

AIR PRODUCTS & CHEMICALS INC /DE/
Form 10-K
November 20, 2012

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

FORM 10-K

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE
SECURITIES EXCHANGE ACT OF 1934 For the fiscal year ended
30 September 2012

OR

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF
THE SECURITIES EXCHANGE ACT OF 1934 For the transition
period from _____ to _____
Commission file number 1-4534

AIR PRODUCTS AND CHEMICALS, INC.

7201 Hamilton Boulevard
Allentown, Pennsylvania, 18195-1501
Tel. (610) 481-4911

State of incorporation: Delaware
I.R.S. identification number: 23-1274455

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

Title of Each Class:
Common Stock, par value \$1.00 per share
Preferred Stock Purchase Rights

Registered on:
New York
New York

Securities registered pursuant to Section 12(g) of the Act: None

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 Act.

YES NO

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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

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). YES NO

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§ 229.405) 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 10-K or any amendment to this Form 10-K.

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

Large accelerated filer Accelerated filer Non-accelerated filer Smaller reporting company

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act). YES NO

The aggregate market value of the voting stock held by non-affiliates of the registrant on 31 March 2012 was approximately \$19.4 billion. For purposes of the foregoing calculations all directors and/or executive officers have been deemed to be affiliates, but the registrant disclaims that any such director and/or executive officer is an affiliate.

The number of shares of common stock outstanding as of 31 October 2012 was 212,850,078.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the registrant's definitive Proxy Statement for the Annual Meeting of Shareholders to be held on 24 January 2013 are incorporated by reference into Part III.

AIR PRODUCTS AND CHEMICALS, INC.

ANNUAL REPORT ON FORM 10-K

For the fiscal year ended 30 September 2012

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PART I

ITEM 1. BUSINESS

General Description of Business and Fiscal Year 2012 Developments

Air Products and Chemicals, Inc. (we, our, us, the Company, Air Products, or registrant), a Delaware corporation originally founded in 1911, serves energy, electronics, chemicals, steel, and manufacturing customers globally with a unique portfolio of products, services, and solutions that include atmospheric gases, process and specialty gases, performance materials, equipment, and services. The Company is the world's largest supplier of hydrogen and helium and has built leading positions in growth markets such as semiconductor materials, refinery hydrogen, natural gas liquefaction, and advanced coatings and adhesives. As used in this report, unless the context indicates otherwise, the terms we, our, us, the Company, or registrant include controlled subsidiaries and predecessors of Air Products and its subsidiaries.

During 2012 the Company took several important steps to improve our global portfolio of businesses. In January 2012, the Board of Directors authorized management to sell the Company's Homecare business. In April 2012, the Company completed the sale of the Homecare business in Belgium, Germany, France, Portugal, and Spain. The Company is actively marketing the remainder of this business, which is primarily in the United Kingdom. In July of 2012, the Company acquired a 64.8% controlling interest in the outstanding shares of Indura S.A. Prior to the acquisition, Indura S.A. was the largest independent industrial gas company in South America. Indura S.A.'s integrated gas and retail business produces packaged and liquid bulk gases and sells related hardgoods. We also invested in a 25% position in Abdullah Hashim Industrial Gases & Equipment Co. Ltd., the largest industrial gas company in Saudi Arabia. Finally, in our Electronics division, we purchased the remaining 50% share of our DA NanoMaterials joint venture, which manufactures chemical mechanical planarization (CMP) slurries for the semiconductor and wafer polishing industries.

Financial Information about Segments

The Company manages its operations, assesses performance, and reports earnings under four business segments: Merchant Gases, Tonnage Gases, Electronics and Performance Materials, and Equipment and Energy. The Homecare business was previously reported as part of the Merchant Gases operating segment. Beginning in the second quarter of the fiscal year, the Homecare business was accounted for as a discontinued operation. Indura S.A. is accounted for as part of the Merchant Gases operating segment. Financial information concerning the Company's four business segments appears in Note 24, Business Segment and Geographic Information, to the consolidated financial statements, included under Item 8 herein.

Narrative Description of Business by Segments

Merchant Gases

Merchant Gases sells atmospheric gases, such as oxygen, nitrogen, and argon (primarily recovered by the cryogenic distillation of air); process gases such as hydrogen and helium (purchased or refined from crude helium); specialty gases; and certain services and equipment, throughout the world to customers in many industries, including those in metals, glass, chemical processing, food processing, healthcare, steel, general manufacturing, and petroleum and natural gas industries.

Merchant Gases includes the following types of products:

Liquid bulk Product is delivered in bulk (in liquid or gaseous form) by tanker or tube trailer and stored, usually in its liquid state, in equipment designed and installed by the Company at the customer's site for vaporizing into a gaseous state as needed. Liquid bulk sales are typically governed by three- to five-year contracts.

Packaged gases Small quantities of product are delivered in either cylinders or dewars. The Company operates packaged gas businesses in Europe, Asia, and Latin America. In the United States, the Company's packaged gas business sells products only for the electronics and magnetic resonance imaging (principally helium) industries.

Small on-site plants Customers receive product through small on-sites (cryogenic or noncryogenic generators), either by a sale of gas contract or the sale of the equipment to the customer.

Electric power is the largest cost component in the production of atmospheric gases—oxygen, nitrogen, and argon. Natural gas is also an energy source at a number of the Company's Merchant Gases facilities. The Company mitigates energy and natural gas price increases through pricing

formulas and surcharges. Helium is produced as a by-product of natural gas production. We purchase crude helium for purification and resale. During fiscal year 2012,

we experienced shortages in helium supply due to industrywide sourcing shortfalls. No other significant difficulties were encountered in obtaining adequate supplies of energy or raw materials during the year.

Merchant Gases competes worldwide against three global industrial gas companies: L Air Liquide S.A.; Linde AG; and Praxair, Inc.; and several regional sellers (including Airgas, Inc., primarily with respect to liquid bulk sales). Competition in industrial gases is based primarily on price, reliability of supply, and the development of industrial gas applications.

Merchant Gases sales constituted 38% of the Company's consolidated sales in fiscal year 2012, 38% in fiscal year 2011, and 38% in fiscal year 2010. Sales of atmospheric gases (oxygen, nitrogen, and argon) constituted approximately 21% of the Company's consolidated sales in fiscal year 2012, 21% in fiscal year 2011, and 21% in fiscal year 2010.

The Merchant Gases segment also includes the Company's share of the results of several joint ventures accounted for by the equity method. The largest of these joint ventures operate in Mexico, Italy, South Africa, Saudi Arabia, India, and Thailand.

