

MILLENNIUM CHEMICALS INC

Form 10-K

March 15, 2006

Table of Contents

Index to Financial Statements

---

**UNITED STATES**  
**SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 20549

---

**FORM 10-K**

---

(Mark One)

- Annual Report Pursuant to Section 13 or 15(D) of the Securities Exchange Act of 1934 for the Fiscal Year Ended December 31, 2005**
- Transition Report Pursuant to Section 13 or 15(D) of the Securities Exchange Act of 1934**

Commission File No. 1-12091

---

**MILLENNIUM CHEMICALS INC.**

(Exact name of Registrant as specified in its charter)

---

Delaware  
(State or other jurisdiction of  
incorporation or organization)  
Two Greenville Crossing, 4001 Kennett Pike

22-3436215  
(I.R.S. Employee  
Identification No.)  
19807

Edgar Filing: MILLENNIUM CHEMICALS INC - Form 10-K

Suite 238, Greenville, Delaware  
(Address of principal executive offices)

(Zip Code)

Registrant's telephone number, including area code: (713) 652-7200

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

---

<u>Title of Each Class</u>	<u>Name of each exchange on which registered</u>
4% Senior Convertible Debentures  Due November 15, 2023	New York Stock Exchange

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

---

Indicate by check mark if the Registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes  No

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

Indicate by check mark whether the Registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the Registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes  No

Indicate by check mark 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 the Registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K.

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

Indicate by check mark whether the Registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes  No

## Edgar Filing: MILLENNIUM CHEMICALS INC - Form 10-K

There is no established public trading market for the Registrant's equity securities. As of June 30, 2005, the last business day of the Registrant's most recently completed second fiscal quarter, all of the Registrant's equity securities were held by affiliates.

**The Registrant meets the conditions set forth in General Instructions I(1)(a) and (b) of Form 10-K and, therefore, is filing this form with a reduced disclosure format.**

---

**Table of Contents**

**Index to Financial Statements**

**TABLE OF CONTENTS**

<u>PART I</u>	1
<u>Item 1. Business</u>	1
<u>MILLENNIUM</u>	1
<u>Overview of the Business</u>	1
<u>Additional Information Available</u>	1
<u>INORGANIC CHEMICALS SEGMENT</u>	2
<u>Overview</u>	2
<u>Raw Materials</u>	3
<u>Marketing and Sales</u>	3
<u>Competition and Industry Conditions</u>	3
<u>ETHYLENE, CO-PRODUCTS AND DERIVATIVES SEGMENT</u>	4
<u>Acetyls Business</u>	4
<u>Overview</u>	4
<u>Raw Materials</u>	5
<u>Marketing and Sales</u>	5
<u>Competition and Industry Conditions</u>	6
<u>Equity Investment in Equistar</u>	6
<u>Overview</u>	6
<u>Raw Materials</u>	10
<u>Marketing and Sales</u>	11
<u>Competition and Industry Conditions</u>	12
<u>OTHER CHEMICALS</u>	13
<u>ENVIRONMENTAL CAPITAL EXPENDITURES</u>	13
<u>RESEARCH AND TECHNOLOGY; INTELLECTUAL PROPERTY</u>	13
<u>EMPLOYEE RELATIONS</u>	14
<u>Item 1A. Risk Factors</u>	14
<u>Risks Relating to the Businesses</u>	14
<u>Risks Relating to Debt</u>	22
<u>FORWARD-LOOKING STATEMENTS</u>	24
<u>INDUSTRY AND OTHER INFORMATION</u>	25
<u>NON-GAAP FINANCIAL MEASURES</u>	25
<u>Item 2. Properties</u>	26
<u>Principal Manufacturing Facilities and Mine</u>	26
<u>Other Locations and Properties</u>	28
<u>Item 3. Legal Proceedings</u>	28
<u>Litigation Matters</u>	28
<u>Environmental Matters</u>	32
<u>Indemnification</u>	33



**Table of Contents**

**Index to Financial Statements**

<b><u>PART II</u></b>	34
<u>Item 5. Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities</u>	34
<u>Item 6. Selected Financial Data</u>	34
<u>Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations</u>	35
<u>Overview</u>	35
<u>Results Of Operations</u>	36
<u>Financial Condition</u>	42
<u>Current Business Outlook</u>	47
<u>Related Party Transactions</u>	47
<u>Critical Accounting Policies</u>	48
<u>Accounting and Reporting Changes</u>	50
<u>Environmental Matters</u>	51
<u>Item 7A. Disclosure of Market Risk</u>	51
<u>Commodity Price Risk</u>	52
<u>Foreign Exchange Risk</u>	52
<u>Interest Rate Risk</u>	52
<u>Item 8. Financial Statements and Supplementary Data</u>	53
<u>Item 9. Changes in and Disagreements With Accountants on Accounting and Financial Disclosure</u>	98
<u>Item 9A. Controls and Procedures</u>	98
<u>Item 9B. Other Information</u>	98
<b><u>PART III</u></b>	99
<u>Item 10. Directors and Executive Officers of the Registrant</u>	99
<u>Item 11. Executive Compensation</u>	99
<u>Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters</u>	99
<u>Item 13. Certain Relationships and Related Transactions</u>	99
<u>Item 14. Principal Accountant Fees and Services</u>	99
<u>Audit and Non-Audit Fees</u>	99
<u>Pre-Approval Policy</u>	100
<b><u>PART IV</u></b>	101
<u>Item 15. Exhibits and Financial Statement Schedules</u>	101

---

**Table of Contents**

**Index to Financial Statements**

**PART I**

**Item 1. *Business***

**MILLENNIUM**

**Overview of the Business**

Millennium Chemicals Inc. (together with its consolidated subsidiaries, Millennium) is a global chemical company, with total 2005 revenues of approximately \$2.0 billion, and assets of approximately \$2.5 billion as of December 31, 2005. On November 30, 2004, Lyondell Chemical Company (Lyondell) acquired Millennium in a stock-for-stock business combination. As a result of the business combination, Millennium is now a wholly owned subsidiary of Lyondell.

Millennium reports its results of operations in two business segments: inorganic chemicals; and ethylene, co-products and derivatives. Millennium's inorganic chemicals segment primarily produces titanium dioxide (TiO<sub>2</sub>). The inorganic chemicals segment also produces titanium tetrachloride (TiCl<sub>4</sub>), titanyl sulfate (TiOSO<sub>4</sub>), ultra-fine TiO<sub>2</sub> and silica gel. Millennium's ethylene, co-products and derivatives segment comprises its acetyls business and its equity investment in Equistar Chemicals, LP (together with its consolidated subsidiaries, Equistar). Millennium's acetyls business produces vinyl acetate monomer (VAM), acetic acid and methanol, which is a raw material for acetic acid. Equistar produces ethylene and its co-products, which primarily include propylene, butadiene and aromatics, which include benzene and toluene. Equistar's derivatives primarily include polyethylene, ethylene oxide (EO), ethylene glycol (EG) and other EO derivatives, as well as ethanol and polypropylene. Equistar also produces fuels, such as methyl tertiary butyl ether (MTBE) and alkylate. Millennium owns 29.5% of Equistar, the balance of which is owned by Lyondell through other subsidiaries. Millennium accounts for its interest in Equistar using the equity method. Millennium also produces fragrance and flavor chemicals. For additional segment information and for geographic information for each of the years in the three-year period ended December 31, 2005, see Note 23 to the Consolidated Financial Statements.

**Additional Information Available**

Millennium was incorporated under the laws of Delaware in 1996. Its principal executive offices are located at Two Greenville Crossing, 4001 Kennett Pike, Suite 238, Greenville, Delaware. Its telephone number is (713) 652-7200 and its website address is [www.lyondell.com](http://www.lyondell.com). Millennium's Annual Report on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K and all amendments to those reports are available free of charge through [www.lyondell.com](http://www.lyondell.com) as soon as reasonably practicable after those reports are electronically filed with or furnished to the Securities and Exchange Commission.

In addition, Millennium has adopted a code of ethics, as defined in Item 406(b) of Regulation S-K. Millennium's code of ethics, known as its Business Ethics and Conduct Policy, is part of the overall Lyondell Business Ethics and Conduct Policy. It applies to all members of Millennium's Board of Directors and to all officers and employees of Millennium, including Millennium's principal executive officer, principal financial officer, principal accounting officer and controller. A copy of the Business Ethics and Conduct Policy is available at [www.lyondell.com](http://www.lyondell.com) free of charge. In addition, Millennium intends to satisfy the disclosure requirements of Item 5.05 of Form 8-K regarding any

## Edgar Filing: MILLENNIUM CHEMICALS INC - Form 10-K

amendment to, or waiver from, a provision of the Business Ethics and Conduct Policy that applies to Millennium's principal executive officer, principal financial officer, principal accounting officer or controller and relates to any element of the definition of code of ethics set forth in Item 406(b) of Regulation S-K by posting such information at [www.lyondell.com](http://www.lyondell.com).

Information contained on Millennium's website ([www.lyondell.com](http://www.lyondell.com)) or any other website is not incorporated into this Annual Report and does not constitute a part of this Annual Report.



**Table of Contents****Index to Financial Statements****INORGANIC CHEMICALS SEGMENT****Overview**

TiO<sub>2</sub> is the primary product of the inorganic chemicals segment, which accounted for approximately 65% of Millennium's total revenues in 2005, 71% in 2004 and 69% in 2003. TiO<sub>2</sub> is a white pigment used for imparting whiteness, brightness, opacity and durability in a wide range of products, including paint and coatings, plastics, paper and elastomers.

As of December 31, 2005, Millennium's annual TiO<sub>2</sub> production capacity, using the chloride process and the sulfate process discussed below, was approximately 670,000 metric tons. Unless otherwise specified, annual processing capacities were calculated by estimating the average number of days in a typical year that a production unit of a plant is expected to operate, after allowing downtime for regular maintenance, and multiplying that number by an amount equal to the unit's optimal daily output. Because the processing capacity of a production unit is an estimated amount, actual production volumes may be more or less than capacities set forth below.

<b>TiO<sub>2</sub> Production Process</b>	<b>Annual Capacity</b>	<b>Percentage of Capacity</b>
Chloride Process	515,000 metric tons	77%
Sulfate Process	155,000 metric tons	23%
<b>Total</b>	<b>670,000 metric tons</b>	<b>100%</b>

TiO<sub>2</sub> is produced in two crystalline forms: rutile and anatase. Rutile TiO<sub>2</sub> is primarily used in paint and coatings, ink and plastics. Anatase TiO<sub>2</sub> is primarily used in paper, ceramics, rubber and man-made fibers.

TiO<sub>2</sub> is manufactured using two different technologies. The newer chloride process is a high-temperature process in which chlorine is used to produce an intermediate TiO<sub>2</sub> rutile crystal pigment, with greater purity and higher control over the size distribution of the pigment particles than the alternative sulfate process permits. In general, the chloride process is also less intensive than the sulfate process in terms of labor and energy. Because much of the chlorine can be recycled, the chloride process produces less waste than does the sulfate process.

The sulfate process is a wet chemical process that uses concentrated sulfuric acid to produce either an intermediate TiO<sub>2</sub> anatase or rutile crystal pigment. The sulfate process generates higher volumes of waste, including iron sulfate and spent sulfuric acid.

Millennium's TiO<sub>2</sub> plants are located in the four major world markets for TiO<sub>2</sub>: North America, South America, Western Europe and the Asia/Pacific region. The North American plants, consisting of one in Baltimore, Maryland and two in Ashtabula, Ohio, use the chloride process. The plant in Salvador, Bahia, Brazil uses the sulfate process. Millennium also owns a mineral sands mine located at Mataraca, Paraiba, Brazil, which supplies the Brazilian plant with most of its titanium ores. As of December 31, 2005, the mine had approximately 1.6 million metric tons of recoverable ilmenite reserves, approximately 266,000 metric tons of zircon reserves and approximately 26,600 metric tons of natural rutile

## Edgar Filing: MILLENNIUM CHEMICALS INC - Form 10-K

reserves. The mine produced approximately 114,000 metric tons of ilmenite, a titanium-bearing ore, in 2005. Approximately 100,000 metric tons of ilmenite produced at the mine were processed by the Salvador TiO<sub>2</sub> plant in 2005, while approximately 600 metric tons were sold to unrelated parties. The mine also produced approximately 20,000 metric tons of zircon and approximately 2,000 metric tons of natural rutile titanium ore, all of which were sold to unrelated parties. The Stallingborough, United Kingdom plant uses the chloride process. The plants in France at Le Havre, Normandy and Thann, Alsace use the sulfate process. The Kemerton plant in Western Australia uses the chloride process.

Millennium's inorganic chemicals segment also produces a number of specialty and performance TiO<sub>2</sub> related products, some of which are manufactured at dedicated facilities and others of which are manufactured at facilities

---

**Table of Contents**

**Index to Financial Statements**

that also produce other TiO<sub>2</sub> products. These products include titanium tetrachloride ( TiCl<sub>4</sub> ), titanyl sulfate ( TiOSO<sub>4</sub> ), ultra-fine TiO<sub>2</sub> and silica gel.

**Raw Materials**

Naturally occurring titanium-bearing ores such as ilmenite and natural rutile occur as sand or hard rock deposits in various parts of the world and are used as raw materials in the TiO<sub>2</sub> extraction process. Mining companies are increasingly treating ilmenite to extract iron and other minerals to produce slag or synthetic rutile with higher TiO<sub>2</sub> concentrations, resulting in lower amounts of wastes and by-products during processing by TiO<sub>2</sub> pigment plants. Generally, titanium-bearing ores are shipped by using bulk carriers from terminals in the country of origin to TiO<sub>2</sub> production plants, usually located near port facilities. Millennium obtains ores from a number of suppliers in South Africa, Australia, Canada, Brazil and Norway, generally pursuant to multi-year supply contracts. Rio Tinto Iron & Titanium Inc. (through its affiliates Richards Bay Iron & Titanium (Proprietary) Limited and QIT-Fer et Titane Inc.) and Iluka Resources Limited are the world's largest producers of titanium ores and accounted for approximately 77% of the titanium ores purchased for Millennium's inorganic chemicals segment in 2005.

Other major raw materials used in the production of TiO<sub>2</sub> are chlorine, caustic soda, coke, aluminum, sodium silicate, sodium aluminate, sulfuric acid, oxygen, nitrogen and natural gas. The number of sources for and availability of these materials is specific to the particular geographic region in which a facility is located. There are certain risks related to the acquisition of raw materials from less-developed or developing countries. See Item 1A. Risk Factors Risks Relating to the Businesses Millennium's international operations are subject to exchange rate fluctuations, exchange controls, political risks and other risks relating to non-U.S. operations.

A number of the raw materials used by Millennium in the production of TiO<sub>2</sub> and Millennium's other inorganic chemicals products are provided by only a few vendors and, accordingly, if one significant supplier or a number of significant suppliers were unable to meet their obligations under present supply arrangements, Millennium could suffer reduced supplies and/or be forced to incur increased costs for these raw materials. For example, for the Australian plant, chlorine and caustic soda are obtained exclusively from one supplier under a long-term supply agreement. See Item 1A. Risk Factors Risks Relating to the Businesses Costs of raw materials and energy, as well as reliability of supply, may result in increased operating expenses and reduced results of operations. However, at the present time, chloride- and sulfate-process raw materials are available in sufficient quantities.

**Marketing and Sales**

Of the TiO<sub>2</sub> sold by Millennium in 2005, approximately 66% was sold to customers in the paint and coatings industry, approximately 24% to customers in the plastics industry, approximately 9% to customers in the paper industry, and approximately 1% to other customers. Millennium experiences some seasonality in its TiO<sub>2</sub> sales because, in general, its customers' production of paint and coatings are greatest in the spring and summer months. TiO<sub>2</sub> generally is sold by Millennium at prices determined by market-based negotiation under annual and multi-year contracts. TiO<sub>2</sub> is sold either directly to customers or, to a lesser extent, through agents or distributors, and is distributed by rail, truck and ocean carrier in either dry or slurry form.

No single inorganic chemicals customer accounted for 10% or more of Millennium's total revenues in 2005. For geographic data, see Note 23 to the Consolidated Financial Statements.

**Competition and Industry Conditions**

The bases for competition in the inorganic chemicals businesses are price, product quality, product performance, product delivery, customer service and reliability of supply. The major competitors for sales of

**Table of Contents**

**Index to Financial Statements**

TiO<sub>2</sub> are E. I. du Pont de Nemours and Company ( DuPont ), Huntsman Tioxide ( Huntsman Tioxide, a business unit of Huntsman Corporation), Kronos Worldwide, Inc. ( Kronos ) and Tronox Incorporated ( Tronox, formerly a business unit of Kerr-McGee Corporation). Millennium estimates that collectively, as of December 31, 2005, DuPont, Millennium, Huntsman Tioxide, Kronos and Tronox accounted for approximately 70% of the world's TiO<sub>2</sub> production capacity. Millennium is the second largest producer of TiO<sub>2</sub> in the world, based on published rated capacity.

In certain applications, TiO<sub>2</sub> competes with other whitening agents that are generally less effective but less expensive. These alternate products include kaolin clays, calcium carbonate pigments and synthetic polymers materials.

Generally, new plant capacity additions in the TiO<sub>2</sub> industry are slow to develop because of the substantial capital expenditure required and the significant lead time (three to five years typically for a new plant) needed for planning, obtaining environmental approvals and permits, construction of manufacturing facilities and arranging for raw material supplies. DuPont has announced plans to construct a 200,000 ton per year TiO<sub>2</sub> plant in Dongying, China with a planned completion date of 2010. Debottlenecking and other capacity expansions at existing plants require substantially less time and capital and can also increase overall industry capacity.

**ETHYLENE, CO-PRODUCTS AND DERIVATIVES SEGMENT**

Millennium's ethylene, co-products and derivatives segment comprises its acetyls business and its equity investment in Equistar.

**Acetyls Business**

**Overview**

The acetyls business includes VAM, acetic acid and methanol, which is a raw material for acetic acid. VAM and acetic acid are manufactured by Millennium at facilities in La Porte, Texas. VAM is used to produce a variety of polymers used in adhesives, water-based paint, textile coatings and paper coatings. Acetic acid is used to produce VAM, purified terephthalic acid, industrial solvents and a variety of other chemicals. Millennium also owns an 85% interest in La Porte Methanol Company, which produces methanol at a plant in La Porte, Texas. The remaining 15% interest is owned by Linde AG ( Linde ).

Sales of VAM accounted for approximately 16% of Millennium's total revenues in 2005, 2004 and 2003. Sales of acetyls collectively accounted for approximately 26% of Millennium's total revenues in 2005, 24% in 2004 and 25% in 2003.

**Table of Contents****Index to Financial Statements**

The following table outlines the acetyls business' primary products, annual processing capacity at December 31, 2005, and the primary uses for such products. Unless otherwise specified, annual processing capacity was calculated by estimating the average number of days in a typical year that a production unit of a plant is expected to operate, after allowing for downtime for regular maintenance, and multiplying that number by an amount equal to the unit's optimal daily output based on the design raw material mix. Because the processing capacity of a production unit is an estimated amount, actual production volumes may be more or less than the capacities set forth below. Capacities shown include 100% of the capacity of joint venture facilities.

<b>Product</b>	<b>Annual Capacity</b>	<b>Primary Uses</b>
Vinyl Acetate Monomer (VAM)	820 million pounds	VAM is a petrochemical product used to produce a variety of polymers products used in adhesives, water-based paint, textile coatings and paper coatings.
Acetic Acid	1.2 billion pounds	Acetic acid is a raw material used to produce VAM, terephthalic acid (used to produce polyester for textiles and plastic bottles), industrial solvents and a variety of other chemicals.
Methanol	190 million gallons (a)	Methanol is a raw material used to produce acetic acid, MTBE, formaldehyde and several other products.

(a) Represents 100% of the methanol capacity at the La Porte, Texas facility, which is owned by La Porte Methanol Company, a partnership owned 85% by Millennium and 15% by Linde.

**Raw Materials**

The primary raw materials for the production of VAM are acetic acid and ethylene. For VAM produced by Millennium, Millennium obtains its entire requirements for acetic acid from its internal production and buys all of its ethylene requirements from Equistar under a long-term supply contract based on market prices. In 2005, Millennium used a large percentage of its acetic acid production to produce VAM.

The primary raw materials required for the production of acetic acid are carbon monoxide and methanol. Millennium purchases its carbon monoxide from Linde pursuant to a long-term contract under which pricing is based primarily on cost of production. La Porte Methanol Company, Millennium's 85%-owned joint venture, supplies all of Millennium's requirements for methanol production. Natural gas is the primary raw material required for the production of methanol and carbon monoxide.

**Marketing and Sales**

VAM generally is sold into domestic and export markets under multi-year contracts, and also on a spot basis. Acetic acid that is not consumed internally for the production of VAM generally is sold into domestic and export markets under multi-year contracts, and also on a spot basis. Contract pricing for sales of VAM and acetic acid generally is determined by market-based negotiation, market index or cost-based formulas. Millennium also sells VAM to Equistar and acetic acid to both Lyondell and Equistar at market-based pricing. In addition, Millennium has an agreement with DuPont to convert a portion of the acetic acid produced at Millennium's La Porte, Texas plant into VAM through DuPont's nearby VAM plant and to acquire all of the VAM production at DuPont's plant that is not utilized internally by DuPont. The contract expires on December 31, 2006. VAM and acetic acid are shipped by barge, ocean-going vessel, pipeline, tank car and tank truck. Millennium has bulk

Edgar Filing: MILLENNIUM CHEMICALS INC - Form 10-K

storage arrangements in Europe and Asia to better serve its customers requirements in those regions. Sales are made through a direct sales force, agents and distributors.

## **Table of Contents**

### **Index to Financial Statements**

The La Porte, Texas methanol facility is owned by La Porte Methanol Company, Millennium's 85%-owned joint venture. Each party to the joint venture receives its respective share of the methanol production. Millennium uses the methanol as a raw material for acetic acid and also sells the methanol under annual contracts and on a spot basis to large domestic customers. The product is shipped by barge and pipeline.

No single acetyls customer accounted for 10% or more of Millennium's total revenues in 2005. For geographic data, see Note 23 to the Consolidated Financial Statements.

### **Competition and Industry Conditions**

The bases for competition in the acetyls businesses are price, product performance, product quality, product delivery, reliability of supply and customer service. The acetyls businesses compete globally with other large marketers and producers for sales of acetyls, including Celanese Corporation (Celanese), The Dow Chemical Company (Dow), Eastman Chemical Company, Ineos, Methanex Corporation and Saudi Basic Industries Corp. Millennium is the second largest producer of VAM and acetic acid in North America, and the third largest producer worldwide, based on 2005 published rated production capacity.

### **Equity Investment in Equistar**

Millennium owns a 29.5% interest in Equistar, a joint venture with Lyondell. Millennium accounts for its interest in Equistar as an equity investment. Equistar reports its results of operations in one segment: ethylene, co-products and derivatives.

### **Overview**

Equistar can produce ethylene, co-products and derivatives at sixteen facilities located in six states in the U.S. Ethylene co-products primarily include propylene, butadiene and aromatics, which include benzene and toluene. Derivatives primarily include polyethylene, EO, EG and other EO derivatives, as well as ethanol and polypropylene. Equistar also produces fuels, such as MTBE and alkylate. Ethylene, co-products and derivatives are fundamental to many segments of the economy, including the production of consumer products, packaging, housing and automotive components and other durable and nondurable goods.

Ethylene is the most significant petrochemical in terms of worldwide production volume and is the key building block for polyethylene and a large number of other chemicals, plastics and synthetics. Equistar can produce ethylene at seven sites located in four states. The Chocolate Bayou, Corpus Christi and Channelview, Texas plants predominantly use heavy liquids to produce ethylene. These heavy liquids include crude oil-based naphtha and gas oil, as well as condensate, a very light crude oil resulting from natural gas production (collectively referred to as heavy liquids). The use of heavy liquid raw materials results in the production of a significant amount of co-products such as propylene, butadiene, benzene and toluene. The Morris, Illinois; Clinton, Iowa; Lake Charles, Louisiana; and La Porte, Texas plants are designed to consume primarily natural gas liquids, including ethane, propane and butane (collectively NGLs), to produce ethylene with some co-products such as propylene. The Corpus Christi and Channelview plants also may consume NGLs to produce ethylene, depending upon the relative economic advantage of the alternative raw materials. The Lake Charles, Louisiana ethylene and co-products facility has been idled since the first quarter 2001, pending sustained improvement in market conditions. Sales of ethylene accounted for approximately 13% of Equistar's total



## Edgar Filing: MILLENNIUM CHEMICALS INC - Form 10-K

revenues in 2005, 12% in 2004 and 13% in 2003.

Ethylene co-products are manufactured by Equistar primarily at four facilities in Texas. The Morris, Illinois; Clinton, Iowa; and Lake Charles, Louisiana facilities also can produce propylene. Sales of propylene, which is used to produce polypropylene, acrylonitrile and propylene oxide, accounted for approximately 18% of Equistar's total revenues in 2005, 18% in 2004 and 16% in 2003. Benzene is used to produce styrene, phenol and cyclohexane, which are used in the production of nylon, plastics, synthetic rubber and polystyrene. Sales of benzene accounted for less than 10% of Equistar's total revenues in 2005 and 2003 and approximately 10% in 2004.

**Table of Contents**

**Index to Financial Statements**

Polyethylene is manufactured by Equistar using a variety of technologies at five facilities in Texas and at the Morris, Illinois and Clinton, Iowa facilities. Polyethylene is used in a variety of consumer and industrial products, including packaging film, trash bags, automotive parts, plastic bottles and caps and compounds for wire and cable insulation. The Morris and Clinton facilities enjoy a freight cost advantage over Gulf Coast facilities in delivering products to customers in the U.S. Midwest. Polyethylene includes high density polyethylene ( HDPE ), low density polyethylene ( LDPE ) and linear low density polyethylene ( LLDPE ). HDPE accounted for approximately 12% of Equistar s total revenues in 2005, 14% in 2004 and 15% in 2003, and polyethylene (HDPE, LDPE and LLDPE collectively) accounted for approximately 21% of Equistar s total revenues in 2005, 26% in 2004 and 28% in 2003.

EO and its primary derivative, EG, are produced at the Bayport facility located in Pasadena, Texas and through a 50/50 joint venture between Equistar and DuPont in Beaumont, Texas. The Bayport facility also produces other derivatives of EO, principally ethylene glycol ethers and ethanolamines. EG is used in antifreeze, polyester fibers, resins and films. EO and its other derivatives are used in many consumer and industrial end uses, such as detergents and surfactants, brake fluids and polyurethane seating and bedding foams.

The Morris, Illinois facility manufactures polypropylene using propylene produced as a co-product of Equistar s ethylene production, as well as propylene purchased from unrelated parties. Polypropylene is sold for various applications in the automotive, housewares and appliance industries.

Equistar also produces performance polymer products, which include enhanced grades of polyethylene and polypropylene. Wire and cable insulating resins and compounds are performance polymers used to insulate copper and fiber optic wiring in power, telecommunication, computer and automobile applications. Many of Equistar s polyethylene facilities can produce wire and cable insulating resins, some of which can be compounded with additive materials at the facility in Fairport Harbor, Ohio. Equistar believes that, over a business cycle, average selling prices and profit margins for performance polymers tend to be higher than average selling prices and profit margins for higher-volume commodity polyethylenes.

**Table of Contents****Index to Financial Statements**

The following table outlines Equistar's primary products, annual processing capacity as of December 31, 2005, and the primary uses for such products. Unless otherwise specified, annual processing capacity was calculated by estimating the average number of days in a typical year that a production unit of a plant is expected to operate, after allowing for downtime for regular maintenance, and multiplying that number by an amount equal to the unit's optimal daily output based on the design raw material mix. Because the processing capacity of a production unit is an estimated amount, actual production volumes may be more or less than the capacities set forth below. Capacities shown include 100% of the capacity of joint venture facilities.

<b>Product</b>	<b>Annual Capacity</b>	<b>Primary Uses</b>
Ethylene	11.6 billion pounds (a)	Ethylene is used as a raw material to manufacture polyethylene, EO, ethanol, ethylene dichloride, styrene and VAM.
Propylene	5 billion pounds (a)(b)	Propylene is used to produce polypropylene, acrylonitrile and propylene oxide.
Butadiene	1.2 billion pounds	Butadiene is used to manufacture styrene-butadiene rubber and polybutadiene rubber, which are used in the manufacture of tires, hoses, gaskets and other rubber products. Butadiene is also used in the production of paints, adhesives, nylon clothing, carpets, paper coatings and engineered plastics.
MTBE	284 million gallons (18,500 barrels/day) (c)	MTBE is a gasoline component used for reducing emissions in reformulated gasolines and enhancing octane value.
Benzene	310 million gallons	Benzene is used to produce styrene, phenol and cyclohexane. These products are used in the production of nylon, plastics, synthetic rubber and polystyrene. Polystyrene is used in insulation, packaging and drink cups.
Toluene	66 million gallons	Toluene is used as an octane enhancer in gasoline, as a chemical raw material for benzene and/or paraxylene production, and a core ingredient in toluene diisocyanate, a compound used in urethane production.
Alkylate	337 million gallons (d)	Alkylate is a premium gasoline blending component used by refiners to meet Clean Air Act standards for reformulated gasoline.
High density polyethylene (HDPE)	3.2 billion pounds	HDPE is used to manufacture grocery, merchandise and trash bags; food containers for items from frozen desserts to margarine; plastic caps and closures; liners for boxes of cereal and crackers; plastic drink cups and toys; dairy crates; bread trays; pails for items from paint to fresh fruits and vegetables; safety equipment such as hard hats; house wrap for insulation; bottles for household and industrial chemicals and motor oil; milk, water, and juice bottles; and large (rotomolded) tanks for storing liquids such as agricultural and lawn care chemicals.

