AIR PRODUCTS & CHEMICALS INC /DE/ Form 10-K December 13, 2006

UNITED STATES SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549

FORM 10-K ANNUAL REPORT PURSUANT TO SECTIONS 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

(Mark One)

b ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the fiscal year ended 30 September 2006

OR

o 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.

(Exact Name of Registrant as Specified in Its Charter)

Delaware 23-1274455

(State or Other Jurisdiction of Incorporation or Organization) (IRS Employer Identification No.)

------,

7201 Hamilton Boulevard, Allentown, Pennsylvania 18195-1501

(Address of Principal Executive Offices) (Zip Code)

Registrant s telephone number, including area code (610) 481-4911 Securities registered pursuant to Section 12(b) of the Act:

Name of Each Exchange on Title of Each Class

Which Registered

Common Stock, par value \$1.00 per share New York

Preferred Stock Purchase Rights New York

8³/4% Debentures Due 2021 New York

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. YES b NO o

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 o $NO \, b$

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 b NO o

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 10-K or any amendments to this Form 10-K. b 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 (Check one):

Large accelerated filer b Accelerated filer o 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).

The aggregate market value of the voting stock held by non-affiliates of the registrant on 31 March 2006 was approximately \$15 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 30 November 2006 was 216,936,873.

NO b

YES o

DOCUMENTS INCORPORATED BY REFERENCE

Annual Report to Shareholders for the fiscal year ended 30 September 2006. With the exception of those portions that are incorporated by reference into Parts I, II and IV of this Form 10-K, the Annual Report is not deemed to be filed. Proxy Statement for Annual Meeting of Shareholders to be held 25 January 2007 . . . Part III.

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PART I

ITEM 1. BUSINESS. GENERAL DESCRIPTION OF BUSINESS

Air Products and Chemicals, Inc. (the Company), a Delaware corporation originally founded in 1940, serves technology, energy, industrial and healthcare 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, home healthcare and advanced coatings and adhesives. As used in this Report, unless the context indicates otherwise, the term Company includes subsidiaries and predecessors of the registrant and its subsidiaries.

During fiscal 2006, the Company announced that it was realigning its business portfolio into six reporting segments under which it would manage its operations, assess performance and report earnings: Merchant Gases; Tonnage Gases; Electronics and Performance Materials; Equipment and Energy; Healthcare; and Chemicals. The Company previously managed its operations and reported results under three business segments: Gases; Chemicals; and Equipment. It also announced that it would divest its amines and polymers emulsions businesses if appropriate buyers were found and did divest the amines business in September 2006. The polymers emulsions business is currently being marketed to potential purchasers.

FINANCIAL INFORMATION ABOUT SEGMENTS

Financial information concerning the Company s six new business segments (including restated financial information corresponding to the six new business segments) appears in Note 21 to the Consolidated Financial Statements included under Item 8 herein, which information and all other specific references herein to information appearing in the 2006 Financial Review Section of the Annual Report are incorporated herein by reference.

NARRATIVE DESCRIPTION OF BUSINESS BY SEGMENTS MERCHANT GASES

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

Merchant Gases delivers its products by one of the following three methods:

- (1) *liquid bulk* under which 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;
- (2) packaged gases under which small quantities of product are delivered in either cylinders or dewars. The Company operates packaged gas businesses in Europe, Asia and Brazil; in the United States, its packaged gas business sells products only for the electronics and magnetic resonance imaging (principally helium) industries; and
- (3) *small on-site plants* under which customers receive product through small on-sites (cryogenic or non-cryogenic 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 prices through pricing formulas and surcharges. A shortage or interruption of electricity or natural gas supply, or a price increase that cannot be passed through to customers, possibly for competitive reasons, may adversely affect the operations or results of Merchant Gases. During fiscal year 2006, no significant difficulties were encountered in obtaining adequate supplies of energy or raw materials.

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Merchant Gases competes in the United States against three global industrial gas companies, L. Air Liquide S.A., Linde AG and Praxair, Inc., and several regional sellers (including Airgas, Inc.). Competition is based primarily on price, reliability of supply and the development of applications for use of industrial gases. Similar competitive situations exist in the European and Asian industrial gas markets in which the Company competes against the three global companies as well as regional competitors.

Sales of atmospheric gases (oxygen, nitrogen and argon) constituted approximately 18 percent of the Company s consolidated sales in fiscal year 2006, 17 percent in fiscal year 2005 and 16 percent in fiscal year 2004.

TONNAGE GASES

Tonnage Gases provides hydrogen, carbon monoxide, nitrogen and oxygen principally to the petroleum 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 fifteen-to-twenty 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 metallurgical industry utilizes nitrogen for inerting and oxygen for the manufacture of steel and certain non-ferrous metals, and the chemical industry uses hydrogen, oxygen, nitrogen, carbon monoxide and syngas (a hydrogen-carbon monoxide mixture) as feedstocks in the production of many basic chemicals. The Company delivers product through pipelines from centrally located facilities in the Texas Gulf Coast; Los Angeles, California; Baton Rouge and New Orleans, Louisiana; Alberta, Canada; Rotterdam, the Netherlands; Ulsan, Korea; Tangshan, China; Kuan Yin, Taiwan; Singapore; and Camaçari, Brazil. The Company owns less than controlling interests in pipelines located in Thailand, Singapore and South Africa.

Electric power is the largest cost component in the production of atmospheric gases. Natural gas is also an energy source at a number of Tonnage Gases facilities. The Company mitigates energy and natural gas prices through long-term cost pass-through contracts. Natural gas is the principal raw material for hydrogen, carbon monoxide and syngas production. During fiscal year 2006, no significant difficulties were encountered in obtaining adequate supplies of energy or raw materials.

Tonnage Gases competes in the United States against three global industrial gas companies, L. Air Liquide S.A., Linde AG and Praxair, Inc., and several regional sellers. 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. Similar competitive situations exist in the European and Asian industrial gas markets where the Company competes against the three global companies as well as regional competitors.

Tonnage Gases hydrogen sales constituted approximately 14 percent of the Company s consolidated sales in fiscal year 2006, 12 percent in fiscal year 2005 and 11 percent in fiscal year 2004.

ELECTRONICS AND PERFORMANCE MATERIALS

Electronics and Performance Materials employs applications technology to provide material 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 specialty and bulk chemicals, services and equipment for the manufacture of silicon and compound semiconductors, thin film transistor liquid crystal displays 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; Tainon, Taiwan; Gumi and Giheung, Korea; and Tianjin and Shanghai, 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 and specialty surfactants. To enhance its performance materials capabilities, the Company recently acquired Tomah³ Products, a producer of specialty surfactants and processing aids used primarily in the institutional and industrial cleaning, mining and oil

field industries.

The Electronics and Performance Materials segment uses a wide variety of raw materials, including alcohols, etheramines, cyclohexamine, acrylonitriles and glycols. During fiscal year 2006, no significant difficulties were encountered in obtaining adequate supplies of energy or raw materials.

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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 and technical service assistance.

Total sales from Electronics and Performance Materials constituted approximately 21 percent of the Company s consolidated sales in fiscal year 2006, 22 percent in fiscal year 2005 and 23 percent in fiscal year 2004.

EQUIPMENT AND ENERGY

Equipment and Energy designs and manufactures cryogenic and gas processing equipment for air separation (utilizing membrane technology and adsorption technology), hydrocarbon recovery and purification, natural gas liquefaction (known as 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 desulphurization facilities and its development of hydrogen as an energy carrier and oxygen-based technologies to serve energy markets in the future. The Company owns and operates cogeneration facilities in Calvert City, Kentucky; Wilmington, California; and Port Arthur, Texas; operates and owns fifty percent interests in a 49-megawatt fluidized-bed coal-fired power generation facility in Stockton, California and a 24-megawatt gas-fired combined-cycle power generation facility near Rotterdam, the Netherlands; and operates and owns a 48.8 percent interest in a 112-megawatt gas-fueled power generation facility in Thailand. The Company also operates and owns a fifty percent interest in a flue gas desulphurization facility in Indiana.

Steel, aluminum and capital equipment subcomponents (such as compressors) 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, petroleum coke 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 2006, 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. 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 (including equity affiliates) was approximately \$446 million on 30 September 2006, approximately 30 percent of which is for cryogenic air separation equipment and 62 percent of which is for liquefied natural gas heat exchanges, as compared with a total backlog of approximately \$577 million on 30 September 2005. The Company expects that approximately \$357 million of the backlog on 30 September 2006 will be completed during fiscal year 2007.

