliates. Those local currencies are then translated into U.S. dollars at the applicable exchange rates for inclusion in our consolidated financial statements. The exchange rates between some of these currencies and the U.S. dollar in recent years have fluctuated significantly and may continue to do so in the future. Changes in exchange rates, particularly the strengthening of the U.S. dollar, could significantly reduce our sales and profitability from foreign subsidiaries or affiliates from one period to the next as local currency amounts are translated into fewer U.S. dollars.

## Our European and Japanese activated carbon businesses are sourced from both the United States and China, which subjects these businesses to foreign exchange transaction risk.

Our only production facilities for virgin granular activated carbon are in the United States and China. Those production facilities are used to supply all of our global demand for virgin granular activated carbon. All of our foreign operations purchase from the U.S. operations in U.S. dollars yet sell in local currency, resulting in foreign exchange transaction risk. We generally execute foreign currency derivative contracts of not more than one year in duration to cover a portion of our known or projected foreign currency exposure. However, those contracts do not protect us from longer-term trends of a strengthening U.S. dollar, which could significantly increase our cost of activated carbon delivered to our European and Japanese markets, and we may not be able to offset these costs by increasing our prices.

#### Our business includes capital equipment sales which could have extreme fluctuations due to the cyclical nature of that type of business.

Our Equipment segment represented approximately 12% of our 2006 net sales. This business generally has a long project life cycle from bid solicitation to project completion and often requires customers to make large capital commitments well in advance of project execution. In addition, this business is usually affected by the general health of the overall economy. As a result, sales and earnings from the Equipment segment could be volatile.

## We could find it difficult to fund the capital needed to complete our growth strategy due to borrowing restrictions under our current credit facility.

We are extended credit under our current credit facility subject to compliance with certain financial covenants. For example, our current credit facility contains various affirmative and negative covenants, including limitations on us with respect to our ability to pay dividends, make loans, incur indebtedness, grant liens on our property, engage in certain mergers and acquisitions, dispose of assets and engage in certain transactions with our affiliates. Borrowing availability under our current credit facility is based on the value, from time to time, of certain of our accounts receivable, inventory and equipment. As a result, these restrictions may prevent us from being able to borrow sufficient funds under our current credit facility to meet our future capital needs, and alternate financing on terms acceptable to us may not be available.

We had to amend our prior revolving credit facility several times within the past year in order to cure violations or remain compliant as financial results have declined. Through June 30, 2006, we were in default of our prior revolving credit facility as a result of a violation of a financial covenant and were required to reclassify the borrowings outstanding under our old revolving credit facility as short-term debt. During the period of default, the lenders had the right to accelerate the debt. Under our current credit facility, we obtained covenant default waivers to extend the dates upon which year-end 2006 audited financial statements and financial plan information had to be provided to our lenders due to delays in filing this Annual Report on Form 10-K. We may have similar issues in the future with respect to our current revolving credit facility. If our liquidity remains constrained for more than a temporary period, we may need to either delay certain strategic growth projects or access higher cost capital markets in order to fund our projects, which may adversely affect our financial results.

#### Our required capital expenditures may exceed our estimates.

Our capital expenditures were \$12.9 million in 2006, primarily including improvements to our manufacturing facilities, repair of our Pearl River manufacturing facility as a result of damage sustained from Hurricane Katrina and equipment to be utilized in our service business. Of the amount spent on capital expenditures in 2006, \$2.3 million was funded by insurance proceeds obtained from a settlement with our insurance carrier related to damage sustained from Hurricane Katrina. Future capital expenditures may be significantly higher and may vary substantially if we are required to undertake certain actions to comply with new regulatory requirements or compete with new technologies. We may not have the capital to undertake these capital investments. If we are unable to do so, we may not be able to effectively compete.

### Our financial results could be adversely affected by the continued idling of one of our reactivation facilities.

In January 2006, we announced the temporary idling of our reactivation facility in Blue Lake, California. It currently is our intention to resume operation of the plant in late 2007. If we conclude that idling of facility beyond 2007 is warranted, our financial results may be adversely affected by the resulting impairment charges of approximately \$1.3 million.

## Declines in the operating performance of one of our business segments could result in an impairment of the segment s goodwill.

As of December 31, 2006, we had consolidated goodwill of approximately \$27.5 million recorded in our business segments, primarily from our Activated Carbon and Service and Equipment segments. We test our goodwill on an annual basis or when an indication of possible impairment exists in order to determine whether the carrying value of our assets is still supported by the fair value of the underlying business. To the extent that it is not, we are required to record an impairment charge to reduce the asset to fair value. For the year ended December 31, 2006, we recorded a \$6.9 million impairment charge associated with our UV equipment reporting unit, principally as a result of the fourth quarter decision by the Federal Court of Canada, which found that our patent for the use of UV light to prevent infection from cryptosporidium in drinking water is invalid. As a result, our estimate of future royalty income used in determining the fair value of the reporting unit declined substantially from the prior year. A decline in the operating performance of any of our business segments or sale of a business at an amount less than book value could result in a goodwill impairment charge which could have a material effect on our financial results.