**Table of Contents****Index to Financial Statements**

<b>Product</b>	<b>Annual Capacity</b>	<b>Primary Uses</b>
Low density polyethylene (LDPE)	1.4 billion pounds	LDPE is used to manufacture food packaging films; plastic bottles for packaging food and personal care items; dry cleaning bags; ice bags; pallet shrink wrap; heavy-duty bags for mulch and potting soil; boil-in-bag bags; coatings on flexible packaging products; and coatings on paper board such as milk cartons. Ethylene vinyl acetate is a specialized form of LDPE used in foamed sheets, bag-in-box bags, vacuum cleaner hoses, medical tubing, clear sheet protectors and flexible binders.
Linear low density polyethylene (LLDPE)	1.2 billion pounds	LLDPE is used to manufacture garbage and lawn-leaf bags; industrial can liners; housewares; lids for coffee cans and margarine tubs, dishpans, home plastic storage containers, kitchen trash containers; large (rotomolded) toys like outdoor gym sets; drip irrigation tubing; wire and cable insulating resins and compounds used to insulate copper and fiber optic wiring, and film; shrink wrap for multi-packaging canned food, bag-in-box bags, produce bags, and pallet stretch wrap.
Ethylene Oxide (EO)	1.5 billion pounds EO equivalents; 400 million pounds as pure EO (e)	EO is used to produce surfactants, industrial cleaners, cosmetics, emulsifiers, paint, heat transfer fluids and ethylene glycol.
Ethylene Glycol (EG)	1.4 billion pounds (e)	EG is used to produce polyester fibers and film, polyethylene terephthalate ( PET ) resin, heat transfer fluids and automobile antifreeze.
Other Ethylene Oxide Derivatives	225 million pounds	EO derivatives include ethylene glycol ethers and ethanolamines, and are used to produce paint and coatings, polishes, solvents and chemical intermediates.
Ethanol	50 million gallons	Ethanol is used in the production of solvents as well as household, medicinal and personal care products.
Polypropylene	280 million pounds	Polypropylene is used to manufacture fibers for carpets, rugs and upholstery; housewares; automotive battery cases; automotive fascia, running boards and bumpers; grid-type flooring for sports facilities; fishing tackle boxes; and bottle caps and closures.

- (a) Includes 850 million pounds/year of ethylene capacity and 200 million pounds/year of propylene capacity at the Lake Charles, Louisiana ethylene and co-products facility. The Lake Charles facility has been idled since the first quarter 2001, pending sustained improvement in market conditions.
- (b) Does not include refinery-grade material or production from the product flexibility unit at the Channelview facility, which can convert ethylene and other light petrochemicals into propylene. This facility has an annual processing capacity of an additional one billion pounds/year of propylene.

---

**Table of Contents**

**Index to Financial Statements**

- (c) Includes up to 44 million gallons/year of capacity produced for and returned to LYONDELL-CITGO Refining LP (a joint venture owned 58.75% by Lyondell ( LCR )).
- (d) Includes up to 172 million gallons/year of capacity produced for and returned to LCR.
- (e) Includes 700 million pounds/year of EO equivalents capacity and 800 million pounds/year of EG capacity at the Beaumont, Texas facility, which represents 100% of the EO equivalents capacity and EG capacity, respectively, at the facility. The Beaumont, Texas facility is owned by PD Glycol, a partnership owned 50% by Equistar and 50% by DuPont.

**Raw Materials**

Raw material cost is the largest component of the total cost for the production of ethylene and co-products. The primary raw materials used are heavy liquids and NGLs. The flexibility to consume a wide range of raw materials, including heavy liquids, has historically provided plants with that flexibility with an advantage over plants that are restricted in their raw material processing capability to NGLs such as ethane and propane, assuming the co-products were recovered and sold. Facilities using heavy liquids historically have generated, on average, approximately four cents of additional variable margin per pound of ethylene produced compared to facilities restricted to using ethane. This margin advantage is based on an average of historical data over a period of years and is subject to short-term fluctuations, which can be significant. For example, the advantage during first quarter 2004 was slightly above the historical average. However, in the fourth quarter 2005, the variable cost to produce ethylene from ethane rose to record high levels due to the impact of multiple hurricanes, which resulted in the best quarterly and annual heavy liquids average advantage in twenty years. Equistar has the capability to realize this margin advantage due to its ability to process heavy liquids at the Channelview, Corpus Christi and Chocolate Bayou ethylene and co-products facilities.

The Channelview facility is particularly flexible because it can range from processing all heavy liquids to processing a majority of NGLs. The Corpus Christi plant can range from processing predominantly heavy liquids to processing significant levels of NGLs. The Chocolate Bayou facility processes 100% heavy liquids. The La Porte facility processes mainly lighter NGLs, but can process some butane, natural gasoline and light naphtha. The three other ethylene and co-products facilities process only NGLs.

As described above, management believes that this raw material flexibility is a key advantage in the production of ethylene and co-products. As a result, Equistar's heavy liquids requirements are purchased via a mix of contractual and spot arrangements from a variety of domestic and international sources. Spot market purchases are made in order to maintain raw material flexibility and to take advantage of raw material pricing opportunities. A large portion of Equistar's NGLs requirements are purchased via contractual arrangements from a variety of sources, but NGLs also are purchased on the spot market. Equistar also obtains a portion of its heavy liquids requirements from LCR at market-related prices. Heavy liquids generally are delivered by ship or barge, and NGLs generally are delivered via pipeline.

Equistar purchases all of its methanol requirements for ethylene and co-products from Lyondell at market-based prices. Also, Equistar purchases large amounts of natural gas to be used as energy for consumption in its business via market-based contractual arrangements with a variety of sources.

The primary raw material for the derivatives products is ethylene. Equistar's derivatives facilities generally can receive their ethylene directly from Equistar's ethylene and co-products facilities via its pipeline system, pipelines owned by unrelated parties or on-site production. All of the ethylene used in Equistar's polyethylene production is produced internally by Equistar's ethylene and co-products facilities. However, the polyethylene plants at Chocolate Bayou, La Porte and Bayport, Texas are connected by pipeline to unrelated parties and could receive ethylene via exchanges or purchases. The polypropylene facility at Morris, Illinois receives propylene from Equistar's ethylene and co-products facilities, as well as unrelated parties.

The raw materials for ethylene, co-products and derivatives are, in general, commodity chemicals with numerous bulk suppliers and ready availability at competitive prices. Historically, raw material availability for

**Table of Contents**

**Index to Financial Statements**

ethylene, co-products and derivatives has not been an issue. For additional discussion regarding the effects of raw material pricing and supply on recent operating results, see Item 1A. Risk Factors Risks Relating to the Businesses Costs of raw materials and energy, as well as reliability of supply, may result in increased operating expenses and reduced results of operations and Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations.

**Marketing and Sales**

Ethylene produced by Equistar generally is consumed internally as a raw material in the production of derivatives, or is shipped by pipeline to related and unrelated parties. For the year ended December 31, 2005, approximately 85% of Equistar's ethylene, based on sales dollars, was used by Equistar's derivatives facilities or sold to related parties at market-related prices. The sales to related parties during 2005 include significant ethylene sales to Occidental Chemical Corporation (a subsidiary of Occidental Petroleum Corporation (together with its subsidiaries and affiliates, collectively, Occidental)), which owns approximately 12% of Lyondell's outstanding common stock) pursuant to a long-term ethylene supply agreement.

Equistar consumes propylene in the production of polypropylene and also sells propylene to Lyondell at market-related prices. Equistar's propylene production that is not consumed internally or sold to related parties generally is sold under multi-year contracts. In addition, pursuant to a 15-year propylene supply arrangement entered into in 2003 with a subsidiary of Sunoco, Inc. (Sunoco), Equistar supplies 700 million pounds of propylene annually to Sunoco. Under the arrangement, a majority of the propylene is supplied under a cost-based formula and the balance is supplied on a market-related basis.

Equistar generally sells its butadiene under multi-year contracts. Equistar sells benzene to Lyondell and toluene to LCR at market-related prices. Most of Equistar's benzene and toluene production that is not sold to related parties generally is sold under multi-year contracts. Equistar also sells benzene produced by LCR, which it purchases from LCR at market-related prices. Equistar serves as LCR's sole agent to market toluene produced by LCR and receives a marketing fee for such services. Equistar produces alkylate for and returns alkylate to LCR for a processing fee, and also sells alkylate under annual and multi-year contracts.

Equistar at times purchases ethylene, propylene, benzene and butadiene for resale, when necessary, to satisfy customer demand for these products above production levels. Volumes of ethylene, propylene, benzene and butadiene purchased for resale can vary significantly from period to period. However, purchased volumes generally do not have a significant impact on profitability.

The co-products that are not consumed internally or sold to related parties generally are sold to customers with whom Equistar has had long-standing relationships. These sales generally are made under written agreements that typically provide for monthly negotiation of price and customer purchases of a specified minimum quantity.

MTBE produced at one of the two Channelview units is sold to Lyondell and LCR at market-related prices. MTBE is produced for LCR at the second Channelview unit for a processing fee. In addition, MTBE produced at the Chocolate Bayou plant is sold at market-related prices to Lyondell.

## Edgar Filing: MILLENNIUM CHEMICALS INC - Form 10-K

Most of the ethylene and propylene production of the Channelview, Chocolate Bayou, Corpus Christi, La Porte and Lake Charles facilities is shipped via a pipeline system which has connections to numerous Gulf Coast ethylene and propylene consumers. This pipeline system, some of which is owned and some of which is leased by Equistar, extends from Corpus Christi to Mont Belvieu to Port Arthur, Texas as well as around the Lake Charles, Louisiana area. In addition, exchange agreements with other ethylene and co-products producers allow access to customers who are not directly connected to Equistar's pipeline system. Some ethylene is shipped by railcar from Clinton, Iowa to Morris, Illinois and also to customers. A pipeline owned and operated by an unrelated party is used to transport ethylene from Morris, Illinois to Tuscola, Illinois. Some propylene is shipped



## **Table of Contents**

### **Index to Financial Statements**

by ocean-going vessel. Butadiene, benzene, toluene and other products are distributed by pipeline, railcar, truck, barge or ocean-going vessel.

Polyethylene products primarily are sold to an extensive base of established customers. Approximately two-thirds of Equistar's domestic polyethylene product volumes are sold to customers under annual or multi-year contracts. The remainder of the polyethylene volume generally is sold under customary terms and conditions without formal contracts. In either case, in most of the continuous supply relationships, prices are subject to change upon mutual agreement.

EO and EG typically are sold under multi-year contracts, with market-based pricing. Glycol ethers, ethanalamines and brake fluids are sold primarily into the solvent and distributor markets at market prices. Ethanol and ethers primarily are sold under contracts at market prices. EO is shipped by railcar, and its derivatives are shipped by railcar, truck, isotank or ocean-going vessel.

Other derivatives products are primarily distributed via railcar. The vast majority of the derivatives products are sold in North America, primarily through Equistar's sales organization. Sales agents are generally engaged to market the derivatives products in the rest of the world.

Other than Lyondell, which accounted for approximately 10% of Equistar's total revenues in 2005, no single customer accounted for 10% or more of Equistar's total revenues in 2005. For geographic data, see Note 23 to the Consolidated Financial Statements.

### **Competition and Industry Conditions**

The bases for competition in the ethylene, co-products and derivatives businesses are price, product quality, product delivery, reliability of supply, product performance and customer service. Industry consolidation has brought North American production capacity under the control of fewer, although larger, competitors.

Profitability is affected not only by supply and demand for ethylene, co-products and derivatives, but also by raw material costs and price competition among producers, which may intensify due to, among other things, the addition of new capacity. In general, demand is a function of economic growth in the United States and elsewhere in the world, which fluctuates. It is not possible to accurately predict the changes in raw material costs, market conditions, capacity utilization and other factors that will affect industry profitability in the future. In 2004, ethylene markets began a cyclical recovery from the downturn brought about by the prior three years of weak demand. The shutdown of two of a competitor's U.S. Gulf Coast ethylene and co-products plants in 2003 and improving demand, driven by worldwide economic recovery, resulted in greatly improved industry operating rates in 2004 and 2005. However, in 2005, temporary hurricane-related shutdowns greatly impacted supply and demand during the last four months of 2005. Over the next five years, forecasts for the worldwide average annual ethylene capacity additions are projected at more than 5%, with more than half of these additions in the Middle East and Northeast Asia. The average worldwide demand growth is expected to lag this rate only by approximately 1%. In the U.S., minor capacity increases combined with sustained demand levels are projected to result in continued high average operating rates in the next few years. Capacity share figures for Equistar and its competitors, discussed below, are based on completed production facilities and, where appropriate, include the full capacity of joint venture facilities and certain long-term supply arrangements.

## Edgar Filing: MILLENNIUM CHEMICALS INC - Form 10-K

Equistar competes with other large domestic marketers and producers for sales of ethylene and co-products, including Chevron Phillips Chemical Company LP ( ChevronPhillips ), Enterprise Products Partners L.P., Exxon Mobil Corporation ( ExxonMobil ), Huntsman Corporation ( Huntsman ), Ineos and Shell Chemical Company. Equistar's ethylene rated capacity at December 31, 2005 was approximately 11.6 billion pounds per year, or approximately 15% of total North American ethylene production capacity. Based on published rated production capacities, Equistar is the second largest producer of ethylene in North America. North American

**Table of Contents**

**Index to Financial Statements**

ethylene rated capacity at December 31, 2005 was approximately 77 billion pounds per year. Approximately 78% of the total ethylene production capacity in North America is located along the Gulf Coast.

Equistar competes with other large marketers and producers for sales of derivatives, including Celanese, ChevronPhillips, Dow, Eastman Chemical Company, ExxonMobil, Formosa Plastics Corporation, Huntsman, Ineos, NOVA Chemicals Corporation, TOTAL and Westlake Polymers. Based on published rated industry capacities, Equistar is the third largest producer of polyethylene in North America. The rated capacity of Equistar's polyethylene units as of December 31, 2005 was approximately 5.8 billion pounds per year, or approximately 13% of total industry capacity in North America. There are many other North American producers of polyethylene, the most significant of which are ChevronPhillips, Dow and ExxonMobil.

**OTHER CHEMICALS**

Millennium also produces fragrance and flavors chemicals. The Brunswick, Georgia and Jacksonville, Florida facilities manufacture terpene-based fragrance ingredients and flavor ingredients, primarily for the oral care markets. These products are also used in a number of other applications, including chemical reaction agents, or initiators, for the rubber industry and solvents and cleaners, such as pine oil, for the hard surface cleaner markets.

**ENVIRONMENTAL CAPITAL EXPENDITURES**

Millennium and its joint ventures (together with the industries in which they operate) are subject to extensive national, state and local environmental laws and regulations concerning, and are required to have permits and licenses regulating, emissions to the air, discharges onto land or waters and the generation, handling, storage, transportation, treatment and disposal of waste materials. In some cases, compliance with environmental, health and safety laws and regulations can only be achieved by capital expenditures. In the years ended December 31, 2005, 2004 and 2003, Millennium spent approximately \$8 million, \$8 million and \$9 million, respectively, for environmentally related capital expenditures at existing facilities. Millennium currently estimates that environmentally related capital expenditures at its facilities will be approximately \$11 million for 2006 and \$6 million for 2007. These amounts include estimated expenditures related to air emission reductions.

In the years ended December 31, 2005, 2004 and 2003, Equistar spent approximately \$62 million, \$44 million and \$38 million, respectively, for environmentally related capital expenditures at existing facilities. The increased capital expenditures relate to air emission reductions and wastewater management. Equistar currently estimates that environmentally related capital expenditures at its facilities will be approximately \$71 million for 2006 and \$27 million for 2007, including estimated expenditures related to air emission reductions and wastewater management.

For additional information regarding environmentally related capital expenditures, see Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations Environmental Matters and Note 19 to the Consolidated Financial Statements.

**RESEARCH AND TECHNOLOGY; INTELLECTUAL PROPERTY**

**Millennium** Millennium conducts research principally at technology centers in Baltimore, Maryland; Stallingborough, United Kingdom; and Jacksonville, Florida. Millennium's research and development expenditures were \$23 million in 2005, \$21 million in 2004 and \$23 million in 2003.

Millennium maintains an extensive patent portfolio and continues to file new patent applications related to its TiO<sub>2</sub>, acetyls and fragrance and flavor businesses. As of December 31, 2005, Millennium owned

## **Table of Contents**

### **Index to Financial Statements**

approximately 50 United States patents and approximately 95 worldwide patents. Millennium owns globally registered and unregistered trademarks, including the Millennium logo. Millennium does not regard its business as being materially dependent upon any single patent, trademark or license.

**Equistar** Equistar conducts research and development principally at its technology centers in Cincinnati, Ohio and Chocolate Bayou, Texas. Equistar's research and development expenditures were \$33 million in 2005, \$34 million in 2004 and \$38 million in 2003.

Equistar maintains an extensive patent portfolio and continues to file new patent applications related to its businesses. As of December 31, 2005, Equistar owned approximately 240 United States patents and approximately 350 worldwide patents. Equistar owns globally registered and unregistered trademarks, including the Equistar logo. Equistar does not regard its business as being materially dependent upon any single patent, trademark or license.

## **EMPLOYEE RELATIONS**

**Millennium** At December 31, 2005, Millennium had approximately 3,325 full-time and part-time employees, approximately 1,195 of whom were located in the United States, approximately 1,065 of whom were located in Europe, approximately 685 of whom were located in Brazil, approximately 360 of whom were located in Australia and approximately 20 of whom were located in Asia. As of December 31, 2005, approximately 26% of the employees located in the U.S., approximately 77% of the employees located in Europe and substantially all of the employees located in Brazil were represented by labor unions. In addition to its own employees, Millennium uses the services of Lyondell and Equistar employees pursuant to shared services and loaned employee arrangements and also uses the services of independent contractors in the routine conduct of its business. Millennium believes that its relations with its employees are good.

**Equistar** At December 31, 2005, Equistar employed approximately 3,195 full-time and part-time employees. Approximately 5% of Equistar's employees are covered by collective bargaining agreements. In addition to its own employees, Equistar uses the services of Lyondell and Millennium employees pursuant to shared services and loaned employee arrangements and also uses the services of independent contractors in the routine conduct of its business. Equistar believes that its relations with its employees are good.

### **Item 1A. Risk Factors**

*There are many factors that may affect the businesses and results of operations of Millennium and its joint ventures. For additional discussion regarding factors that may affect the businesses and operating results of Millennium and its joint ventures, see Item 1. Business, Item 3. Legal Proceedings, Forward-Looking Statements, Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations and Item 7A. Disclosure of Market Risk. If one or more of these risks actually occur, Millennium's business, financial position or results of operations could be materially and adversely affected.*

### **Risks Relating to the Businesses**

*Costs of raw materials and energy, as well as reliability of supply, may result in increased operating expenses and reduced results of operations.*

Millennium and its joint ventures purchase large amounts of raw materials and energy for their businesses. The cost of these raw materials and energy, in the aggregate, represents a substantial portion of their operating expenses. The costs of raw materials and energy used for acetyls and Equistar's products, and the energy costs

---

**Table of Contents**

**Index to Financial Statements**

for TiO<sub>2</sub>, generally follow price trends of, and vary with the market conditions for, crude oil and natural gas, which may be highly volatile and cyclical. The costs of energy and certain raw materials increased during 2005 and remain at high levels. There have been in the past, and will likely be in the future, periods of time when Millennium and its joint ventures are unable to pass raw material and energy cost increases on to customers quickly enough to avoid adverse impacts on their results of operations. Customer consolidation also has made it more difficult to pass along cost increases to customers. The results of operations of Millennium and its joint ventures have been, and could be in the future, significantly affected by increases and volatility in these costs. Cost increases also may increase working capital needs, which could reduce liquidity and cash flow for Millennium and its joint ventures. In addition, when raw material and energy costs increase rapidly and are passed along to customers as product price increases, the credit risks associated with certain customers can be compounded. See Millennium and its joint ventures sell commodity products in highly competitive markets and face significant price pressures below.

In addition, higher North American natural gas prices relative to natural gas cost-advantaged regions, such as the Middle East, have diminished the ability of many domestic chemical producers to compete internationally since natural gas prices affect a significant portion of the industry's raw materials and energy sources. This environment has in the past caused and may in the future cause a reduction in Equistar's exports, and has in the past reduced and may in the future reduce the competitiveness of U.S. producers. It also has in the past increased the competition for sales of chemicals in North America, as U.S. production that would otherwise have been sold overseas was instead offered for sale domestically, resulting in excess supply and lower margins in North America, and may do so in the future.

Furthermore, for Millennium and its joint ventures, there are a limited number of suppliers for some of their raw materials and utilities and, in some cases, the number of sources for and availability of raw materials is specific to the particular geographic region in which a facility is located. In addition, for some products of Millennium and its joint ventures, the facilities and/or distribution channels of raw material suppliers and Millennium and its joint ventures form an integrated system. This is especially true in the U.S. Gulf Coast where the infrastructure of the petrochemical industry is tightly integrated such that a major disruption of supply of a given commodity can negatively affect numerous participants, including suppliers of other raw materials. If one or more of Millennium's or its joint ventures' significant suppliers were unable to meet its obligations under present supply arrangements or supplies are otherwise disrupted, Millennium's or its joint ventures' businesses could suffer reduced supplies or be forced to incur increased costs for their raw materials, which would have a direct negative impact on plant operations. For example, Hurricanes Katrina and Rita negatively affected crude oil and natural gas supplies, as well as supplies of some of Millennium's and its joint ventures' other raw materials, contributing to increases in raw material prices during the second half of 2005 and, in some cases, disrupting production. In addition, hurricane-related disruption of rail and pipeline traffic in the U.S. Gulf Coast area negatively affected shipments of raw materials and product.

*The cyclical nature of the chemical industry may cause significant fluctuations in Millennium's and its joint ventures' operating results.*

The historical operating results of Millennium and its joint ventures reflect the cyclical and volatile nature of the supply-demand balance in the chemical industry, and their future operating results continue to be affected by this cyclical nature and volatility. This cyclical pattern results in volatile profits and cash flow over the business cycles.

Demand for TiO<sub>2</sub> has fluctuated from year to year. The TiO<sub>2</sub> industry also is sensitive to changes in its customers' marketplaces, which are primarily the paint and coatings, plastics and paper industries.

Demand for ethylene and its derivatives, and acetyls, also has fluctuated from year to year. These industries are particularly sensitive to capacity additions. These industries historically have experienced alternating periods of capacity shortages leading to tight supply, causing prices and profit margins to increase, followed by periods





**Table of Contents**

**Index to Financial Statements**

when substantial capacity is added, resulting in oversupply, declining capacity utilization rates and declining prices and profit margins.

The chemical industry has entered a period characterized by tight supply in many product areas and increased demand as the global economy has improved over the past several years. As a result, the industry has seen a return to enhanced profitability, even in a world of volatile raw material and energy costs. However, the sustainability of these positive business conditions remains subject to uncertainty. The global economic and political environment continues to be uncertain, and negative changes could result in a decline in demand and place pressure on Millennium's results of operations. In addition, new capacity additions by some participants in the industry, especially those in the Middle East and Asia that are expected to start up beginning in 2006 and through the latter part of the decade, could lead to another period of oversupply and poor profitability.

Millennium and its joint ventures may reduce production at or idle a facility for an extended period of time or exit a business because of an oversupply of a particular product and/or a lack of demand for that particular product, or high raw material prices, which makes production uneconomical. Any decision to permanently close facilities or exit a business would result in impairment and other charges to earnings. Temporary outages sometimes last for several quarters or, in certain cases, longer, and could cause Millennium and its joint ventures to incur costs, including the expenses of maintaining and restarting these facilities. It is possible that factors such as increases in raw material costs or lower demand in the future will cause Millennium or its joint ventures to reduce operating rates, idle facilities or exit uncompetitive businesses.

***External factors beyond Millennium's or its joint ventures' control can cause fluctuations in demand for their products and in their prices and margins, which may result in lower operating results.***

External factors beyond Millennium's or its joint ventures' control can cause volatility in the price of raw materials and other operating costs, as well as significant fluctuations in demand for their products and can magnify the impact of economic cycles on their businesses. Examples of external factors include:

general economic conditions;

international events and circumstances;

competitor actions;

governmental regulation in the U.S. and abroad; and

severe weather and natural disasters.

Millennium believes that events in the Middle East have had a particularly adverse influence on its acetyls business and Equistar's businesses in recent years and may continue to do so. In addition, a number of Millennium's and its joint ventures' products are highly dependent on durable goods markets, such as the housing and automotive markets, which also are cyclical. Many of Millennium's and its joint ventures' products are components of other chemical products that, in turn, are subject to the supply-demand balance of the chemical industry and general economic

conditions. The global economy has improved, increasing demand for Millennium's and its joint ventures' products. This has occurred even as the volatility and elevated level of prices for crude oil and natural gas have resulted in increased raw material costs. However, the impact of the factors cited above and others may once again cause a slowdown in the business cycle, reducing demand and lowering operating rates and, ultimately, reducing profitability.

*Millennium and its joint ventures sell commodity products in highly competitive markets and face significant price pressures.*

Millennium and its joint ventures sell their products in highly competitive markets. Due to the commodity nature of certain of their products, competition in these markets is based primarily on price and to a lesser extent

**Table of Contents**

**Index to Financial Statements**

on product performance, product quality, product deliverability, reliability of supply and customer service. As a result, Millennium and its joint ventures generally are not able to protect their market position for these products by product differentiation and may not be able to pass on cost increases to their customers. Accordingly, increases in raw material and other costs may not necessarily correlate with changes in prices for these products, either in the direction of the price change or in magnitude. In addition, their ability to increase product sales prices, and the timing of those increases, are affected by the supply-demand balances for their products, as well as the capacity utilization rates for those products. Timing differences in pricing between rising raw material costs, which may change daily, and contract product prices, which in many cases are negotiated only monthly or less often, sometimes with an additional lag in effective dates for increases, have reduced and may continue to reduce profitability. Further, volatility in costs and pricing can result in commercial disputes with customers and suppliers with respect to interpretations of complex contractual arrangements. Significant adverse resolution of any such disputes also could reduce profitability.

***Millennium's international operations are subject to exchange rate fluctuations, exchange controls, political risks and other risks relating to non-U.S. operations.***

Millennium has substantial international operations, which are subject to the risks of doing business abroad, including fluctuations in currency exchange rates, transportation delays and interruptions, political and economic instability and disruptions, restrictions on the transfer of funds, the imposition of duties and tariffs, import and export controls, changes in governmental policies, labor unrest and current and changing regulatory environments. These events could reduce the demand for Millennium's products internationally, decrease the prices at which it can sell its products internationally or disrupt production or other operations internationally, which could reduce its operating results. In addition, Millennium and Equistar obtain a substantial portion of their principal raw materials from sources outside the U.S., which are subject to these same risks. Although Millennium and Equistar have compliance programs and processes intended to ensure compliance with applicable customs, currency exchange control regulations, transfer pricing regulations or any other laws or regulations to which they may be subject, they are subject to the risk that their compliance could be challenged. Furthermore, these laws may be modified, the result of which may be to prevent or limit non-U.S. subsidiaries from transferring cash to Millennium. For geographic data, see Note 23 to the Consolidated Financial Statements.

In addition, Millennium generates revenue from export sales and operations conducted outside the U.S. that may be denominated in currencies other than the relevant functional currency. Exchange rates between these currencies and U.S. dollars in recent years have fluctuated significantly and may do so in the future. Future events, which may significantly increase or decrease the risk of future movement in foreign currencies in which it conducts its business, cannot be predicted. Millennium also may hedge certain revenues and costs using derivative instruments to minimize the impact of changes in the exchange rates of those currencies compared to the respective functional currencies. It is possible that fluctuations in foreign exchange rates will result in reduced operating results.