HEALTHCARE

Healthcare provides respiratory therapies, home medical equipment and infusion services to over 500,000 patients in their homes. The Company operates in fifteen countries, including the United States, and is the market leader in Spain, Portugal, the United Kingdom and Mexico. Its serves patients whose conditions range from chronic lung disease, asthma and emphysema to sleep apnea and diabetes by providing oxygen therapy, pharmacist-managed direct-shipped respiratory medications, home nebulizer therapy, sleep management therapy, anti-infection therapy, enteral nutrition, beds and wheelchairs.

Labor is the largest cost component in this segment. In addition, the Company purchases oxygen concentrators and cylinders, beds, wheelchairs, sleep apnea products and equipment for respiratory therapy from multiple vendors. The home healthcare market is highly competitive. Competition in the Company s Healthcare segment involves regulatory compliance, price, quality, service and reliability of supply. Home healthcare in the United States is served by over 2,000 regional and local providers, including Apria Healthcare Group and Lincare Holdings Inc. Reimbursement levels are established by fee schedules regulated by Medicare and Medicaid or by the levels negotiated with insurance companies. Accordingly, in the United States, home healthcare companies compete

primarily on the basis of service. The structure of home healthcare in Europe is different from that in the United States. In certain countries in Europe, competitive bidding leads to exclusive supply arrangements for fixed terms. In other European countries, a licensed home healthcare provider competes for customers in a manner similar to that in the U.S. Three large industrial gas companies, L. Air Liquide S.A.,

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Linde AG, and Praxair, Inc., represent Healthcare s principal competitors in Europe. Maintaining competitiveness requires efficient logistics, reimbursement and accounts receivable systems.

CHEMICALS

Chemicals consists of the Company s polymer emulsions business, which is currently being marketed to potential buyers, and its polyurethane intermediates business, which is being restructured. In March 2006, the Company announced plans to restructure its chemicals business. Its polyurethane intermediates production facility in Geismer, Louisiana was sold in March 2006, and its amines business divested in September 2006.

Polymers are water-based and water-soluble emulsion products derived primarily from vinyl acetate monomer. The Company s major emulsions products are AIRFLEX vinyl acetate-ethylene copolymer emulsions and vinyl acetate homopolymer emulsions, which are used in adhesives, nonwoven fabric binders, paper coatings, paints, inks and carpet backing binder formulations.

The Company produces di-nitrotoluene (DNT), which is converted to toluene diamine (TDA) and sold for use as an intermediate in the manufacture of a major precursor of flexible polyurethane foam used in furniture cushioning, carpet underlay, bedding and seating in automobiles. Most of the Company s TDA is sold under long-term contracts to a small number of customers. In 2005, one of these customers closed its facility and another terminated its contract. The Company employs proprietary technology and scale of production to differentiate its polyurethane intermediates from those of its competitors. The Company also produces nitric acid as a raw material for its intermediates. The Chemicals segment s principal raw material purchases are chemical intermediates produced by others from basic petrochemical feedstocks such as olefins and aromatic hydrocarbons, which are generally derived from various crude oil fractions or from liquids extracted from natural gas. The Company purchases its chemical intermediates, which are generally readily available, from many sources and normally is not dependent on one supplier. The Company uses such raw materials in the production of emulsions, polyurethane intermediates, specialty additives, polyurethane additives and epoxy additives. In addition, the Company purchases finished and semi-finished materials and chemical intermediates from many suppliers. The Company also purchases ammonia under long-term contracts as a feedstock for its Pasadena, Texas facility. During fiscal year 2006, no significant difficulties were encountered in obtaining adequate supplies of energy or raw materials.

The Chemicals segment competes against a number of chemical companies, some of which are larger and more vertically integrated than the Company. While competition varies from product to product, the Company believes it has strong market positions in most of its chemical products. The possibility of back integration by large customers is a major competitive factor in the Company s polyurethane intermediates business. Competition is conducted principally on the basis of price, quality, product performance, reliability of product supply and technical service assistance.

Chemicals sales constituted 10 percent of the Company s consolidated sales in fiscal year 2006, 12 percent in fiscal year 2005 and 13 percent in fiscal year 2004.

NARRATIVE DESCRIPTION OF THE COMPANY S BUSINESS GENERALLY FOREIGN OPERATIONS

The Company, through subsidiaries, affiliates and minority-owned ventures, conducts business in over forty 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, 15 European countries (including the United Kingdom and Spain), 12 Asian countries (including China, Korea, Singapore and Taiwan) and four Latin American countries (including Mexico and Brazil). The Company also owns less-than-controlling interests in entities operating in Europe, Asia, Africa and Latin America (including Italy, Germany, China, Korea, India, Singapore, Thailand, South Africa and Mexico).

Financial information about the Company s foreign operations and investments is included in Notes 8, 17 and 21 to the Consolidated Financial Statements included under Item 8 herein. Information about foreign currency translation is included under Foreign Currency in Note 1 and information on the Company s exposure to currency fluctuations is included under Currency Risk Management in Note 6 to the Consolidated Financial Statements included under Item 8

herein and in Management s Discussion and Analysis of Financial Condition and Results of Operations under Foreign Currency Exchange Rate Risk included under Item 7 herein. Export sales from operations in the United States to unconsolidated customers amounted to \$738 million, \$719 million and

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\$611 million in fiscal years 2006, 2005 and 2004, respectively. Total export sales in fiscal year 2006 included \$491 million in export sales to affiliated customers. The sales to affiliated customers were primarily equipment sales within the Equipment and Energy segment and Electronic and Performance Materials sales.

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 (Trexlertown, Pennsylvania; Carlsbad, California; Milton, Wisconsin; and Phoenix, Arizona), the United Kingdom (Basingstoke, London and Carrington); Germany (Burghausen and Hamburg); the Netherlands (Utrecht); Spain (Barcelona and Madrid) and Asia (Tokyo, Japan; Shanghai, China; Giheung, Korea; and Hsinchu, 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 materials, process and analytical centers, support the research efforts of various businesses throughout the Company. Technology development efforts for use within Merchant Gases, Tonnage Gases and Equipment and Energy focus 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 is primarily concerned with 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. In Healthcare, the Company employs new scientific developments, knowledge, clinical evidence or technology to develop new products and services that focus on both the clinical and home healthcare environment. Research and development expenditures were \$151 million during fiscal year 2006, \$132 million in fiscal year 2005 and \$126 million in fiscal year 2004, and the Company expended \$21 million on customer-sponsored research activities during fiscal year 2006, \$17 million during fiscal year 2005 and \$14 million in fiscal year 2004. As of 1 November 2006, the Company owned 1,076 United States patents and 2,781 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 policies on environmental expenditures are discussed in Note 1 to the Consolidated Financial Statements included under Item 8 herein and in Management s Discussion and Analysis of Financial Condition and Results of Operations under Environmental Liabilities included under Item 7 herein.

The amounts charged to income from continuing operations on an after-tax basis related to environmental matters totaled \$26 million in fiscal 2006, \$26 million in 2005 and \$32 million in 2004. These amounts represent an estimate of expenses for compliance with environmental laws, remedial activities and activities undertaken to meet internal Company standards. Such costs are estimated to be \$21 million in 2007 and \$17 million in 2008.

Although precise amounts are difficult to define, the Company estimates that in fiscal year 2006 it spent approximately \$14 million on capital projects to control pollution versus \$8 million in 2005. Capital expenditures to control pollution in future years are estimated at approximately \$12 million in 2007 and \$5 million in 2008. 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 \$52 million to a reasonably possible upper exposure of \$70 million. The accrual on the

balance sheet for 30 September 2006 was \$52.4 million and for 30 September 2005 was \$13.3 million; the 2006 balance sheet accrual included environmental obligations related to the Pace, Florida facility (see Note 5 to the Consolidated Financial Statements for environmental amounts charged to discontinued operations). 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 materially adverse effect on its financial condition or results of operations in any one year.

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INSURANCE

The Company s policy is to obtain public liability and property insurance coverage that is currently available at what management determines to be a fair and reasonable price. The Company maintains public liability and property insurance coverage at amounts that management believes are sufficient to meet the Company s anticipated needs in light of historical experience to cover future litigation and claims. There is no assurance, however, that the Company will not incur losses beyond the limits of, or outside the coverage of, its insurance.