## Delays in enactment of new state or federal regulations could restrict our ability to reach our strategic growth targets and lower our return on invested capital.

Our strategic growth initiatives are reliant upon more restrictive environmental regulations being enacted for the purpose of making water and air cleaner and safer. If stricter regulations are delayed or are not enacted or enacted but subsequently repealed or amended to be less strict, or enacted with prolonged phase-in periods, our sales growth targets could be adversely affected and our return on investor capital could be reduced.

For example, stricter regulations surrounding the treatment of cryptosporidium and other disease causing microorganisms in drinking water, as addressed by the EPA s promulgation of the Long Term 2 Enhanced Surface Water Treatment Rule (LT2), were expected to be effective as of the fourth quarter of 2004. LT2 was not ultimately published in the Federal Register until January 2006, thus delaying municipalities requirements for testing and any subsequent need to fund a plan for remediation by over a year. The effect has been a delay in the timing of the expected growth for our UV equipment business.

## Our industry is highly competitive. If we are unable to compete effectively with competitors having greater resources than we do, our financial results could be adversely affected.

Our activated carbon business faces significant competition from Norit N.V., Mead/Westvaco Corporation and Siemens Water, together with Chinese producers. Our UV technology products face significant competition from Trojan Technologies, Inc., which is owned by Danaher Corporation, and Wedeco Ideal Horizons, which is owned by ITT Industries. In each case, our competitors include major manufacturers and diversified companies, a number of which have revenues and capital resources exceeding ours, which they may use to develop more advanced or more cost-effective technologies, increase market share or leverage their distribution networks. We may experience reduced net sales as a result of having fewer resources than these competitors.

#### Encroachment into our markets by competitive technologies could adversely affect our financial results.

Activated carbon is utilized in various applications as a cost-effective solution for solving customer problems. If other competitive technologies, such as membranes, ozone and UV, are advanced to the stage in which such technologies could effectively compete with activated carbon technologies, we could experience a decline in net sales, which could adversely affect our financial results.

### Failure to develop innovative new products or applications could adversely affect our ability to meet our strategic growth targets.

Part of our strategic growth and profitability plans involves the development of new products or new applications for our current products in order to replace more mature products or markets that have seen increased competition. If we are unable to develop new products or applications, our financial results could be adversely affected.

### A planned or unplanned shutdown at one of our production facilities could have an adverse effect on our financial results.

We operate multiple facilities, and source product from strategic partners who operate facilities, which are close to water or in areas susceptible to earthquakes. An unplanned shutdown at any of our or our strategic partners facilities for more than a temporary period as a result of a hurricane, typhoon, earthquake or other natural disaster, or a result of fire, explosions, war, terrorist activities, political conflict or other hostilities, could significantly affect our ability to meet our demand requirements, thereby resulting in lost sales and profitability in the short term or eventual loss of customers in the long term. In addition, a prolonged planned shutdown of any of our production facilities due to a change in business conditions could result in impairment charges that could have an adverse impact on our financial results.

A recent example of an unplanned shutdown of one of our production facilities is the shutdown of our Pearl River facility in Pearlington, Mississippi due to damage caused by Hurricane Katrina in August 2005. The plant did not become operational again until November 2005 and was not operating again at full capacity until January 2006. Certain customer shipments were either delayed or cancelled during the plant outage, the consequences of which have adversely affected us during 2006. We estimated our pre-tax business interruption losses during 2005 and 2006 to be approximately \$4.4 million in the aggregate due to the effect of the unplanned shutdown of the Pearl River facility.

## We hold a variety of patents that gives us a competitive advantage in certain markets. An inability to defend those patents from competitive attack could have an adverse effect on both current results and future growth targets.



From time to time in the course of our business, we have to address competitive challenges to our patented technology. We are currently in litigation in multiple jurisdictions to defend our process patent for the use of ultraviolet light in the prevention of infection from cryptosporidium and giardia in drinking water. In June 2006, the U.S. District Court for the District of New Jersey granted the plaintiff Wedeco Ideal Horizons, Inc. s motion for summary judgment, holding that our patent was invalid. We appealed this ruling. On April 24, 2007, the Court affirmed the lower court s judgment that was appealed. We are currently evaluating our options regarding further action. In another suit filed in Canada, we alleged that the defendants are practicing the method claimed in our patent without a license. On November 14, 2006 a Canadian Federal Court entered a judgment after trial finding that our process patent for the use of ultraviolet light to prevent infection from cryptosporidium and giardia in drinki