***Millennium's and its joint ventures' operations and assets are subject to extensive environmental, health and safety and other laws and regulations, which could result in material costs or liabilities.***

Millennium and its joint ventures cannot predict with certainty the extent of future liabilities and costs under environmental, health and safety and other laws and regulations and whether liabilities and costs will be material. Millennium and its joint ventures also may face liability for alleged personal injury or property damage due to exposure to chemicals or other hazardous substances at their facilities or chemicals that they manufacture, handle or own. In addition, because the chemical products of Millennium and its joint ventures are components of a variety of other end-use products, Millennium and its joint ventures, along with other members of the chemical industry, are inherently subject to potential claims related to those end-use products. Although claims of the types described above have not historically had a material impact on Millennium's or its joint ventures' operations, a substantial increase in the success of these types of claims could result in the expenditure of a significant amount of cash by Millennium or its joint ventures to pay claims, and could reduce their operating results.



**Table of Contents****Index to Financial Statements**

Millennium and its joint ventures (together with the industries in which they operate) are subject to extensive national, state and local environmental laws and regulations concerning, and are required to have permits and licenses regulating, emissions to the air, discharges onto land or waters and the generation, handling, storage, transportation, treatment and disposal of waste materials. Many of these laws and regulations provide for substantial fines and potential criminal sanctions for violations. Some of these laws and regulations are subject to varying and conflicting interpretations. In addition, some of these laws and regulations require Millennium and its joint ventures to meet specific financial responsibility requirements. Millennium cannot accurately predict future developments, such as increasingly strict environmental laws, and inspection and enforcement policies, as well as higher compliance costs, which might affect the handling, manufacture, use, emission or disposal of products, other materials or hazardous and non-hazardous waste. Some risk of environmental costs and liabilities is inherent in Millennium's and its joint ventures' operations and products, as it is with other companies engaged in similar businesses, and there is no assurance that material costs and liabilities will not be incurred. In general, however, with respect to the costs and risks described above, Millennium does not expect that it or its joint ventures will be affected differently than the rest of the chemical industry where their facilities are located.

Environmental laws may have a significant effect on the nature and scope of cleanup of contamination at current and former operating facilities, the costs of transportation and storage of raw materials and finished products and the costs of the storage and disposal of wastewater. Also, U.S.

Superfund statutes may impose joint and several liability for the costs of remedial investigations and actions on the entities that generated waste, arranged for disposal of the wastes, transported to or selected the disposal sites and the past and present owners and operators of such sites. All such responsible parties (or any one of them, including Millennium and its joint ventures) may be required to bear all of such costs regardless of fault, the legality of the original disposal or ownership of the disposal site. In addition, similar environmental laws and regulations that have been or may be enacted in countries outside of the U.S. may impose similar liabilities and costs upon Millennium.

Millennium and its joint ventures have on-site solid-waste management units at several facilities. It is anticipated that corrective measures will be necessary to comply with federal and state requirements with respect to these facilities. Millennium and its joint ventures also have liabilities under the Resource Conservation and Recovery Act and various state and non-U.S. government regulations related to several current and former plant sites. Millennium and its joint ventures also are responsible for a portion of the remediation of certain off-site waste disposal facilities. Millennium and its joint ventures are contributing funds to the cleanup of several waste sites throughout the U.S. under the Comprehensive Environmental Response, Compensation and Liability Act ( CERCLA ) and the Superfund Amendments and Reauthorization Act of 1986, including the Kalamazoo River Superfund Site discussed below. Millennium and its joint ventures also have been named as potentially responsible parties at several other sites. Millennium's policy is to accrue remediation expenses when it is probable that such efforts will be required and the related expenses can be reasonably estimated. Estimated costs for future environmental compliance and remediation are necessarily imprecise due to such factors as the continuing evolution of environmental laws and regulatory requirements, the availability and application of technology, the identification of presently unknown remediation sites and the allocation of costs among the potentially responsible parties under applicable statutes. For further discussion regarding Millennium's and its joint ventures' environmental matters and related accruals (including those discussed in this risk factor), and environmentally-related capital expenditures, see also Item 1. Business Environmental Capital Expenditures, Item 3. Legal Proceedings Environmental Matters, Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations Environmental Matters and Note 19 to the Consolidated Financial Statements. If actual expenditures exceed the amounts accrued, that could have an adverse effect on Millennium's and its joint ventures' results of operations and financial position.

**Kalamazoo River Superfund Site** A Millennium subsidiary has been identified as a Potential Responsible Party ( PRP ) with respect to the Kalamazoo River Superfund Site. The site involves cleanup of river sediments and floodplain soils contaminated with polychlorinated biphenyls, cleanup of former paper mill operations, and cleanup and closure of landfills associated with the former paper mill operations. Litigation concerning the matter commenced in December 1987 but was subsequently stayed and is being addressed under

## Table of Contents

### Index to Financial Statements

CERCLA. In 2000, the Kalamazoo River Study Group (the KRSG), of which the Millennium subsidiary and other PRPs are members, submitted to the State of Michigan a Draft Remedial Investigation and Draft Feasibility Study, which evaluated a number of remedial options for the river. The estimated costs for these remedial options ranged from \$0 to \$2.5 billion.

At the end of 2001, the U.S. Environmental Protection Agency (EPA) took lead responsibility for the river portion of the site at the request of the State of Michigan. In 2004, the EPA initiated a confidential process to facilitate discussions among the agency, the Millennium subsidiary, other PRPs, the Michigan Departments of Environmental Quality and Natural Resources, and certain federal natural resource trustees about the need for additional investigation activities and different possible approaches for addressing the contamination in and along the Kalamazoo River. These discussions are continuing.

As of December 31, 2005, the probable future remediation spending associated with the river cannot be determined with certainty. Although the KRSG study identified a broad range of remedial options, not all of those options would represent reasonably possible outcomes. Management does not believe that it can identify a single remedy among those options that would represent the highest-cost reasonably possible outcome. However, Millennium recognized a liability representing Millennium's interim allocation of 55% of the \$73 million total of estimated cost of bank stabilization, recommended as the preferred remedy in 2000 by the KRSG study, and of certain other costs. At December 31, 2005, the balance of this liability, net of related spending, was \$57 million.

In addition, Millennium recognized a liability primarily related to Millennium's estimated share of remediation costs for two former paper mill sites and associated landfills, which are also part of the Kalamazoo River Superfund Site. At December 31, 2005, the balance of the liability, net of related spending, was \$46 million. Although no final agreement has been reached as to the ultimate remedy for these locations, Millennium has begun remediation activity related to these sites.

Millennium's ultimate liability for the Kalamazoo River Superfund Site will depend on many factors that have not yet been determined, including the ultimate remedy selected, the determination of natural resource damages, the number and financial viability of the other PRPs, and the determination of the final allocation among the PRPs.

**Other Regulatory Requirements** In addition to the matters described above, Millennium and its joint ventures are subject to other material regulatory requirements, including those relating to the shipment or exportation of products. Although Millennium and its joint ventures have compliance programs and other processes intended to ensure compliance with all such regulations, Millennium and its joint ventures are subject to the risk that their compliance with such regulations could be challenged. Non-compliance with certain of these regulations could result in the incurrence of additional costs, penalties or assessments that could be significant.

*Proceedings related to the alleged exposure to lead-based paints and lead pigments could require Millennium to expend material amounts in litigation and settlement costs and judgments.*

Together with alleged past manufacturers of lead-based paint and lead pigments for use in paint, Millennium has been named as a defendant in various legal proceedings alleging personal injury, property damage, and remediation costs allegedly associated with the use of these products. The plaintiffs include individuals and governmental entities, and seek recovery under a variety of theories, including negligence, failure to warn, breach of warranty, conspiracy, market share liability, fraud, misrepresentation and nuisance. The majority of these legal proceedings assert unspecified monetary damages in excess of the statutory minimum and, in certain cases, equitable relief such as abatement of lead-based paint in

## Edgar Filing: MILLENNIUM CHEMICALS INC - Form 10-K

buildings. These legal proceedings are in various trial stages and post-dismissal settings, some of which are on appeal. One legal proceeding relating to lead pigment or paint was tried in 2002. On October 29, 2002, the judge in that case declared a mistrial after the jury declared itself deadlocked. The sole issue before the jury was whether lead pigment in paint in and on Rhode Island buildings constituted a public nuisance. The re-trial of this case began on November 1, 2005. On

**Table of Contents**

**Index to Financial Statements**

February 22, 2006, a jury returned a verdict in favor of the State of Rhode Island finding that the cumulative presence of lead pigments in paints and coatings on buildings in the state constitutes a public nuisance; that a Millennium subsidiary and other defendants either caused or substantially contributed to the creation of the public nuisance; and that those defendants, including the Millennium subsidiary, should be ordered to abate the public nuisance. On February 28, 2006, the judge held that the state could not proceed with its claim for punitive damages. As a result, the jury was discharged. There will be further proceedings by the judge to determine the scope of any abatement. Millennium is considering its options, including all appropriate appeals.

While Millennium believes that it has valid defenses to all the lead-based paint and lead pigment proceedings and is vigorously defending them, litigation is inherently subject to many uncertainties. Additional lead-based paint and lead pigment litigation may be filed against Millennium in the future asserting similar or different legal theories and seeking similar or different types of damages and relief, and any adverse court rulings or determinations of liability, among other factors, could affect this litigation by encouraging an increase in the number of future claims and proceedings. In addition, from time to time, legislation and administrative regulations have been enacted or proposed to impose obligations on present and former manufacturers of lead-based paint and lead pigment respecting asserted health concerns associated with such products or to overturn successful court decisions. Millennium is unable to predict the outcome of lead-based paint and lead pigment litigation, the number or nature of possible future claims and proceedings, and the effect that any legislation and/or administrative regulations may have on Millennium. In addition, Millennium cannot reasonably estimate the scope or amount of the costs and potential liabilities related to such litigation, or any such legislation and regulations. Thus, any liability Millennium incurs with respect to pending or future lead-based paint or lead pigment litigation, or any legislation or regulations could, to the extent not covered or reduced by insurance or other recoveries, have a material impact on Millennium's results of operations. In addition, Millennium has not accrued any liabilities for judgments or settlements against Millennium resulting from lead-based paint and lead pigment litigation. See Item 3. Legal Proceedings Litigation Matters for additional discussion regarding lead-based paint and lead pigment litigation.

***Operating problems in the businesses of Millennium and its joint ventures may result in lower operating results.***

The occurrence of material operating problems at facilities owned by Millennium and its joint ventures, including, but not limited to, the events described below, may materially reduce the productivity and profitability of a particular manufacturing facility, or Millennium as a whole, during and after the period of such operational difficulties. Millennium's operating results are dependent on the continued operation of its and its joint ventures' various production facilities and the ability to complete construction and maintenance projects on schedule.

Although Millennium and its joint ventures take precautions to enhance the safety of their operations and minimize the risk of disruptions, their operations, along with the operations of other members of the chemical industry, are subject to hazards inherent in chemical manufacturing and the related storage and transportation of raw materials, products and wastes. These potential hazards include:

pipeline leaks and ruptures;

explosions;

fires;

severe weather and natural disasters;



mechanical failure;

unscheduled downtimes;

supplier disruptions;

labor difficulties;

**Table of Contents**

**Index to Financial Statements**

transportation interruptions;

remediation complications;

chemical spills;

discharges or releases of toxic or hazardous substances or gases;

storage tank leaks;

other environmental risks; and

terrorist acts.

Some of these hazards can cause personal injury and loss of life, severe damage to or destruction of property and equipment and environmental damage, and may result in suspension of operations and the imposition of civil or criminal penalties.

Furthermore, Millennium and its joint ventures also will continue to be subject to present and future claims with respect to workplace exposure, workers' compensation and other matters. Millennium and its joint ventures maintain property, business interruption and casualty insurance that they believe are in accordance with customary industry practices, but they are not fully insured against all potential hazards incident to their businesses, including losses resulting from natural disasters, war risks or terrorist acts. Changes in insurance market conditions have caused, and may in the future cause, premiums and deductibles for certain insurance policies to increase substantially and, in some instances, for certain insurance to become unavailable or available only for reduced amounts of coverage. If Millennium or its joint ventures were to incur a significant liability for which they were not fully insured, that company might not be able to finance the amount of the uninsured liability on terms acceptable to it or at all, and might be obligated to divert a significant portion of its cash flow from normal business operations.

***Conflicts of interest between Lyondell, Equistar and/or Millennium could be resolved in a manner that may be perceived to be adverse to Millennium and/or Equistar.***

Lyondell owns 70.5% of Equistar, and Millennium owns the remaining 29.5% of Equistar. As a result of Lyondell's November 30, 2004 acquisition of Millennium, Millennium and Equistar are wholly owned subsidiaries of Lyondell. All executive officers of Millennium and Equistar and all members of Equistar's Partnership Governance Committee and Millennium's Board of Directors also serve as officers of Lyondell. Conflicts of interest may arise between Lyondell, Equistar and/or Millennium when decisions arise that could have different implications for Lyondell, Equistar and/or Millennium. Their respective debt agreements generally require related party transactions to be on an arm's-length basis; however, because Lyondell owns both Millennium and Equistar, conflicts of interest could be resolved in a manner that may be perceived to be adverse to Millennium and/or Equistar.

*Millennium and Equistar depend to a significant degree on Lyondell for the administration of their businesses, and Equistar has product supply arrangements with its owners and other related parties. If those parties do not fulfill their obligations under the arrangements, Millennium's and/or Equistar's revenues, margins and cash flow could be adversely affected.*

Lyondell and Equistar and parties related to them have various agreements and transactions with Millennium. For example, Millennium is party to shared services, loaned employee and operating arrangements with Lyondell and Equistar pursuant to which Lyondell, Equistar and Millennium provide many administrative and operating services to each other. For example, Lyondell provides to Millennium and Equistar services that are essential to the administration and management of Millennium's and Equistar's businesses, which from time to time may include information technology, human resources, sales and marketing, raw material supply, supply chain, health, safety and environmental, engineering, research and development, facility services, legal,

**Table of Contents**

**Index to Financial Statements**

accounting, treasury, internal audit and tax services. Accordingly, Millennium and Equistar depend to a significant degree on Lyondell for the administration of their businesses. If Lyondell did not fulfill its obligations under the shared services arrangement, it would disrupt Millennium's and Equistar's businesses and could have a material adverse effect on their businesses and results of operations. In addition, Equistar has product supply agreements with Lyondell and Millennium and various other related parties pursuant to which Equistar sells a substantial amount of its products. Equistar expects to continue to derive a significant portion of its business from transactions with these parties. If they are unable or otherwise cease to purchase Equistar's products, Equistar's revenues and margins and, therefore, Millennium's cash flow could be adversely affected.

*Millennium pursues acquisitions, dispositions and joint ventures, which may not yield the expected benefits.*

Millennium may purchase or sell assets or enter into contractual arrangements or joint ventures in an effort to generate value. To the extent permitted under Millennium's credit facility and other debt agreements, some of these transactions may be financed with additional borrowings by Millennium or its joint ventures. Although these transactions may be expected to yield longer-term benefits if the expected efficiencies and synergies of the transactions are realized, they could reduce the operating results of Millennium or its joint ventures in the short term because of the costs associated with such transactions or the benefits of a transaction may not be realized to the extent anticipated. Other transactions may advance future cash flows from some of Millennium's or its joint ventures' businesses, thereby yielding increased short-term liquidity, but consequently resulting in lower cash flows from these operations over the longer term.

**Risks Relating to Debt**

*Millennium's consolidated balance sheet is highly leveraged and Millennium's business and future prospects may be limited by its significant amount of debt and other financial obligations.*

Millennium's consolidated balance sheet is highly leveraged. Millennium's total consolidated debt was approximately \$1.1 billion at December 31, 2005, which is substantially all of its capitalization. In addition, Millennium has contractual commitments and ongoing pension and post-retirement benefit obligations described in Contractual and Other Obligations under Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations that will require cash contributions in 2006 and beyond.

Millennium's level of debt and other obligations could have significant adverse consequences on its business and future prospects, including the following:

Millennium may not be able to obtain financing in the future for working capital, capital expenditures, acquisitions, debt service requirements or other purposes;

less leveraged competitors could have a competitive advantage because they have greater flexibility to utilize their cash flow to improve their operations; and

## Edgar Filing: MILLENNIUM CHEMICALS INC - Form 10-K

in the event of poor business conditions, Millennium may be less able to take advantage of significant business opportunities and to react to changes in market or industry conditions than its competitors.

See the "Liquidity and Capital Resources" section in "Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations" for discussion regarding Millennium's ability to pay or refinance its debt.

*Millennium and Equistar each require a significant amount of cash to service their indebtedness, and the ability of each of them to generate cash depends on many factors beyond their control.*

Due to debt covenant limitations on transferring cash between the entities discussed below in this "Item 1A. Risk Factors," the ability of each of Millennium and Equistar to make payments on and to refinance its respective

---

**Table of Contents****Index to Financial Statements**

indebtedness may depend solely upon its individual ability to generate cash. Each of Millennium and Equistar is separately responsible for its respective outstanding debt (except that \$300 million of Equistar's debt is guaranteed by Lyondell). The businesses of each of Millennium and Equistar may not generate sufficient cash flow from operations to meet their respective debt service obligations, future borrowings may not be available under current or future credit facilities of each entity in an amount sufficient to enable each of them to pay their respective indebtedness at or before maturity, and each entity may not be able to refinance its respective indebtedness on reasonable terms, if at all. Factors beyond the control of Millennium and Equistar affect the ability of each of them to make these payments and refinancings. These factors include those discussed elsewhere in this Item 1A. Risk Factors section and those listed in the Forward-Looking Statements section of this Annual Report on Form 10-K.

Further, the ability of Millennium and Equistar to fund capital expenditures and working capital depends on the ability of each entity to generate cash and depends on the availability of funds under lines of credit and other liquidity facilities. If, in the future, sufficient cash is not generated from their respective operations to meet their respective debt service obligations and sufficient funds are not available under lines of credit or other liquidity facilities, Millennium and Equistar each may need to reduce or delay non-essential expenditures, such as capital expenditures and research and development efforts. In addition, Millennium and Equistar may need to refinance debt, obtain additional financing or sell assets, which they may not be able to do on reasonable terms, if at all.

***Debt and other agreements restrict Millennium's and Equistar's ability to take certain actions and require the maintenance of certain financial ratios; failure to comply with these requirements could result in acceleration of debt.***

**Millennium's Debt** Millennium has a U.S. and an Australian revolving credit facility, an Australian term loan facility and a U.K. revolving credit facility. Millennium's facilities and its indentures contain covenants that, subject to exceptions, restrict, among other things, distributions, debt incurrence, lien incurrence, investments, sale and leaseback transactions, certain other payments, sales of assets, affiliate transactions, mergers, domestic accounts receivable securitization transactions, restrictive agreements and issuances of redeemable stock and preferred stock. Pursuant to these provisions, Millennium is prohibited from making restricted payments, including paying certain dividends. Other than the U.K. facility, Millennium's facilities also contain covenants that require the maintenance of specified financial ratios: (1) the Leverage Ratio (as defined) is required to be less than 4.50 to 1 and (2) the Interest Coverage Ratio (as defined) for any period of four consecutive fiscal quarters is required to be equal to or greater than (a) 1.75 to 1 for any such period ending before September 30, 2006, and (b) 2.25 to 1 for any such period ending on or after September 30, 2006. Millennium's U.K. facility does not require the maintenance of specified financial ratios as long as certain conditions are met.

**Equistar's Debt and Accounts Receivable Facility** Equistar has an inventory-based revolving credit facility and an accounts receivable sales facility. Both of these facilities and Equistar's indentures contain covenants that, subject to exceptions, restrict, among other things, lien incurrence, debt incurrence, sales of assets, investments, capital expenditures, certain other payments, affiliate transactions, restrictive agreements and mergers. Equistar's credit facility does not require the maintenance of specified financial ratios as long as certain conditions are met. Some of Equistar's indentures require additional interest payments to note holders if Equistar makes distributions when Equistar's Fixed Charge Coverage Ratio (as defined) is less than 1.75 to 1. Equistar met this ratio as of December 31, 2005.

**Effects of a Breach** A breach by Millennium or Equistar of any of the covenants or other requirements in their respective debt instruments could (1) permit their respective note holders or lenders to declare the outstanding debt under the breached debt instrument due and payable, (2) permit the lenders under their respective credit facilities to terminate future lending commitments and (3) permit acceleration of the breaching entity's other debt instruments that contain cross-default or cross-acceleration provisions. The respective debt agreements of Millennium and Equistar contain various event of default and cross-default provisions. In particular, certain of the debt agreements include event of default provisions that, under certain circumstances,



---

**Table of Contents**

**Index to Financial Statements**

may be triggered in connection with judgments against the relevant entity unless discharged, stayed or bonded within a specified time period. It is not likely that Millennium or Equistar, as the case may be, would have, or be able to obtain, sufficient funds to make these accelerated payments. In that event, the breaching entity's lenders could proceed against any assets that secure their debt. Similarly, the breach by Equistar of covenants in its accounts receivable sales facility would permit the counterparties under their respective facilities to terminate further purchases of interests in accounts receivable and to receive all collections from previously sold interests until they had collected on their interests in those receivables, thus reducing Equistar's or Millennium's liquidity, respectively.

***Debt covenants limit transfers of cash between Lyondell, Millennium and Equistar.***

Although Equistar and Millennium are wholly owned subsidiaries of Lyondell, debt covenants limit the ability to transfer cash among Lyondell, Equistar and Millennium. For example, Lyondell's indentures contain a covenant that prohibits it from making investments in subsidiaries and joint ventures that are not restricted subsidiaries as defined in the indentures, subject to limited exceptions. Neither Millennium nor Equistar currently is a restricted subsidiary. Lyondell's credit facility also contains a covenant that places limitations on its ability to make investments in joint ventures. Millennium's flexibility to make investments in Equistar also is limited by its debt covenants. As a result, Lyondell's cash flow may not be available to fund cash needs of Millennium, and the cash flow of Lyondell and Millennium may not be available to fund cash needs of Equistar, such as servicing debt or paying capital expenditures.

Some of Equistar's indentures require additional interest payments to the note holders if Equistar makes distributions when Equistar does not meet a specified fixed charge coverage ratio. Equistar met this ratio as of December 31, 2005. In addition, Equistar's credit facility prohibits the payment of distributions during any default under the facility. These provisions may deter or limit the movement of cash from Equistar to Lyondell and Millennium.

Applicable laws may also limit the amounts Equistar is permitted to pay as distributions to Lyondell and Millennium. The ability of Equistar to distribute cash to Lyondell and Millennium, and the ability of Lyondell to make cash investments in Millennium, also is dependent upon their economic performance, which is dependent on a variety of factors, including factors described elsewhere in this Item 1A. Risks Factors section.

**FORWARD-LOOKING STATEMENTS**

Certain of the statements contained in this report are forward-looking statements within the meaning of the federal securities laws. Forward-looking statements can be identified by words such as estimate, believe, expect, anticipate, plan, budget or other words that convey uncertainty of future events or outcomes. Many of these forward-looking statements have been based on expectations and assumptions about future events that may prove to be inaccurate. While management considers these expectations and assumptions to be reasonable, they are inherently subject to significant business, economic, competitive, regulatory and other risks, contingencies and uncertainties, most of which are difficult to predict and many of which are beyond Millennium's control. Millennium's or its joint ventures' actual results could differ materially from those anticipated in these forward-looking statements as a result of certain factors, including but not limited to:

the availability, cost and price volatility of raw materials and utilities,



## Edgar Filing: MILLENNIUM CHEMICALS INC - Form 10-K

the supply/demand balances for Millennium's and its joint ventures' products, and the related effects of industry production capacities and operating rates,

the cyclical nature of the chemical industry,

operating interruptions (including leaks, explosions, fires, weather-related incidents, mechanical failure, unscheduled downtime, supplier disruptions, labor difficulties, transportation interruptions, spills and releases and other environmental risks),

**Table of Contents**

**Index to Financial Statements**

uncertainties associated with the U.S. and worldwide economies, including those due to political tensions in the Middle East and elsewhere,

current and potential governmental regulatory actions in the U.S. and in other countries,

terrorist acts and international political unrest,

competitive products and pricing pressures,

risks of doing business outside the U.S., including foreign currency fluctuations,

legal, tax and environmental proceedings,

access to capital markets,

technological developments, and

Millennium's ability to implement its business strategies.

Any of these factors, or a combination of these factors, could materially affect Millennium's or its joint ventures' future results of operations and the ultimate accuracy of the forward-looking statements. These forward-looking statements are not guarantees of Millennium's or its joint ventures' future performance, and Millennium's or its joint ventures' actual results and future developments may differ materially from those projected in the forward-looking statements. Management cautions against putting undue reliance on forward-looking statements or projecting any future results based on such statements or present or prior earnings levels.

All forward-looking statements in this Form 10-K are qualified in their entirety by the cautionary statements contained in this section and elsewhere in this report. See Item 1. Business, Item 1A. Risk Factors, Item 3. Legal Proceedings, Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations and Item 7A. Disclosure of Market Risk for additional information about factors that may affect the businesses and operating results of Millennium and its joint ventures. These factors are not necessarily all of the important factors that could affect Millennium and its joint ventures. Use caution and common sense when considering these forward-looking statements. Millennium does not intend to update these statements unless securities laws require it to do so.

In addition, this report contains summaries of contracts and other documents. These summaries may not contain all of the information that is important to an investor, and reference is made to the actual contract or document for a more complete understanding of the contract or document involved.

**INDUSTRY AND OTHER INFORMATION**

The data included or incorporated by reference in this report regarding the chemical industry, product capacity and ranking, including Millennium's and Equistar's respective capacity positions, the capacity positions of their competitors for certain products and expected rates of demand, is based on independent industry publications, reports from government agencies or other published industry sources and estimates of Millennium and/or Equistar. These estimates are based on information obtained from Millennium's and/or Equistar's customers, distributors, suppliers, trade and business organizations and other contacts in the markets in which Millennium and Equistar operate and managements knowledge and experience. These estimates involve risks and uncertainties and are subject to change based on various factors, including those discussed under Item 1A. Risk Factors and Forward-Looking Statements.

#### **NON-GAAP FINANCIAL MEASURES**

The body of generally accepted accounting principles is commonly referred to as GAAP. For this purpose, a non-GAAP financial measure is generally defined by the Securities and Exchange Commission as one that purports to measure historical or future financial performance, financial position or cash flows but excludes or

**Table of Contents****Index to Financial Statements**

includes amounts that would not be so adjusted in the most comparable U.S. GAAP measure. From time to time Millennium discloses so-called non-GAAP financial measures, primarily EBITDA, or earnings before interest, taxes, depreciation and amortization of long-lived assets. The non-GAAP financial measures described herein or in other documents issued by Millennium are not a substitute for the GAAP measures of earnings, for which management has responsibility.

Millennium sometimes uses EBITDA in its communications with investors, financial analysts and the public. This is because EBITDA is perceived as a useful and comparable measure of operating performance and the contribution of operations to liquidity. For example, interest expense is dependent on the capital structure and credit rating of a company. However, debt levels, credit ratings and, therefore, the impact of interest expense on earnings vary in significance between companies. Similarly, the tax positions of individual companies can vary because of their differing abilities to take advantage of tax benefits, with the result that their effective tax rates and tax expense can vary considerably. Finally, companies differ in the age and method of acquisition of productive assets, and thus the relative costs of those assets, as well as in the depreciation (straight-line, accelerated, units of production) method, which can result in considerable variability in depreciation and amortization expense between companies. Thus, for comparison purposes, management believes that EBITDA can be useful as an objective and comparable measure of operating profitability and the contribution of operations to liquidity because it excludes these elements of earnings that do not provide information about the current operations of existing assets. Accordingly, management believes that disclosure of EBITDA can provide useful information to investors, financial analysts and the public in their evaluation of companies' operating performance and the contribution of operations to liquidity.

Millennium also sometimes reports adjusted net income (loss) or adjusted EBITDA, excluding specified items that are unusual in nature or are not comparable from period to period and that are included in GAAP measures of earnings. Management believes that excluding these items may help investors compare operating performance between two periods. Such adjusted data is always reported with an explanation of the items that are excluded.

**Item 2. Properties****Principal Manufacturing Facilities and Mine**

The principal manufacturing facilities and mine are set forth below, and are identified by the principal segment or segments using the facility or mine. The facilities producing fragrance and flavors chemicals also are identified below. The facilities and mine are wholly owned, except as otherwise noted below.