EMPLOYEES

On 30 September 2006, the Company (including majority-owned subsidiaries) had approximately 20,700 employees, of whom approximately 20,000 were full-time employees and of whom approximately 9,800 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 three to 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 sannual 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 Exchange Act (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 450 Fifth Street, NW, 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 six business segments are subject to seasonal fluctuations to any material extent, the Chemicals segment is susceptible to the cyclical nature of the chemicals industry.

WORKING CAPITAL

The Company s policy is to consistently maintain an adequate level of working capital to support its business needs at all times.

CUSTOMERS

There is no single or small number of customers upon which any business segment depends.

GOVERNMENTAL CONTRACTS

No material portion of any segment s business is subject to renegotiation of profits or termination of contracts at the election of a government entity.

EXECUTIVE OFFICERS OF THE COMPANY

The Company s executive officers and their respective positions and ages on 15 November 2006 follow. Except where indicated, each of the executive officers listed below has been employed by the Company in the position indicated during the past five fiscal years. Information with respect to offices held is stated in fiscal years.

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Name	Age	Office
W. Douglas Brown (C)	60	Vice President, General Counsel and Secretary (became Vice President, General Counsel and Secretary in 1999)
Robert D. Dixon	47	Vice President and General Manager Merchant Gases (became Vice President and General Manager Merchant Gases in 2006; President Air Products Asia in 2003; Vice President Air Products Asia in 2003 and Vice President Structured Businesses in 2001)
Michael F. Hilton	52	Vice President and General Manager Electronics and Performance Materials (became Vice President and General Manager Electronics and Performance Materials in 2006; Vice President Electronics Businesses in 2003; and Vice President Electronic Gases, Equipment and Services in 2002)
Paul E. Huck (C)	56	Vice President and Chief Financial Officer (became Vice President and Chief Financial Officer in 2004; and Vice President and Corporate Controller in 2002)
John P. Jones III (A)(B)(C)	56	Chairman and Chief Executive Officer (became Chairman and Chief Executive Officer in 2006; and Chairman, President and Chief Executive Officer in 2000)
Arthur T. Katsaros (C)	59	Group Vice President Development and Technology (became Group Vice President Development and Technology in 2003; and Group Vice President Engineered Systems and Development in 2001)
John W. Marsland	40	Vice President and General Manager Healthcare (became Vice President and General Manager Healthcare in 2006; Vice President and General Manager, Global Healthcare in 2005; Vice President Corporate Development Office in 2003; and Director, Business Development in 2002)
John E. McGlade (C)	52	President and Chief Operating Officer (became President and Chief Operating Officer in 2006; Group Vice President Chemicals in 2003; Vice President Chemicals Group Business Divisions in 2003; and Vice President and General Manager, Performance Chemicals Division in 2001)
Lynn C. Minella (C)	48	Vice President Human Resources (became Vice President Human Resources in 2004; Vice President, Human Resources, Software Group, International Business Machines Corporation in 2003; and Vice President, Human Resources, Technology Group, International Business Machines Corporation in 2001)
Scott A. Sherman	55	Vice President and General Manager Tonnage Gases, Equipment and Energy (became Vice President and General Manager Tonnage Gases, Equipment and Energy in 2006 and Vice President and General Manager Energy and Process Industries in 2001) 7

- (A) Member, Board of Directors
- (B) Member, Executive Committee of the Board of

Directors

(C) Member, Corporate Executive Committee

ITEM 1A. RISK FACTORS.

The Company operates in over 40 countries around the world and faces a variety of risks and uncertainties that could materially affect its future operations and financial performance. Many of these risks and uncertainties are not within the Company s control. Risks that may significantly impact the Company include the following:

Overall Economic Conditions and Demand for Products General economic conditions in markets in which the Company does business can impact the demand for its goods and services. Decreased demand for its products and services can have a negative impact on the Company s financial performance and cash flow.

Demand for the Company s products and services in part depends on the general economic conditions affecting the countries and industries in which the Company does business. A downturn in economic conditions in a country or industry served by the Company may negatively impact demand for the Company s products and services, in turn negatively impacting the Company s operations and financial results. Further, changes in demand for its products and services can magnify the impact of economic cycles on the Company s businesses. Unanticipated contract terminations by current customers can negatively impact operations, financial results and cash flow. The Company s recent divestiture of certain of its chemicals businesses, along with the potential sale of its polymers business, should make the Company less susceptible to the cyclical nature of the chemicals industry.

Competition The Company faces strong competition from several large, global competitors and many smaller regional ones in most of its business segments. Inability to compete effectively in a segment could adversely impact sales and financial performance.

The Merchant Gases segment competes with three global industrial gas companies, L. Air Liquide S.A., Linde AG and Praxair, Inc., as well as with several regional competitors in North America (including Airgas, Inc.) and in Europe and Asia. Competition is based primarily on price, product quality, reliability of supply and development of innovative applications.

The Tonnage Gases segment also competes with the three global industrial gas competitors noted above as well as with several regional competitors in North America, Europe and Asia. Competition is based primarily on price, product quality, reliability of supply, development of innovative applications and, in some instances, provision of additional items such as power and steam generation.

The Electronics and Performance Materials segment faces competition on a product-by-product basis against companies 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 and technical service assistance.

Equipment and Energy competes against many firms based primarily on technological performance, service, technical know-how, price and performance guarantees.

Healthcare competes against many local and regional providers in the United States, including Apria Healthcare Group and Lincare Holdings Inc., and against three large industrial gas companies, L. Air Liquide, S.A., Linde AG and Praxair, Inc., as well as local and regional suppliers in Europe. Competition is based primarily on quality of service.

Remaining competitive requires efficient logistic, reimbursement and accounts receivable systems. The Chemicals segment competes against a large number of chemical companies, generally on a product-by-product basis, principally on the basis of price, quality, product performance, reliability of product supply and technical service assistance. Several of these competitors are larger than the Company and are more vertically integrated.

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Raw Material and Energy Cost and Availability Volatility in raw material and energy costs, interruption in ordinary sources of supply and an inability to recover unanticipated increases in energy and raw material costs from customers could result in lost sales or significantly increase the cost of doing business.

Electricity is the largest cost input for the production of atmospheric gases in Merchant Gases and Tonnage Gases. Because the Company s industrial gas facilities use substantial amounts of electricity, energy price fluctuations could materially impact the financial performance of these segments. While the Company has been successful in contracting for electricity under multi-year agreements and passing through the cost to its customers, there is no assurance that it will be able to do so in the future.

Hydrocarbons, including natural gas, are the primary feedstock for the production of hydrogen, carbon monoxide and synthesis gas within Merchant Gases and Tonnage Gases. Volatility in hydrocarbon prices can impact the Company s financial performance. While the Company generally passes this risk through to its customers under its take-or-pay contracts by matching feedstock prices to the purchase price of the product being produced, an inability to do so in the future could impact its financial results.

The Company s large delivery truck fleet requires a readily available supply of gasoline and diesel fuel. The Company attempts to pass through increases in the cost of these fuels to its customers whenever possible.

Steel, aluminum and capital equipment subcomponents (such as compressors) are the principal raw materials in the equipment portion of the Equipment and Energy segment. Firm purchase agreements that cover the term of the project provide for adequate raw materials. Coal, petroleum coke and natural gas are the largest cost components for the energy portion of this segment. These costs are mitigated, in part, through long-term cost-pass-through contracts. The principal raw materials used in Chemicals are chemical intermediates such as olefins and aromatic hydrocarbons produced by outside suppliers from basic petrochemical feed-stocks like crude oil or natural gas. This segment also depends on adequate energy sources and natural gas as a feedstock for certain products. The Company does not depend on any one supplier for its chemical intermediates supply.

Despite the Company s contractual pass-through of the costs of energy, raw materials and delivery fuel, a shortage or interruption in their supply or an increase in any of their prices that cannot be passed on to customers for competitive or other reasons can negatively impact the Company s operations, financial results and cash flow.

Regulatory and Political Risks and Foreign Operations The Company is subject to extensive government regulation in jurisdictions around the globe in which it does business. Regulations address, among other things, environmental compliance, import/export restrictions, healthcare services, taxes and financial reporting, and can significantly increase the cost of doing business, which in turn can negatively impact the Company s operations, financial results and cash flow.