Tonnage Gases

Tonnage Gases provides hydrogen, carbon monoxide, nitrogen, oxygen, and synthesis gas (a hydrogen-carbon monoxide mixture) principally to the energy production and refining, chemical, and metallurgical industries worldwide. Gases are produced at large facilities located adjacent to customers' facilities or by pipeline systems from centrally located production facilities and are generally governed by contracts with 15- to 20-year terms. The Company is the world's largest provider of hydrogen, which is used by oil refiners to facilitate the conversion of heavy crude feedstock and lower the sulfur content of gasoline and diesel fuels to reduce smog and ozone depletion. The energy production industry uses nitrogen injection for enhanced recovery of oil and natural gas and oxygen for gasification. The metallurgical industry uses nitrogen for inerting and oxygen for the manufacture of steel and certain nonferrous metals. The chemical industry uses hydrogen, oxygen, nitrogen, carbon monoxide, and synthesis gas as feedstocks in the production of many basic chemicals. The Company delivers product through pipelines from centrally located facilities in or near the Texas Gulf Coast; Louisiana; Los Angeles, California; Alberta, Canada; Rotterdam, the Netherlands; United Kingdom; Western Belgium; Ulsan, Korea; Nanjing, China; Tangshan, China; Kuan Yin, Taiwan; Singapore; and Camaçari, Brazil. The Company also owns less than controlling interests in pipelines located in Thailand and South Africa.

Tonnage Gases also includes a Polyurethane Intermediates (PUI) business which sells toluenediamine (TDA). In 2012, we sold certain PUI assets and the rights to a supply contract. A supply arrangement with terms at fair market value was established with the buyer to serve the retained product supply contracts so that our PUI production facility in Pasadena, TX could permanently close.

Natural gas is the principal raw material for hydrogen, carbon monoxide, and synthesis gas production. Electric power is the largest cost component in the production of atmospheric gases. The Company mitigates energy and natural gas price increases through long-term cost pass-through contracts. Prior to entering into the TDA buy/resale agreement, toluene, ammonia, and hydrogen were the principal raw materials for the PUI business and were purchased from various suppliers under multiyear contracts. During fiscal year 2012, no significant difficulties were encountered in obtaining adequate supplies of energy or raw materials.

Tonnage Gases competes against three global industrial gas companies: L Air Liquide S.A.; Linde AG; Praxair, Inc.; and several regional competitors. Competition is based primarily on price, reliability of supply, the development of applications that use industrial gases, and, in some cases, provision of other services or products such as power and steam generation. We also have a competitive advantage in regions where we have pipeline networks, which enable us to provide a reliable and economic supply of products to customers.

Tonnage Gases sales constituted approximately 33% of the Company's consolidated sales in fiscal year 2012, 34% in fiscal year 2011, and 34% in fiscal year 2010. Tonnage Gases hydrogen sales constituted approximately 14% of the consolidated sales in fiscal year 2012, 16% in fiscal year 2011, and 15% in fiscal year 2010.

Electronics and Performance Materials

Electronics and Performance Materials employs applications technology to provide solutions to a broad range of global industries through chemical synthesis, analytical technology, process engineering, and surface science. This segment provides the electronics industry with specialty gases (such as nitrogen trifluoride, silane, arsine, phosphine, white ammonia, silicon tetrafluoride, carbon tetrafluoride, hexafluoromethane, critical etch gases, and tungsten hexafluoride) as well as tonnage gases (primarily nitrogen), CMP slurries, specialty chemicals, services,

and equipment for the manufacture of silicon and compound semiconductors, thin film transistor liquid crystal displays, light-emitting diodes and photovoltaic devices. These products are delivered through various supply chain methods, including bulk delivery systems or distribution by pipelines such as those located in California's Silicon Valley; Phoenix, Arizona; Tainan, Taiwan; Gumi and Giheung, Korea; and Tianjin China.

Electronics and Performance Materials also provides performance materials for a wide range of products, including coatings, inks, adhesives, civil engineering, personal care, institutional and industrial cleaning, mining, oil refining, and polyurethanes, and focuses on the development of new materials aimed at providing unique functionality to emerging markets. Principal performance materials include polyurethane catalysts and other additives for polyurethane foam, epoxy amine curing agents and auxiliary products for epoxy systems, specialty surfactants for formulated systems, and functional additives for industrial cleaning and mining industries.

The Electronics and Performance Materials segment uses a wide variety of raw materials, including ammonia, tungsten powder, hydrogen fluoride, amines, alcohols, epoxides, organic acids, and ketones. During fiscal year 2012, no significant difficulties were encountered in obtaining adequate supplies of energy or raw materials.

The Electronics and Performance Materials segment faces competition on a product-by-product basis against competitors ranging from niche suppliers with a single product to larger and more vertically integrated companies. Competition is principally conducted on the basis of price, quality, product performance, reliability of product supply, technical innovation, service, and global infrastructure.

Total sales from Electronics and Performance Materials constituted approximately 24% of the Company's consolidated sales in fiscal year 2012, 24% in fiscal year 2011, and 22% in fiscal year 2010.

Equipment and Energy

Equipment and Energy designs and manufactures cryogenic equipment for air separation, hydrocarbon recovery and purification, natural gas liquefaction (LNG), and helium distribution (cryogenic transportation containers), and serves energy markets in a variety of ways.

Equipment is sold globally to customers in the chemical and petrochemical manufacturing, oil and gas recovery and processing, and steel and primary metals processing industries. The segment also provides a broad range of plant design, engineering, procurement, and construction management services to its customers.

Energy markets are served through the Company's operation and partial ownership of cogeneration and flue gas desulfurization facilities. In addition, we are developing hydrogen as an energy carrier, waste-to-energy facilities to produce electricity, carbon capture technologies for a variety of industrial and power applications, and oxygen-based technologies to serve energy markets in the future. The Company operates and owns a 47.9% interest in a 112-megawatt gas-fueled power generation facility in Thailand. The Company also operates and owns a 50% interest in a flue gas desulfurization facility in Indiana.

Steel, aluminum, and capital equipment subcomponents (compressors, etc.) are the principal raw materials in the equipment portion of this segment. Adequate raw materials for individual projects are acquired under firm purchase agreements. Coal and natural gas are the largest cost components in the production of energy. The Company mitigates these cost components, in part, through long-term cost pass-through contracts. During fiscal year 2012, no significant difficulties were encountered in obtaining adequate supplies of raw materials.

Equipment and Energy competes with a great number of firms for all of its offerings except LNG heat exchangers, for which there are fewer competitors due to the limited market size and proprietary technologies. Competition is based primarily on technological performance, service, technical know-how, price, and performance guarantees.

The backlog of equipment orders (including letters of intent believed to be firm) from third-party customers was approximately \$450 million on 30 September 2012, approximately 22% of which is for cryogenic equipment and 47% of which is for LNG heat exchangers, as compared with a total backlog of approximately \$334 million on 30 September 2011. The Company expects that approximately \$325 million of the backlog on 30 September 2012 will be completed during fiscal year 2013.

Narrative Description of the Company's Business Generally

The Company, through subsidiaries, affiliates, and less-than-controlling interests, conducts business in over 50 countries outside the United States. Its international businesses are subject to risks customarily encountered in foreign operations, including fluctuations in foreign currency exchange rates and controls; import and export controls; and other economic, political, and regulatory policies of local governments.

The Company has majority or wholly owned foreign subsidiaries that operate in Canada, 18 European countries (including the United Kingdom and Spain), 11 Asian countries (including China, Korea, and Taiwan), and 7 Latin American countries (including Chile, Mexico and Brazil). The Company also owns less-than-controlling interests in entities operating in Europe, Asia, Africa, the Middle East, and Latin America (including Italy, Germany, China, India, Saudi Arabia, Singapore, Thailand, United Arab Emirates, South Africa, and Mexico).