**Location*****Inorganic Chemicals Segment***

Ashtabula, Ohio (a) \*  
 Baltimore, Maryland (Hawkins Point)  
 Baltimore, Maryland (St. Helena)  
 Bunbury, Western Australia (b)\*  
 Le Havre, France (c)  
 Mataraca, Paraiba, Brazil (mine) (d)\*

**Principal Products**

TiO<sub>2</sub> and TiCl<sub>4</sub>  
 TiO<sub>2</sub>  
 Silica gel  
 TiO<sub>2</sub>  
 TiO<sub>2</sub>  
 Ilmenite (generally consumed in the Salvador TiO<sub>2</sub> plant), zircon and natural rutile titanium ore

Edgar Filing: MILLENNIUM CHEMICALS INC - Form 10-K

Salvador, Bahia, Brazil (d)  
Stallingborough, United Kingdom \*  
Thann, France

TiO<sub>2</sub>  
TiO<sub>2</sub>  
TiO<sub>2</sub>, TiCl<sub>4</sub> and ultra-fine TiO<sub>2</sub>

***Ethylene, Co-Products and Derivatives Segment***

Bayport (Pasadena), Texas  
Bayport (Pasadena), Texas (e)  
Beaumont, Texas (f)

EO, EG and other EO Derivatives  
LDPE  
EG

**Table of Contents****Index to Financial Statements**

<b><u>Location</u></b>	<b><u>Principal Products</u></b>
Channelview, Texas (g)	Ethylene, Propylene, Butadiene, Benzene, Toluene, Alkylate and MTBE
Chocolate Bayou, Texas (h)(c)	Ethylene, Propylene, Butadiene, Benzene, Toluene and MTBE
Chocolate Bayou, Texas (h)	HDPE
Clinton, Iowa	Ethylene, Propylene, LDPE and HDPE
Corpus Christi, Texas	Ethylene, Propylene, Butadiene and Benzene
Fairport Harbor, Ohio (i)	Performance polymers
Lake Charles, Louisiana (j)	Ethylene and Propylene
La Porte, Texas	Ethylene, Propylene, LDPE and LLDPE
La Porte, Texas	VAM and Acetic Acid
La Porte, Texas (k)	Methanol
Matagorda, Texas	HDPE
Morris, Illinois	Ethylene, Propylene, LDPE, LLDPE and Polypropylene
Newark, New Jersey	Denatured Alcohol
Tuscola, Illinois	Ethanol
Victoria, Texas (c)	HDPE
<b><i>Other Chemicals</i></b>	
Brunswick, Georgia	Fragrance and Flavor Chemicals
Jacksonville, Florida	Fragrance and Flavor Chemicals

Facilities which received the OSHA Star Certification, which is the highest safety designation issued by the U.S. Department of Labor.

- \* Facilities which received ISO 14001 Certification of their environmental management systems.
- (a) There are two manufacturing plants at Ashtabula, Ohio.
- (b) The Bunbury site includes the Kemerton plant and the Australind plant. The plants are not on contiguous property.
- (c) The facility is located on leased land.
- (d) Unrelated equity investors hold a minority ownership interest in Millennium's Brazilian subsidiary that owns the facility.
- (e) The facility is located on leased land. The facility is owned by Equistar and operated by an unrelated party.
- (f) The Beaumont facility is owned by PD Glycol, a partnership owned 50% by Equistar and 50% by an unrelated party.
- (g) The Channelview facility has two ethylene processing units owned by Equistar. An unrelated party owns an idled facility at the site on land leased from Equistar. Equistar also operates a styrene maleic anhydride unit and a polybutadiene unit, which are owned by an unrelated party and are located on property leased from Equistar within the Channelview facility.
- (h) Millennium and Occidental each contributed to Equistar a facility located at the Chocolate Bayou site. These facilities are not on contiguous property.
- (i) The building and land are leased.
- (j) The Lake Charles facility has been idled since the first quarter of 2001, pending sustained improvement in market conditions. The facility and land are leased from Occidental under a lease that expires in May 2006. If the Lake Charles lease terminates, Occidental will either (1) allow Lyondell or, at Lyondell's election, Equistar to acquire, operate or receive the benefit of operating the Lake Charles facility, (2) pay Lyondell \$75 million in cash or (3) transfer or pay to Lyondell 5.4 million shares of Lyondell common stock or the sale proceeds from 5.4 million shares of Lyondell common stock or a combination of both if the value is greater than \$75 million. The parties are investigating alternatives to the facility and land.
- (k) The facility is owned by La Porte Methanol Company, a partnership owned 15% by an unrelated party.

## **Table of Contents**

### **Index to Financial Statements**

#### **Other Locations and Properties**

**Millennium** Millennium leases warehouses, offices and its research facility in Maryland. Lyondell provides office space to Millennium in Greenville, Delaware as part of a shared services arrangement. Millennium also has barge docking facilities and related equipment for loading and unloading raw materials and products. Millennium owns or leases railcars for use in its businesses.

**Equistar** Equistar owns storage capacity for up to approximately 13 million barrels of NGLs, ethylene, propylene and other hydrocarbons in caverns within a salt dome in Mont Belvieu, Texas. There are an additional approximately three million barrels of ethylene and propylene storage with related brine facilities operated by Equistar on leased property in Markham, Texas.

Equistar uses an extensive pipeline system, some of which it owns and some of which it leases, extending from Corpus Christi to Mont Belvieu to Port Arthur and around the Lake Charles area. Equistar owns other pipelines in connection with its Chocolate Bayou, Corpus Christi, La Porte, Matagorda and Victoria facilities. Equistar uses a pipeline owned and operated by an unaffiliated party to transport ethylene from its Morris facility to its Tuscola facility. Equistar owns and leases several pipelines connecting the Channelview facility, the LCR refinery and the Mont Belvieu storage facility, which are used to transport raw materials, butylenes, hydrogen, butane, MTBE and unfinished gasolines. Equistar also has barge docking facilities and related terminal equipment for loading and unloading raw materials and products. Equistar owns or leases railcars for use in its businesses.

Lyondell provides office space to Equistar for its executive offices in downtown Houston, Texas as part of a shared services arrangement. In addition, Equistar owns facilities that house its research operations. Equistar also leases various sales facilities and storage facilities, primarily in the Gulf Coast area, for the handling of products.

#### **Item 3. *Legal Proceedings***

##### **Litigation Matters**

Millennium and its joint ventures are, from time to time, defendants in lawsuits, some of which are not covered by insurance. Many of these suits make no specific claim for relief. Although final determination of legal liability and the resulting financial impact with respect to any such litigation cannot be ascertained with any degree of certainty, Millennium does not believe that any ultimate uninsured liability resulting from the legal proceedings in which it or its joint ventures currently are involved (directly or indirectly) will individually, or in the aggregate, have a material adverse effect on the business or financial position of Millennium. However, the adverse resolution in any reporting period of one or more of these suits could have a material impact on Millennium's results of operations for that period, which may be mitigated by contribution or indemnification obligations of co-defendants or others, or by any insurance coverage that may be available.

Although Millennium and its joint ventures are involved in numerous and varied legal proceedings, a significant portion of their outstanding litigation arose in five contexts: (1) claims for personal injury or death allegedly arising out of exposure to the products produced by or located on the premises of the respective entities; (2) claims for personal injury or death, and/or property damage allegedly arising out of the generation and disposal of chemical wastes at Superfund and other waste disposal sites; (3) claims for personal injury, property damage and/or air, noise

## Edgar Filing: MILLENNIUM CHEMICALS INC - Form 10-K

and water pollution allegedly arising out of operations; (4) employment and benefits related claims; and (5) commercial disputes.

Millennium has received requests from the staff of the Northeast Regional Office of the Securities and Exchange Commission for the voluntary production of documents in connection with an informal inquiry into the previously disclosed restatement of Millennium's financial statements for the years 1998 through 2002 and for the first quarter of 2003. Millennium is complying with all such requests received.



---

**Table of Contents**

**Index to Financial Statements**

Together with alleged past manufacturers of lead-based paint and lead pigments for use in paint, Millennium has been named as a defendant in various legal proceedings alleging personal injury, property damage, and remediation costs allegedly associated with the use of these products. The plaintiffs include individuals and governmental entities, and seek recovery under a variety of theories, including negligence, failure to warn, breach of warranty, conspiracy, market share liability, fraud, misrepresentation and nuisance. The majority of these legal proceedings assert unspecified monetary damages in excess of the statutory minimum and, in certain cases, equitable relief such as abatement of lead-based paint in buildings. Legal proceedings relating to lead pigment or paint are in various trial stages and post-dismissal settings, some of which are on appeal.

Millennium's defense costs to date for lead-based paint and lead pigment litigation largely have been covered by insurance. Millennium has not accrued any liabilities for any lead-based paint and lead pigment litigation. Millennium has insurance policies that potentially provide approximately \$1 billion in indemnity coverage for lead-based paint and lead pigment litigation. Millennium's ability to collect under the indemnity coverage would depend upon, among other things, the resolution of certain potential coverage defenses that the insurers are likely to assert and the solvency of the various insurance carriers that are part of the coverage block at the time of such a request. As a result of insurance coverage litigation initiated by Millennium, an Ohio trial court issued a decision in 2002 effectively requiring certain insurance carriers to resume paying defense costs in the lead-based paint and lead pigment cases. Indemnity coverage was not at issue in the Ohio court's decision. On February 23, 2006, certain Lloyd's, London insurance underwriters filed a declaratory judgment action in the Supreme Court of the State of New York against several of their policyholders, including Millennium, contesting their responsibility to provide insurance coverage for all of the lead-based paint and lead pigment cases, including the Rhode Island case discussed below. In response to this New York action, on March 7, 2006, Millennium filed an amended complaint in the Ohio case referenced above that revived its Ohio state court litigation, seeking, among other relief, a declaratory judgment as to the responsibility of all of its insurance carriers for any judgments or settlements in connection with any lead-based paint and lead pigment litigation involving Millennium. In addition, on March 14, 2006, Millennium filed a motion to dismiss the New York case referenced above in favor of the pre-existing Ohio action. The insurance carriers have in the past and may in the future attempt to deny indemnity coverage if there is ever a settlement or a final, non-appealable adverse judgment in any lead-based paint or lead pigment case.

After owning the Glidden Paints business for six months, in 1986, a predecessor of a current subsidiary of Millennium sold, through a stock sale, its Glidden Paints business. As part of that sale, the seller and purchaser agreed to provide indemnification to each other against certain claims made during the first eight years after the sale, and the purchaser agreed to fully indemnify the seller against such claims made after the eight-year period. With the exception of two cases described below, all pending lead-based paint and lead pigment litigation involving Millennium, including the Rhode Island case, was filed after the eight-year period. Accordingly, Millennium believes that it is entitled to full indemnification from the purchaser against lead-based paint and lead pigment cases filed after the eight-year period. The purchaser disputes that it has such an indemnification obligation, and claims that the seller must indemnify it. To date, Millennium's defense costs largely have been covered by insurance. As Millennium has not paid either a settlement or any judgment, its indemnification claims have not been finally resolved. The only two remaining cases originally filed within the eight-year period following the 1986 sale of the Glidden Paints business include as parties a current Millennium subsidiary and an alleged predecessor company. In the first of these two cases, *The City of New York et al. v. Lead Industries Association, Inc., et al.*, which commenced in the Supreme Court of the State of New York on June 8, 1989, the New York City Housing Authority brought an action relating to tens of thousands of public housing units. All claims in that case have been dropped except for those relating to two housing projects. The other remaining case, *Jackson, et al. v. The Glidden Co., et al.*, which commenced in the Court of Common Pleas, Cuyahoga County, Ohio, on August 12, 1992, includes two minors as plaintiffs, and was dismissed by summary judgment on January 20, 2006.

Millennium believes that it has valid defenses to all pending lead-based paint and lead pigment proceedings and is vigorously defending them. However, litigation is inherently subject to many uncertainties. Additional

---

**Table of Contents**

**Index to Financial Statements**

lead-based paint and lead pigment litigation may be filed against Millennium in the future asserting similar or different legal theories and seeking similar or different types of damages and relief, and any adverse court rulings or determinations of liability, among other factors, could affect the litigation by encouraging an increase in the number of future claims and proceedings. In addition, from time to time, legislation and administrative regulations have been enacted or proposed to impose obligations on present and former manufacturers of lead-based paint and lead pigment respecting asserted health concerns associated with such products or to overturn successful court decisions. Millennium is unable to predict the outcome of lead-based paint and lead pigment litigation, the number or nature of possible future claims and proceedings, or the effect that any legislation and/or administrative regulations may have on Millennium. In addition, management cannot reasonably estimate the scope or amount of the costs and potential liabilities related to such litigation, or any such legislation and regulations. Accordingly, Millennium has not accrued any amounts for such litigation.

Legal proceedings related to lead-based paint and lead pigments are described below in groups pursuant to their general procedural posture:

On October 29, 2002, after a trial in which the jury deadlocked, the court in *State of Rhode Island v. Lead Industries Association, Inc., et al.* (which commenced in the Superior Court of Providence, Rhode Island, on October 13, 1999) declared a mistrial. The sole issue before the jury was whether lead pigment in paint in and on public and private Rhode Island buildings constituted a public nuisance. The new trial in this case began on November 1, 2005. On February 22, 2006, a jury returned a verdict in favor of the State of Rhode Island finding that the cumulative presence of lead pigments in paints and coatings on buildings in the state constitutes a public nuisance; that a Millennium subsidiary and other defendants either caused or substantially contributed to the creation of the public nuisance; and that those defendants, including the Millennium subsidiary, should be ordered to abate the public nuisance. On February 28, 2006, the judge held that the state could not proceed with its claim for punitive damages. As a result, the jury was discharged. There will be further proceedings by the judge to determine the scope of any abatement. Millennium is considering its options, including all appropriate appeals.

*Pre-Trial Cases*

Pending legal proceedings relating to lead pigment or paint in various pre-trial stages are as follows: *The City of New York et al. v. Lead Industries Association, Inc., et al.*, commenced in the Supreme Court of the State of New York on June 8, 1989; *Mark Ludwigsen Walters v. NL Industries, Inc., et al.*, commenced on July 18, 2002, in the Supreme Court, County of Kings, New York; *McCloud v. Millennium Inorganic Chemicals Inc.*, commenced in the Circuit Court for St. Louis City, Missouri, on August 27, 2005; *Angel T. Evans, et al. v. Atlantic Richfield Company, et al.*, commenced in the Milwaukee County, Wisconsin, Circuit Court on October 19, 2005; *Hurkmans v. Salczenko, et al.*, commenced in Marinette County, Wisconsin Circuit Court on November 23, 2005; *Hardison v. Millennium Holdings LLC, et al.*, commenced in the Milwaukee County, Wisconsin, Circuit Court on January 17, 2006; *Roy Lee Merrick v. Phillips Building Supply of Laurel, et al.*, commenced in the Circuit Court of Jones County, Mississippi on January 14, 2002. Although the claims of co-plaintiffs were dismissed without prejudice, Merrick's claims were transferred to the Circuit Court of Claiborne County, Mississippi in January 2005; and *Sifuentes v. Millennium Holdings LLC, et al.*, commenced in the Circuit Court for Milwaukee County on January 10, 2006.

*Dismissed Cases*

Legal proceedings relating to lead pigment or paint which have been dismissed are as follows: *Will T. Turner v. Sherwin-Williams Company, et al.*, commenced in the Circuit Court of Jefferson County, Mississippi on December 30, 2002, and was dismissed without prejudice on March 16, 2005. *William Russell, et al. v. NL Industries, et al.*, commenced in the Circuit Court of LeFlore County, Mississippi on December 30, 2002, and was dismissed by summary judgment on May 6, 2005. *John Henry Sweeney v. The Sherwin Williams Co., et al.*, commenced in the Circuit Court of Hinds County, Mississippi on December 30, 2002, and was dismissed without



---

**Table of Contents**

**Index to Financial Statements**

prejudice on June 30, 2005. *Herman Frederick Jackson, Billye Raye Ishee, Gaiey Ducksworth, Jr. and Roy Lee Merrick v. Phillips Building Supply of Laurel, et al.*, commenced in the Circuit Court of Jones County, Mississippi on January 14, 2002. Claims of all plaintiffs except Roy Lee Merrick were dismissed without prejudice. Merrick's claims were transferred to the Circuit Court of Claiborne County, Mississippi in January 2005. *City of Chicago v. American Cyanamid Company, et al.*, commenced on September 5, 2002, in the Circuit Court, Cook County, Illinois and the court entered summary judgment on behalf of all defendants. Plaintiffs filed a notice of appeal, and on May 25, 2005, the Illinois Supreme Court denied the City of Chicago's petition for leave to appeal.

On June 24, 2004, the Texas Court of Appeals affirmed the trial court's order granting the defense motion for summary judgment in *Spring Branch Independent School District v. NL Industries, Inc.* Millennium has received plaintiffs' notices of non-suit for the following cases which had been held in abeyance pending resolution of the *Spring Branch Independent School District* appeal: *Houston Independent School District v. Lead Industries Association, et al.*, commenced in the District Court of Harris County, Texas, on June 30, 2000 and notice of non-suit received in March 2005; *Harris County v. Lead Industries Association, et al.*, commenced in the District Court of Harris County, Texas, on April 23, 2001 and notice of non-suit received in May 2005; *Liberty Independent School District v. Lead Industries Association, et al.*, commenced in the District Court of Liberty County, Texas, on January 22, 2002 and notice of non-suit received in July 2005; and *Brownsville Independent School District v. Lead Industries Association, Inc., et al.*, filed on May 28, 2002, in the District Court, Cameron County, Texas and notice of non-suit filed on November 1, 2005.

*Dismissed Cases But Pending Appeal*

Legal proceedings relating to lead pigment or paint dismissed after motions to dismiss or for summary judgment were granted by the court in favor of the defendants, but pending appeal are as follows: On February 7, 2005, the Circuit Court, Cook County, Illinois granted the defendants motion for summary judgment in *Mary Lewis, Tashwan Banks and Jacqueline Nye v. Lead Industries Association, Inc., et al.*, which case was filed on March 14, 2002. On March 11, 2005, the plaintiffs filed a motion for reconsideration of the order granting summary judgment to the defendants and, on March 15, 2005, the plaintiffs served a motion for leave to file a third amended complaint. On March 18, 2005, both motions were denied. On March 23, 2005, the plaintiffs filed a notice of appeal, which was argued before the Illinois Appellate Court on January 11, 2006. On February 1, 2006, the Illinois Court of Appeals reversed the trial court's decision and remanded the case to the trial court for further proceedings. On February 21, 2006, defendants filed a joint affidavit of intent to petition for leave to appeal. In *The County of Santa Clara, a political subdivision of the State of California, individually and on behalf of all those similarly situated v. Atlantic Richfield et al.*, commenced in the Santa Clara County, California, Superior Court on March 23, 2000, the court entered summary judgment on behalf of all defendants, and plaintiffs filed an appeal. Plaintiffs' appeal was argued before the California Court of Appeals on December 6, 2005. On March 3, 2006, the California Court of Appeals reversed portions of the Superior Court's decision and reinstated the plaintiffs' claims alleging public nuisance, strict liability, negligence and fraud. The Court of Appeals affirmed the dismissal of plaintiffs' claims for unfair business practices and the denial of plaintiffs' motion to amend the complaint to include a trespass claim. *City of St. Louis v. Lead Industries Association, Inc., et al.*, commenced in the St. Louis, Missouri, Circuit Court on January 25, 2000, and was dismissed by summary judgment on January 18, 2006. The City filed a notice of appeal on January 24, 2006. *Jackson, et al. v. The Glidden Co., et al.*, commenced in the Court of Common Pleas, Cuyahoga County, Ohio, on August 12, 1992, and was dismissed by summary judgment on January 20, 2006. Plaintiffs have filed a notice of appeal.

*Other Pending Cases*

Other pending legal proceedings relating to lead pigment or paint are as follow: *Steven Thomas, et al. v. Lead Industries Association, Inc., et al.*, commenced in the Milwaukee County, Wisconsin, Circuit Court on September 10, 1999. On July 15, 2005, the Wisconsin Supreme Court in *Steven Thomas, et al.* reversed the trial



---

**Table of Contents**

**Index to Financial Statements**

and appellate courts and ruled that the plaintiff could proceed against the defendants on a risk-contribution theory. The court affirmed the lower courts' decisions dismissing the plaintiff's claims of civil conspiracy and enterprise liability. *In Re Lead Paint Litigation* was consolidated on February 11, 2002, in the Superior Court of New Jersey, Law Division: Middlesex County, Case Code 702. On August 17, 2005, the Superior Court of New Jersey, Appellate Division upheld the lower court's dismissal of plaintiffs' claims except for the public nuisance claim. On September 16, 2005, Millennium and the other defendants filed a joint petition to the New Jersey Supreme Court seeking review of the Appellate Division's decision regarding the public nuisance claim, and the petition was granted on November 18, 2005.

*Reginald Smith, et al. v. Lead Industries Association, Inc., et al.*, commenced in the Baltimore City, Maryland, Circuit Court on September 29, 1999, and on April 4, 2005, the Maryland Court of Appeals dismissed the plaintiffs' appeal. The *Reginald Smith* case was remanded to the lower court for further proceedings. On February 6, 2006, the Circuit Court granted the Smith family plaintiffs' motion to sever their claims, severed the claims against bankrupt defendants, and issued a stay as to the remaining plaintiffs' claims against defendants.

*Cases Not Formally Served On Millennium*

Legal proceedings relating to lead pigment or paint that have been filed with a court, are pending, but have yet to be formally served on Millennium or alleged predecessor companies, are as follows: *Hall, et al. v. Lead Industries Association, et al.*, commenced in the Baltimore City, Maryland, Circuit Court on June 19, 2000; *Hart, et al. v. Lead Industries Association, et al.*, commenced in the Baltimore City, Maryland, Circuit Court on June 26, 2000; *Johnson, et al. v. Clinton, et al.*, commenced in the Baltimore City, Maryland, Circuit Court on October 10, 2000; *Randle, et al. v. Lead Industries Association, et al.*, commenced in the Baltimore City, Maryland, Circuit Court on August 10, 2000; *Williams, et al. v. Lead Industries Association, et al.*, commenced in the Baltimore City, Maryland, Circuit Court on July 7, 2000; *Myreona Stewart, et al. v. NL Industries, et al.*, commenced in the Circuit Court of LeFlore County, Mississippi on December 31, 2002; and *Moran v. Atlantic Richfield Co., et al.*, commenced in the San Francisco County, California, Superior Court on December 9, 2004. On January 18, 2006, the plaintiff in *Moran* filed an amended complaint, which dismissed alleged former manufacturers of lead pigment and lead paint, including Millennium.

**Environmental Matters**

From time to time Millennium and its joint ventures receive notices or inquiries from federal, state or local governmental entities of alleged violations of environmental laws and regulations pertaining to, among other things, the disposal, emission and storage of chemical and petroleum substances, including hazardous wastes. Any such alleged violations may become the subject of enforcement actions, settlement negotiations or other legal proceedings and may (individually or in the aggregate) involve monetary sanctions of \$100,000 or more (exclusive of interest and costs).

Millennium's accrued liability for future environmental remediation costs at current and former plant sites and other remediation sites totaled \$168 million as of December 31, 2005. The remediation expenditures are expected to occur over a number of years, and not to be concentrated in any single year. In the opinion of management, there is no material estimable range of reasonably possible loss in excess of the liabilities recorded for environmental remediation. However, it is possible that new information about the sites for which the accrual has been established, new technology or future developments such as involvement in investigations by regulatory agencies, could require Millennium to reassess its potential exposure related to environmental matters. The liabilities for individual sites range from less than \$1 million to \$103 million. The \$103 million liability relates to the Kalamazoo River Superfund Site. For additional information regarding environmental matters, including the liability related to the Kalamazoo River Superfund Site, see Item 1A. Risk Factors Risks Relating to the Businesses Millennium's and its joint ventures' operations and assets are subject to extensive environmental, health and safety and other laws and regulations, which could result in

Edgar Filing: MILLENNIUM CHEMICALS INC - Form 10-K

material costs or liabilities, Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations Environmental Matters and Note 19 to the Consolidated Financial Statements.

**Table of Contents**

**Index to Financial Statements**

A Millennium subsidiary has been identified as a PRP with respect to the Kalamazoo River Superfund Site. The site involves cleanup of river sediments and floodplain soils contaminated with polychlorinated biphenyls, cleanup of former paper mill operations, and cleanup and closure of landfills associated with the former paper mill operations. Litigation concerning the matter commenced in December 1987 but was subsequently stayed and is being addressed under CERCLA. Millennium's ultimate liability for the Kalamazoo River Superfund Site will depend on many factors that have not yet been determined, including the ultimate remedy selected, the determination of natural resource damages, the number and financial viability of the other PRPs, and the determination of the final allocation among the PRPs.

In November 2005, the Texas Commission on Environmental Quality ( TCEQ ) notified Millennium that it is seeking a civil penalty of \$179,520 in connection with alleged noncompliance of emissions monitoring requirements at Millennium's La Porte plant. Millennium does not believe that the ultimate resolution of this matter will have a material adverse effect on the business, financial position, liquidity or results of operations of Millennium.

In May 2003, the TCEQ notified Millennium's Equistar joint venture that it is seeking a civil penalty of \$167,000 in connection with alleged exceedances of permitted emissions at certain cooling towers at Equistar's Channelview plant. Equistar does not believe that the ultimate resolution of this matter will have a material adverse effect on the business, financial position, liquidity or results of operations of Equistar.

**Indemnification**

Millennium and its joint ventures are parties to various indemnification arrangements, including arrangements entered into in connection with acquisitions, divestitures and the formation of joint ventures. For example, Millennium entered into indemnification arrangements in connection with its demerger from Hanson plc, and Equistar and its owner companies (including Millennium) entered into indemnification arrangements in connection with the formation of Equistar. Pursuant to these arrangements, Millennium and its joint ventures provide indemnification to and/or receive indemnification from other parties in connection with liabilities that may arise in connection with the transactions and in connection with activities prior to completion of the transactions. These indemnification arrangements typically include provisions pertaining to third party claims relating to environmental and tax matters and various types of litigation. As of December 31, 2005, Millennium has not accrued any significant amounts for such indemnification obligations, other than amounts under tax sharing agreements that have been reflected in the provision for income taxes, and is not aware of other circumstances that would be likely to lead to significant future indemnification claims against Millennium. Millennium cannot determine with certainty the potential amount of future payments under the indemnification arrangements until events arise that would trigger a liability under the arrangements.

**Item 4. *Submission of Matters to a Vote of Security Holders***

Omitted pursuant to General Instruction I of Form 10-K.



**Table of Contents****Index to Financial Statements****PART II****Item 5. Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities**

Millennium does not have a class of equity securities registered pursuant to Section 12 of the Securities Exchange Act of 1934. There is no established public trading market for the common stock of Millennium. As a result of Lyondell's acquisition of Millennium, Millennium is a wholly owned subsidiary of Lyondell.

Millennium did not pay dividends on its common stock during 2004 and 2005. Millennium's credit facility and the indenture under which the 9.25% Senior Notes due June 15, 2008 were issued contain certain restrictions on Millennium's ability to pay dividends on its common stock. For a description of those restrictions, see Item 1A. Risk Factors - Risks Relating to Debt. Debt covenants limit transfers of cash between Lyondell, Millennium and Equistar, Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations - Financial Condition - Liquidity and Capital Resources and Note 14 to the Consolidated Financial Statements. Millennium is prohibited from paying any dividends under provisions of the 9.25% Senior Notes.

**Item 6. Selected Financial Data**

The following selected financial data should be read in conjunction with the Consolidated Financial Statements and the notes thereto and Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations.

Millions of dollars, except per share data	For the year ended December 31,				
	2005	2004	2003	2002	2001
<b>Results of Operations Data:</b>					
Sales and other operating revenues	\$ 1,959	\$ 1,888	\$ 1,687	\$ 1,554	\$ 1,590
Income (loss) from equity investment in Equistar	221	81	(100)	(73)	(83)
Income (loss) before cumulative effect of accounting change (a)	28	(31)	(185)	(39)	(56)
Cumulative effect of accounting change (b)			(1)	(305)	
Net income (loss)	28	(31)	(186)	(344)	(56)
Diluted earnings (loss) per share (c)			(2.91)	(5.41)	(0.88)
Dividends per share (d)			0.27	0.54	0.54
<b>Balance Sheet Data:</b>					
Total assets	2,473	2,530	2,398	2,396	2,965
Long-term debt	966	1,398	1,461	1,212	1,172
<b>Cash Flow Data:</b>					
<b>Cash provided (used) by</b>					
Operating activities	275	195	(92)	80	112
Investing activities	(60)	(41)	(48)	(64)	(78)
Financing activities	(272)	(38)	205	(4)	(22)

## Edgar Filing: MILLENNIUM CHEMICALS INC - Form 10-K

- (a) The 2004 and 2003 losses before cumulative effect of accounting change include after-tax business combination costs of \$46 million in 2004 and after-tax impairment charges of \$101 million in 2003. The 2003 charges were the result of the write down of property, plant and equipment at Millennium's Le Havre, France TiO<sub>2</sub> facility.
- (b) Cumulative effect of accounting change in 2003 reflects change in accounting for asset retirement obligations, and cumulative effect of accounting change in 2002 reflects change in accounting for goodwill.
- (c) Basic and diluted earnings (loss) per share are the same in all years.
- (d) In July 2003, the payment of dividends on common stock was suspended.