The Company is subject to government regulation and intervention both in the United States and in all foreign jurisdictions in which it conducts its business. Compliance with applicable laws and regulations results in higher capital expenditures and operating costs and changes to current regulations with which the Company complies can necessitate further capital expenditures and increases in operating costs to enable continued compliance. Additionally, from time to time, the Company is involved in proceedings under certain of these laws and regulations. Foreign operations are subject to political instabilities, restrictions on funds transfers, import/export restrictions and currency fluctuation. Significant areas of regulation and intervention include the following:

Environmental and Health Compliance. The Company is committed to conducting its activities so that there is no or only minimal damage to the environment; there is no assurance, however, that its activities will not at times result in liability under environmental and health regulations. Costs and expenses resulting from such liability may materially negatively impact the Company s operations and financial condition. Overall, environmental and health laws and regulations will continue to affect the Company s businesses worldwide. For a more detailed description of these matters, see Narrative Description of the Company s Business Generally Environmental Controls herein.

Import/Export Regulation. The Company is subject to significant regulatory oversight of its import and export operations due to the nature of its product offerings. The Company voluntarily participates in various government programs designed to enhance supply chain security and promote appropriate screening practices and internal controls

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regarding its purchases and sales to customers around the world. Penalties for non-compliance can be significant and violation can result in adverse publicity for the Company.

Nationalization and Expropriation. 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. The occurrence of any of these risks could have a material, adverse impact on the Company s operations and financial condition. For a more detailed description of these matters, see Narrative Description of the Company s Business Generally Foreign Operations herein.

Home Healthcare Regulation. The Company s Healthcare segment is subject to extensive government regulation, including laws directed at preventing fraud, abuse, kickbacks and false claims, laws regulating billing and reimbursement under various governmental healthcare programs and laws related to the privacy of patient data. Enforcement actions may be brought by the government or by qui tam relaters (private citizens bringing an action on behalf of the government), which could result in the imposition of fines or exclusion from participation in government healthcare programs. Also, the government contracts with regional carriers who administer claims processing for governmental healthcare programs. These carriers conduct both pre-payment and post-payment reviews and audits, which could result in demands for refunds or recoupments of amounts paid. The Company maintains a compliance program designed to minimize the likelihood that it would engage in conduct that violates these requirements or that could result in material refunds or recoupments. In addition, state and federal healthcare programs are subject to reform by legislative and administrative initiatives that could impact the relative cost of doing business and the amount of reimbursement for products and services provided by the Company. The Company closely monitors reform initiatives and participates actively in trade association and other activities designed to influence these reforms. Taxes. The Company structures its operations to be tax efficient and to make use of tax credits and other incentives when it makes business sense to do so. Nevertheless, changes in tax laws, actual results of operations, final audit of tax returns by taxing authorities, and the timing and rate at which tax credits can be utilized can change the rate at which the Company is taxed, thereby affecting its financial results and cash flow.

Financial Accounting Standards. The Company s financial results can be impacted by new or modified financial accounting standards.

Financial Market Risks The Company s earnings, cash flow and financial position are exposed to financial market risks worldwide, including interest rate and currency exchange rate fluctuations and exchange rate controls.

The Company operates in over 40 countries. It finances a portion of its operations through United States and foreign debt markets with various short-term and long-term public and private borrowings, and conducts its business in both U.S. dollars and many foreign currencies. Consequently, it is subject to both interest rate and currency exchange rate fluctuations. The Company actively manages the interest rate risk inherent in its debt portfolio in accordance with parameters set by management addressing the type of debt issued (fixed versus floating rate) and the use of derivative financial instruments. The Company strives to mitigate its currency exchange rate risks by minimizing cash flow exposure to adverse changes in exchange rates through the issuance of debt in currencies in which operating cash flows are generated and the use of derivative financials instruments. Derivative counterparty risk is mitigated by contracting with major financial institutions that have investment grade credit ratings. All derivative instruments are entered into for other than trading purposes. For a more detailed analysis of these matters see Note 6 to the Consolidated Financial Statements included under Item 8 herein.

Catastrophic Events Catastrophic events such as natural disasters, pandemics, war and acts of terrorism, could disrupt the Company s business or the business of its suppliers or customers, any of which disruptions could have a negative impact on the Company s operations, financial results and cash flow.

The Company s operations are at all times subject to the occurrence of catastrophic events outside the Company s control, ranging from severe weather conditions such as hurricanes, floods, earthquakes and storms, to health epidemics and pandemics, to 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, and its customers, who 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 condition. $\,$ $\,$ 10

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Company Undertakings The Company actively manages its business to protect and optimize its assets and businesses. There is no assurance, however, that the Company s undertakings will result in the intended protections and optimizations. In certain circumstances, the Company s undertakings could negatively impact its operations and financial results.

Operations. Inherent in the Company s operations of its facilities, pipelines and delivery systems are hazards that require continuous oversight and control. 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 on-going operations, financial results and cash flow. While the safety and security of the Company s operations have always been a priority, the Company has significantly expanded its efforts in this area since the terrorist attacks of September 11, 2001. It has been an active participant in the development and implementation of the American Chemistry Council s Responsible Care Security Code and has implemented this Code at all global facilities. Security vulnerability assessments (SVA) were conducted and necessary security upgrades implemented at facilities in North American and Europe; SVAs and necessary security upgrades to the Company s Asian facilities are expected to be completed by March 2007. The Company has also developed global security standards to address the safety and security of its global supply chain. Portfolio Management. The Company continuously reviews and manages its portfolio of assets in an attempt to conduct its businesses in a manner to maximize value to its shareholders. Portfolio management involves many variables, including future acquisitions and divestitures, restructurings and re-segmentations and cost-cutting and productivity initiatives. The timing, impact and ability to complete such undertakings, the costs and financial charges associated with such activities and the ultimate financial impact of such undertakings is uncertain and can have a negative short or long-term impact on the Company s operations and financial results.

Insurance. The Company carries public liability and property insurance in amounts that management believes are sufficient to meet its anticipated needs in light of historical experience to cover future litigation and property damage claims. Nevertheless, the occurrence of an unforeseen event for which the Company does not have adequate insurance could result in a negative impact on its financial results and cash flow. There is no assurance that the Company will collect insurance proceeds to which it is entitled if an insurer s business fails or it refuses to pay in a timely manner. Further, there is no assurance that the Company will not incur losses beyond the limits of, or outside the coverage of, its insurance policies.

Security. Acts of terrorism that threaten the Company or its facilities, pipelines, transportation or computer systems could severely disrupt its business operations and adversely affect the results of operations.

IT Risk. The security of the Company s IT systems could be compromised, which could adversely affect its ability to operate. The Company utilizes a global enterprise resource planning (ERP) system and other technologies for the distribution of information both within the Company and to customers and suppliers. The ERP system and other technologies are potentially vulnerable to interruption from viruses, hackers or system breakdown. To mitigate these risks, the Company has implemented a variety of security measures, including virus protection, a state of the art data center, redundancy procedures and recovery processes. A significant system interruption, however, could seriously affect the Company s business operation and financial condition.

Litigation. The Company is involved from time to time in various legal proceedings, including competition, environmental, health, safety, product liability and insurance matters. There is a risk that a lawsuit may be settled or adjudicated for an amount that is not insured. Any such uninsured amount could have a significant impact on the Company s financial condition and cash flow.

Recruiting and Retaining. Continued business success depends on the recruitment, development and retention of qualified employees. The inability to attract, develop or retain quality employees could negatively impact the Company s business objectives which might adversely affect the Company s business operation and financial condition.

ITEM 1B. UNRESOLVED STAFF COMMENTS.

The Company has not received any written comments from the Commission staff that remain unresolved.

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ITEM 2. PROPERTIES.

The Company owns its principal executive offices, which are located at its headquarters in Trexlertown, Pennsylvania, and also owns additional principal administrative offices in Hersham, near London, England and in Hattingen, Germany. Its principal Asian administrative offices, which are leased, are located in Hong Kong; Shanghai, China; Taipei, Taiwan; and Singapore. Additional administrative offices are leased near Philadelphia, Pennsylvania; Ontario, Canada; Tokyo, Japan; Seoul, South Korea; Kuala Lumpur, Malaysia; Brussels, Belgium; Paris, France; Barcelona, Spain; Utrecht, the Netherlands; and São Paulo, Brazil. Management believes the Company s manufacturing facilities, described in more detail below, are adequate to support its businesses.