Financial information about the Company's foreign operations and investments is included in Note 8, Summarized Financial Information of Equity Affiliates; Note 21, Income Taxes; and Note 24, Business Segment and Geographic Information, to the consolidated financial statements included under Item 8 herein. Information about foreign currency translation is included under Foreign Currency in Note 1, Major Accounting Policies, and information on the Company's exposure to currency fluctuations is included in Note 12, Financial Instruments, to the consolidated financial statements, included under Item 8 below, and in Foreign Currency Exchange Rate Risk, included under Item 7A below. Export sales from operations in the United States to third party customers amounted to \$521.1 million, \$537.3 million, and \$470.2 million in fiscal years 2012, 2011, and 2010, respectively.

Technology Development

The Company pursues a market-oriented approach to technology development through research and development, engineering, and commercial development processes. It conducts research and development principally in its laboratories located in the United States (Trexlerstown, Pennsylvania; Carlsbad, California; Milton, Wisconsin; and Phoenix, Arizona), Canada (Vancouver), the United Kingdom (Basingstoke and Carrington), Germany (Hamburg), the Netherlands (Utrecht), Spain (Barcelona), and Asia (Tokyo, Japan; Shanghai, China; Giheung, Korea; and Chupei and Hsinchu City, Taiwan). The Company also funds and cooperates in research and development programs conducted by a number of major universities and undertakes research work funded by others principally the United States government.

The Company's corporate research groups, which include science and process technology centers, support the research efforts of various businesses throughout the Company. Development of technology for use within Merchant Gases, Tonnage Gases, and Equipment and Energy focuses primarily on new and improved processes and equipment for the production and delivery of industrial gases and new or improved applications for all such products. Research and technology development for Electronics and Performance Materials supports development of new products and applications to strengthen and extend the Company's present positions. Work is also performed in Electronics and Performance Materials to lower processing costs and develop new processes for the new products.

Research and development expenditures were \$126.4 million during fiscal year 2012, \$118.8 million in fiscal year 2011, and \$114.7 million in fiscal year 2010. In addition, the Company expended \$45.4 million on customer-sponsored research activities during fiscal year 2012, \$29.1 million in fiscal year 2011, and \$23.9 million in fiscal year 2010.

As of 1 November 2012, the Company owns 950 United States patents, 3,157 foreign patents, and is a licensee under certain patents owned by others. While the patents and licenses are considered important, the Company does not consider its business as a whole to be materially dependent upon any particular patent, patent license, or group of patents or licenses.

Environmental Controls

The Company is subject to various environmental laws and regulations in the countries in which it has operations. Compliance with these laws and regulations results in higher capital expenditures and costs. From time to time, the Company is involved in proceedings under the Comprehensive Environmental Response, Compensation, and Liability Act (the federal Superfund law), similar state laws, and the Resource Conservation and Recovery Act (RCRA) relating to the designation of certain sites for investigation and possible cleanup. Additional information with respect to these proceedings is included under Item 3, Legal Proceedings, below. The Company's accounting policy for environmental expenditures is discussed in Note 1, Major Accounting Policies, and environmental loss contingencies are discussed in Note 16, Commitments and Contingencies, to the consolidated financial statements, included under Item 8, below.

The amounts charged to income from continuing operations related to environmental matters totaled \$44.7 million in fiscal 2012, \$34.0 million in 2011, and \$31.6 million in 2010. These amounts represent an estimate of expenses for compliance with environmental laws, remedial activities, and activities undertaken to meet internal Company standards. Refer to Note 16, Commitments and Contingencies, to the consolidated financial statements for additional information.

Although precise amounts are difficult to determine, the Company estimates that in fiscal years 2012 and 2011, it spent approximately \$4 million and \$6 million, respectively, on capital projects to control pollution. Capital

expenditures to control pollution in future years are estimated at approximately \$4 million and \$5 million in fiscal years 2013 and 2014, respectively. The cost of any environmental compliance generally is contractually passed through to the customer.

The Company accrues environmental investigatory and remediation costs for identified sites when it is probable that a liability has been incurred and the amount of loss can be reasonably estimated. The potential exposure for such costs is estimated to range from \$87 million to a reasonably possible upper exposure of \$101 million. The accrual on the consolidated balance sheet for 30 September 2012 was \$87.5 million and for 30 September 2011 was \$82.3 million. Actual costs to be incurred in future periods may vary from the estimates, given inherent uncertainties in evaluating environmental exposures. Subject to the imprecision in estimating future environmental costs, the Company does not expect that any sum it may have to pay in connection with environmental matters in excess of the amounts recorded or disclosed above would have a material adverse effect on its financial condition or results of operations in any one year.

Employees

On 30 September 2012, the Company (including majority-owned subsidiaries) had approximately 21,300 employees, of whom approximately 20,900 were full-time employees and of whom approximately 13,500 were located outside the United States. The Company has collective bargaining agreements with unions at various locations that expire on various dates over the next four years. The Company considers relations with its employees to be satisfactory and does not believe that the impact of any expiring or expired collective bargaining agreements will result in a material adverse impact on the Company.

Available Information

All periodic and current reports, registration statements, and other filings that the Company is required to file with the Securities and Exchange Commission (SEC), including the Company's annual report on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and amendments to those reports filed or furnished pursuant to Section 13(a) of the Securities Exchange Act of 1934 (the 1934 Act Reports), are available free of charge through the Company's Internet website at www.airproducts.com. Such documents are available as soon as reasonably practicable after electronic filing of the material with the SEC. All 1934 Act Reports filed during the period covered by this report were available on the Company's website on the same day as filing.

The public may also read and copy any materials filed by the Company with the SEC at the SEC's Public Reference Room at 100 F Street, N.E., Washington, DC 20549. The public may obtain information on the operation of the Public Reference Room by calling the SEC at 1-800-SEC-0330. The SEC maintains an Internet site that contains reports, proxy, and information statements, and other information regarding issuers that file electronically with the SEC. The address of that site is www.sec.gov.

Seasonality

Although none of the four business segments are subject to seasonal fluctuations to any material extent, the Electronics and Performance Materials segment is susceptible to the cyclical nature of the electronics industry and to seasonal fluctuations in underlying end-use performance materials markets.

Working Capital

The Company maintains inventory where required to facilitate the supply of products to customers on a reasonable delivery schedule. Merchant Gases inventory consists primarily of industrial, specialty gas, and crude helium inventories supplied to customers through liquid bulk and packaged gases supply modes. The Tonnage Gases inventory is primarily Polyurethane Intermediates finished goods; on-site plants and pipeline complexes have limited inventory. Electronics inventories consist primarily of bulk and packaged specialty gases and chemicals and also include inventories to support sales of equipment and services. Performance Materials inventories consist primarily of bulk and packaged performance chemical solutions. Equipment and Energy has limited inventory.

Customers

We do not have a homogeneous customer base or end market, and no single customer accounts for more than 10% of our consolidated revenues. The Tonnage Gases and Electronics and Performance Materials segments do have concentrations of customers in specific industries, primarily refining, chemicals, and electronics. Within each of these industries, the Company has several large-volume customers with long-term contracts. A negative trend affecting one of these industries, or the loss of one of these major customers, although not material to our consolidated revenues, could have an adverse impact on the affected segment.

Governmental Contracts

No segment's business is subject to a government entity's renegotiation of profits or termination of contracts that would be material to our business as a whole.