**Table of Contents**

**Index to Financial Statements**

**Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations**

This discussion should be read in conjunction with information contained in the Consolidated Financial Statements of Millennium Chemicals Inc. (together with its consolidated subsidiaries, Millennium) and the notes thereto.

In addition to comparisons of annual operating results, Millennium has included, as additional disclosure, certain trailing quarter comparisons of fourth quarter 2005 operating results to third quarter 2005 operating results. Millennium's acetyls business and its joint ventures' businesses are highly cyclical, in addition to experiencing some seasonal effects. Trailing quarter comparisons may offer important insight into the current business direction of Millennium and its joint ventures.

References to industry benchmark prices or costs, including the weighted average cost of ethylene production, are generally to industry prices and costs reported by Chemical Marketing Associates, Incorporated (CMAI), except that crude oil and natural gas benchmark price references are to industry prices reported by Platts, a reporting service of The McGraw-Hill Companies.

**OVERVIEW**

**General** Millennium, a global manufacturer and marketer of chemicals, primarily titanium dioxide (TiO<sub>2</sub>) and acetyls, is a wholly owned subsidiary of Lyondell Chemical Company (Lyondell). Millennium was acquired by Lyondell on November 30, 2004. Millennium's principal operations are part of two Lyondell business segments: inorganic chemicals, which primarily consist of TiO<sub>2</sub>; and ethylene, co-products and derivatives (EC&D). The EC&D segment includes Millennium's acetyls business and Millennium's 29.5% interest in Equistar Chemicals, LP (together with its consolidated subsidiaries, Equistar), which is accounted for by Millennium using the equity method. Other subsidiaries of Lyondell hold the remaining interest in Equistar.

**2005 versus 2004** The TiO<sub>2</sub> market experienced weaker demand in 2005 compared to 2004. However, in 2005, the chemical industry generally experienced improved profitability compared to 2004, despite higher crude oil and natural gas prices that pushed up raw material costs for most of the year and the disruptive effects of two major U.S. Gulf Coast hurricanes.

The U.S. Gulf Coast hurricanes, Katrina and Rita, negatively affected crude oil and natural gas supplies, as well as supplies of other raw materials, contributing to the increases in raw material prices in 2005. In addition, hurricane-related disruption of rail and pipeline traffic in the Gulf Coast area negatively affected shipments of raw materials and products. Supply/demand balances and prices were affected beginning in September 2005 as most Gulf Coast refiners and producers of chemicals suspended operations in preparation for the hurricanes, with some sustaining major damage as a result of the hurricanes. Millennium's and Equistar's Gulf Coast plants experienced only minor hurricane damage; however, Millennium and Equistar suspended plant operations in preparation for Hurricane Rita, resulting in lost production and higher costs during 2005. These higher costs, including Millennium's share of costs incurred by Equistar, consisted of \$12 million of charges, representing Millennium's exposure to industry losses expected to be underwritten by industry insurance consortia and \$6 million of costs incurred in conjunction with suspending and restoring operations. Neither Millennium nor Equistar has recognized, in 2005, any benefits of expected insurance reimbursements. See Note 3 to the Consolidated Financial Statements.

## Edgar Filing: MILLENNIUM CHEMICALS INC - Form 10-K

Operating results for the inorganic chemicals segment in 2005, compared to conditions in 2004, benefited from higher sales prices. However, the benefits of the higher sales prices were substantially offset by the negative effects of weaker demand for TiO<sub>2</sub>, which resulted in lower sales volumes, and also by inventory reduction efforts, including reduced 2005 plant operating rates that lowered earnings by approximately \$20 million.

---

**Table of Contents**

**Index to Financial Statements**

The acetyls business was negatively affected in 2005 by higher raw material and energy costs, due to higher ethylene and natural gas prices, and lower sales volumes, resulting from weaker demand. These negative effects were only partly offset by the benefits of higher average product sales prices.

Additionally, Millennium's equity investment in Equistar resulted in 2005 income of \$221 million compared to 2004 income of \$81 million as Equistar's average product margins improved. The benefit of the higher average product margins was partly offset by the negative effects of hurricane-related costs and lower sales volumes.

**2004 versus 2003** During 2004, the TiO<sub>2</sub> industry experienced strong demand and reduced capacity that tightened the TiO<sub>2</sub> market. Demand increased an estimated 6% to 8% compared to 2003, resulting in worldwide industry operating rates of approximately 91%. Millennium's TiO<sub>2</sub> products benefited from higher 2004 sales prices; however, these were more than offset by higher costs and selling, general and administrative (SG&A) expenses.

The acetyls business and Equistar benefited from a cyclical turnaround in the chemical industry as a stronger global economy led to increased demand and tighter chemical industry supply/demand balances compared to 2003. In this improved business environment, acetyls generally benefited from higher product margins in 2004 compared to 2003. Millennium's equity investment in Equistar resulted in 2004 income compared to a 2003 loss as Equistar's product margins improved.

**RESULTS OF OPERATIONS**

**Revenues** Revenues of \$1,959 million for 2005 increased 4% compared to \$1,888 million in 2004 due to higher acetyls and TiO<sub>2</sub> sales prices, partly offset by lower sales volumes. Acetyls sales volumes decreased due primarily to a 17% decrease in VAM sales, while TiO<sub>2</sub> sales volumes were 7% lower.

Revenues of \$1,888 million for 2004 increased 12% compared to \$1,687 million in 2003 primarily due to higher TiO<sub>2</sub> sales volumes coupled with higher local currency sales prices and the favorable effect of translating sales denominated in stronger local currencies into U.S. dollars. Higher average 2004 acetyls sales prices were partly offset by lower sales volumes.

**Cost of Sales** Cost of sales of \$1,715 million in 2005 increased 7% compared to \$1,602 million in 2004 and 9% in 2004 compared to \$1,470 in 2003, primarily due to rising energy and raw material costs, particularly natural gas, during this three-year period. In 2005, reduced plant operating rates resulting from the inventory reduction program also affected cost of sales negatively. These effects were partly offset by the effect of lower sales volumes in 2005 compared to 2004. Higher TiO<sub>2</sub> sales volumes in 2004 compared to 2003 contributed to the increase in cost of sales in 2004.

**SG&A Expenses** SG&A expenses were \$194 million, \$164 million and \$130 million in 2005, 2004 and 2003, respectively. The 18% increase in SG&A expenses in 2005 compared to 2004 was primarily due to legal services and estimated environmental remediation costs. The 26% increase in SG&A expenses in 2004 compared to 2003 reflected a \$31 million higher accrual in 2004 for estimated environmental remediation

costs and higher costs for outside consultants and employee benefits.

**Business Combination Costs** The decrease of \$69 million in business combination costs from 2004 to 2005 was the result of Millennium incurring \$71 million of business combination costs in connection with Lyondell's November 30, 2004 acquisition of Millennium, which costs primarily consisted of change-of-control liabilities to officers and key employees of Millennium and the vesting of certain of their benefits in 2004, compared to only \$2 million in 2005.

---

**Table of Contents**

**Index to Financial Statements**

**Asset Impairments** Asset impairment charges were \$15 million in 2005, \$14 million in 2004 and \$103 million in 2003, related to Millennium's Le Havre, France TiO<sub>2</sub> manufacturing facility. At December 31, 2003, after the impairment charge, the carrying value of the property, plant and equipment at the Le Havre TiO<sub>2</sub> manufacturing facility was zero. Subsequent capital expenditures at this plant were included in operating expense as additional impairment charges. See Note 5 to the Consolidated Financial Statements.

**Reorganization and Other Costs** In July 2003, Millennium announced a program to reduce costs, including a reduction of approximately 5% in the number of Millennium employees worldwide. Millennium closed its executive offices in Red Bank, New Jersey, effective September 1, 2003, and relocated its headquarters to Baltimore, Maryland, where Millennium had existing administrative offices. Millennium recorded related charges of \$3 million and \$18 million in 2004 and 2003, respectively. In 2004, other costs, net, include a net write-off of \$6 million for assets that will not have future value as a result of a jury verdict in the first quarter 2005. See Note 7 to the Consolidated Financial Statements.

**Interest Expense** Interest expense was \$130 million in 2005, \$106 million in 2004 and \$98 million in 2003. Interest expense in 2005 includes \$29 million of interest associated with income tax issues. Interest expense was higher in 2004 compared to 2003, as a result of higher average debt levels. Millennium issued, in April 2003, an additional \$100 million principal amount of 9.25% Senior Notes and, in November 2003, \$150 million of 4% Convertible Senior Debentures.

**Other Income (Expense), net** Millennium had \$19 million of other expense, net in 2005 and other income, net of \$14 million and \$58 million in 2004 and 2003, respectively. Other expense, net in 2005 included \$10 million of debt prepayment premiums and \$9 million of charges related to other investments. Other income, net in 2004 and 2003 included \$6 million and \$55 million, respectively, related to the reversal of interest expense accruals as a result of the favorable settlement of tax issues.

**Income from Equity Investment in Equistar** Millennium's equity investment in Equistar resulted in income of \$221 million and \$81 million in 2005 and 2004, respectively, and a loss of \$100 million in 2003. See Note 8 to the Consolidated Financial Statements. Equistar's operating results are reviewed in the discussion of the EC&D segment below.

**Income Taxes** The tax provision was \$67 million and \$33 million in 2005 and 2004, respectively, and a benefit of \$11 million in 2003. The \$67 million provision in 2005 exceeded the U.S. statutory rate due primarily to a \$13 million increase in estimates of taxes for prior years and a \$16 million increase in the valuation reserve for tax assets of French subsidiaries. The \$33 million provision in 2004 exceeded the U.S. statutory rate, reflecting an increase of \$28 million in estimates of taxes for prior years and a \$20 million increase in the valuation reserve for tax assets of French subsidiaries. The \$11 million tax benefit from a pretax loss in 2003 was less than the statutory rate due to a \$56 million increase in the valuation allowance provided for net deferred tax assets of French subsidiaries and a \$19 million deferred tax provision for the planned repatriation of approximately \$100 million of earnings of Australian and European subsidiaries. In each 2004 and 2003, Millennium benefited from non-U.S. tax incentives that reduced taxes.

**Net Income** Millennium reported net income of \$28 million in 2005 and net losses of \$31 million and \$186 million in 2004 and 2003, respectively. The \$59 million improvement in 2005 compared to 2004 was primarily the result of the increase in income from Millennium's equity investment in Equistar of \$91 million after tax and a decrease in business combination costs of \$45 million after tax. These improvements were partly offset by the increases in SG&A, interest expense and other expense, net, noted above, totaling \$45 million after tax, and the after-tax effect of lower sales volumes of approximately \$30 million in 2005 compared to 2004.

## Edgar Filing: MILLENNIUM CHEMICALS INC - Form 10-K

The \$155 million improvement in 2004 compared to 2003 was primarily the result of an improvement in income from Millennium's equity investment in Equistar of \$118 million after tax and in Millennium's operations, resulting from higher sales volumes and product margins, of approximately \$45 million after tax.



**Table of Contents****Index to Financial Statements**

These improvements were partly offset by the increase in SG&A and the decrease in other income, net, noted above, totaling \$51 million after tax. In addition, 2004 included business combination costs of \$46 million after tax, while 2003 included asset impairment charges of \$67 million after tax. Additionally, the 2004 tax provision included \$48 million that was unrelated to 2004 pretax earnings, while the 2003 provision included \$75 million that was unrelated to 2003 pretax earnings.

**Fourth Quarter 2005 versus Third Quarter 2005** Millennium had a net loss of \$2 million in the fourth quarter 2005 compared to a net loss of \$72 million in the third quarter 2005. The improvement in the fourth quarter 2005 reflected an after tax increase of \$63 million in income from the equity investment in Equistar and a \$30 million after tax decrease in SG&A expenses, partly offset by additional income tax provisions of \$24 million in the fourth quarter 2005. Equistar benefited from significantly higher product margins in the fourth quarter 2005 compared to the third quarter 2005. Higher SG&A expenses in the third quarter 2005 primarily reflected higher provision for environmental remediation costs. The additional tax provision in the fourth quarter 2005 was due to changes in estimates for prior year items. Fourth quarter 2005 operating results were relatively comparable to the third quarter as higher raw material and energy costs were offset by higher product selling prices.

**Segment Analysis**

Millennium's principal operations are grouped into two business segments: inorganic chemicals; and EC&D. The EC&D segment includes Millennium's acetyls business and Millennium's 29.5% interest in Equistar, which is accounted for under the equity method. See Note 8 to the Consolidated Financial Statements. Operating income and expense not identified with the two businesses, including certain of Millennium's SG&A expenses, business combination costs, employee-related costs from predecessor businesses and costs associated with Millennium's 2003 cost reduction program are grouped under the heading, Other operating loss.

The following table reflects summarized financial information for Millennium.

<b>Millions of dollars</b>	<b>For the year ended December 31,</b>		
	<b>2005</b>	<b>2004</b>	<b>2003</b>
<b>Revenues:</b>			
Inorganic chemicals segment	\$ 1,360	\$ 1,340	\$ 1,172
EC&D segment - acetyls business	504	453	421
<b>Operating income (loss):</b>			
Inorganic chemicals segment	24	51	(53)
EC&D segment - acetyls business	45	59	26
Other operating loss	(59)	(103)	(30)
Income (loss) from equity investment in Equistar	221	81	(100)
<b>Volumes</b>			
<b>Inorganic chemicals:</b>			
TiO <sub>2</sub> (metric kilotons)	618	665	591
<b>EC&amp;D - Acetyls (volumes in millions):</b>			
Vinyl Acetate Monomer (VAM) (pounds)	712	856	857
Acetic acid (pounds)	546	520	473

Methanol (gallons)

64

57

77

***Inorganic Chemicals Segment***

**Overview** The Inorganic Chemicals ( Inorganics ) segment primarily produces  $TiO_2$ . It also produces titanium tetrachloride (  $TiCl_4$  ), titanyl sulfate (  $TiSO_4$  ), ultra-fine  $TiO_2$  and silica gel.

## Table of Contents

### Index to Financial Statements

Operating results for the Inorganics segment included pretax asset impairment charges of \$15 million in 2005, \$14 million in 2004 and \$103 million in 2003 associated primarily with the write-down of property, plant and equipment at the Le Havre, France TiO<sub>2</sub> manufacturing facility.

**Revenues** Revenues of \$1,360 million in 2005 were comparable to revenues of \$1,340 million in 2004 as higher sales prices were substantially offset by the negative effects of lower sales volumes. Average sales prices in 2005 were 9% higher compared to 2004. Sales volumes in 2005 for TiO<sub>2</sub> decreased 7% compared to 2004, reflecting weaker 2005 demand and Millennium's 2004 efforts to reduce inventory levels through a strong volume push.

Revenues of \$1,340 million in 2004 increased 14% compared to revenues of \$1,172 million in 2003, primarily due to higher sales volumes and the favorable effect of translating sales denominated in stronger foreign currencies into weaker U.S. dollars. Sales volumes in 2004 for TiO<sub>2</sub> increased 13% compared to 2003, reflecting increases in all major markets and geographic regions. Average sales prices in 2004 were comparable to 2003.

**Operating Income** The Inorganics segment had operating income of \$24 million in 2005 compared to \$51 million in 2004. The decrease in operating income reflected the negative effect of lower sales volumes of approximately \$15 million and a \$15 million provision for estimated environmental remediation costs. Product margins were relatively unchanged as higher product sales prices substantially offset the negative effects of lower sales volumes. Operating income for 2005 and 2004 included \$15 million and \$14 million, respectively, of asset impairment charges related to the Le Havre, France manufacturing facility.

The Inorganics segment had operating income of \$51 million in 2004 compared to an operating loss of \$53 million in 2003. Operating income for 2004 included \$14 million of asset impairment charges related to the Le Havre, France manufacturing facility. The operating loss in 2003 included asset impairment charges of \$103 million related primarily to the Le Havre, France manufacturing facility. The remaining improvement of \$21 million reflected the benefits of higher sales volumes of approximately \$20 million and higher average sales prices of approximately \$25 million, partially offset by higher manufacturing and other cost of sales of approximately \$25 million and higher SG&A costs of approximately \$13 million.

### *Ethylene, Co-products and Derivatives Segment*

Millennium's EC&D segment comprises its wholly owned acetyls business and its equity investment in Equistar.

### Acetyls Business

**Overview** The acetyls business produces and markets vinyl acetate monomer ( VAM ), acetic acid and methanol. During 2005, the acetyls business was negatively affected by higher raw material and energy costs, due to higher ethylene and natural gas prices, and lower sales volumes, resulting from weaker demand. These negative effects were only partly offset by the benefits of higher average product sales prices.

## Edgar Filing: MILLENNIUM CHEMICALS INC - Form 10-K

Acetyls production costs increased in 2005 compared to 2004, primarily due to higher raw material and energy costs, particularly natural gas and ethylene. However, the increases in production costs were more than offset by higher average selling prices, contributing to higher margins in the acetyls business.

**Revenues** Acetyls revenues of \$504 million in 2005 increased by \$51 million, or 11%, compared to revenues of \$453 million in 2004 primarily due to higher average sales prices, which were partly offset by lower sales volumes. In 2005, the aggregate sales price for VAM and acetic acid was 17% higher than in 2004 as price increases were implemented in response to higher raw material and energy costs. The sales volume decrease in 2005 compared to 2004 primarily reflected lower VAM sales volumes.

## Table of Contents

### Index to Financial Statements

Acetyls revenues of \$453 million in 2004 increased by \$32 million, or 8%, compared to revenues of \$421 million in 2003 primarily due to higher average sales prices, which were partly offset by lower sales volumes. In 2004, the aggregate U.S. dollar price for VAM and acetic acid was 13% higher than in 2003. Average 2004 sales prices were higher than in 2003 as a result of sales price increases and the favorable effect of translating foreign currency-denominated sales into U.S. dollars. The price increases were implemented in response to higher raw material and energy costs. The sales volume decrease in 2004 compared to 2003 primarily reflected lower methanol sales volumes.

**Operating Income** The acetyls business had operating income of \$45 million in 2005 compared to operating income of \$59 million in 2004. The \$14 million decrease was primarily due to higher raw material and energy costs of approximately \$90 million and the effect of lower sales volumes of approximately \$10 million, partially offset by approximately \$85 million of higher sales prices.

The acetyls business had operating income of \$59 million in 2004 compared to operating income of \$26 million in 2003. The \$33 million increase was primarily due to higher sales prices of approximately \$40 million, partially offset by the negative effect of lower sales volumes of approximately \$5 million.

### Equity Investment in Equistar

**Overview** Equistar manufactures and markets ethylene and its co-products, primarily propylene, butadiene and aromatics, which include benzene and toluene. Equistar also manufactures and markets ethylene derivatives, primarily polyethylene (including high density polyethylene ( HDPE ), low density polyethylene ( LDPE ) and linear-low density polyethylene ( LLDPE )), ethylene glycol, ethylene oxide and its other derivatives, and ethanol. Equistar also manufactures and markets fuels, such as methyl tertiary butyl ether ( MTBE ) and alkylate, as well as polypropylene. As a result of the acquisition of Millennium by Lyondell on November 30, 2004, Equistar became a wholly owned subsidiary of Lyondell. Millennium continues to hold a 29.5% equity interest in Equistar. The following discussion of Equistar's operations is on a 100% basis.

In 2005, the chemical industry experienced improved profitability compared to 2004, despite higher crude oil and natural gas prices that pushed up raw material costs for most of the year and the disruptive effects of two major U.S. Gulf Coast hurricanes. Tight gasoline markets in 2005 resulted in higher sales prices and margins for fuel-related products compared to the already high levels experienced in 2004. U.S. ethylene industry demand decreased an estimated 6% in 2005 compared to 2004, due primarily to the effects of the U.S. Gulf Coast hurricanes. U.S. ethylene demand grew 11% in 2004 compared to 2003.

**Benchmark Indicators** Benchmark crude oil and natural gas prices generally have been indicators of the level and direction of movement of raw material and energy costs for Equistar. Ethylene and its co-products are produced from two major raw material groups:

crude oil-based liquids ( liquids or heavy liquids ), including naphthas, condensates, and gas oils, the prices of which are generally related to crude oil prices; and

natural gas liquids ( NGLs ), principally ethane and propane, the prices of which are generally affected by natural gas prices.

## Edgar Filing: MILLENNIUM CHEMICALS INC - Form 10-K

Equistar has the ability to shift its ratio of raw materials used in ethylene production to take advantage of the relative costs of liquids and NGLs.

The following table shows the average benchmark prices for crude oil and natural gas for the applicable three-year period, as well as benchmark sales prices for ethylene, propylene, benzene and HDPE, which Equistar

**Table of Contents****Index to Financial Statements**

produces and sells. The benchmark weighted average cost of ethylene production is based on CMAI's estimated ratio of heavy liquid raw materials and NGLs used in U.S. ethylene production and is subject to revision.

	Average Benchmark Price for the Year and				
	Percent Change Versus Prior Year Average				
	2005	Percent Increase	2004	Percent Increase	2003
Crude oil dollars per barrel	56.44	36%	41.42	33%	31.12
Natural gas dollars per million BTUs	7.58	31%	5.78	10%	5.24
Weighted average cost of ethylene production cents per pound	29.41	25%	23.55	15%	20.44
Ethylene cents per pound	44.21	31%	33.75	18%	28.50
Propylene cents per pound	40.75	28%	31.96	49%	21.42
Benzene cents per gallon	289.88	1%	287.96	87%	154.00
HDPE cents per pound	72.13	21%	59.58	20%	49.54

As indicated in the table above, benchmark crude oil prices and natural gas prices continued to increase from 2003 to 2005, resulting in successively higher average raw material and energy costs each year. Benchmark sales prices for ethylene and propylene increased in response to the higher raw material and energy costs in 2004 and 2005, as well as the improving market conditions.

**Revenues** Equistar revenues of \$11,686 million in 2005 increased 25% compared to revenues of \$9,316 million in 2004. The increase in 2005 reflected higher average sales prices, partially offset by lower sales volumes. As noted in the table above, benchmark sales prices for ethylene, propylene and HDPE averaged significantly higher in 2005 compared to 2004, while benzene average sales prices in 2005 were comparable to 2004. Ethylene and derivative sales volumes were 5% lower in 2005 compared to 2004.

Revenues of \$9,316 million in 2004 increased 42% compared to revenues of \$6,545 million in 2003, reflecting higher average sales prices and volumes. Benchmark ethylene, propylene and HDPE sales prices averaged significantly higher in 2004 compared to 2003, while average benchmark benzene sales prices nearly doubled in 2004 compared to 2003. Ethylene and derivative sales volumes were 10% higher in 2004 compared to 2003.

**Net Income** Equistar had net income of \$748 million in 2005 compared to \$276 million in 2004. The \$472 million improvement was primarily the result of higher average product margins. The benefit of the higher 2005 average product margins was partly offset by the negative effects of hurricane-related costs and lower sales volumes. Hurricane-related costs included \$20 million of charges representing Equistar's exposure to industry losses expected to be underwritten by industry insurance consortia.

Equistar's net income was \$276 million in 2004, compared to a net loss of \$339 million in 2003. The \$615 million improvement in 2004 was primarily due to higher product margins and higher sales volumes in 2004 due to improved supply/demand fundamentals compared to 2003. The higher sales prices more than offset the effect of significantly higher raw material and energy costs compared to 2003. In addition to higher sales prices for ethylene and derivatives, Equistar benefited from significantly higher prices for co-products such as propylene, benzene and fuels compared to 2003. The higher raw material and energy costs during 2004 reflected the effect of 33% higher average benchmark crude oil prices in 2004, as well as ongoing high natural gas prices compared to 2003. Also, ethylene and derivative sales volumes in 2004 were 11% higher

## Edgar Filing: MILLENNIUM CHEMICALS INC - Form 10-K

compared to 2003. The net loss in 2003 included the \$37 million of refinancing costs, the \$12 million loss from the sale of the polypropylene production facility, the \$11 million charge for the write-off of a R&D facility, as well as \$6 million of employee severance costs.

### *Other*

Other operations include Millennium's flavors and fragrances business, and unallocated operating expenses that are not identified with the reportable business segments.



## Table of Contents

### Index to Financial Statements

Other operating losses were \$59 million in 2005, \$103 million in 2004 and \$30 million in 2003. The 2005 amount included \$43 million of accruals for estimated environmental remediation costs and \$13 million of charges related to other investments. The 2004 amount included \$71 million of business combination costs, \$31 million of accruals for estimated environmental remediation costs and \$3 million of reorganization costs. The \$30 million in 2003 primarily included \$18 million in reorganization and office closure charges and accruals for estimated environmental remediation costs of \$3 million.

## FINANCIAL CONDITION

**Operating Activities** Operating activities provided cash of \$275 million in 2005 and \$195 million in 2004, respectively, and used cash of \$92 million in 2003. The \$80 million improvement in operating cash flow in 2005 compared to 2004 was primarily due to \$133 million of higher distributions of earnings from Equistar and reductions in the main components of working capital—accounts receivable, inventories and accounts payable, partly offset by the effects of lower 2005 earnings at Millennium.

The main components of working capital decreased, providing cash of \$29 million in 2005. The net decrease of \$29 million in 2005 was primarily due to a \$77 million increase in accounts payable, which reflected higher raw materials and energy prices in December 2005.

The \$287 million improvement in operating cash flow in 2004 compared to 2003 was primarily due to earnings of \$81 million from Millennium's investment in Equistar, which were distributed to Millennium, and a reduction of \$56 million in inventories. A net decrease in the main components of working capital provided cash of \$85 million in 2004 compared to 2003 when a net increase in these items used cash of \$106 million.

**Investing Activities** Investing activities used cash of \$60 million in 2005, \$41 million in 2004 and \$48 million in 2003, primarily reflecting Millennium's capital expenditures. In addition, in 2004, Millennium received \$12 million of distributions in excess of earnings from Equistar. Capital expenditures were \$60 million in 2005, \$55 million in 2004 and \$48 million in 2003. Millennium's capital expenditures in these years primarily included replacement capital projects and certain environmental, cost reduction, and yield-improvement projects. Planned capital spending in 2006 is projected to be approximately \$97 million primarily for base asset support and projects to improve manufacturing efficiency.

**Financing Activities** Financing activities used cash of \$272 million in 2005 and \$38 million in 2004 and provided cash of \$205 million in 2003.

In August 2005, Millennium amended and restated its \$150 million credit facility, replacing it with a \$125 million U.S. revolving credit facility, a \$25 million Australian revolving credit facility, and a \$100 million Australian senior term loan, all of which mature in August 2010. See [Liquidity and Capital Resources](#) below for a description of the new credit facilities. The U.S. revolving credit facility and the Australian revolving credit facility will be used for liquidity and general corporate purposes. The Australian term loan facilitated the repatriation of non-U.S. earnings and returns of investment that were primarily used to reduce Millennium indebtedness as discussed below.

In 2005, Millennium purchased \$281 million principal amount of its 7% Senior Notes due 2006 pursuant to a cash tender offer at 102.622 percent of par. During 2005, Millennium also purchased an additional \$61 million of the 7% Senior Notes due 2006, \$13 million of the 9.25% Senior Notes due 2008 and \$1 million of the 7.625% Senior Debentures due 2026. See [Liquidity and Capital Resources](#) below regarding the

Edgar Filing: MILLENNIUM CHEMICALS INC - Form 10-K

May 2005 credit facility amendment, which permitted the purchases, and other amendments to the Millennium credit facility.

Millennium paid a cash dividend totaling \$6 million to minority interests during 2005 and received a contribution of \$6 million from Lyondell.

## Table of Contents

### Index to Financial Statements

In January 2006, a U.K subsidiary of Millennium entered into a new \$60 million, five-year, revolving credit facility. See **Liquidity and Capital Resources** below for a description of the facility. In addition, on February 28, 2006, Millennium completed a cash tender offer for its 7% Senior Notes due 2006, purchasing \$149 million principal amount of the notes at 101.256 percent of par. Millennium intends to continue to reduce its indebtedness as market conditions permit.

Pursuant to the indenture governing the 9.25% Senior Notes, Millennium was required to purchase \$4 million principal amount of its 9.25% Senior Notes and pay a 1% premium as a result of Lyondell's acquisition of Millennium on November 30, 2004.

In 2004 cash was used to prepay \$55 million of debt, and cash proceeds from stock option exercises were \$17 million.

In 2003, \$222 million of net debt proceeds were received and cash dividends of \$17 million were paid. Dividends paid in 2003 totaled \$17 million. In June 2003, Millennium announced the suspension of the payment of dividends on its common stock and has not since paid dividends. Millennium is prohibited from paying dividends pursuant to a covenant under Millennium's 9.25% Senior Notes.

**Liquidity and Capital Resources** Millennium's balance sheet remains highly leveraged. Total debt as of December 31, 2005 was \$1,135 million. Current maturities of long-term debt at December 31, 2005 included \$158 million of 7% Senior Notes and other debt of \$11 million.