Following is a description of the properties used by the Company s six business segments:

MERCHANT GASES

Merchant Gases currently operates over 110 facilities across the United States and in Canada (approximately 20 of which sites are owned), over 40 sites in Europe (approximately half of which sites are owned) and over 30 facilities in seven countries within Asia and in Brazil. Helium is recovered at sites in Kansas and Texas and distributed from several transfill sites in the U.S. and Asia. Sales support offices are located at its Trexlertown headquarters as well as in leased properties in three states, at several sites in Europe and at 15 sites in Asia.

TONNAGE GASES

Tonnage Gases operates more than 50 plants in the United States that produce over 300 standard tons-per-day of product. Over 30 of these facilities produce or recover hydrogen, many of which support the three major pipeline systems located along the Gulf Coast of Texas, on the Mississippi River corridor and in Los Angeles, California. The segment also operates approximately 20 tonnage plants in Europe and 16 tonnage plants within Asia, the majority of which are on leased properties. Sales support offices are located at the Company s headquarters in Trexlertown, Pennsylvania, as well as in leased offices in Texas, Louisiana, California and Calgary, Alberta.

ELECTRONICS AND PERFORMANCE MATERIALS

The electronics business within the Electronics and Performance Materials segment produces, packages and stores nitrogen, specialty gases and electronic chemicals at over 50 sites in the United States (the majority of which are leased), nine facilities (including sales offices) in Europe and over 40 facilities in Asia (approximately half of which are located on customer sites).

The performance materials portion of this segment operates facilities in Los Angeles, California; Calvert City, Kentucky; Paulsboro, New Jersey; Wichita, Kansas; Clayton, U.K.; Singapore; Isehara, Japan; and Shanghai, China. The acquisition of Tomah³ Products added properties in Milton, Wisconsin and Reserve, Louisiana. Substantially all of the performance materials properties are owned.

This segment has eight field sales offices in the United States as well as sales offices in Europe, Taiwan, Korea, Singapore and China, the majority of which are leased.

EOUIPMENT AND ENERGY

Equipment and Energy operates five plants and two sales offices in the U.S. The Company manufactures a significant portion of the world supply of natural gas liquefaction equipment at its Wilkes-Barre, Pennsylvania site. When capacity is available, the site manufactures air separation columns and cold boxes for company-owned facilities and for sale to third parties. The Acrefair site in the United Kingdom and a new operation in Caojing, China also produce air separation columns. Cryogenic transportation containers for liquid helium are manufactured and reconstructed at facilities in eastern Pennsylvania and Liberal, Kansas. Additional facilities utilized by the segment include three plants and offices in Europe, China and Korea. Electric power is produced at various facilities including Stockton and Wilmington, California; Port Arthur, Texas; Calvert City, Kentucky; and Rotterdam in the Netherlands. Flue gas desulfurization operations are conducted at the Pure Air facility in Chesterton, Indiana. The Company or its affiliates owns approximately 50 percent of the real estate in this segment and leases the remaining 50 percent.

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HEALTHCARE

Healthcare has 182 facilities that are located in the United States, six countries in Europe (including the U.K., Spain and Portugal), Canada, Mexico, Argentina and Korea. The majority of Healthcare facilities are leased. Many of the U.S. facilities were consolidated and upgraded to newer facilities in 2006.

CHEMICALS

In Chemicals, polyurethane intermediates operations are located in Pasadena, Texas and its polymer emulsions operations are conducted at properties in Calvert City, Kentucky; South Brunswick, New Jersey; Piedmont, South Carolina; Elkton, Maryland; Cologne, Germany; and Ulsan, Korea. The Chemicals segment has sales offices and laboratories in the United States, Europe, Mexico, Korea and China, the majority of which are leased.

ITEM 3. LEGAL PROCEEDINGS.

In the normal course of business the Company and its subsidiaries are involved in various legal proceedings, including competition, environmental, health, safety, product liability and insurance matters. Certain proceedings involve governmental authorities 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 32 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. The Company does not expect that any sums it may have to pay in connection with these matters would have a materially adverse effect on its consolidated financial position. Additional information on the Company s environmental exposure is included under Environmental Controls.

ITEM 4. SUBMISSION OF MATTERS TO A VOTE OF SECURITY HOLDERS. Not applicable.

PART II

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

The Company s 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. The Company s objective is to pay dividends consistent with the reinvestment of earnings necessary for long-term growth. It is the Company s expectation that comparable cash dividends will continue to be paid in the future.

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Quarterly Stock Information

2006	High	Low	Close	Dividend
First	\$61.89	\$53.00	\$59.19	\$.32
Second	68.10	58.01	67.19	.34
Third	69.54	59.18	63.92	.34
Fourth	68.48	60.92	66.37	.34
				\$1.34
2005	High	Low	Close	Dividend
First	\$59.18	\$51.85	\$57.97	\$.29
Second	65.81	55.99	63.29	.32
Third	64.06	55.53	60.30	.32
Fourth	61.60	53.30	55.14	.32
				\$1.25

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 as between series. 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. The Company s Transfer Agent and Registrar is American Stock Transfer and Trust Company, 59 Maiden Lane, Plaza Level, New York, New York 10038, telephone (800) 937-5449 (U.S. and Canada) or (718) 921-8200 (all other locations), Internet website www.amstock.com, and e-mail address info@amstock.com. As of 30 November 2006, there were 9,807 record holders of the Company s Common Stock.

Purchases of Equity Securities by the Issuer

The Company commenced a stock repurchase program, as described in footnote 1 to the following table. As of 30 September 2006, the Company had purchased 7.7 million of its outstanding shares at a cost of \$496.1 million. The Company expects to complete an additional \$500 million of the program by 30 September 2007. Purchases of equity securities by the issuer during the fourth quarter of fiscal 2006 are as follows:

				(d) Maximum
				Number (or
			(c) Total	
	(a) Total		Number of	Approximate Dollar
			Shares (or	
	Number of		Units)	Value) of Shares (or
		(b) Average	Purchased as	Units) that May Yet
	Shares (or	Price	Part of	Be
			Publicly	
	Units)	Paid	Announced	Purchased Under the
Period	Purchased			

		per Share (or Unit)	Plans or Programs	Plans or Programs ⁽¹⁾
7/1/06-7/31/06	1,458,900	\$ 63.01	1,458,900	\$ 1,201,213,019
8/1/06-8/31/06	1,610,000	\$ 65.32	1,610,000	\$ 1,096,044,609
9/1/06-9/30/06	1,384,700	\$ 66.53	1,384,700	\$ 1,003,925,074
Total	4,453,600	\$ 64.94	4,453,600	\$ 1,003,925,074

(1) On 22 March 2006, the Company announced plans to purchase up to \$1.5 billion of Air Products and Chemicals, Inc. common stock under a share repurchase program approved by the Company s Board of Directors on 16 March 2006. The program does not have a

stated expiration

date.

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For the quarter ending 30 September 2006, the Company expended \$275.4 million in cash for the repurchase of shares: \$13.8 million was reported as an accrued liability on the balance sheet for share repurchases settling in

October.

ITEM 6. SELECTED FINANCIAL DATA.

The tabular information appearing under Five-Year Summary of Selected Financial Data on page 80 of the 2006 Financial Review Section of the Annual Report to Shareholders is incorporated herein by reference.

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

The textual information appearing under Management's Discussion and Analysis on pages 19 through 42 of the 2006 Financial Review Section of the Annual Report to Shareholders is incorporated herein by reference.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK.

The textual information appearing under Market Risks and Sensitivity Analysis on pages 37 and 38 of the 2006 Financial Review Section of the Annual Report to Shareholders is incorporated herein by reference.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA.

The consolidated financial statements and the related notes thereto, together with the reports thereon of KPMG LLP dated 12 December 2006, appearing on pages 44 through 80 of the 2006 Financial Review Section of the Annual Report to Shareholders, are incorporated herein by reference.

Management s Report on Internal Control Over Financial Reporting, appearing on page 43 of the 2006 Financial Review Section of the Annual Report to Shareholders, is incorporated herein by reference.

The Report of Independent Registered Public Accounting Firm on Internal Control over Financial Reporting, appearing on page 44 of the 2006 Financial Review Section of the Annual Report to Shareholders, is incorporated herein by reference.

The Report of Independent Registered Public Accounting Firm, KPMG LLP, appearing on page 45 of the 2006 Financial Review Section of the Annual Report to Shareholders, is incorporated herein by reference.

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE.

Not Applicable.

ITEM 9A. CONTROLS AND PROCEDURES.