Executive Officers of the Company

The Company's executive officers and their respective positions and ages on 20 November 2012 follow. Information with respect to offices held is stated in fiscal years.

Name	Age	Office
M. Scott Crocco (1)	48	Vice President and Corporate Controller (became Vice President in 2008; and Corporate Controller in 2007).
Paul E. Huck (1) (A)	62	Senior Vice President and Chief Financial Officer (became Senior Vice President and Chief Financial Officer in 2008).
Stephen J. Jones (A)	51	Senior Vice President and General Manager, Tonnage Gases, Equipment and Energy and China President (became Senior Vice President and General Manager, Tonnage Gases, Equipment and Energy and China President in 2011; Senior Vice President and General Manager, Tonnage Gases, Equipment and Energy in 2009; Senior Vice President, General Counsel and Secretary in 2008).
John W. Marsland (A)	46	Senior Vice President and General Manager Merchant Gases (became Senior Vice President and General Manager Merchant Gases in 2012; Senior Vice President and General Manager, Electronics, Performance Materials, and Supply Chain in 2010; Vice President and General Manager Global Liquid Bulk, Generated Gases and Helium in 2009; Vice President Business Services in 2009; and Vice President and General Manager Healthcare in 2007).
John E. McGlade (A)(B)(C)	58	Chairman, President, and Chief Executive Officer (became Chairman and Chief Executive Officer in 2008).
Guillermo Novo (A)	50	Senior Vice President and General Manager Electronics, Performance Materials, Strategy and Technology (became Senior Vice President and General Manager Electronics, Performance Materials, Strategy and Technology in 2012; Group Vice President, Dow Coating Materials at Dow Chemical Company in 2010; Vice President, Polyurethanes Business at Dow Chemical Company in 2009; and Vice President at Rohm and Haas in 2008).
Corning F. Painter (A)	50	Senior Vice President Supply Chain (became Senior Vice President Supply Chain in 2012; Senior Vice President Corporate Strategy and Technology in 2011; and Vice President and General Manager, Global Electronics in 2007).
John D. Stanley (A)	54	Senior Vice President and General Counsel (became Senior Vice President and General Counsel in 2009; and Assistant General Counsel, Americas and Europe in 2007).

(A) Member, Corporate Executive Committee

(B) Member, Board of Directors

(C) Member, Executive Committee of the Board of Directors

(1) On October 19, 2012, the Company announced that Mr. Huck will retire on February 28, 2013. Mr. Crocco will succeed Mr. Huck as Chief Financial Officer and as a member of the Corporate Executive Committee.

ITEM 1A. RISK FACTORS

In conjunction with evaluating an investment in the Company and the forward-looking information contained in this Annual Report on Form 10-K or presented elsewhere by management from time to time, you should carefully read the following risk factors. Any of the following risks could have a material adverse effect on our business, operating results, financial condition, and the actual outcome of matters as to which forward-looking statements are made. While we believe we have identified and discussed below the key risk factors affecting our business, there may be additional risks and uncertainties that adversely affect our business, performance, or financial condition in the future that are not presently known, are not currently believed to be significant, or are not identified below because they are common to all businesses.

Overall Economic Conditions A return of recessionary economic conditions in certain markets in which the Company does business may decrease the demand for its goods and services and adversely impact its revenues, operating results, and cash flow.

Demand for the Company's products and services depends in part on the general economic conditions affecting the countries and industries in which the Company does business. Recently, uncertain economic conditions in certain geographies and industries served by the Company have impacted and may in the future impact demand for the Company's products and services, in turn negatively impacting the Company's revenues and earnings. Unfavorable conditions can depress sales in a given market, affect our margins, constrain our operating flexibility, or result in charges which are unusual or nonrecurring. Excess capacity in the Company's or its competitors' manufacturing facilities could decrease the Company's ability to maintain pricing and generate profits. Unanticipated contract terminations or project delays by current customers can also negatively impact financial results. Our operating results in one or more segments may also be affected by uncertain or deteriorating economic conditions particularly germane to that segment or to particular customer markets within that segment.

Asset Impairments The Company may be required to record impairment on its long-lived assets.

Weak demand may cause underutilization of the Company's manufacturing capacity or elimination of product lines; contract terminations or customer shutdowns may force sale or abandonment of facilities and equipment; and contractual provisions may allow customer buyout of facilities or equipment. These or other events associated with weak economic conditions or specific end market, product, or customer events may require the Company to record an impairment on tangible assets, such as facilities and equipment, or intangible assets, such as intellectual property or goodwill, which would have a negative impact on its financial results.

Competition Inability to compete effectively in a segment could adversely impact sales and financial performance.

The Company faces strong competition from several large global competitors and many smaller regional ones in all of its business segments. Introduction by competitors of new technologies, competing products, or additional capacity could weaken demand for or impact pricing of the Company's products, negatively impacting financial results. In addition, competitors' pricing policies could materially affect the Company's profitability or its market share.

Raw Material and Energy Cost and Availability Interruption in ordinary sources of supply or an inability to recover increases in energy and raw material costs from customers could result in lost sales or reduced profitability.

A disruption in the supply of energy and raw materials, whether due to market conditions, legislative or regulatory actions, natural events, or other disruption, could prevent the Company from meeting its contractual commitments, harming its business and financial results. Energy, including electricity, natural gas, and diesel fuel for delivery trucks, is the largest cost component of the Company's business. Because the Company's industrial gas facilities use substantial amounts of electricity, energy price fluctuations could materially impact the Company's revenues and earnings. Hydrocarbons, including natural gas, are the primary feedstock for the production of hydrogen, carbon monoxide, and synthesis gas. Helium is a by-product of natural gas production. Lower natural gas production due to further deterioration in natural gas prices or other factors, such as supplier operating issues, could further reduce crude helium available for the Company to process for resale to its customers, reducing its sales. The Electronics and Performance Materials segment uses a wide variety of raw materials, including alcohols, ethylenamines, cyclohexylamine, acrylonitriles, and glycols. Shortages or price escalation in these materials could negatively impact financial results.

The Company typically contracts to pass through cost increases in energy and raw materials to its customers, but cost variability can still have a negative impact on its results. The Company may not be able to raise prices as quickly as costs rise, or competitive pressures may prevent full recovery. Increases in energy or raw material costs that cannot be passed on to customers for competitive or other reasons would negatively impact the Company's revenues and earnings. Even where costs are passed through, price increases can cause lower sales volume.

Regulatory Compliance The Company is subject to extensive government regulation in jurisdictions around the globe in which it does business. Changes in regulations addressing, among other things, environmental compliance, import/export restrictions, and taxes, can negatively impact the Company's operations and financial results.

The Company is subject to government regulation in the United States and foreign jurisdictions in which it conducts its business. The application of laws and regulations to the Company's business is sometimes unclear. Compliance with laws and regulations may involve significant costs or require changes in business practice that could result in reduced profitability. Determination of noncompliance can result in penalties or sanctions that could also impact financial results. Compliance with changes in laws or regulations can require additional capital expenditures or increase operating costs. Export controls or other regulatory restrictions could prevent the Company from shipping its products to and from some markets or increase the cost of doing so. This area continues to attract external focus by multiple customs and export enforcement authorities. Changes in tax laws and regulations and international tax treaties could affect the financial results of the Company's businesses.