Historically, Millennium has financed its operations primarily through cash generated from its operations, cash distributions from Equistar, and debt financing. Cash generated from operations is, to a large extent, dependent on economic, financial, competitive and other factors affecting Millennium's and Equistar's businesses. The amount of cash distributions received from Equistar is affected by Equistar's results of operations and current and expected future cash flow requirements. Some of Equistar's indentures require additional interest payments to the note holders if Equistar makes distributions when its Fixed Charge Coverage Ratio, as defined, is less than 1.75 to 1. Millennium received \$214 million and \$93 million, respectively, of distributions from Equistar during 2005 and 2004.

Millennium's ability to pay or refinance its debt also may depend on future operating performance, which could be affected by general economic, financial, competitive, legislative, regulatory, business and other factors, many of which are beyond its control. However, Millennium believes that conditions will be such that cash balances, cash generated from operating activities, cash distributions from Equistar and funds from lines of credit will be adequate to meet anticipated future cash requirements, including scheduled debt repayments, necessary capital expenditures and ongoing operations. In the first quarter 2005, Standard & Poors (S&P) upgraded Millennium's debt rating from B+ to BB- and gave Millennium a positive outlook. However, on February 23, 2006, S&P placed its ratings on Millennium on Credit Watch with negative implications, following a jury verdict against Millennium and other defendants in Rhode Island. See the **Litigation** section of Note 19 to the Consolidated Financial Statements for information regarding the jury verdict.

At December 31, 2005, Millennium had cash on hand of \$279 million. Millennium's total unused availability under the \$125 million U.S. and \$25 million Australian revolving credit facilities was \$123 million. Availability under the revolving credit facilities is reduced to the extent of outstanding letters of credit provided under the facilities. There were \$27 million of outstanding letters of credit under the U.S. revolving credit facility and none outstanding under the Australian revolving credit facility as of December 31, 2005. There was no outstanding borrowing under either revolving credit facility as of December 31, 2005.

## Edgar Filing: MILLENNIUM CHEMICALS INC - Form 10-K

In addition to letters of credit outstanding under the U.S. revolving credit facility, Millennium had other outstanding letters of credit and bank guarantees under other arrangements of \$4 million at December 31, 2005.

---

**Table of Contents****Index to Financial Statements**

In January 2006, a U.K. subsidiary of Millennium entered into a new \$60 million, five-year, revolving credit facility, which, subject to permitted liens, is generally secured by the subsidiary's inventory, accounts receivable and certain other assets. Availability under the U.K. facility, which was \$44 million, or approximately \$53 million, at March 14, 2006, gives effect to the borrowing base as determined using a formula applied to accounts receivable and inventory balances and is reduced to the extent of outstanding borrowing and letters of credit provided under the facility.

In August 2005, Millennium amended and restated its \$150 million credit facility, replacing it with a \$125 million U.S. revolving credit facility, a \$25 million Australian revolving credit facility, and a \$100 million Australian senior term loan, all of which mature in August 2010. In May 2005, Millennium obtained an amendment to its previous \$150 million credit facility to allow for the unrestricted repurchase of indebtedness in the form of bonds, debentures, notes, or similar instruments. On February 2, 2005, as a result of certain adjustments and charges related to the February 2005 restatement of Millennium's financial statements, Millennium entered into an amendment and waiver to its previous \$150 million credit facility, which amended the credit facility definition of EBITDA and waived any and all defaults or events of default that may have occurred on or prior to the amendment and waiver. Millennium also obtained amendments to its previous credit facility in 2003 to provide additional financial flexibility by easing certain financial ratio requirements. One of the 2003 amendments was conditioned on Millennium obtaining \$110 million of long-term financing, which was satisfied by the sale of \$150 million of the 4% Convertible Senior Debentures. The same 2003 amendment also reduced the maximum availability under the credit facility from \$175 million to \$150 million. Millennium also obtained an amendment to its previous credit facility in July 2004 to permit Lyondell's acquisition of Millennium.

Millennium's facilities and its indentures contain restrictive covenants. Pursuant to these provisions, Millennium is prohibited from making restricted payments, including paying certain dividends. Other than the U.K. facility, Millennium's facilities also contain covenants that require the maintenance of specified financial ratios. These covenants, as well as debt guarantees, are described in Note 14 to the Consolidated Financial Statements. Millennium's U.K. facility does not require the maintenance of specified financial ratios as long as certain conditions are met.

A breach by Millennium of any of the covenants or other requirements in its debt instruments could (1) permit the note holders or lenders to declare the outstanding debt under the breached debt instrument due and payable, (2) permit the lenders under that credit facility to terminate future lending commitments and (3) permit acceleration of Millennium's other debt instruments that contain cross-default or cross-acceleration provisions. The debt agreements of Millennium contain various event of default and cross-default provisions. In particular, certain of the debt agreements include event of default provisions that, under certain circumstances, may be triggered in connection with judgments against the relevant entity unless discharged, stayed or bonded within a specified time period. If Millennium was unable to obtain sufficient funds to make these accelerated payments, Millennium's lenders could proceed against any assets that secure their debt.

Millennium has outstanding \$150 million aggregate principal amount of 4% Convertible Senior Debentures, which are due in 2023, unless earlier redeemed, converted or repurchased. As a result of Lyondell's acquisition of Millennium, the Debentures are convertible into shares of Lyondell's common stock or, at Lyondell's discretion, equivalent cash or a combination thereof. As of December 31, 2005, based on a quarterly test related to the price of Lyondell common stock, the Debentures were convertible at a conversion rate of 72.0183 Lyondell shares per one thousand dollar principal amount of the Debentures. As of December 31, 2005, none of the Debentures had been converted into shares of Lyondell common stock. The Debentures are redeemable at Millennium's option beginning November 15, 2010 at a redemption price equal to 100% of their principal amount or at the option of the Debenture holders under certain circumstances. The Debenture redemption terms are described in Note 14 to the Consolidated Financial Statements.

*Future Tax Obligations* Certain income tax returns for Millennium's U.S. and non-U.S. subsidiaries are currently under examination by the Internal Revenue Service (IRS), Revenue and Customs (formerly Inland Revenue) of the U.K. and various other tax authorities. In many cases, these audits result in proposed



**Table of Contents****Index to Financial Statements**

assessments by the tax authority. Millennium believes that its tax positions comply with applicable tax law and intends to defend its positions through appropriate administrative and judicial processes. Millennium believes it has adequately provided for any probable outcome related to these matters, and does not anticipate any material adverse effect on its financial position or results of operations from their ultimate resolution. However, the settlement of one or more of these matters could require substantial cash payments during 2006.

**Off-Balance Sheet Arrangements** The Securities and Exchange Commission ( SEC ) has described various characteristics to identify contractual arrangements that would fall within the SEC 's definition of off-balance sheet arrangements. Millennium is not a party to any such contractual arrangements.

Other obligations that do not give rise to liabilities that would be reflected in Millennium 's balance sheet are described below under Purchase Obligations and Operating Leases .

**Contractual and Other Obligations** The following table summarizes as of December 31, 2005, Millennium 's minimum payments for long-term debt, and contractual and other obligations for the next five years and thereafter.

Millions of dollars	Payments Due By Period						
	Total	2006	2007	2008	2009	2010	Thereafter
Long-term debt	\$ 1,135	\$ 169	\$ 7	\$ 463	\$ 5	\$ 79	\$ 412
Interest on long-term debt	618	77	68	45	25	25	378
Pension benefits:							
PBO	970	62	61	62	64	62	659
Assets	(731)						(731)
Funded status	239						
Other postretirement benefits	82	3	3	3	3	3	67
Other	323	2	53	50	47	47	124
Deferred income taxes	167	17	19	21	23	23	64
Other obligations:							
Purchase obligations	2,164	382	304	198	174	150	956
VAM toll	87	87					
Operating leases	165	23	20	16	13	11	82
<b>Total</b>	<b>\$ 4,980</b>	<b>\$ 822</b>	<b>\$ 535</b>	<b>\$ 858</b>	<b>\$ 354</b>	<b>\$ 400</b>	<b>\$ 2,011</b>

*Long-Term Debt* Millennium 's long term debt includes credit facilities and debt obligations. See Note 14 to the Consolidated Financial Statements for a discussion of covenant requirements under the credit facilities and indentures and additional information regarding long-term debt.

## Edgar Filing: MILLENNIUM CHEMICALS INC - Form 10-K

*Interest* The long-term debt agreements contain provisions for the payment of either monthly or semi-annual interest at a stated rate of interest over the term of the debt. These payment obligations are reflected in the table above.

*Pension Benefits* Millennium maintains several defined benefit pension plans as described in Note 17 to the Consolidated Financial Statements. At December 31, 2005, the projected benefit obligation for Millennium's pension plans exceeded the fair value of plan assets by \$239 million. Subject to future actuarial gains and losses, as well as actual asset earnings, Millennium, together with its consolidated subsidiaries, will be required to fund the \$239 million, with interest, in future years. Millennium's pension contributions were \$28 million, \$15 million and \$12 million for the years 2005, 2004 and 2003, respectively, and are expected to be approximately \$14 million for 2006.



**Table of Contents**

**Index to Financial Statements**

Pension expense for 2005, 2004 and 2003 was \$32 million, \$30 million and \$7 million, respectively. The 2004 and 2003 pension expense includes \$13 million and \$3 million of curtailment charges, respectively, resulting from severances subsequent to Lyondell's acquisition of Millennium in 2004 and the 2003 cost reduction program. Due to a reduction in the discount rate assumption related to Millennium's pension plans and the amortized recognition of pension fund investment losses in the financial markets in recent years prior to 2003, pension expense for 2006 is estimated to be approximately \$39 million.

*Other Postretirement Benefits* Millennium provides other postretirement benefits, as described in Note 17 to the Consolidated Financial Statements. Other postretirement benefits are unfunded and are paid by Millennium as incurred.

As a result of rising medical benefit costs and competitive business conditions, effective April 1, 2004 Millennium reduced the level of retiree medical benefits provided to essentially all of its retirees by offering a monthly subsidy in 2004 to retirees that enrolled in designated preferred provider organization plans or Medicare supplement insurance plans. This change reduced Millennium's accumulated postretirement benefit obligation by approximately \$48 million. This reduction will be recognized ratably over approximately thirteen years through the postretirement net periodic benefit cost.

*Other* Other primarily consists of liabilities for environmental remediation, deferred compensation arrangements and accrued liabilities for the resolution of probable tax assessments. The timing of payments of the latter is subject to considerable uncertainty.

*Deferred Income Taxes* The scheduled settlement of the deferred tax liabilities shown in the table is based on the scheduled reversal of the underlying temporary differences, all of which would be fully offset during the first five years by Millennium's tax loss carry forwards. Actual cash tax payments will vary dependent upon future taxable income.

*Purchase Obligations* In the ordinary course of business, Millennium enters into contractual obligations to purchase raw materials, utilities and services for fixed or minimum amounts. See the *Commitments* section of Note 19 to the Consolidated Financial Statements for a description of Millennium's commitments and contingencies, including these purchase obligations.

*VAM Toll* Millennium has entered into an agreement with an unrelated party to process acetic acid through that party's VAM plant. Under the agreement, Millennium will purchase all VAM production at such plant not utilized by the unrelated party through December 31, 2006. The processing fee is based on the market price of ethylene plus a processing charge. The total commitment over the remaining term is approximately \$87 million at December 31, 2005 market prices for ethylene. See the *Commitments* section of Note 19 to the Consolidated Financial Statements.

*Operating Leases* Millennium leases various facilities and equipment under noncancelable lease arrangements for various periods. See Note 15 to the Consolidated Financial Statements for related lease disclosures.

**Equistar Liquidity and Capital Resources** At December 31, 2005, Equistar's long-term debt, including current maturities, totaled \$2.3 billion, or approximately 60% of its total capitalization. Current maturities included \$150 million of 6.5% Notes due in February 2006. At December 31, 2005, Equistar had cash on hand of \$215 million. In addition, the total amount available at December 31, 2005 under both Equistar's

## Edgar Filing: MILLENNIUM CHEMICALS INC - Form 10-K

\$400 million inventory-based revolving credit facility and \$600 million accounts receivable sales facility was approximately \$734 million.

The available amount of \$734 million under Equistar's inventory-based revolving credit facility and accounts receivable sales facility at December 31, 2005 gave effect to the borrowing base net of a \$50 million unused availability requirement, the \$200 million outstanding amount of accounts receivable sold under the

## **Table of Contents**

### **Index to Financial Statements**

accounts receivable sales facility at December 31, 2005, and \$16 million of outstanding letters of credit under the revolving credit facility as of December 31, 2005. The borrowing base is determined using a formula applied to accounts receivable and inventory balances. The revolving credit facility requires that the unused available amounts under that facility and the \$600 million accounts receivable sales facility equal or exceed \$50 million, or \$100 million if the Interest Coverage Ratio, as defined, at the end of any period of four consecutive fiscal quarters is less than 2:1. There was no outstanding borrowing under the revolving credit facility at December 31, 2005.

Equistar's inventory-based revolving credit facility, accounts receivable sales facility and indentures contain restrictive covenants that, subject to certain exceptions, restrict, among other things, lien incurrence, debt incurrence, sales of assets, investments, capital expenditures, certain other payments, affiliate transactions, restrictive agreements and mergers. The credit facility does not require the maintenance of specified financial ratios as long as certain conditions are met. Some of Equistar's indentures require additional interest payments to the note holders if Equistar makes distributions when its Fixed Charge Coverage Ratio, as defined, is less than 1.75 to 1.

A breach by Equistar of any of the covenants or other requirements in its debt instruments could (1) permit its note holders or lenders to declare the outstanding debt under the breached debt instrument due and payable, (2) permit its lenders under the credit facility to terminate future lending commitments and (3) permit acceleration of Equistar's other debt instruments that contain cross-default or cross-acceleration provisions. The debt agreements of Equistar contain various event of default and cross-default provisions. In particular, certain of the debt agreements include event of default provisions that, under certain circumstances, may be triggered in connection with judgments against the relevant entity unless discharged, stayed or bonded within a specified time period. If Equistar was unable to obtain sufficient funds to make these accelerated payments, Equistar's lenders could proceed against any assets that secure their debt. Similarly, the breach by Equistar of covenants in its accounts receivable sales facility would permit the counterparty under the facility to terminate further purchases of interests in accounts receivable and to receive all collections from previously sold interests until they had collected on their interests in those receivables, thus reducing Equistar's liquidity.

## **CURRENT BUSINESS OUTLOOK**

At this time, TiO<sub>2</sub> sales volumes are strong, and Millennium believes that the inorganic chemicals segment is positioned for a strong 2006. In the EC&D segment, Equistar's global economic outlook for 2006 is positive. Chemical industry operations have largely recovered from the disruptions of the 2005 hurricane season. In the ethylene markets, demand has improved, and Equistar has seen a return of positive price momentum in a number of product areas. Equistar expects strong business conditions for its products in 2006. The acetyls business continues to be negatively affected by high natural gas prices in the U.S., and 2006 results will be influenced by the trend in such prices.

## **RELATED PARTY TRANSACTIONS**

Millennium purchases products from Equistar, a joint venture with Lyondell, at market-related prices and, sells products to Equistar and Lyondell at market-based prices. As a result of the acquisition of Millennium by Lyondell on November 30, 2004, Millennium and Lyondell entered into an agreement for the provision of administrative services by Lyondell to Millennium, as well as a tax-sharing agreement.

Millennium believes that such transactions are effected on terms substantially no more or less favorable than those that would have been agreed upon by unrelated parties on an arm's length basis. See Note 6 to the Consolidated Financial Statements for further discussion of related party transactions involving Lyondell, Equistar and Millennium.



---

**Table of Contents**

**Index to Financial Statements**

**CRITICAL ACCOUNTING POLICIES**

Millennium applies those accounting policies that management believes best reflect the underlying business and economic events, consistent with accounting principles generally accepted in the U.S. Millennium's more critical accounting policies include those related to liabilities for anticipated expenditures to comply with environmental regulations, accruals for taxes based on income, the equity interest in Equistar, long-lived assets, the valuation of goodwill, and accruals for long-term employee benefit costs such as pension and postretirement costs. Inherent in such policies are certain key assumptions and estimates made by management. Management periodically updates its estimates used in the preparation of the financial statements based on its latest assessment of the current and projected business and general economic environment. These critical accounting policies have been discussed with Millennium's Board of Directors. Millennium's significant accounting policies are summarized in Note 2 to the Consolidated Financial Statements.

*Liabilities for Environmental Remediation Costs* Anticipated expenditures related to investigation and remediation of contaminated sites, which include current and former plant sites and other remediation sites, are accrued when it is probable a liability has been incurred and the amount of the liability can be reasonably estimated. Only ongoing operating and monitoring costs, the timing of which can be determined with reasonable certainty are discounted to present value. Future legal costs associated with such matters, which generally are not estimable, are not included in these liabilities.

As of December 31, 2005, Millennium's accrued liability for future environmental remediation costs at current and former plant sites and other remediation sites totaled \$168 million. The liabilities for individual sites range from less than \$1 million to \$103 million, and remediation expenditures are expected to occur over a number of years, and not to be concentrated in any single year. In the opinion of management, there is no material estimable range of reasonably possible loss in excess of the liabilities recorded for environmental remediation. However, it is possible that new information about the sites for which the accrual has been established, new technology or future developments such as involvement in investigations by regulatory agencies, could require Millennium to reassess its potential exposure related to environmental matters. See Note 19 to the Consolidated Financial Statements for further discussion of environmental remediation matters.

*Accruals for Taxes Based on Income* Uncertainties exist with respect to interpretation of complex U.S. federal and non-U.S. tax regulations. Management expects that Millennium's interpretations will prevail. Also, Millennium has recognized deferred tax benefits relating to its future utilization of past operating losses. Millennium believes it is more likely than not that the amounts of deferred tax assets in excess of the related valuation reserves will be realized. Further details on Millennium's income taxes appear in Note 18 to the Consolidated Financial Statements.

*Equity Interest in Equistar* Millennium has evaluated the carrying value of its investment in Equistar at December 31, 2005 using fair value estimates prepared by Lyondell in connection with Lyondell's accounting for its acquisition of Millennium, and by third parties. Based on those estimates, Millennium has determined that the fair value exceeded Millennium's carrying value for its Equistar investment. The carrying value of Millennium's investment in Equistar at December 31, 2005 was \$464 million. If future valuation estimates for Millennium's interest in Equistar are lower than Millennium's carrying value for its interest in Equistar, an adjustment to write down the investment would be required.

*Long-Lived Assets* With respect to long-lived assets, key assumptions include the estimates of useful asset lives and the recoverability of carrying values of fixed assets, and other intangible assets, as well as the existence of any obligations associated with the retirement of fixed assets. Such estimates could be significantly modified and/or the carrying values of the assets could be impaired by such factors as new technological developments, new chemical industry entrants with significant raw material or other cost advantages, uncertainties associated with the U.S. and world economies, the cyclical nature of the chemical and refining industries, and uncertainties associated with governmental actions. Impairments were recorded in each of the years 2005, 2004 and 2003 for the LeHavre TiO<sub>2</sub> facility.



---

**Table of Contents**

**Index to Financial Statements**

Millennium defers the costs of major periodic maintenance and repair activities (turnarounds) amortizing such costs over the period until the next expected major turnaround of the affected unit. The balances of such deferred costs totaled \$14 million and \$15 million at December 31, 2005 and 2004. During 2005, 2004 and 2003, cash expenditures of approximately \$11 million, \$12 million and \$15 million, respectively, were deferred and are being amortized, generally over 18 months to 3 years. Amortization in 2005, 2004 and 2003, of previously deferred turnaround costs was \$8 million, \$12 million and \$9 million, respectively.

The estimated useful lives of long-lived assets range from 5 to 40 years. Depreciation and amortization of these assets, including amortization of deferred turnaround costs, under the straight-line method over their estimated useful lives totaled \$90 million, \$94 million and \$99 million in 2005, 2004 and 2003, respectively. If the useful lives of the assets were found to be shorter than originally estimated, depreciation and amortization charges would be accelerated over the revised useful life.

Additional information on long-lived assets, deferred turnaround costs and related depreciation and amortization appears in Note 11 to the Consolidated Financial Statements.

*Goodwill* Goodwill represents the excess of the purchase price over the fair value of net tangible and identifiable intangible assets and liabilities of acquired businesses. Millennium evaluates the carrying value of goodwill annually or more frequently if events or changes in circumstances indicate that the carrying amount may exceed fair value. Recoverability is determined by comparing the estimated fair value of the reporting unit to which the goodwill applies to the carrying value, including goodwill, of that reporting unit. The carrying value of goodwill at December 31, 2005 was \$104 million, of which \$56 million and \$48 million was associated with Millennium's inorganics segment and acetyls business, respectively. The recoverability of Millennium's goodwill is dependent upon the future valuations associated with these businesses, which could change significantly based upon business performance or other factors.

*Long-Term Employee Benefit Costs* The costs to Millennium of long-term employee benefits, particularly pension and postretirement medical and life insurance benefits, are incurred over long periods of time, and involve many uncertainties over those periods. The net periodic benefit cost attributable to current periods is based on several assumptions about such future uncertainties, and is sensitive to changes in those assumptions. It is management's responsibility, often with the assistance of independent experts, to select assumptions that in its judgment represent its best estimates of the future effects of those uncertainties. It also is management's responsibility to review those assumptions periodically to reflect changes in economic or other factors that affect those assumptions.

The current benefit service costs, as well as the existing liabilities, for pensions and other postretirement benefits are measured on a discounted present value basis. The discount rate is a current rate, related to the rate at which the liabilities could be settled. Millennium's assumed discount rate is based on average rates published by Moody's and Merrill Lynch for high-quality (Aa rating) ten-year fixed income securities. For the purpose of measuring the U.S. benefit obligations at December 31, 2005, Millennium lowered its assumed discount rate from 5.75% to 5.5%, reflecting market interest rates at December 31, 2005. The 5.5% rate also will be used to measure net periodic benefit cost during 2006. A further one percentage point reduction in the assumed discount rate would increase Millennium's benefit obligation for pensions and other postretirement benefits by approximately \$108 million, and would reduce Millennium's net income by approximately \$5 million.

The benefit obligation and the periodic cost of postretirement medical benefits also are measured based on assumed rates of future increase in the per capita cost of covered health care benefits. As of December 31, 2005, the assumed rate of increase was 10%, decreasing 1% per year to 5% in 2011 and thereafter. A one percentage point change in the health care cost trend rate assumption would have no significant effect on either the benefit liability or the net periodic cost.

The net periodic cost of pension benefits included in expense also is affected by the expected long-term rate of return on plan assets assumption. Investment returns that are recognized currently in net income represent the



## Table of Contents

### Index to Financial Statements

expected rate of return on plan assets rate applied to a market-related value of plan assets which, for Millennium, is defined as the market value of assets. The expected rate of return on plan assets rate is a longer term rate, and is expected to change less frequently than the current assumed discount rate, reflecting long-term market expectations, rather than current fluctuations in market conditions.

The actual rate of return on plan assets may differ from the expected rate due to the volatility normally experienced in capital markets. Management's goal is to manage the investments over the long term to achieve optimal returns with an acceptable level of risk and volatility. Based on the market value of plan assets at December 31, 2005, a one percentage point decrease in this assumption for Millennium would decrease Millennium's net income by approximately \$5 million.

Net periodic pension cost recognized each year includes the expected asset earnings, rather than the actual earnings or loss. As a result of asset earnings significantly below the expected return on plan assets rate over the last several years, the level of unrecognized investment losses, together with the net actuarial gains and losses, is \$400 million at December 31, 2005. This unrecognized amount, to the extent it exceeds ten percent of the projected benefit obligation for the respective plan, will be recognized as additional net periodic benefit cost over the average remaining service period of the participants in each plan. This annual amortization charge will be approximately \$33 million per year based on the December 31, 2005 unrecognized amount.

Additional information on the key assumptions underlying these benefit costs appears in Note 17 to the Consolidated Financial Statements.

## **ACCOUNTING AND REPORTING CHANGES**

Effective October 1, 2005, Millennium implemented Financial Accounting Standards Board (FASB) Interpretation (FIN) No. 47, *Accounting for Conditional Asset Retirement Obligations*, which clarifies the term *conditional asset retirement obligation* as used in Statement of Financial Accounting Standard (SFAS) No. 143, *Accounting for Conditional Asset Retirement Obligations*, as an obligation that is conditional only as to timing or amount. Millennium's application of this interpretation had no material effect on its consolidated financial statements.

Effective July 1, 2005, Millennium implemented SFAS No. 153, *Exchanges of Nonmonetary Assets*, which amends Accounting Principles Board (APB) Opinion No. 29, *Accounting for Nonmonetary Transactions*, to replace the exception to fair value recognition for nonmonetary exchanges of similar productive assets, with a general exception for exchanges of nonmonetary assets that do not have commercial substance. Millennium's application of SFAS No. 153 had no material effect on its consolidated financial statements.

SFAS No. 123 *Accounting for Stock-Based Compensation*, as amended by SFAS No. 148, *Accounting for Stock-Based Compensation Transition and Disclosure*, encourages, but does not require, a fair-value based method of accounting for employee stock options and similar equity instruments, which generally would result in the recording of additional compensation expense in Millennium's financial statements. Millennium accounts for stock-based employee compensation using the intrinsic value method prescribed in APB Opinion No. 25 and related interpretations. Accordingly, no compensation cost was recognized for the stock option plans in the accompanying financial statements as all options granted had an exercise price equal to the market value of the underlying common stock on the date of grant. Pro forma compensation expense related to stock options was \$1 million and \$2 million, respectively, for 2004 and 2003.

## Edgar Filing: MILLENNIUM CHEMICALS INC - Form 10-K

In December 2004, the FASB issued SFAS No. 123 (revised 2004), *Share-Based Payment*. A primary focus of this Statement is accounting for transactions in which an entity obtains employee services in share-based payment transactions, such as by the granting of stock options and phantom stock options. Millennium does not expect application of these provisions to have a material effect on its consolidated financial statements.

**Table of Contents**

**Index to Financial Statements**

In September 2005, the Emerging Issues Task Force ( EITF ) of the FASB reached consensus on one issue of EITF Issue No. 04-13, *Accounting for Purchases and Sales of Inventory with the Same Counterparty*, that inventory purchase and sales transactions with the same counterparty that are entered into in contemplation of one another should be combined for purposes of applying APB Opinion No. 29, *Accounting for Nonmonetary Transactions*. The effect would be to reduce reported revenues and cost of sales for affected transactions. The consensus on this issue would apply to transactions entered into beginning in the second quarter 2006. Millennium is evaluating the effect of EITF 04-13 on its consolidated financial statements.

**ENVIRONMENTAL MATTERS**

Various environmental laws and regulations impose substantial requirements upon the operations of Millennium. Millennium's policy is to be in compliance with such laws and regulations, which include, among others, the Comprehensive Environmental Response, Compensation and Liability Act ( CERCLA or Superfund ) as amended, the Resource Conservation and Recovery Act ( RCRA ) and the Clean Air Act Amendments ( Clean Air Act ). Millennium does not specifically track all recurring costs associated with managing hazardous substances and pollution in ongoing operations. Such costs are included in cost of sales.

Millennium's accrued liability for future environmental remediation costs at current and former plant sites and other remediation sites totaled \$168 million as of December 31, 2005. The remediation expenditures are expected to occur over a number of years, and not to be concentrated in any single year. In the opinion of management, there is no material estimable range of reasonably possible loss in excess of the liabilities recorded for environmental remediation. However, it is possible that new information about the sites for which the accrual has been established, new technology or future developments such as involvement in investigations by regulatory agencies, could require Millennium to reassess its potential exposure related to environmental matters. The liabilities for individual sites range from less than \$1 million to \$103 million. The \$103 million liability relates to the Kalamazoo River Superfund Site. See *Critical Accounting Policies* above and the *Environmental Remediation* section of Note 19 to the Consolidated Financial Statements for additional discussion of Millennium's liabilities for environmental remediation, including the liability related to the Kalamazoo River Superfund Site.

Millennium also makes capital expenditures to comply with environmental regulations. Capital expenditures for regulatory compliance in 2005, 2004 and 2003 totaled approximately \$8 million, \$8 million and \$9 million, respectively. Millennium currently estimates environmentally-related capital expenditures at its facilities will be approximately \$11 million in 2006 and \$6 million in 2007.

**Item 7A. Disclosure of Market Risk**

See Note 16 to the Consolidated Financial Statements for discussion of Millennium's management of commodity price risk, foreign currency exposure and interest rate risk through its use of derivative instruments and hedging activities.

**Table of Contents**

**Index to Financial Statements**

**COMMODITY PRICE RISK**

A substantial portion of Millennium's products and raw materials are commodities whose prices fluctuate as market supply and demand fundamentals change. Accordingly, product margins and the level of Millennium's profitability tend to fluctuate with changes in the business cycle.