Under the supervision of the Chief Executive Officer and Chief Financial Officer, the Company s management conducted an evaluation of the effectiveness of the design and operation of the Company s disclosure controls and procedures as of 30 September 2006. Based on that evaluation, the Chief Executive Officer and Chief Financial Officer concluded that the design and operation of its disclosure controls and procedures have been effective. There have been no significant changes in internal controls or in other factors that could significantly affect internal controls subsequent to the date of such evaluation.

Management s Report on Internal Control Over Financial Reporting is provided under Item 8. Financial Statements and Supplementary Data, appearing above. The report of KPMG LLP, the Company s independent registered public accounting firm, regarding the Company s internal control over financial reporting, is also provided under Item 8. Financial Statements and Supplementary Data, appearing above.

ITEM 9B. OTHER INFORMATION.

Not Applicable.

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PART III

ITEM 10. DIRECTORS AND EXECUTIVE OFFICERS OF THE REGISTRANT.

The biographical information relating to the Company s directors, appearing in the Proxy Statement relating to the Company s 2007 Annual Meeting of Shareholders under the section, The Board of Directors, is incorporated herein by reference. Biographical information relating to the Company s executive officers is set forth in Item 1 of Part I of this Report.

Information on Section 16(a) Beneficial Ownership Reporting Compliance, appearing in the Proxy Statement relating to the Company s 2007 Annual Meeting of Shareholders under the section, Air Products Stock Beneficially Owned by Officers and Directors, is incorporated herein by reference.

The Company s Code of Conduct was updated in 2003 to comply with the requirements of Sarbanes-Oxley and the New York Stock Exchange. The Code of Conduct was filed as Exhibit 14 to the 2003 Annual Report on Form 10-K. In 2005, the Code of Conduct was further updated to make it more reader friendly, cover additional areas of compliance and internal policies and expand its application to employees and businesses worldwide. The existing Code of Conduct was filed as Exhibit 14 to the 2005 Annual Report on Form 10-K. The Code of Conduct can also be found at the Company s Internet website at www.airproducts.com/responsibility/governance/codeofconduct.htm.

ITEM 11. EXECUTIVE COMPENSATION.

The information under Compensation of Executive Officers which includes Report of the Management Development and Compensation Committee, Executive Compensation Tables, Severance and Employment Arrangements, Change in Control Arrangements, and Information About Stock Performance and Ownership, appearing in the Proxy Statement relating to the Company s 2007 Annual Meeting of Shareholders, is incorporated herein by reference.

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS.

Securities Authorized for Issuance Under Equity Compensation Plans.

Equity Compensation Plan Information

The following table provides information as of 30 September 2006, about Company stock that may be issued upon the exercise of options, warrants and rights granted to employees or members of the Board of Directors under the Company s existing equity compensation plans, including plans approved by shareholders and plans that have not been approved by shareholders in reliance on the New York Stock Exchange s former treasury stock exception or other applicable exception to the Exchange s listing requirements.

Number of securities

			remaining available for
			future issuance under
	Number of		equity compensation
	securities to	Weighted-average	plans
	be issued upon	exercise price	
	exercise	of	(excluding securities
	of outstanding	outstanding	
	options,	options,	reflected in
		warrants, and	
Plan Category	warrants, and rights	rights	column (a))
Equity compensation plans approved			
by security holders	21,586,609(1)	\$ 42.48	9,073,483(2)
Equity compensation plans not			
approved by security holders	2,805,962(3)	\$ 37.03	
Total	24,392,571	\$ 41.84	9,073,483

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Represents Long-Term Incentive Plan outstanding stock options and deferred stock units that have been granted. Deferred stock units entitle the recipient to one share of Company common stock upon vesting, which is conditioned on continued employment during the deferral period and may also be conditioned on earn out against certain performance targets. The deferral period generally ends after death, disability or retirement; however, for a portion of the performance-based deferred stock units (Performance Shares), the deferral period ends two years after the performance period or, if earlier, after death, disability or retirement. Performance Share awards that have not been earned are included at the maximum potential

(2) Represents authorized shares

award level.

that were available for future grants as of September 30, 2006. These shares may be used for options, deferred stock units, restricted stock and other stock-based awards to officers, directors and key employees. Full value awards such as restricted stock are limited to 20 percent of cumulative awards.

Represents outstanding options under Global **Employee Stock** Awards (972,681), the Stock Incentive Plan (1,266,705), the Stock Option Plan for Directors (62,000) and the U.K. Savings-Related **Share Option** Schemes (336,645). This number also includes deferred stock units granted under the Deferred Compensation Plan for Directors prior to 23 January 2003 (73,799) and deferred stock units under the Deferred Compensation Plan (94,132). Deferred stock units issued under the Deferred Compensation Plan are purchased for the fair market value of the

underlying shares

of stock with eligible deferred compensation.

The Long Term Incentive Plan has been approved by shareholders. The following equity compensation plans or programs were not approved by shareholders. All of these plans have either been discontinued or do not require shareholder approval because participants forego current compensation equal to the full market value of any share units credited under the plans.

Global Employee Stock Option Awards and Stock Incentive Program No further awards will be made under these programs. All stock options under these programs were granted at fair market value on the date of grant, first became exercisable three years after grant and terminate ten years after the date of grant or upon the holder s earlier termination of employment for reasons other than retirement, disability, death or involuntary termination due to Company action necessitated by business conditions.

Stock Option Plan for Directors No further awards will be made under this plan. All stock options under this plan were granted at fair market value on the date of grant. The options became exercisable six months after grant and remain exercisable for nine and one-half years unless the director resigns from our Board after serving for less than six years (other than because of disability or death). This plan is no longer offered. Stock options may now be granted to directors under the Long-Term Incentive Plan; however, since September 2005, the compensation program for nonemployee directors has not provided stock options.

The Air Products PLC U.K. Savings-Related Share Option Scheme and the Air Products Group Limited U.K. Savings-Related Share Option Scheme (together, the U.K. Plan) are employee benefit plans for employees of Air Products PLC (and certain of its U.K. subsidiaries) and Air Products Group Limited (and certain of its U.K. subsidiaries), respectively (together, the U.K. Companies). No further options will be offered under the U.K. Plan. Employees participate in the U.K. Plan by having elected to do so during a brief invitation period. An employee who elected to participate chose a five- or seven-year option period and has amounts of salary automatically withheld and contributed to a savings account at a bank not affiliated with the Company. At the end of the five-year savings period, a tax-free bonus is added to the employee s account. An employee who elected a seven-year option and retains his savings account for seven years receives a further bonus at the end of the seventh year. At the end of the option period, the participant may use his savings to purchase shares of Company stock at the fixed option price or receive in cash the amount of his savings and bonus(es). His election must be made within six months of the close of the option period. The option price is an amount determined by the directors of the U.K. Company on the date the option is granted, which may not be less than 90 percent of Market Value (as defined in the U.K. Plan) on the date of grant. Deferred Compensation Plan for Directors This plan is no longer offered. Our compensation program for nonemployee directors provides that one-half of each director s quarterly retainer is paid in deferred stock units. Directors have the opportunity to purchase more deferred stock units with up to all of the rest of their retainers and meeting fees. New directors and directors continuing in office after our annual meetings are awarded an annual grant of deferred stock units. Each deferred stock unit entitles the director to one share of Company stock when paid out. Deferred stock units also accrue dividend equivalents which are equal to the dividends that would have been paid on a share of stock during the

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period the units are outstanding. Accumulated dividend equivalents are converted to deferred stock units on a quarterly basis. Deferred stock units are now provided to directors under the Long-Term Incentive Plan. The Company s Deferred Compensation Plan is an unfunded employee retirement benefit plan available to certain of the Company s U.S.-based management and other highly compensated employees (and those of its subsidiaries) who receive awards under the Company s Annual Incentive Plan, which is the annual cash bonus plan for executives and key salaried employees of the Company and its subsidiaries. Because participants forego current compensation to purchase deferred stock units for full value under the Plan, it is not required to be approved by shareholders under the NYSE listing standards. Under the Plan, participants may defer a portion of base salary which cannot be contributed to the Company's Retirement Savings Plan, a 401(k) and profit-sharing plan offered to all salaried employees, because of tax limitations (elective deferrals) and earn matching contributions from the Company they would have received if their Elective Deferrals had been contributed to the RSP (matching credits). In addition, participants in the Plan may defer all or a portion of their bonus awards under the Annual Incentive Plan (bonus deferrals) under the Deferred Compensation Plan. Finally, certain participants under the Plan who participate in the profit-sharing component of the Retirement Savings Plan rather than the Company s salaried pension plans receive contribution credits under the Plan which are a percentage of their salary ranging from 4-6% based on their years of service (contribution credits). The dollar amount of elective deferrals, matching credits, bonus deferrals and contribution credits is initially credited to an unfunded account, which earns interest credits. Participants are periodically permitted while employed by the Company to irrevocably convert all or a portion of their interest bearing account to deferred stock units in a Company stock account. Upon conversion, the Company stock account is credited with deferred stock units based on the fair market value of a share of Company stock on the date of crediting. Dividend equivalents corresponding to the number of units are credited quarterly to the interest-bearing account. Deferred stock units generally are paid after termination of employment in shares of Company stock.