Greenhouse Gases Legislative and regulatory responses to global climate change create financial risk.

Some of the Company's operations are within jurisdictions that have or are developing regulatory regimes governing emissions of greenhouse gases (GHG). These include existing and expanding coverage under the European Union (EU) Emissions Trading Scheme (ETS); mandatory reporting and reductions at manufacturing facilities in Alberta, Canada; and mandatory reporting and anticipated constraints on GHG emissions in Ontario, Canada and South Korea. In addition, the U.S. Environmental Protection Agency is regulating GHG emissions for new construction and major modifications to existing facilities. As of 1 January 2013, The Company's hydrogen production facilities in California and the EU will begin their compliance obligation under California's AB32 cap and trade program and Phase 3 EU ETS, respectively; however, these facilities have contractual terms to enable cost recovery.

Increased public concern may result in more international, U.S. federal, and/or regional requirements to reduce or mitigate the effects of GHG. Although uncertain, these developments could increase the Company's costs related to consumption of electric power, hydrogen production, and fluorinated gases production. The Company believes it will be able to mitigate some of the increased costs through its contractual terms, but the lack of definitive legislation or regulatory requirements prevents accurate estimate of the long-term impact on the Company. Any legislation that limits or taxes GHG emissions could impact the Company's growth, increase its operating costs, or reduce demand for certain of its products.

Environmental Compliance Costs and expenses resulting from compliance with environmental regulations may negatively impact the Company's operations and financial results.

The Company is subject to extensive federal, state, local, and foreign environmental and safety laws and regulations concerning, among other things, emissions in the air, discharges to land and water, and the generation, handling, treatment, and disposal of hazardous waste and other materials. The Company takes its environmental responsibilities very seriously, but there is a risk of environmental impact inherent in its manufacturing operations and transportation of chemicals. Future developments and more stringent environmental regulations may require the Company to make additional unforeseen environmental expenditures. In addition, laws and regulations may require significant expenditures for environmental protection equipment, compliance, and remediation. These additional costs may adversely affect financial results. For a more detailed description of these matters, see Narrative Description of the Company's Business Generally Environmental Controls, above.

Foreign Operations, Political, and Legal Risks The Company's foreign operations can be adversely impacted by nationalization or expropriation of property, undeveloped property rights and legal systems, or political instability. Developing market operations present special risks.

The Company's operations in certain foreign jurisdictions are subject to nationalization and expropriation risk, and some of its contractual relationships within these jurisdictions are subject to cancellation without full compensation for loss. Economic and political conditions within foreign jurisdictions, social unrest, or strained relations between

countries can cause fluctuations in demand, price volatility, supply disruptions, or loss of property. The occurrence of any of these risks could have a material adverse impact on the Company's operations and financial results.

Our developing market operations may be subject to greater political, legal, and economic risks than those faced by our operations in mature economies. We expect to achieve our long-term financial goals, in part, by achieving disproportionate growth in developing regions. Should growth rates or our market share fall substantially below expected levels in these regions, our results could be negatively impacted. Our success will depend, in part, on our ability to manage the risks inherent in operating in a developing market, including unfamiliar regulatory environments, new relationships with local partners, and tailoring products for acceptance by local markets.

We may not be able to successfully implement initiatives to improve productivity and streamline operations to control or reduce costs.

Achieving our long-term profitability and return goals depends significantly on our efforts to control or reduce our operating costs. Because many of our costs are affected by factors outside or substantially outside our control, we generally must seek to control or reduce costs through operating efficiency or other initiatives. Such initiatives are important to our success. If we are not able to identify and complete initiatives designed to control or reduce costs and increase operating efficiency, or if the cost savings initiatives we have implemented to date, or any future cost-savings initiatives, do not generate expected cost savings, our financial results could be adversely impacted.

Currency Fluctuations Changes in foreign currencies may adversely affect the Company's financial results.

A substantial amount of the Company's sales are derived from outside the United States and denominated in foreign currencies. The Company also has significant production facilities which are located outside of the United States. Financial results therefore will be affected by changes in foreign currency rates. The Company uses certain financial instruments to mitigate these effects, but it is not cost-effective to hedge foreign currency exposure in a manner that would entirely eliminate the effects of changes in foreign exchange rates on earnings, cash flows, and fair values of assets and liabilities. Accordingly, reported sales, net earnings, cash flows, and fair values have been and in the future will be affected by changes in foreign exchange rates. For a more detailed discussion of currency exposure, see Item 7A, below.

Interest Rate Increases The Company's earnings, cash flow, and financial position can be impacted by interest rate increases.

At 30 September 2012, the Company had total consolidated debt of \$5,291.9 million, of which \$1,007.7 million will mature in the next twelve months. The Company expects to continue to incur indebtedness to fund new projects and replace maturing debt. Although the Company actively manages its interest rate risk through the use of derivatives and diversified debt obligations, not all borrowings at variable rates are hedged, and new debt will be priced at market rates. If interest rates increase, the Company's interest expense could increase significantly, affecting earnings and reducing cash flow available for working capital, capital expenditures, acquisitions, and other purposes. In addition, changes by any rating agency to the Company's outlook or credit ratings could increase the Company's cost of borrowing. For a more detailed discussion of interest rate risk, see Item 7A, below.

Pension Liabilities The Company's results of operations and financial condition could be negatively impacted by its pension plans.

Adverse equity market conditions and volatility in the credit markets have had and may continue to have an unfavorable impact on the value of the Company's pension trust assets and its future estimated pension liabilities, significantly affecting the net periodic benefit costs of its pension plans and ongoing funding requirements for these plans. As a result, the Company's financial results and cash flow in any period could be negatively impacted. For information about potential impacts from pension funding and the use of certain assumptions regarding pension matters, see the discussion in Note 15, Retirement Benefits, to the consolidated financial statements, included in Item 8, below.

Catastrophic Events Catastrophic events could disrupt the Company's operations or the operations of its suppliers or customers, having a negative impact on the Company's business, financial results, and cash flow.

The Company's operations could be impacted by catastrophic events outside the Company's control, including severe weather conditions such as hurricanes, floods, earthquakes, and storms, or acts of war and terrorism. Any

such event could cause a serious business disruption that could affect the Company's ability to produce and distribute its products and possibly expose it to third-party liability claims. Additionally, such events could impact the Company's suppliers, in which event energy and raw materials may be unavailable to the Company, or its customers may be unable to purchase or accept the Company's products and services. Any such occurrence could have a negative impact on the Company's operations and financial results.

Operational Risks **Operational and execution risks may adversely affect the Company's operations or financial results.**

The Company's operation of its facilities, pipelines, and delivery systems inherently entails hazards that require continuous oversight and control, such as pipeline leaks and ruptures, fire, explosions, toxic releases, mechanical failures, or vehicle accidents. If operational risks materialize, they could result in loss of life, damage to the environment, or loss of production, all of which could negatively impact the Company's ongoing operations, reputation, financial results, and cash flow. In addition, the Company's operating results are dependent on the continued operation of its production facilities and its ability to meet customer requirements. Operating results are also dependent on the Company's ability to complete new construction projects on time, on budget, and in accordance with performance requirements. Failure to do so may expose the Company to loss of revenue, potential litigation, and loss of business reputation.