Millennium selectively entered into commodity derivative hedging transactions, primarily price swaps, options, and futures, to help manage the exposure to commodity price risk with respect to purchases of raw materials and product sales. The net gain recognized in earnings in 2004 was less than \$1 million. During 2004 and 2003, the derivative transactions were not significant compared to Millennium's overall inventory purchases and product sales; there were no derivative transactions in 2005. Millennium had no outstanding commodity derivative transactions at December 31, 2005 and 2004.

**FOREIGN EXCHANGE RISK**

Millennium manufactures and markets its products in a number of countries throughout the world and, as a result, is exposed to changes in foreign currency exchange rates. Costs in some countries are incurred, in part, in currencies other than the applicable functional currency. Millennium's non-U.S. operations account for approximately 55% of consolidated revenues and 50% of consolidated assets. Millennium has selectively utilized forward, swap and option derivative contracts with terms normally lasting less than three months to protect against the adverse effect that exchange rate fluctuations may have on foreign currency denominated trade receivables and trade payables. These derivatives generally are not designated as hedges for accounting purposes. At December 31, 2005, there were no outstanding foreign currency forward, swap and option contracts and at December 31, 2004, \$104 million were outstanding.

**INTEREST RATE RISK**

Derivative instruments have been used selectively to manage the ratio of fixed- to variable-rate debt at Millennium. At December 31, 2005 and 2004, there were outstanding interest rate swap agreements in the notional amount of \$175 million, which were designated as fair-value hedges of underlying fixed-rate obligations. The fair value of these interest rate swap agreements was an obligation of \$4 million at December 31, 2005 and \$1 million at December 31, 2004, resulting in a decrease in the carrying value of long-term debt and the recognition of a corresponding liability. Using sensitivity analysis, the negative impact on the fair value of the obligation at December 31, 2005 would be approximately \$2 million assuming a 10% unfavorable change in variable interest rates.

**Table of Contents**

**Index to Financial Statements**

**Item 8. *Financial Statements and Supplementary Data***

**Index to the Consolidated Financial Statements**

	<b>Page</b>
<b>MILLENNIUM CHEMICALS INC.</b>	
<u>Management's Report on Internal Controls Over Financial Reporting</u>	54
<u>Report of Independent Registered Public Accounting Firm</u>	55
Consolidated Financial Statements:	
<u>Consolidated Statements of Income</u>	57
<u>Consolidated Balance Sheets</u>	58
<u>Consolidated Statements of Cash Flows</u>	59
<u>Consolidated Statements of Stockholder's Equity</u>	60
<u>Notes to the Consolidated Financial Statements</u>	61

**Table of Contents**

**Index to Financial Statements**

**MANAGEMENT'S REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING**

The management of Millennium is responsible for establishing and maintaining adequate internal control over financial reporting. Millennium's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles.

Millennium management assessed the effectiveness of Millennium's internal control over financial reporting as of December 31, 2005. In making this assessment, management used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission in *Internal Control - Integrated Framework*. Based on its assessment, Millennium's management has concluded that Millennium's internal control over financial reporting was effective as of December 31, 2005 based on those criteria.

PricewaterhouseCoopers LLP, the independent registered public accounting firm that audited the financial statements included in this Annual Report on Form 10-K, has audited management's assessment of the effectiveness of Millennium's internal control over financial reporting as of December 31, 2005, as stated in their report that appears on the following page.

**Table of Contents**

**Index to Financial Statements**

**REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

To the Board of Directors and Stockholder of

Millennium Chemicals Inc.:

We have completed an integrated audit of Millennium Chemicals Inc.'s 2005 consolidated financial statements and of its internal control over financial reporting as of December 31, 2005 and audits of its 2004 and 2003 consolidated financial statements in accordance with the standards of the Public Company Accounting Oversight Board (United States). Our opinions, based on our audits, are presented below.

**Consolidated financial statements**

In our opinion, the accompanying consolidated balance sheets and the related consolidated statements of income, of stockholder's equity and of cash flows present fairly, in all material respects, the financial position of Millennium Chemicals Inc. and its subsidiaries at December 31, 2005 and 2004, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2005 in conformity with accounting principles generally accepted in the United States of America. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits of these statements in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit of financial statements includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

**Internal control over financial reporting**

Also, in our opinion, management's assessment, included in Management's Report on Internal Control Over Financial Reporting appearing under Item 8, that the Company maintained effective internal control over financial reporting as of December 31, 2005 based on criteria established in *Internal Control - Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO), is fairly stated, in all material respects, based on those criteria. Furthermore, in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2005, based on criteria established in *Internal Control - Integrated Framework* issued by the COSO. The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting. Our responsibility is to express opinions on management's assessment and on the effectiveness of the Company's internal control over financial reporting based on our audit. We conducted our audit of internal control over financial reporting in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. An audit of internal control over financial reporting includes obtaining an understanding of internal control over financial reporting, evaluating management's assessment, testing and evaluating the design and operating effectiveness of internal control, and performing such other procedures as we consider necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinions.

## Edgar Filing: MILLENNIUM CHEMICALS INC - Form 10-K

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) provide reasonable



**Table of Contents**

**Index to Financial Statements**

assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ PricewaterhouseCoopers LLP

PRICEWATERHOUSECOOPERS LLP

Houston, Texas

March 14, 2006

**Table of Contents****Index to Financial Statements****MILLENNIUM CHEMICALS INC.****CONSOLIDATED STATEMENTS OF INCOME**

<b>Millions of dollars</b>	<b>For the year ended December 31,</b>		
	<b>2005</b>	<b>2004</b>	<b>2003</b>
<b>Sales and other operating revenues:</b>			
Trade	\$ 1,914	\$ 1,878	\$ 1,677
Related parties	45	10	10
	<u>1,959</u>	<u>1,888</u>	<u>1,687</u>
<b>Operating costs and expenses:</b>			
Cost of sales	1,715	1,602	1,470
Selling, general and administrative expenses	194	164	130
Research and development expenses	23	21	23
Business combination costs	2	71	
Asset impairments	15	14	103
Reorganization and other costs		9	18
	<u>1,949</u>	<u>1,881</u>	<u>1,744</u>
Operating income (loss)	10	7	(57)
Interest expense	(130)	(106)	(98)
Interest income	18	12	6
Other income (expense), net	(19)	14	58
	<u>(121)</u>	<u>(73)</u>	<u>(91)</u>
Loss before equity investments, minority interests and income taxes	(121)	(73)	(91)
Income (loss) from equity investment in Equistar	221	81	(100)
	<u>100</u>	<u>8</u>	<u>(191)</u>
Income (loss) before income taxes and minority interests	100	8	(191)
Provision for (benefit from) income taxes	67	33	(11)
	<u>33</u>	<u>(25)</u>	<u>(180)</u>
Income (loss) before minority interests	33	(25)	(180)
Minority interests	(5)	(6)	(5)
	<u>28</u>	<u>(31)</u>	<u>(185)</u>
Income (loss) before cumulative effect of accounting change	28	(31)	(185)
Cumulative effect of accounting change			(1)
	<u>\$ 28</u>	<u>\$ (31)</u>	<u>\$ (186)</u>
<b>Net income (loss)</b>	<b>\$ 28</b>	<b>\$ (31)</b>	<b>\$ (186)</b>

See Notes to the Consolidated Financial Statements.



**Table of Contents****Index to Financial Statements****MILLENNIUM CHEMICALS INC.****CONSOLIDATED BALANCE SHEETS**

<u>Millions of dollars</u>	<u>December 31,</u>	
	<u>2005</u>	<u>2004</u>
<b>ASSETS</b>		
Current assets:		
Cash and cash equivalents	\$ 279	\$ 344
Accounts receivable:		
Trade, net	331	336
Related parties	30	
Inventories	429	414
Prepaid expenses and other current assets	79	61
	<u>          </u>	<u>          </u>
Total current assets	1,148	1,155
Property, plant and equipment, net	647	707
Investments in Equistar Chemicals, LP	464	457
Goodwill, net	104	104
Other assets, net	110	107
	<u>          </u>	<u>          </u>
Total assets	\$ 2,473	\$ 2,530
<b>LIABILITIES AND STOCKHOLDER S DEFICIT</b>		
Current liabilities:		
Current maturities of long-term debt	\$ 169	\$ 7
Accounts payable:		
Trade	305	265
Related parties	62	29
Accrued liabilities	156	153
	<u>          </u>	<u>          </u>
Total current liabilities	692	454
Long-term debt	966	1,398
Other liabilities	644	536
Deferred income taxes	167	164
Commitments and contingencies		
Minority interests	42	33
Stockholder s deficit:		
Common stock, \$0.01 par value, 100,000,000 shares authorized, 66,135,816 shares issued	1	1
Additional paid-in capital	1,175	1,169
Retained deficit	(999)	(1,026)
Accumulated other comprehensive loss	(125)	(105)
Treasury stock, at cost, (4,799,694 shares issued)	(90)	(94)
	<u>          </u>	<u>          </u>

Edgar Filing: MILLENNIUM CHEMICALS INC - Form 10-K

Total stockholder's deficit	(38)	(55)
Total liabilities and stockholder's deficit	\$ 2,473	\$ 2,530

See Notes to the Consolidated Financial Statements.

Table of ContentsIndex to Financial Statements

## MILLENNIUM CHEMICALS INC.

## CONSOLIDATED STATEMENTS OF CASH FLOWS

Millions of dollars	For the year ended December 31,		
	2005	2004	2003
<b>Cash flows from operating activities:</b>			
Net income (loss)	\$ 28	\$ (31)	\$ (186)
Adjustments to reconcile net income (loss) to net cash provided by operating activities:			
Depreciation and amortization	107	114	126
Asset impairments	15	14	103
Equity investment in Equistar			
Amount included in net (income) loss	(221)	(81)	100
Distributions of earnings	214	81	
Deferred income taxes	(4)	(75)	(23)
Debt prepayment premiums and charges	11		
Changes in assets and liabilities that provided (used) cash:			
Accounts receivable	(28)	(15)	(45)
Inventories	(20)	56	(13)
Accounts payable	77	44	(48)
Other, net	96	88	(106)
Net cash provided by (used in) operating activities	275	195	(92)
<b>Cash flows from investing activities:</b>			
Expenditures for property, plant and equipment	(60)	(55)	(48)
Distributions from affiliates in excess of earnings		12	
Proceeds from sale of assets		2	
Net cash used in investing activities	(60)	(41)	(48)
<b>Cash flows from financing activities:</b>			
Repayment of long-term debt	(374)	(89)	(404)
Issuance of long-term debt	100	34	626
Proceeds from exercise of stock options		17	
Contribution from affiliate	6		
Distributions to minority interests	(6)		
Dividends paid			(17)
Other	2		
Net cash provided by (used in) financing activities	(272)	(38)	205
Effect of exchange rate changes on cash	(8)	19	19
<b>Increase (decrease) in cash and cash equivalents</b>	<b>(65)</b>	<b>135</b>	<b>84</b>

Edgar Filing: MILLENNIUM CHEMICALS INC - Form 10-K

Cash and cash equivalents at beginning of period	344	209	125
Cash and cash equivalents at end of period	\$ 279	\$ 344	\$ 209

See Notes to the Consolidated Financial Statements.

Table of ContentsIndex to Financial Statements

## MILLENNIUM CHEMICALS INC.

## CONSOLIDATED STATEMENTS OF STOCKHOLDER S EQUITY

Millions of dollars	Common Stock		Paid In Capital	Retained Deficit	Accumulated Other Comprehensive Loss	Total Stockholder s Deficit	Comprehensive Income (Loss)
	Issued	Treasury					
<b>Balance, January 1, 2003</b>	\$ 1	\$ (275)	\$ 1,314	\$ (792)	\$ (299)	\$ (51)	
Net loss				(186)		(186)	\$ (186)
Foreign currency translation					128	128	128
Minimum pension liability, net of tax of \$16 million					29	29	29
Dividends to shareholders				(17)		(17)	
Shares purchased by employee benefit plan trusts		8	(6)			2	
Shares issued to fund 401(k) plan		7	(4)			3	
Net gains on derivative financial instruments					1	1	1
Comprehensive loss							\$ (28)
<b>Balance, December 31, 2003</b>	\$ 1	\$ (260)	\$ 1,304	\$ (995)	\$ (141)	\$ (91)	
Net loss				(31)		(31)	\$ (31)
Retirement of treasury shares pursuant to merger		137	(124)			13	
Foreign currency translation, net of tax of \$7 million					50	50	50
Minimum pension liability, net of tax of \$7 million					(15)	(15)	(15)
Exercise of stock options		22	(3)			19	
Shares purchased by employee benefit plan trusts		3	(7)			(4)	
Shares issued to fund 401(k) plan		4	(1)			3	
Net gains on derivative financial instruments					1	1	1
Comprehensive income							\$ 5
<b>Balance, December 31, 2004</b>	\$ 1	\$ (94)	\$ 1,169	\$ (1,026)	\$ (105)	\$ (55)	
Net income				28		28	\$ 28
Foreign currency translation					(24)	(24)	(24)
Minimum pension liability, net of tax of \$4 million					4	4	4
Capital contribution from Lyondell			6			6	
Shares sold by employee benefit plan trusts		4		(1)		3	
Comprehensive income							\$ 8
<b>Balance, December 31, 2005</b>	\$ 1	\$ (90)	\$ 1,175	\$ (999)	\$ (125)	\$ (38)	



See Notes to the Consolidated Financial Statements.

**Table of Contents**

**Index to Financial Statements**

**MILLENNIUM CHEMICALS INC.**

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

**TABLE OF CONTENTS**

	<b>Page</b>
1. Description of the Company and Operations	62
2. Summary of Significant Accounting Policies	62
3. Hurricane Effects	65
4. Acquisition by Lyondell Chemical Company	66
5. Asset Impairments	66
6. Related Party Transactions	66
7. Reorganization and Other Costs	67
8. Investment in Equistar Chemicals, LP	67
9. Accounts Receivable	68
10. Inventories	69
11. Property, Plant and Equipment and Other Assets	69
12. Accounts Payable	70
13. Accrued Liabilities	70
14. Long-Term Debt	71
15. Lease Commitments	73
16. Financial Instruments and Derivatives	74
17. Pension and Other Postretirement Benefits	75
18. Income Taxes	80
19. Commitments and Contingencies	83
20. Stockholder's Deficit	87
21. Per Share Data	90
22. Supplemental Cash Flow Information	90
23. Segment and Related Information	90
24. Supplemental Guarantor Information	92

---

**Table of Contents**

**Index to Financial Statements**

**MILLENNIUM CHEMICALS INC.**

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**1. Description of the Company and Operations**

Millennium Chemicals Inc., together with its consolidated subsidiaries (collectively, Millennium) is a global chemical company. On November 30, 2004, Lyondell acquired Millennium in a stock-for-stock business combination. As a result of the business combination, Millennium is a wholly owned subsidiary of Lyondell. The consolidated financial statements of Millennium reflect its historical cost basis, and, accordingly, do not reflect any purchase accounting adjustments related to the acquisition by Lyondell.

Millennium's principal operations are part of two Lyondell business segments: inorganic chemicals; and ethylene, co-products and derivatives (EC&D). Millennium's inorganic chemicals segment primarily produces titanium dioxide ( $\text{TiO}_2$ ). Millennium also produces titanium tetrachloride ( $\text{TiCl}_4$ ), titanyl sulfate ( $\text{TiO}_4\text{S}_4$ ), ultra-fine  $\text{TiO}_2$  and silica gel. Millennium's EC&D segment comprises its acetyls business and its equity investment in Equistar Chemicals, LP (Equistar). The acetyls business produces vinyl acetate monomer (VAM), acetic acid and methanol. Millennium also produces fragrance and flavor chemicals, which is not a reportable segment.

Millennium owns 29.5% of Equistar, which is a joint venture with Lyondell Chemical Company (Lyondell). Equistar manufactures and markets ethylene and its co-products, primarily propylene, butadiene, fuels and aromatics. Equistar also manufactures and markets derivatives, primarily ethylene oxide, ethylene glycol and polyethylene. Millennium accounts for its interest in Equistar using the equity method.

**2. Summary of Significant Accounting Policies**

*Basis of Presentation* The consolidated financial statements include the accounts of Millennium Chemicals Inc. and its consolidated subsidiaries. Investments in joint ventures where Millennium exerts a certain level of management control, but lacks full decision making ability over all major issues, are accounted for using the equity method.

*Revenue Recognition* Revenue from product sales is recognized at the time of transfer of title and risk of loss to the customer, which usually occurs at the time of shipment. Revenue is recognized at the time of delivery if Millennium retains the risk of loss during shipment. For products that are shipped on a consignment basis, revenue is recognized when the customer uses the product. Costs incurred in shipping products sold are included in cost of sales. Billings to customers for shipping costs are included in sales revenue.

## Edgar Filing: MILLENNIUM CHEMICALS INC - Form 10-K

*Cash and Cash Equivalents* Cash equivalents consist of highly liquid debt instruments such as certificates of deposit, commercial paper and money market accounts. Cash equivalents include instruments with maturities of three months or less when acquired. Cash equivalents are stated at cost, which approximates fair value. Millennium's policy is to invest cash in conservative, highly rated instruments and to limit the amount of credit exposure to any one institution.

Millennium has no requirements for compensating balances in a specific amount at a specific point in time. Millennium does maintain compensating balances for some of its banking services and products. Such balances are maintained on an average basis and are solely at Millennium's discretion.

*Allowance for Doubtful Accounts* Millennium establishes provisions for doubtful accounts receivable based on management's estimates of amounts that it believes are unlikely to be collected. Collectability of receivables is reviewed and the allowance for doubtful accounts is adjusted at least quarterly, based on aging of specific accounts and other available information about the associated customers.

**Table of Contents**

**Index to Financial Statements**

**MILLENNIUM CHEMICALS INC.**

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**2. Summary of Significant Accounting Policies (Continued)**

*Inventories* Inventories are stated at the lower of cost or market. Cost is determined using the first-in, first-out ( FIFO ) method for substantially all inventories, except for materials and supplies, which are valued using the average cost method.

*Property, Plant and Equipment* Property, plant and equipment are recorded at cost. Depreciation is computed using the straight-line method over the estimated useful asset lives, generally 20 to 40 years for buildings and 5 to 25 years for machinery and equipment. Upon retirement or sale, Millennium removes the cost of the asset and the related accumulated depreciation from the accounts and reflects any resulting gain or loss in the Consolidated Statement of Income. Millennium's policy is to capitalize interest cost incurred on debt during the construction of major projects exceeding one year.

*Long-Lived Asset Impairment* Millennium evaluates long-lived assets, including identifiable intangible assets, for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. When it is probable that undiscounted future cash flows will not be sufficient to recover an asset's carrying amount, the asset is written down to its estimated fair value.

*Goodwill* Goodwill represents the excess of purchase price paid over the fair value assigned to the net tangible and identifiable intangible assets of businesses acquired by Millennium. Goodwill is reviewed for impairment at least annually.

*Identifiable Intangible Assets* Costs to purchase and to develop software for internal use are deferred and amortized on a straight-line basis over periods of 3 to 7 years.

Costs of major maintenance and repairs incurred as part of substantial overhauls or turnarounds of major units at Millennium's manufacturing facilities are deferred and amortized using the straight-line method over the period until the next planned turnaround, predominantly 18 months to 3 years. These costs are necessary to maintain, extend and improve the operating capacity and efficiency rates of the production units.

Other intangible assets are carried at cost or amortized cost and primarily consist of deferred debt issuance costs, patents and license costs. These assets are amortized using the straight-line method over their estimated useful lives or over the term of the related agreement, if shorter.

## Edgar Filing: MILLENNIUM CHEMICALS INC - Form 10-K

*Environmental Remediation Costs* Anticipated expenditures related to investigation and remediation of contaminated sites, which include current and former plant sites and other remediation sites, are accrued when it is probable a liability has been incurred and the amount of the liability can reasonably be estimated. Only ongoing operations and monitoring costs, the timing of which can be determined with reasonable certainty, are discounted to present value. Future legal costs associated with such matters, which generally are not estimable, are not included in these liabilities.

*Legal Costs* Millennium expenses legal costs, including those incurred in connection with loss contingencies, as incurred.

*Income Taxes* Deferred income taxes reflect the net tax effects of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes, as well as the net tax effects of net operating loss carryforwards. Valuation allowances are provided against deferred tax assets when it is more likely than not that some portion or all of the deferred tax asset will not be realized.

Table of Contents

Index to Financial Statements

MILLENNIUM CHEMICALS INC.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

**2. Summary of Significant Accounting Policies (Continued)**

*Minority Interests* Minority interests represent the interests of unaffiliated investors in a partnership that owns the LaPorte Methanol Company plant in LaPorte, Texas, and in Millennium's  $TiO_2$  Operations in Brazil.

*Foreign Currency Translation* Millennium operates primarily in three functional currencies: the euro for operations in Europe, the real for operations in Brazil, and the U.S. dollar for the U. S. and other locations, including manufacturing and marketing operations in Australia, product sales of which are generally in U.S. dollars.

*Derivative Instruments* Gains and losses on derivative instruments are classified in the same category as the item being hedged.

*Use of Estimates* The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities at the date of the financial statements, and the reported amounts of revenues and expenses during the reporting periods. Actual results could differ from those estimates.

*Reclassifications* Certain previously reported amounts have been reclassified to conform to classifications adopted in 2005.

*Accounting and Reporting Changes* Effective October 1, 2005, Millennium implemented Financial Accounting Standards Board ( FASB ) Interpretation ( FIN ) No. 47, *Accounting for Conditional Asset Retirement Obligations*, which clarifies the term *conditional asset retirement obligation* as used in Statement of Financial Accounting Standards ( SFAS ) No. 143, *Accounting for Conditional Asset Retirement Obligations*, as an obligation that is conditional only as to timing or amount. Millennium's application of this interpretation had no material effect on its consolidated financial statements.

Effective July 1, 2005, Millennium implemented SFAS No. 153, *Exchanges of Nonmonetary Assets*, which amends Accounting Principles Board ( APB ) Opinion No. 29, *Accounting for Nonmonetary Transactions*, to replace the exception to fair value recognition for nonmonetary exchanges of similar productive assets with a general exception for exchanges of nonmonetary assets that do not have commercial substance. Millennium's application of SFAS No. 153 had no material effect on its consolidated financial statements.

In December 2004, the FASB issued SFAS No. 123 (revised 2004), *Share-Based Payment*. A primary focus of this Statement is accounting for transactions in which an entity obtains employee services in share-based payment transactions, such as by the granting of stock options and phantom stock options. Millennium will be required to apply the provisions of SFAS No. 123 (revised 2004) in the first quarter 2006. Millennium does not expect application of these provisions to have a material effect on its consolidated financial statements.



---

**Table of Contents**

**Index to Financial Statements**

**MILLENNIUM CHEMICALS INC.**

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**2. Summary of Significant Accounting Policies (Continued)**

In September 2005, the Emerging Issues Task Force ( EITF ) of the FASB reached consensus on one issue of EITF Issue No. 04-13, *Accounting for Purchases and Sales of Inventory with the Same Counterparty*, that inventory purchase and sales transactions with the same counterparty that are entered into in contemplation of one another should be combined for purposes of applying APB Opinion No. 29, *Accounting for Nonmonetary Transactions*. The effect would be to reduce reported revenues and cost of sales for affected transactions. The consensus on this issue would apply to transactions entered into beginning in the second quarter 2006. Millennium is evaluating the effect of EITF 04-13 on its consolidated financial statements.

In December 2003, the FASB issued Interpretation No. 46 (Revised December 2003), *Consolidation of Variable Interest Entities* ( FIN 46R ), primarily to clarify the required accounting for interests in variable interest entities ( VIEs ). This standard replaces FASB Interpretation No. 46, *Consolidation of Variable Interest Entities*, which was issued in January 2003 to address certain situations in which a company should include in its financial statements the assets, liabilities and activities of another entity. Millennium evaluated its long-term obligations with one entity that may be a VIE. Millennium has no equity interest in this entity and has confirmed that the entity is consolidated by an equity owner. Millennium has not been able to obtain the financial information from the entity necessary to determine whether Millennium is the primary beneficiary of the entity. Management of the entity cited confidentiality considerations with regard to the decision not to provide certain financial information to Millennium. Millennium pays approximately \$2 million in plant and equipment rental charges on an annual basis to this entity.

On January 1, 2003, Millennium adopted SFAS No. 143, *Accounting for Asset Retirement Obligations* . SFAS No. 143 applies to legal obligations associated with the retirement of long-lived assets. This standard requires that the fair value of a liability for an asset retirement obligation be recognized in the period in which it is incurred and the associated asset retirement costs be capitalized as part of the carrying amount of the long-lived asset. Accretion expense and depreciation expense related to the liability and capitalized asset retirement costs, respectively, are recorded in subsequent periods. Millennium's asset retirement obligations arise from activities associated with the eventual remediation of sites used for landfills and mining and include estimated liabilities for closure, restoration, and post-closure care. None of Millennium's assets are legally restricted for purposes of settling these obligations. As these liabilities are settled, a gain or loss is recognized for any difference between the settlement amount and the liability recorded. Millennium reported an after-tax transition charge of \$1 million in 2003 as the cumulative effect of this accounting change. The effect of adoption was to increase Millennium's reported liabilities of \$8 million by \$3 million. Activity associated with the asset retirement obligations other than the effect of initial adoption of SFAS No. 143 was \$4 million in 2005 and \$1 million in each of 2004 and 2003. Millennium's asset retirement obligation at December 31, 2005 and 2004 was \$17 million and \$13 million, respectively.

**3. Hurricane Effects**

## Edgar Filing: MILLENNIUM CHEMICALS INC - Form 10-K

During 2005, two major hurricanes impacted the chemical and related industries in the coastal and off-shore regions of the Gulf of Mexico. Net income in 2005, including Millennium's equity interest in Equistar, reflected charges totaling \$12 million before tax, representing Millennium's exposure to industry losses expected to be underwritten by industry insurance consortia, primarily resulting from hurricane damages.

As a result of Hurricane Rita, Millennium and Equistar also incurred various costs that are subject to insurance reimbursements. Such costs included those incurred in conjunction with suspending operations at substantially all of Millennium's and Equistar's Gulf Coast plants, minor damage to facilities, and costs to restore operations. Net income in 2005 included \$6 million of such costs, including Millennium's share of Equistar's costs of

**Table of Contents**

**Index to Financial Statements**

**MILLENNIUM CHEMICALS INC.**

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**3. Hurricane Effects (Continued)**

\$19 million, of which all but a \$5 million deductible under the relevant insurance policies are subject to reimbursement through insurance. Neither Millennium nor Equistar has recognized, in 2005, any benefits of expected insurance reimbursements.

**4. Acquisition by Lyondell Chemical Company**

On November 30, 2004, Millennium was acquired by Lyondell in a stock-for-stock business combination. As a result of the acquisition, each share of Millennium's common stock outstanding immediately prior to the acquisition was converted into the right to receive 0.95 shares of Lyondell common stock, and Millennium became a wholly owned subsidiary of Lyondell. Millennium incurred approximately \$71 million of costs in connection with the acquisition. The consolidated financial statements of Millennium reflect its historical cost basis, and, accordingly, do not reflect any purchase accounting adjustments related to the acquisition by Lyondell. As a result of the acquisition, Lyondell and Millennium entered into an agreement for the provision of administrative services, at cost, by Lyondell and a tax-sharing agreement. See Notes 6 and 18 for Millennium's transactions with Lyondell and Equistar.

**5. Asset Impairments**

In 2003, Millennium recognized the impairment of the entire book value of property, plant and equipment at Millennium's Le Havre, France TiO<sub>2</sub> manufacturing plant. Capital expenditures at this plant of \$15 million and \$14 million during 2005 and 2004, respectively, were reflected in asset impairments. At December 31, 2005 and 2004, the carrying value of the property, plant and equipment at the Le Havre manufacturing plant was zero.

**6. Related Party Transactions**

Millennium is a wholly owned subsidiary of Lyondell as a result of the acquisition of Millennium by Lyondell on November 30, 2004. Millennium owns 29.5% of Equistar (see Note 8). Millennium conducts transactions with Lyondell, Equistar and Occidental, all of which are considered related parties.

## Edgar Filing: MILLENNIUM CHEMICALS INC - Form 10-K

*Product Transactions with Equistar* Millennium purchases ethylene from Equistar at market-related prices pursuant to an agreement entered into in connection with the formation of Equistar. Under this agreement, Millennium is required to purchase 100% of its ethylene requirements for its LaPorte, Texas facility from Equistar. The initial term of the contract expired December 31, 2000 and it continues thereafter for one-year periods unless either party serves notice twelve months in advance.

Also, Millennium sells VAM to Equistar under an agreement that requires Equistar to purchase 100% of its vinyl acetate monomer raw material requirements at market-related prices from Millennium for the production of ethylene vinyl acetate products at its LaPorte, Texas; Clinton, Iowa and Morris, Illinois plants, and 100% of its glacial acetic acid requirements at market-related prices from Millennium for the production of glycol ether acetate at its Bayport, Texas plant. The initial term of this agreement expired December 31, 2005 and continues year to year thereafter unless terminated by either party.