The Deferred Compensation Plan was formerly known as the Supplementary Savings Plan. The name was changed in 2006 when the deferred bonus program, previously administered under the Annual Incentive Plan, was merged into this Plan.

The information set forth in the sections headed Persons Owning More than 5% of Air Products Stock as of September 30, 2006, and Air Products Stock Beneficially Owned by Officers and Directors, appearing in the Proxy Statement relating to the Company s 2007 Annual Meeting of Shareholders, is incorporated herein by reference.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS.

Not applicable.

ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES.

The information appearing in the Proxy Statement relating to the Company s 2007 Annual Meeting of Shareholders under the section Fees of Independent Registered Public Accountant, is incorporated herein by reference.

PART IV

ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES.

(a) The following documents are filed as a part of this Report to the extent below noted:

1. The 2006 Financial Review Section of the Company s 2006 Annual Report to Shareholders. Information contained therein is not deemed filed except as it is incorporated by reference into this Report. The following financial information is incorporated herein by reference:

(Page references to 2006 Financial Review Section of the Annual Report)

Management s Discussion and Analysis	19
Management s Report on Internal Control over Financial Reporting	43
Report of Independent Registered Public Accounting Firm on Internal Control over Financial Reporting	44
Report of Independent Registered Public Accounting Firm	45
Consolidated Income Statements for the three years ended 30 September 2006	46
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Consolidated Balance Sheets at 30 September 2006 and 2005	4/
Consolidated Statements of Cash Flows for the three years ended 30 September 2006	48
Consolidated Statements of Shareholders Equity for the three years ended 30 September 2006	49
Notes to the Consolidated Financial Statements	50
Business Segment and Geographic Information	77
Five-Year Summary of Selected Financial Data	80
2. The following additional information should be read in conjunction with the consolidated financial staten	nents in the
Company s 2006 Financial Review Section of the Annual Report to Shareholders:	
(Page references to this Report)	
Report of Independent Registered Public Accounting Firm on Schedule II	22
Consolidated Schedule for the years ended 30 September 2006, 2005 and 2004 as follows:	
Schedule	
Number	
II Valuation and Qualifying Accounts	23
All other schedules are omitted because the required matter or conditions are not present or because the information required by the Schedules is submitted as part of the consolidated financial statements and notes thereto. 3. Exhibits.	rmation
Exhibits filed as a part of this Annual Report on Form 10-K are listed in the Index to Exhibits located on page	ge 24 of
this Report.	5- 2 : 01
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SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this Report to be signed on its behalf by the undersigned, thereunto duly authorized.

AIR PRODUCTS AND CHEMICALS, INC. (Registrant)

By: /s/ Paul E. Huck

Paul E. Huck Vice President and Chief Financial Officer (Principal Financial Officer) (Principal Accounting Officer)

Date: 13 December 2006

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

Signature and Title	Date
/s/ John P. Jones III	13 December 2006
(John P. Jones III) Director, Chairman and Chief Executive Officer (Principal Executive Officer)	
*	13 December 2006
(Mario L. Baeza) Director	
*	13 December 2006
(William L. Davis, III) Director	
*	13 December 2006
(Michael J. Donahue) Director	
*	13 December 2006
(Ursula O. Fairbairn) Director	

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13 December 2006

W. Douglas Ford Director

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Signature and Title	Date
*	13 December 2006
(Edward E. Hagenlocker) Director	
*	13 December 2006
(Evert Henkes) Director	
*	13 December 2006
(Margaret G. McGlynn) Director	
*	13 December 2006
(Charles H. Noski) Director	
*	13 December 2006
(Lawrence S. Smith) Director	

* W. Douglas

Brown, Vice

President,

General Counsel

and Secretary,

by signing his

name hereto,

does sign this

document on

behalf of the

above noted

individuals,

pursuant to a

power of

attorney duly

executed by

such

individuals,

which is filed

with the

Securities and

Exchange Commission herewith.

/s/ W. Douglas Brown

W. Douglas Brown Attorney-in-Fact

Date: 13 December 2006

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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM ON SCHEDULE II

To the Shareholders and Board of Directors of Air Products and Chemicals, Inc.:

Under date of 12 December 2006, we reported on the consolidated balance sheets of Air Products and Chemicals, Inc. and subsidiaries as of 30 September 2006 and 2005, and the related consolidated statements of income, cash flows, and shareholders—equity for each of the years in the three-year period ended 30 September 2006, which are included in the Annual Report to Shareholders. Also, under the date of 12 December 2006, we reported on the effectiveness of Air Products and Chemicals, Inc.—s internal control over financial reporting as of 30 September 2006, and on management—s assessment of the effective operation of internal control over financial reporting. In connection with our audits of the aforementioned consolidated financial statements, we also audited the related consolidated financial statement schedule referred to in Item 15(a)(2) in this Form 10-K. This financial statement schedule is the responsibility of the Company—s management. Our responsibility is to express an opinion on this financial statement schedule based on our audits.

As discussed in Note 2 to the consolidated financial statements, the Company adopted Financial Accounting Standards Board Interpretation No. 47, Accounting for Conditional Asset Retirement Obligations, and Statement of Financial Accounting Standards No. 123 (R), Share Based Payments, and related interpretations. Also the Company changed the composition of its reportable segments for the fiscal year ended 30 September 2006 and the 30 September 2005 and 2004 amounts presented in the consolidated financial statements relating to reportable segments having been restated to conform to the 30 September 2006 composition of reportable segments.

In our opinion, such financial statement schedule, when considered in relation to the basic consolidated financial statements taken as a whole, presents fairly, in all material respects, the information set forth therein.

/s/ KPMG LLP Philadelphia, Pennsylvania

12 December 2006

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SCHEDULE II CONSOLIDATED

AIR PRODUCTS AND CHEMICALS, INC. AND SUBSIDIARIES SCHEDULE II-VALUATION AND QUALIFYING ACCOUNTS

For the Years Ended 30 September 2006, 2005, and 2004

		Add	itions	Other C Increase(I	-	
	Balance at Beginning of	Charged to	Charged to Other	Cumulative Translation		Balance at End of
Description	Period	Expense	Accounts (in million	Adjustment as of dollars)	Other	Period
Year Ended 30 September 2006 Allowance for doubtful				·		
accounts Allowance for deferred tax	\$35	\$28	\$	\$1	\$(19) ^[c]	\$45
assets	\$18	\$ 2	\$17 _[a]	\$	\$	\$37
Year Ended 30 September 2005 Allowance for doubtful						
accounts Allowance for deferred tax	\$30	\$11	\$	\$	\$ (6) ^[c]	\$35
assets	\$16	\$ 2	\$	\$	\$	\$18
Year Ended 30 September 2004 Allowance for doubtful						
accounts Allowance for deferred tax	\$22	\$18	\$ 2 _[b]	\$1	\$(13) ^[c]	\$30
assets Notes: [a] Primarily adjustment associated with acquisition of deferred tax asset	\$20	\$ (4)	\$	\$	\$	\$16
[b] Primarily collections on accounts previously written off.						

[c]

Primarily write-offs of uncollectible accounts.