Information Security **The security of the Company's Information Technology systems could be compromised, which could adversely affect its ability to operate.**

We depend on information technology to enable us to operate efficiently and interface with customers, as well as maintain financial accuracy and efficiency. Our information technology capabilities are delivered through a combination of internal and outsourced service providers. If we do not allocate and effectively manage the resources necessary to build and sustain the proper technology infrastructure, we could be subject to transaction errors, processing inefficiencies, the loss of customers, business disruptions, or the loss of or damage to our intellectual property through security breach. As with all large systems, our information systems could be penetrated by outside parties intent on extracting information, corrupting information, or disrupting business processes. The Company's systems have in the past been and likely will in the future be subject to hacking attempts. To date, the Company is not aware of any impact on its operations or financial results from such attempts; however, unauthorized access could disrupt our business operations, result in the loss of assets and have a material adverse effect on our business, financial condition, or results of operations.

The Company's business involves the use, storage, and transmission of information about its employees, vendors, and customers. The protection of such information, as well as the Company's information, is critical to the Company. The regulatory environment surrounding information security and privacy is increasingly demanding, with the frequent imposition of new and constantly changing requirements. The Company has established policies and procedures to help protect the security and privacy of this information. The Company also, from time to time, exports sensitive customer data and technical information to recipients outside the U.S. Breaches of our security measures or the accidental loss, inadvertent disclosure, or unapproved dissemination of proprietary information or sensitive or confidential data about us or our customers, including the potential loss or disclosure of such information or data as a result of fraud, trickery, or other forms of deception, could expose us, our customers, or the individuals affected to a risk of loss or misuse of this information; could result in litigation and potential liability for us; could damage our reputation; or could otherwise harm our business.

Litigation and Regulatory Proceedings **The Company's financial results may be affected by various legal and regulatory proceedings, including those involving antitrust, tax, environmental, or other matters.**

The Company is subject to litigation and regulatory proceedings in the normal course of business and could become subject to additional claims in the future, some of which could be material. The outcome of existing legal proceedings may differ from the Company's expectations because the outcomes of litigation, including regulatory matters, are often difficult to predict reliably. Various factors or developments can lead the Company to change current estimates of liabilities and related insurance receivables, where applicable, or make such estimates for matters previously not susceptible to reasonable estimates, such as a significant judicial ruling or judgment, a significant settlement, significant regulatory developments, or changes in applicable law. A future adverse ruling, settlement, or unfavorable development could result in charges that could have a material adverse effect on the Company's results of operations in any particular period. For a more detailed discussion of the legal proceedings involving the Company, see Item 3, below.

Recruiting and Retaining Employees Inability to attract, retain, or develop skilled employees could adversely impact the Company's business.

Sustaining and growing the Company's business depends on the recruitment, development, and retention of qualified employees. Demographic trends, shortages in certain skills and changes in the geographic concentration of global businesses have created more competition for talent. The inability to attract, develop, or retain quality employees could negatively impact the Company's ability to take on new projects and sustain its operations, which might adversely affect the Company's operations or its ability to grow.

New Technologies New technologies create performance risks that could impact our financial results or reputation.

A number of new technologies and new product offerings are being developed or implemented in commercial designs by the Company. Some of our existing technologies are being implemented in products and designs beyond our experience base. These technological expansions can create nontraditional performance risks to our operations. Failure of the technologies to work as predicted or unintended consequences of new designs or uses could lead to cost overruns, project delays, financial penalties, or damage to our reputation.

Acquisitions The inability to effectively integrate acquisitions could adversely impact the Company's financial position and results of operation.

The Company has recently made and expects to continue to evaluate potential strategic acquisitions. Integrating an acquired company, business, or group of assets may create unforeseen operating difficulties and expenditures and may require significant financial and other resources. Risks include:

The need to implement or remediate controls, procedures, and policies at acquired companies or operations;

The need to integrate operations and accounting, management information, human resource, and other administrative systems;

Failure to achieve targeted synergies;

Failure of acquired businesses to grow as expected; and

Inability to retain key employees and business relationships of acquired companies.

Foreign acquisitions involve unique risks in addition to those mentioned above, including those related to integration of operations across different cultures and languages, currency risks, and the particular economic, political, and regulatory risks associated with specific countries.

ITEM 1B. UNRESOLVED STAFF COMMENTS

We have not received any written comments from the Commission staff that remain unresolved.

ITEM 2. PROPERTIES

We own our principal administrative offices, which are located at our headquarters in Trexlertown, Pennsylvania. We also own administrative offices in Hersham, England; Santiago, Chile; and Giheung, Korea and lease administrative offices located in Ontario, Canada; Crewe, U.K.; Brussels, Belgium; Paris, France; Barcelona and Madrid, Spain; Rotterdam and Amsterdam, the Netherlands; Bochum, Germany; Moscow, Russia; Warsaw, Poland; São Paulo, Brazil; Shanghai, China; Taipei, Taiwan; Kuala Lumpur, Malaysia; Kawasaki, Japan; Seoul, Korea; and Singapore.

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Following is a description of the properties used by our four business segments. We believe that, in general, our facilities are suitable and adequate for our current and anticipated future levels of operation and are adequately maintained.

Merchant Gases

Merchant Gases currently operates over 160 production and distribution facilities in North and South America (over 45 sites are owned and the remainder are leased); over 150 sites in Europe and Middle East (over 50 sites are owned and the remainder are leased); and 67 facilities within Asia (8 sites are owned). Helium is processed at sites in Kansas and Texas and then distributed to/from transfill sites in the U.S. Canada, Europe, and Asia. Sales support offices are located at our global office centers above, at additional leased properties in the U.S. and Canada, and at

regional production plant sites in Europe and Asia. Research and development (R&D) activities for this segment are conducted in Trexlertown, Pennsylvania; Basingstoke and Carrington in the UK; newly acquired sites in British Columbia, Canada; and a leased site in Shanghai, China.

Additionally, through our recently acquired controlling interest in Indura S.A., we operate at over 160 properties in the South American countries of Argentina, Chile, Colombia, Ecuador and Peru.

Tonnage Gases

Tonnage Gases operates over 65 plants (10 are owned) in North and South America that produce over 300 standard tons per day of product. Over 40 of these facilities produce or recover hydrogen. Many of the hydrogen facilities support the major pipeline systems located in Los Angeles, California; in Alberta, Canada; and along the Gulf Coast through the newly commissioned Gulf Coast Connection Pipeline, which interconnects the Texas and Louisiana pipeline networks. The segment also operates over 25 tonnage plants in Europe and over 20 tonnage plants within Asia. The majority of the sites in this segment are under structured long-term leasehold type agreements. Sales support offices are located at our headquarters in Trexlertown, Pennsylvania and leased offices in Texas, Louisiana, California, and Calgary, Alberta in North America, as well as in Hersham, England; Rotterdam, the Netherlands; Moscow, Russia; Shanghai, China; Singapore; and Doha, Qatar.

Electronics and Performance Materials

The electronics business within the Electronics and Performance Materials segment produces, packages, and stores nitrogen, specialty gases, and electronic chemicals, and manufactures equipment at over 40 sites in the United States (9 of which are owned and over 20 of which are located on customer sites), eight facilities in Europe and Middle East, over 55 facilities in Asia (approximately half of which are located on customer sites), and two in the Middle East.

The Performance Materials portion of this segment operates facilities in Los Angeles, California; Calvert City, Kentucky; Wichita, Kansas; Milton, Wisconsin; Reserve, Louisiana; Clayton, England; Marl and Schluechtern, Germany; Singapore; Isehara, Japan; and Changzhou and Nanjing, China. Approximately 60% of the Performance Materials facility sites are owned.

This segment has 5 field sales offices in the United States as well as sales offices in Europe, Taiwan, Korea, Japan, Singapore, and China, the majority of which are leased. The segment conducts R&D related activities at 11 locations worldwide, including Trexlertown, Pennsylvania; Carlsbad, California; Tempe, Arizona; Utrecht, the Netherlands; at 3 sites in Germany; Chubei and Hsin Chu, Taiwan; Shanghai, China; and Kawasaki, Japan.

Equipment and Energy

Equipment and Energy operates seven equipment facilities in the U.S., one equipment facility in Europe and two in Asia. We manufacture a significant portion of the world's supply of LNG equipment at our Wilkes-Barre, Pennsylvania site. Air separation columns and cold boxes for Company-owned facilities and third-party sales are produced by operations in Caojing, China and Tanjung Langsat, Malaysia as well as in the Wilkes-Barre facility when capacity is available. The Company has announced plans to expand its LNG manufacturing capacity with the construction of a new facility at the Port of Manatee, Florida.

Cryogenic transportation containers for liquid helium are manufactured and reconstructed at facilities in eastern Pennsylvania; Liberal, Kansas; and Istres, France. Equipment commercial team members are located at offices in Trexlertown and Bethlehem, Pennsylvania; Hersham, England; Pune, India; and Shanghai, China.

Electric power is produced at various facilities globally, including a 47.9% interest in a gas-fueled power generation facility in Thailand. Flue gas desulfurization operations are conducted at the Pure Air facility in Chesterton, Indiana. The Company has announced plans to construct a waste-to-energy facility in Tees Valley, U.K. The Company or its affiliates own approximately 50% of the real estate in this segment and lease the remaining 50%.

ITEM 3. LEGAL PROCEEDINGS

In the normal course of business, the Company and its subsidiaries are involved in various legal proceedings, including contract, product liability, intellectual property, and insurance matters. Although litigation with respect to these matters is routine and incidental to the conduct of our business, such litigation could result in large monetary awards, especially if a civil jury is allowed to determine compensatory and/or punitive damages. However, we believe that litigation currently pending to which we are a party will be resolved without any material adverse effect on our financial position, earnings, or cash flows.

From time to time, we are also involved in proceedings, investigations, and audits involving governmental authorities in connection with environmental, health, safety, competition, and tax matters.

The Company is a party to proceedings under the Comprehensive Environmental Response, Compensation, and Liability Act (the federal Superfund law); the Resource Conservation and Recovery Act (RCRA); and similar state environmental laws relating to the designation of certain sites for investigation or remediation. Presently there are approximately 35 sites on which a final settlement has not been reached where the Company, along with others, has been designated a Potentially Responsible Party by the Environmental Protection Agency or is otherwise engaged in investigation or remediation, including cleanup activity at certain of its current or former manufacturing sites. We do not expect that any sums we may have to pay in connection with these matters would have a material adverse effect on our consolidated financial position. Additional information on the Company's environmental exposure is included under Narrative Description of the Company's Business Generally Environmental Controls.

In September 2010, the Brazilian Administrative Council for Economic Defense (CADE) issued a decision against our Brazilian subsidiary, Air Products Brasil Ltda., and several other Brazilian industrial gas companies for alleged anticompetitive activities. CADE imposed a civil fine of R\$179.2 million (approximately \$88 million at 30 September 2012) on Air Products Brasil Ltda. This fine was based on a recommendation by a unit of the Brazilian Ministry of Justice whose investigation began in 2003, alleging violation of competition laws with respect to the sale of industrial and medical gases. The fines are based on a percentage of the Company's total revenue in Brazil in 2003.

We have denied the allegations made by the authorities and filed an appeal in October 2010 to the Brazilian courts. Certain of the Company's defenses, if successful, could result in the matter being dismissed with no fine against us. The Company, with advice of its outside legal counsel, has assessed the status of this matter and has concluded that although an adverse final judgment after exhausting all appeals is reasonably possible, such a judgment is not probable. As a result, no provision has been made in the consolidated financial statements.

While we do not expect that any sums we may have to pay in connection with these or any other legal proceeding would have a material adverse effect on our consolidated financial position or net cash flows, a future charge for regulatory fines or damage awards could have a significant impact on our net income in the period in which it is recorded.

ITEM 4. NOT APPLICABLE

PART II

ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS, AND ISSUER PURCHASES OF EQUITY SECURITIES

Our common stock (ticker symbol APD) is listed on the New York Stock Exchange. Quarterly stock prices, as reported on the New York Stock Exchange composite tape of transactions, and dividend information for the last two fiscal years appear below. Cash dividends on the Company's common stock are paid quarterly. Our objective is to pay dividends consistent with the reinvestment of earnings necessary for long-term growth. It is our expectation that we will continue to pay comparable cash dividends in the future.

Quarterly Stock Information

	High	Low	Close	Dividend
2012				
First	\$90.20	\$72.26	\$85.19	\$0.58
Second	92.48	85.60	91.80	0.64
Third	92.79	76.11	80.73	0.64
Fourth	85.83	77.21	82.70	0.64
				\$2.50
2011				
First	\$91.39	\$80.90	\$90.95	\$0.49
Second	95.00	83.22	90.18	0.58
Third	96.00	89.18	95.58	0.58
Fourth	98.00	74.58	76.37	0.58

The Company has authority to issue 25,000,000 shares of preferred stock in series. The Board of Directors is authorized to designate the series and to fix the relative voting, dividend, conversion, liquidation, redemption, and other rights, preferences, and limitations. When preferred stock is issued, holders of Common Stock are subject to the dividend and liquidation preferences and other prior rights of the preferred stock. There currently is no preferred stock outstanding. Our transfer agent and registrar is American Stock Transfer & Trust Company, 6201 15th Avenue, Brooklyn, New York 11219, telephone (800) 937-5449 (U.S. and Canada) or (718) 921-8124 (all other locations); Internet website www.amstock.com; and e-mail address info@amstock.com. As of 31 October 2012, there were 7,494 record holders of our common stock.

Purchases of Equity Securities by the Issuer

On 15 September 2011, the Board of Directors authorized the repurchase of up to \$1.0 billion of our outstanding common stock. This program does not have a stated expiration date. We repurchase shares pursuant to Rules 10b5-1 and 10b-18 under the Securities Exchange Act of 1934, as amended, through repurchase agreements established with several brokers. During fiscal year 2012, we purchased .6 million of our outstanding shares at a cost of \$53.1 million. No purchases were made during the fourth quarter of 2012. At 30 September 2012, \$946.9 million in share repurchase authorization remains.

Performance Graph

The performance graph below compares the five-year cumulative returns of the Company's common stock with those of the Standard & Poor's 500 and Dow Jones Chemicals Composite Indices. The figures assume an initial investment of \$100 and the reinvestment of all dividends.