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INDEX TO EXHIBITS

Exhibit No. Description

Articles of Incorporation and By-Laws. (3) 3.1 Amended and Restated By-Laws of the Company. (Filed as Exhibit 3 to the Company s Form 8-K Report dated 26 September 2006.)* 3.2 Restated Certificate of Incorporation of the Company. (Filed as Exhibit 3.2 to the Company s Form 10-K Report for the fiscal year ended 30 September 1987.)* Amendment to the Restated Certificate of Incorporation of the Company dated 25 January 1996. (Filed 3.3 as Exhibit 3.3 to the Company s Form 10-K Report for the fiscal year ended 30 September 1996.)* Instruments defining the rights of security holders, including indentures. Upon request of the Securities (4) and Exchange Commission, the Company hereby undertakes to furnish copies of the instruments with respect to its long-term debt. 4.1 Rights Agreement, dated as of 19 March 1998, between the Company and First Chicago Trust Company of New York. (Filed as Exhibit 1 to the Company s Form 8-A Registration Statement dated 19 March 1998, as amended by Form 8-A/A dated 16 July 1998.)* 4.2 Amended and Restated Credit Agreement dated as of 16 September 1999 among the Company, Additional Borrowers parties thereto, Lenders parties thereto, and The Chase Manhattan Bank (as amended). (Filed as Exhibit 4.2 to the Company s Form 10-K Report for the fiscal year ended 30 September 1999.)* Material Contracts. (10)10.1 1990 Deferred Stock Plan of the Company, as amended and restated effective 1 October 1989. (Filed as Exhibit 10.1 to the Company s Form 10-K Report for the fiscal year ended 30 September 1989.)* 10.2 The Rules of the United Kingdom Savings-Related Share Option Scheme of the Company as adopted on 24 October 1997, as amended on 1 October 1999 and 5 November 1999. (Filed as Exhibit 10.2 to the Company s Form 10-K Report for the fiscal year ended 30 September 2002.)* 10.3 Stock Option Program for Directors of the Company, formerly known as the Stock Option Plan for Directors. Effective 23 January 2003, this Plan was combined with the Long-Term Incentive Plan and offered as a program thereunder. (Filed as Exhibit 10.5 to the Company s Form 10-K Report for the fiscal year ended 30 September 2004.)* 10.4 Letter dated 7 July 1997 concerning pension for an executive officer. (Filed as Exhibit 10.7(c) to the Company s Form 10-K Report for the fiscal year ended 30 September 1998.)* Air Products and Chemicals, Inc. Severance Plan effective 15 March 1990. (Filed as Exhibit 10.8(a) to 10.5 the Company s Form 10-K Report for the fiscal year ended 30 September 1992.)* 10.6 Air Products and Chemicals, Inc. Change of Control Severance Plan effective 15 March 1990. (Filed as

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Exhibit 10.8(b) to the Company s Form 10-K Report for the fiscal year ended 30 September 1992.)*

- Amended and Restated Trust Agreement by and between the Company and PNC Bank, N.A. relating to the Defined Benefit Pension Plans dated as of 1 August 1999. (Filed as Exhibit 10.13 to the Company s Form 10-K Report for the fiscal year ended 30 September 1999.)*
- 10.7 (a) Amendment No. 1 to the Amended and Restated Trust Agreement by and between the Company and PNC Bank, N.A. relating to the Defined Benefit Pension Plan, adopted 1 January 2000.

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Exhibit No. Description

December 2004.)*

(Filed as Exhibit 10.13(a) to the Company s Form 10-K Report for the fiscal year ended 30 September 2000.)* 10.8 Amended and Restated Trust Agreement by and between the Company and PNC Bank, N.A. relating to the Supplementary Savings Plan dated as of 1 August 1999. (Filed as Exhibit 10.14 to the Company s Form 10-K Report for the fiscal year ended 30 September 1999.)* 10.8 (a) Amendment No. 1 to the Amended and Restated Trust Agreement by and between the Company and PNC Bank, N.A. relating to the Supplementary Savings Plan, adopted 1 January 2000. (Filed as Exhibit 10.14(a) to the Company s Form 10-K Report for the fiscal year ended 30 September 2000.)* 10.9 Form of Severance Agreements that the Company has with each of its U.S. Executive Officers. (Filed as Exhibit 10.16 to the Company s Form 10-K Report for the fiscal year ended 30 September 1999.)* 10.10 Form of Award Agreement under the Long Term Incentive Plan of the Company, used for the FY 2004 awards. (Filed as Exhibit 10.2 to the Company s Form 10-Q Report for the quarter ended 31 December 2003.)* 10.11 Amended and Restated Annual Incentive Plan of the Company, effective 1 October 2001. (Filed as Exhibit 10.2 to the Company s Form 10-Q Report for the quarter ended 31 March 2002.)* 10.11 (a) Amendment to the Amended and Restated Annual Incentive Plan of the Company effective 19 July 2006. Stock Incentive Program of the Company effective 1 October 1996. (Filed as Exhibit 10.21 to the 10.12 Company s Form 10-K Report for the fiscal year ended 30 September 2002.)* 10.13 Terms and Conditions of the Global Employee Stock Option Awards of the Company effective 1 October 1995, 1997 and 1999. (Filed as Exhibit 10.22 to the Company s Form 10-K Report for the fiscal year ended 30 September 2002.)* 10.14 Terms and Conditions of the Stock Incentive Awards of the Company effective 1 October 1999, 2000, 2001 and 2002. (Filed as Exhibit 10.19 to the Company s Form 10-K Report for the fiscal year ended 30 September 2004.)* 10.15 Air Products and Chemicals, Inc. Corporate Executive Committee Retention/Separation Program, effective July 17, 2003. (Filed as Exhibit 10.22 to the Company s Form 10-K Report for the fiscal year ended 30 September 2003.)* 10.16 Form of Severance Agreement that the Company has with one U.S. Executive Officer, effective 20 November 2003. (Filed as Exhibit 10.25 to the Company s Form 10-K Report for the fiscal year ended 30 September 2003.)* 10.17 Form of Award Agreement under the Long Term Incentive Plan of the Company used for the FY 2005 awards. (Filed as Exhibit 10.1 to the Company s Form 10-Q Report for the quarter ended 31

10.18	Compensation Program for Directors of the Company, effective 1 October 2005. (Filed as Exhibit 10.24 to the Company s Form 10-K Report for the fiscal year ended 30 September 2005.)*
10.19	Description of Performance Criteria under the Annual Incentive Plan of the Company. (Filed as Exhibit 10.3 to the Company s Form 10-Q Report for the quarter ended 31 December 2004.)*
10.20	Amended and Restated Deferred Compensation Program for Directors, effective 1 October 2005. Effective as of 23 January 2003, this program is offered under the Long-Term Incentive Plan. (Filed as Exhibit 10.26 to the Company s Form 10-K Report for the fiscal year ended 30 September 2005.)*
10.21	Form of Award Agreement under the Long-Term Incentive Plan of the Company, used for FY 2006 awards. (Filed as Exhibit 10.1 to the Company s Form 10-Q Report for the quarter ended 31 December 2005.)*
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Exhibit No	. Desc	ription
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10.22	Amended and Restated Long Term Incentive Plan of the Company, effective 26 January 2006. (Filed as Exhibit 10.1 to the Company s Form 10-Q Report for the quarter ended 31 March 2006.)*
10.22 (a)	Amendments to the Amended and Restated Long Term Incentive Plan of the Company effective 18 May 2006 and 21 September 2006.
10.23	Amended and Restated Deferred Compensation Plan of the Company, formerly known as the Supplementary Savings Plan, effective 1 January 2005, reflecting amendments through 1 September.
10.24	Amended and Restated Supplementary Pension Plan of the Company effective 1 January 2005 reflecting amendments through 30 September 2006.
10.25	Air Products and Chemicals, Inc. Retirement Savings Plan as amended and restated effective 1 January 2005 to reflect amendments through 1 February 2006.
10.26	Compensation Program for Directors of the Company, effective 1 October 2006.
12	Computation of Ratios of Earnings to Fixed Charges.
13	2006 Financial Review Section of the Annual Report to Shareholders for the fiscal year ended 30 September 2006, which is furnished to the Commission for information only and not filed except as portions are expressly incorporated by reference in this Report.
14	Code of Conduct. (Filed as Exhibit 14 to the Company s Form 10-K Report for the fiscal year ended 30 September 2005.)*
21	Subsidiaries of the registrant.
(23)	Consents of Experts and Counsel.
23.1	Consent of Independent Registered Public Accounting Firm.
24	Power of Attorney.
(31)	Rule 13a-14(a)/15d-14(a) Certifications.
31.1	Certification by the Principal Executive Officer pursuant to Rule 13a-14(a) or Rule 15d-14(a) of the Securities Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
31.2	Certification by the Principal Financial Officer pursuant to Rule 13a-14(a) or Rule 15d-14(a) of the Securities Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
(32)	Section 1350 Certifications.

Certification by the Principal Executive Officer and Principal Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.

Previously filed as indicated and incorporated herein by reference.
Exhibits incorporated by reference are located in SEC File No. 1-4534.

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