COMPARISON OF FIVE YEAR CUMULATIVE SHAREHOLDER RETURN

Air Products, S&P 500, and Chemicals Composite Indices

Comparative Growth of a \$100 Investment

(Assumes Reinvestment of All Dividends)

ITEM 6. SELECTED FINANCIAL DATA

Information has been restated for the impact of discontinued operations.

(Millions of dollars, except per share)	2012	2011	2010	2009	2008
Operating Results					
Sales	\$9,612	\$9,674	\$8,616	\$7,847	\$9,978
Cost of sales	7,052	7,098	6,289	5,819	7,458
Selling and administrative	947	942	887	882	1,020
Research and development	126	119	115	116	131
Business restructuring and cost reduction plans	327			298	
Gain on previously held equity interest	86				
Net loss on Airgas transaction		49	96		
Operating income	1,282	1,508	1,268	724	1,366
Equity affiliates income	154	154	127	112	145
Interest expense	124	116	122	122	162
Income tax provision	287	375	306	149	327
Income from continuing operations attributable to Air Products	999	1,134	942	554	999
Net income attributable to Air Products	1,167	1,224	1,029	631	910
Basic earnings per common share attributable to Air Products:					
Income from continuing operations	4.73	5.33	4.44	2.64	4.71
Net income	5.53	5.75	4.85	3.01	4.29
Diluted earnings per common share attributable to Air Products:					
Income from continuing operations	4.66	5.22	4.34	2.59	4.56
Net income	5.44	5.63	4.74	2.96	4.15
Year-End Financial Position					
Plant and equipment, at cost	\$18,046	\$16,859	\$15,934	\$15,387	\$14,636
Total assets	16,942	14,291	13,506	13,029	12,571
Working capital	726	848	790	494	636
Total debt ^(A)	5,292	4,562	4,128	4,500	3,959
Air Products shareholders equity	6,477	5,796	5,547	4,792	5,031
Total equity	6,623	5,939	5,698	4,930	5,167
Financial Ratios					
Return on average Air Products shareholders equity ^(B)	16.1%	19.4%	18.2%	11.5%	18.3%
Operating margin	13.3%	15.6%	14.7%	9.2%	13.7%
Selling and administrative as a percentage of sales	9.9%	9.7%	10.3%	11.2%	10.2%
Total debt to sum of total debt and total equity ^(A)	44.4%	43.4%	42.0%	47.7%	43.4%
Other Data					
Depreciation and amortization	\$841	\$834	\$827	\$807	\$833
Capital expenditures on a GAAP basis ^(C)	2,560	1,366	1,092	1,194	1,114
Capital expenditures on a non-GAAP basis ^(C)	2,778	1,539	1,256	1,433	1,290
Cash provided by operating activities	1,765	1,710	1,485	1,286	1,634
Cash used for investing activities	2,435	1,170	1,014	998	875
Cash provided by (used for) financing activities	(78)	(485)	(580)	101	(977)
Dividends declared per common share	2.50	2.23	1.92	1.79	1.70
Market price range per common share	93 72	98 75	85 64	81 41	106 65
Weighted average common shares outstanding (in millions)	211	213	212	210	212
Weighted average common shares outstanding assuming dilution (in millions)	215	218	217	214	219
Book value per common share at year-end	\$30.48	\$27.57	\$25.94	\$22.68	\$23.70
Shareholders at year-end	7,500	7,900	8,300	8,600	8,900
Employees at year-end ^(D)	21,300	18,900	18,300	18,900	21,100

^(A) Total debt includes long-term debt, current portion of long-term debt, and short-term borrowings as of the end of the year.

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- (B) Calculated using income from continuing operations attributable to Air Products and five-quarter average Air Products shareholders' equity.
- (C) Capital expenditures on a GAAP basis include additions to plant and equipment, investment in and advances to unconsolidated affiliates, and acquisitions. The Company utilizes a non-GAAP measure in the computation of capital expenditures and includes spending associated with facilities accounted for as capital leases and purchases of noncontrolling interests. Certain contracts associated with facilities that are built to provide product to a specific customer are required to be accounted for as leases, and such spending is reflected as a use of cash within cash provided by operating activities. Additionally, the purchase of noncontrolling interests in a subsidiary is accounted for as an equity transaction and will be reflected as a financing activity in the consolidated statement of cash flows. Refer to page 29 for a reconciliation of the GAAP to non-GAAP measure for 2012, 2011, and 2010. For 2009 and 2008, the GAAP measure was adjusted by \$196 and \$239, respectively for spending associated with facilities accounted for as capital leases.
- (D) Includes full- and part-time employees from continuing and discontinued operations.

ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

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The following discussion should be read in conjunction with the consolidated financial statements and the accompanying notes contained in this report. All comparisons in the discussion are to the corresponding prior year unless otherwise stated. All amounts presented are in accordance with U.S. generally accepted accounting principles (GAAP), except as noted. All amounts are presented in millions of dollars, except for share data, unless otherwise indicated.

Captions such as income from continuing operations attributable to Air Products, net income attributable to Air Products, and diluted earnings per share attributable to Air Products are simply referred to as income from continuing operations, net income, and diluted earnings per share throughout this Management's Discussion and Analysis, unless otherwise stated.

The discussion of results that follows includes comparisons to non-GAAP financial measures. In 2012, the non-GAAP measures exclude the photovoltaic (PV) market actions charge, the polyurethane intermediates (PUI) business actions charge, the cost reduction plan charge, the customer bankruptcy charge, the gain on the previously held equity interest in DuPont Air Products NanoMaterials LLC (DA NanoMaterials), the Spanish tax settlement, and the Spanish tax ruling. These non-GAAP measures exclude the net loss on Airgas transaction in 2011 and 2010. The presentation of non-GAAP measures is intended to enhance the usefulness of financial information by providing measures that our management uses internally to evaluate our baseline performance on a comparable basis. The reconciliation of reported GAAP results to non-GAAP measures is presented on pages 29-30.

BUSINESS OVERVIEW

Air Products and Chemicals, Inc. and its subsidiaries serve energy, electronics, chemicals, steel, and manufacturing customers globally with a unique portfolio of products, services, and solutions that include atmospheric, process and specialty gases; performance materials; equipment; and technology. Geographically diverse, with operations in over 50 countries, we have sales of \$9.6 billion, assets of \$16.9 billion, and a worldwide workforce of approximately 21,300 employees.

We organize our operations into four reportable business segments: Merchant Gases, Tonnage Gases, Electronics and Performance Materials, and Equipment and Energy.

2012 IN SUMMARY

In 2012, the global economy proved to be more challenging than we expected and we did not see the anticipated economic growth we forecasted for the second half of the fiscal year. Global manufacturing grew approximately 3% for the year and limited the opportunities for growth, particularly in our Merchant Gases and Electronics and Performance Materials segments. Underlying volume growth was modest, and overall, sales declined by 1% resulting from a stronger dollar and lower energy cost pass-through partially offset by acquisitions. Our operating income declined 1% versus the prior year.

In response to the current and forecasted economic environment, we took a number of important steps to position our global portfolio for future success. In Europe, we sold our homecare business and implemented a restructuring