*Product Transactions with Lyondell* Millennium sells VAM and glacial acetic acid to Lyondell at market-related prices under various agreements. The initial one-year term of these agreements expires in 2006 and continues year-to-year thereafter, unless terminated by either party. Prior to November 30, 2004, such transactions were not related party transactions.

*Shared Services and Shared-Site Agreements with Lyondell* Under a shared services agreement, Lyondell provides office space and various services to Millennium including information technology, human resources,

**Table of Contents****Index to Financial Statements****MILLENNIUM CHEMICALS INC.****NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)****6. Related Party Transactions (Continued)**

sales and marketing, raw material supply, supply chain, health, safety and environmental, engineering, research and development, facility services, legal, accounting, treasury, internal audit and tax (see Note 18). Lyondell charges Millennium for Millennium's share of the cost of such services. Direct costs, incurred exclusively for Millennium, also are charged to Millennium.

*Shared Services and Shared-Site Agreements with Equistar* Millennium and Equistar provide operating services, utilities and raw materials to each other at common locations. Millennium and Equistar have entered into various operating, manufacturing and technical service agreements under which Millennium billed Equistar for certain operational services, including utilities, plant-related transportation and other services, and Equistar billed Millennium for utilities and fuel streams.

Related party transactions are summarized as follows:

Millions of dollars	For the year ended December 31,		
	2005	2004	2003
<b>Millennium billed related parties for:</b>			
Sales of products and processing services			
Lyondell	\$ 37	\$	\$
Equistar	8	10	10
Shared services and shared site agreements			
Equistar	1	2	15
<b>Millennium was billed by related parties for:</b>			
Purchases of products and processing services			
Equistar	\$ 53	\$ 52	\$ 46
Occidental	5		
Shared services, transition and lease agreements			
Lyondell	19		
Equistar	27	19	8

**7. Reorganization and Other Costs**

In July 2003, Millennium announced the implementation of a program to reduce costs. This program included a reduction of approximately 5% in the number of Millennium's employees worldwide and, effective September 1, 2003, the closure of Millennium's executive offices in Red Bank, New Jersey and relocation of its headquarters to Millennium's offices in Baltimore, Maryland. Millennium recorded charges related to this program of \$3 million and \$18 million, respectively, for the years ended December 31, 2004 and 2003. Total cumulative charges of \$21 million included severance-related costs of \$20 million and contractual commitments of \$1 million for ongoing lease costs, net of expected sublease income. Severance-related cash payments for the implementation of this program of \$9 million and \$12 million were made during the years ended December 31, 2004 and 2003, respectively.

#### **8. Investment in Equistar Chemicals, LP**

Equistar is owned 70.5% by Lyondell and 29.5% by Millennium. As a result of Lyondell's November 30, 2004 acquisition of Millennium, Millennium and Equistar are wholly owned subsidiaries of Lyondell (see Note 4). Millennium accounts for its investment in Equistar using the equity method. As a partnership, Equistar is not subject to federal income taxes.

Table of ContentsIndex to Financial Statements

## MILLENNIUM CHEMICALS INC.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

## 8. Investment in Equistar Chemicals, LP (Continued)

Summarized financial information for Equistar follows:

Millions of dollars	December 31, 2005	December 31, 2004
<b>BALANCE SHEETS</b>		
Total current assets	\$ 1,849	\$ 1,490
Property, plant and equipment, net	3,063	3,167
Investments and other assets, net	408	417
<b>Total assets</b>	<b>\$ 5,320</b>	<b>\$ 5,074</b>
Current maturities of long-term debt	\$ 150	\$ 1
Other current liabilities	1,010	805
Long-term debt	2,161	2,312
Other liabilities and deferred revenues	416	395
Partners' capital	1,583	1,561
<b>Total liabilities and partners' capital</b>	<b>\$ 5,320</b>	<b>\$ 5,074</b>

Millions of dollars	For the year ended December 31,		
	2005	2004	2003
<b>STATEMENTS OF INCOME</b>			
Sales and other operating revenues	\$ 11,686	\$ 9,316	\$ 6,545
Cost of sales	10,487	8,587	6,387
Selling, general and administrative expenses	198	205	191
Research and development expense	33	34	38
(Gain) loss on asset dispositions		(4)	27
<b>Operating income (loss)</b>	<b>968</b>	<b>494</b>	<b>(98)</b>

Edgar Filing: MILLENNIUM CHEMICALS INC - Form 10-K

Interest expense, net	218	220	207
Other income (expense), net	(2)	2	(43)
	<u>          </u>	<u>          </u>	<u>          </u>
Net income (loss)	\$ 748	\$ 276	\$ (339)
	<u>          </u>	<u>          </u>	<u>          </u>
<b>OTHER INFORMATION</b>			
Depreciation and amortization	\$ 322	\$ 313	\$ 307
Expenditures for property, plant and equipment	153	101	106

**9. Accounts Receivable**

Millennium sells its products primarily to other industrial concerns in the petrochemicals and coatings industries. Millennium performs ongoing credit evaluations of its customers' financial condition and, in certain circumstances, requires letters of credit from them. Millennium's allowance for doubtful accounts receivable, which is reflected in the Consolidated Balance Sheets as a reduction of accounts receivable, totaled \$4 million and \$7 million at December 31, 2005 and 2004, respectively. The Consolidated Statements of Income for 2005, 2004 and 2003 included provisions for doubtful accounts of \$1 million, \$2 million and \$1 million, respectively.



**Table of Contents****Index to Financial Statements****MILLENNIUM CHEMICALS INC.****NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)****10. Inventories**

Inventories consisted of the following components at December 31:

<u>Millions of dollars</u>	<u>2005</u>	<u>2004</u>
Finished goods	\$ 223	\$ 243
Work-in-process	40	31
Raw materials	106	80
Materials and supplies	60	60
<b>Total inventories</b>	<b>\$ 429</b>	<b>\$ 414</b>

**11. Property, Plant and Equipment and Other Assets**

The components of property, plant and equipment, at cost, and the related accumulated depreciation were as follows at December 31:

<u>Millions of dollars</u>	<u>2005</u>	<u>2004</u>
Land	\$ 20	\$ 20
Manufacturing facilities and equipment	1,531	1,569
Construction in progress	77	76
<b>Total property, plant and equipment</b>	<b>1,628</b>	<b>1,665</b>
Less accumulated depreciation	(981)	(958)
<b>Property, plant and equipment, net</b>	<b>\$ 647</b>	<b>\$ 707</b>

Maintenance and repair expenses were \$161 million, \$160 million and \$136 million for the years ended December 31, 2005, 2004 and 2003, respectively. No interest was capitalized to property, plant and equipment during 2005, 2004 and 2003.

Edgar Filing: MILLENNIUM CHEMICALS INC - Form 10-K

The components of other assets, at cost, and the related accumulated amortization were as follows at December 31:

Millions of dollars	2005			2004		
	Cost	Accumulated Amortization	Net	Cost	Accumulated Amortization	Net
<b>Identifiable intangible assets:</b>						
Turnaround costs	\$ 22	\$ (8)	\$ 14	\$ 19	\$ (4)	\$ 15
Software costs	85	(77)	8	82	(67)	15
Debt issuance costs	25	(11)	14	23	(11)	12
Catalyst costs	18	(8)	10	12	(4)	8
<b>Total intangible assets</b>	<b>\$ 150</b>	<b>\$ (104)</b>	<b>46</b>	<b>\$ 136</b>	<b>\$ (86)</b>	<b>50</b>
Pension assets			40			33
Precious metals			12			9
Other			12			15
<b>Total other assets, net</b>			<b>\$ 110</b>			<b>\$ 107</b>

**Table of Contents****Index to Financial Statements****MILLENNIUM CHEMICALS INC.****NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)****11. Property, Plant and Equipment and Other Assets (Continued)**

Amortization of these identifiable intangible assets for the next five years is expected to be \$22 million in 2006, \$13 million in 2007, \$4 million in 2008 and \$1 million in each of 2009 and 2010.

Depreciation and amortization expense is summarized as follows:

<u>Millions of dollars</u>	<u>2005</u>	<u>2004</u>	<u>2003</u>
Property, plant and equipment	\$ 82	\$ 82	\$ 99
Turnaround costs	8	12	9
Software costs	11	15	14
Other	6	5	4
<b>Total depreciation and amortization</b>	<b>\$ 107</b>	<b>\$ 114</b>	<b>\$ 126</b>

In addition to the depreciation and amortization shown above, amortization of debt issuance costs of \$3 million, in each of 2005, 2004, and 2003 is included in interest expense in the Consolidated Statements of Income.

**12. Accounts Payable**

Accounts payable at December 31, 2005 and 2004 included liabilities in the amounts of \$5 million and \$4 million, respectively, for checks issued in excess of associated bank balances but not yet presented for collection.

**13. Accrued Liabilities**

Edgar Filing: MILLENNIUM CHEMICALS INC - Form 10-K

Accrued liabilities consisted of the following components at December 31:

<u>Millions of dollars</u>	<u>2005</u>	<u>2004</u>
Payroll and benefits	\$ 39	\$ 43
Income taxes	34	4
Product sales rebates	32	39
Environmental costs	15	15
Accrued interest	10	10
Taxes other than income taxes	9	14
Other	17	28
<b>Total accrued liabilities</b>	<b>\$ 156</b>	<b>\$ 153</b>

**Table of Contents****Index to Financial Statements****MILLENNIUM CHEMICALS INC.****NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)****14. Long-Term Debt**

Long-term debt consisted of the following at December 31:

<u>Millions of dollars</u>	<u>2005</u>	<u>2004</u>
<b>Bank Credit Facilities:</b>		
\$150 million senior secured revolving credit facility	\$	\$
\$100 million Australian senior secured term loan due 2010	99	
<b>Other debt obligations:</b>		
Senior Notes due 2006, 7%	158	500
Senior Notes due 2008, 9.25% (\$5 million of premium)	463	479
Senior Debentures due 2026, 7.625% (\$1 million of discount)	248	250
Convertible Senior Debentures due 2023, 4%	150	150
Debt payable through 2011 at interest rates ranging from 0% to 9.5%	19	22
Other	(2)	4
<b>Total</b>	<b>1,135</b>	<b>1,405</b>
Less current maturities	(169)	(7)
<b>Total long-term debt, net</b>	<b>\$ 966</b>	<b>\$ 1,398</b>

Aggregate maturities of all long-term debt during the next five years are \$169 million in 2006, \$7 million in 2007, \$463 million in 2008, \$5 million in 2009, \$79 million in 2010 and \$412 million thereafter.

Millennium may currently redeem its 9.25% Senior Notes due 2008 upon payment of the present value of future interest and principal amounts, using a specified discount rate. Additionally, Millennium may redeem the Australian senior secured term loan due 2010 at 100% of the principal amount.

In August 2005, Millennium amended and restated its \$150 million credit facility, replacing it with a \$125 million U.S. revolving credit facility, a \$25 million Australian revolving credit facility, and a \$100 million Australian senior term loan, all of which mature in August 2010. Availability under the revolving credit facilities is reduced to the extent of outstanding letters of credit provided under the facilities. There were \$27 million of outstanding letters of credit under the U.S. revolving credit facility and none outstanding under the Australian revolving credit facility as of December 31, 2005. There was no outstanding borrowing under either revolving credit facility as of December 31, 2005. The U.S. revolving credit facility and the Australian term loan generally bear interest between LIBOR plus 1% to LIBOR plus 2%, as the case may be,

## Edgar Filing: MILLENNIUM CHEMICALS INC - Form 10-K

based upon the Leverage Ratio, as defined, as of the most recent determination date. The Australian revolving credit facility generally bears interest based on the Australian Bank Bill Rate, as defined, plus between 1% to 2%, as the case may be, based upon the Leverage Ratio as of the most recent determination date.

In January 2006, a U.K. subsidiary of Millennium entered into a new \$60 million, five-year, revolving credit facility, which, subject to permitted liens, is generally secured by the subsidiary's inventory, accounts receivable and certain other assets. Availability under the U.K. facility, which was \$44 million, or approximately \$53 million, at March 14, 2006, gives effect to the borrowing base as determined using a formula applied to accounts receivable and inventory balances and is reduced to the extent of outstanding borrowing and letters of credit provided under the facility. At March 14, 2006, there were no outstanding letters of credit under the facility. The U.K. facility will bear interest between LIBOR plus 1.25% and LIBOR plus 1.75%.

On February 28, 2006, Millennium completed a cash tender offer for its 7% Senior Notes due 2006, purchasing \$149 million principal amount of the notes at 101.256 percent of par. Millennium intends to continue to reduce its indebtedness as market conditions permit.

Table of Contents

Index to Financial Statements

MILLENNIUM CHEMICALS INC.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

**14. Long-Term Debt (Continued)**

The obligations under the U.S. revolving credit facility, subject to permitted liens, are generally secured by Millennium's equity interests in certain U.S. and non-U.S. subsidiaries, cash distributions made by Equistar, certain assets of Millennium and certain of its U.S. subsidiaries and guarantees by Millennium and certain U.S. subsidiaries.

The obligations under the Australian term loan and revolving credit facility, subject to permitted liens, are secured by Millennium's equity interests in certain non-U.S. subsidiaries, substantially all of the assets of those subsidiaries, including cash and proceeds therefrom, and guarantees by Millennium and certain of its subsidiaries.

In addition to letters of credit outstanding under the U.S. revolving credit facility, Millennium had other outstanding letters of credit and bank guarantees under other arrangements of \$4 million at December 31, 2005.

In May 2005, Millennium obtained an amendment to its previous \$150 million credit facility to allow for the unrestricted repurchase of indebtedness in the form of bonds, debentures, notes or similar instruments. On February 2, 2005, as a result of certain adjustments and charges related to the February 2005 restatement of Millennium's financial statements, Millennium entered into an amendment and waiver to its previous \$150 million credit facility, which amended the credit facility definition of EBITDA and waived any and all defaults or events of default that may have occurred on or prior to the amendment and waiver. Millennium also obtained amendments to its previous credit facility in 2003 to provide additional financial flexibility by easing certain financial ratio requirements. One of the 2003 amendments was conditioned on Millennium obtaining \$110 million of long-term financing, which was satisfied by the sale of \$150 million of the 4% Convertible Senior Debentures. The same 2003 amendment also reduced the maximum availability under the credit facility from \$175 million to \$150 million. Millennium also obtained an amendment to its previous credit facility in July 2004 to permit Lyondell's acquisition of Millennium.

Millennium's facilities and its indentures contain covenants that, subject to exceptions, restrict, among other things, distributions, debt incurrence, lien incurrence, investments, sale and leaseback transactions, certain other payments, sales of assets, affiliate transactions, mergers, domestic accounts receivable securitization transactions, restrictive agreements and issuances of redeemable stock and preferred stock. Pursuant to these provisions, Millennium is prohibited from making restricted payments, including paying certain dividends. Other than the U.K. facility, Millennium's facilities also contain covenants that require the maintenance of specified financial ratios: (1) the Leverage Ratio, as defined, is required to be less than 4.50 to 1 and (2) the Interest Coverage Ratio, as defined, for any period of four consecutive fiscal quarters is required to be equal to or greater than (a) 1.75 to 1 for any such period ending before September 30, 2006, and (b) 2.25 to 1 for any such period ending on or after September 30, 2006. Millennium's U.K. facility does not require the maintenance of specified financial ratios as long as certain conditions are met.

## Edgar Filing: MILLENNIUM CHEMICALS INC - Form 10-K

In 2005, Millennium purchased \$281 million principal amount of its 7% Senior Notes due 2006 pursuant to a cash tender offer at 102.622 percent of par. During 2005, Millennium also purchased an additional \$61 million of the 7% Senior Notes due 2006, \$13 million of the 9.25% Senior Notes due 2008 and \$1 million of the 7.625% Senior Debentures due 2026.

Pursuant to the indenture governing the 9.25% Senior Notes, Millennium was required to purchase \$4 million principal amount of its 9.25% Senior Notes and pay a 1% premium as a result of Lyondell's acquisition of Millennium on November 30, 2004.



---

**Table of Contents**

**Index to Financial Statements**

**MILLENNIUM CHEMICALS INC.**

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**14. Long-Term Debt (Continued)**

Millennium has outstanding \$150 million aggregate principal amount of 4% Convertible Senior Debentures, which are due in 2023, unless earlier redeemed, converted or repurchased. On October 1, 2004, based on a quarterly test related to the price of the common stock, the 4% Convertible Senior Debentures became convertible into shares of Millennium's common stock. As a result of Lyondell's acquisition of Millennium, Millennium and Lyondell executed a supplemental indenture providing that the holders of the 4% Convertible Senior Debentures may convert their debentures into shares of Lyondell's common stock (or, at Lyondell's discretion, equivalent cash or a combination thereof). Based on the results of a quarterly test, the conversion price as of December 31, 2005, subject to adjustment upon certain events, was \$13.89 per share, which is equivalent to a conversion rate of 72.0183 Lyondell shares per one thousand dollar principal amount of the Debentures. As of December 31, 2005, none of the Debentures had been converted into shares of Lyondell common stock.

The Debentures are redeemable at Millennium's option beginning November 15, 2010 at a redemption price equal to 100% of their principal amount. On November 15 in each of 2010, 2013 and 2018, holders of the debentures will have the right to require Millennium to repurchase all or some of the debentures they own at a purchase price equal to 100% of their principal amount. Millennium may choose to pay the purchase price in cash or shares of Lyondell's common stock or any combination thereof. In the event of a conversion request as a result of the long-term credit rating assigned to the debentures being either Caa1 or lower, in the case of Moody's Investors Service (Moody's), or B- or lower in the case of Standard & Poor's (S&P) rating service, or if both rating agencies discontinue, withdraw or suspend their ratings, after June 18, 2006, Millennium can deliver cash, or a combination of cash and shares of Lyondell common stock, in lieu of shares of Lyondell common stock. The debentures are currently rated B1 by Moody's and B+ by S&P. Holders of the Debentures also have the right to require Millennium to repurchase all or some of the Debentures at a cash purchase price equal to 100% of their principal amount, upon the occurrence of certain events constituting a Fundamental Change, as defined in the indenture. Lyondell's acquisition of Millennium was not considered a Fundamental Change.

Millennium's revolving credit facility is guaranteed by Millennium and Millennium America Inc. (Millennium America), a subsidiary of Millennium; Millennium's 7% Senior Notes, 7.625% Senior Debentures and 9.25% Senior Notes were issued by Millennium America and are fully and unconditionally guaranteed by Millennium; and Millennium's 4% Convertible Senior Debentures were issued by Millennium and are guaranteed fully and unconditionally by Millennium America.

**15. Lease Commitments**

Millennium leases various facilities and equipment under noncancelable operating lease arrangements for varying periods. As of December 31, 2005, future minimum lease payments for the next five years and thereafter, relating to all noncancelable operating leases with terms in excess of one year were as follows:

Millions of dollars

2006	\$ 23
2007	20
2008	16
2009	13
2010	11
Thereafter	82
	<hr/>
Total minimum lease payments	\$ 165
	<hr/>

Net rental expense was \$24 million in each of 2005 and 2004 and \$22 million in 2003.

---

Table of Contents

Index to Financial Statements

MILLENNIUM CHEMICALS INC.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

**16. Financial Instruments and Derivatives**

Millennium is exposed to market risk, such as changes in commodity pricing, currency exchange rates and interest rates. To manage the volatility related to these exposures, Millennium selectively enters into derivative transactions pursuant to Millennium's policies. Designation of the derivatives as fair-value or cash-flow hedges is performed on a specific exposure basis. Hedge accounting may not be elected with respect to certain short-term exposures. The changes in fair value of these hedging instruments are offset in part or in whole by corresponding changes in the fair value or cash flows of the underlying exposures being hedged. Millennium does not hold or issue derivative financial instruments for speculative or trading purposes.

*Foreign Currency Exposure Management* Millennium manufactures and markets its products in a number of countries throughout the world and, as a result, is exposed to changes in foreign currency exchange rates. Costs in some countries are incurred, in part, in currencies other than the applicable functional currency. Millennium selectively utilizes forward, swap and option derivative contracts with terms normally lasting less than three months to protect against the adverse effect that exchange rate fluctuations may have on foreign currency denominated trade receivables and trade payables. These derivatives generally are not designated as hedges for accounting purposes. The gains and losses on both the derivatives and the foreign currency denominated trade receivables and payables are recorded in earnings. Net gains and losses on forward exchange contracts included in earnings, which offset similar amounts from foreign currency denominated trade receivables and payables, were less than \$1 million in 2005 and 2004, respectively, and was a gain of \$10 million in 2003. At December 31, 2005, Millennium had no outstanding foreign currency forward, swap or option contracts.

In addition, Millennium selectively utilizes forward exchange contracts that qualify as cash-flow hedges. These are intended to offset the effect of exchange rate fluctuations on forecasted sales and purchases. Gains and losses on these instruments are deferred in accumulated other comprehensive income ( AOCI ) until the underlying transaction is recognized in earnings. The earnings impact is reported either in sales and other operating revenues or cost of sales to match the underlying transaction being hedged. Net losses of less than \$1 million in 2005, \$1 million in 2004 and \$5 million in 2003, related to forward exchange contracts designated as cash-flow hedges were reclassified to earnings to match the losses on the underlying transaction being hedged. At December 31, 2005 there were no amounts deferred in AOCI related to foreign exchange cash-flow hedges.

As a result of foreign currency transactions, Millennium had a net loss of \$1 million in 2005 and net gains of \$5 million and \$3 million, respectively, in 2004 and 2003, net of gains or losses on related hedge transactions, which were not significant.

*Interest Rate Risk Management* Millennium selectively uses derivative instruments to manage the ratio of fixed-to variable-rate debt. At December 31, 2005, Millennium had outstanding interest rate swap agreements in the notional amount of \$175 million, which were designated as fair-value hedges of underlying fixed-rate obligations. The fair value of these interest rate swap agreements was an obligation of \$4 million at December 31, 2005, resulting in a decrease in the carrying value of long-term debt and the recognition of a corresponding liability. The net gains and losses resulting from adjustment of both the interest rate swaps and the hedged portion of the underlying debt to fair value are recorded in interest expense. In September 2004, Millennium terminated all of the interest rate swap agreements that were in effect at that time and received

## Edgar Filing: MILLENNIUM CHEMICALS INC - Form 10-K

proceeds of approximately \$3 million. The carrying value of long-term debt was increased in September 2004, by a gain of approximately \$2 million that was deferred. This deferred gain will be recognized as a reduction of interest expense ratably over the remaining term of the underlying fixed-rate obligation previously hedged.

*Commodity Price Risk Management* Millennium is exposed to commodity price volatility related to anticipated purchases of natural gas and certain other commodities, and to product sales. Millennium selectively

Table of ContentsIndex to Financial Statements

## MILLENNIUM CHEMICALS INC.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

## 16. Financial Instruments and Derivatives (Continued)

uses commodity swap, options, and futures contracts with various terms to manage the volatility related to purchases of natural gas and raw materials, as well as product sales. Cash-flow hedge accounting is normally elected for these derivative transactions; however, in some cases, when the duration of a derivative is short, hedge accounting is not elected. When hedge accounting is not elected, the gains and losses on these instruments are recorded in earnings. When hedge accounting is elected, gains and losses on these instruments are deferred in AOCI until the underlying transaction is recognized in earnings. Net losses included in earnings were less than \$1 million in each of the years 2005 and 2004 and \$2 million in 2003. As of December 31, 2005, there were no commodity derivative instruments outstanding and no amounts deferred in AOCI.

The carrying value and the estimated fair value of Millennium's non-current, non-derivative financial instruments as of December 31, 2005 and 2004 are shown in the table below:

Millions of dollars	2005		2004	
	Carrying Value	Fair Value	Carrying Value	Fair Value
Long-term debt:				
Amount outstanding under Revolving Loans	\$	\$	\$	\$
Senior Notes due 2006, 7.00%	159	162	500	520
Senior Debentures due 2026, 7.625%	249	238	250	246
Senior Notes due 2008, 9.25%	458	494	478	535
Convertible Senior Debentures due 2023, 4.00%	150	281	150	344

The fair value of all non-derivative financial instruments included in current assets and current liabilities, including cash and cash equivalents, other short-term investments, accounts receivable, accounts payable and notes payable, approximated their carrying value due to their short maturity. The investment in Equistar Chemicals, LP, was valued using current financial and other available information. Long-term debt, including amounts due within one year, was valued based upon the borrowing rates currently available to Millennium for debt with terms and average maturities similar to Millennium's debt portfolio except that, for the 4% Convertible Senior Debentures, quoted market rates were used.

Financial instruments that potentially subject Millennium to significant concentrations of credit risk consist principally of temporary cash investments, foreign currency, interest rate and natural gas derivative contracts and accounts receivable. Millennium maintains its investments and enters contracts with major institutions that it deems credit worthy, generally financial institutions that provide Millennium with debt financing.

Millennium sells a broad range of commodity, industrial, performance and specialty chemicals to a diverse group of customers operating throughout the world. Accordingly, there is no significant concentration of risk in any one particular country. The sales revenues for the inorganic chemicals segment in 2005, 2004 and 2003 were from customers in the global paint and coatings industry. The leading U.S. economic indicator for this industry is new and existing home sales, which has remained relatively strong in recent years. Credit limits, ongoing credit evaluation, and account-monitoring procedures are utilized to minimize credit risk. Collateral is generally not required, but may be used under certain circumstances or in certain markets, particularly in lesser-developed countries of the world. Credit losses to customers operating in this industry have not been material.

#### **17. Pension and Other Postretirement Benefits**

Millennium has defined benefit pension plans, which cover employees in the United States and a number of other countries. Retirement benefits are generally based on years of credited service and average compensation as defined under the respective plan provisions. Millennium funds the plans through contributions to pension trust

Table of ContentsIndex to Financial Statements

## MILLENNIUM CHEMICALS INC.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

## 17. Pension and Other Postretirement Benefits (Continued)

funds, generally subject to minimum funding requirements as provided by applicable law. In addition, Millennium sponsors postretirement benefit plans other than pensions, which provide medical and life insurance to most employees and their dependents. The measurement date for all of the Company's benefit obligations and plan assets is December 31.

The following table provides a reconciliation of benefit obligations, plan assets and the funded status of Millennium's domestic and non-U.S. pension plans.

Millions of dollars	2005		2004	
	U.S.	Non-U.S.	U.S.	Non-U.S.
<b>Change in benefit obligation:</b>				
Benefit obligation, January 1	\$ 762	\$ 221	\$ 712	\$ 181
Service cost	8	7	8	6
Interest cost	41	11	42	10
Plan amendments			1	
Actuarial loss	12	24	64	25
Benefits paid	(82)	(13)	(68)	(14)
Foreign exchange effects		(22)		13
Other			3	
Benefit obligation, December 31	741	228	762	221
<b>Change in plan assets:</b>				
Fair value of plan assets, January 1	605	137	599	122
Actual return on plan assets	46	23	67	13
Company contributions	19	9	7	8
Benefits paid	(82)	(13)	(68)	(14)
Foreign exchange effects		(14)		8
Fair value of plan assets, December 31	588	142	605	137
Funded status	(153)	(86)	(157)	(84)
Unrecognized actuarial and investment loss	311	88	315	92

Edgar Filing: MILLENNIUM CHEMICALS INC - Form 10-K

Unrecognized prior service cost (benefit)	6		7	
Unrecognized net asset				(1)
Net amount recognized	\$ 164	\$ 2	\$ 165	\$ 7
<b>Amounts recognized in the Consolidated Balance Sheets consist of:</b>				
Prepaid benefit cost	\$ 26	\$ 8	\$ 24	\$ 8
Accrued benefit liability	(97)	(45)	(101)	(47)
Accumulated other comprehensive loss pretax	229	39	235	46
Intangible asset	6		7	
Net amount recognized	\$ 164	\$ 2	\$ 165	\$ 7
<b>Additional Information:</b>				
Accumulated benefit obligation for defined benefit plans, December 31	\$ 665	\$ 179	\$ 687	\$ 182
Increase (decrease) in minimum liability included in other comprehensive loss	(6)	(7)	11	3



Table of ContentsIndex to Financial Statements

## MILLENNIUM CHEMICALS INC.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

## 17. Pension and Other Postretirement Benefits (Continued)

The following table provides a reconciliation of benefit obligations, plan assets and the funded status of Millennium's other postretirement benefit plans.

Millions of dollars	2005	2004
	—	—
<b>Change in benefit obligation:</b>		
Benefit obligation, January 1	\$ 34	\$ 80
Interest cost	2	3
Plan amendments		(48)
Actuarial (gain) loss	1	7
Benefits paid	(4)	(9)
Other		1
	—	—
Benefit obligation, December 31	33	34
	—	—
Funded status	(33)	(34)
Unrecognized actuarial loss	4	3
Unrecognized prior service benefit	(53)	(59)
	—	—
Accrued benefit liability	\$ (82)	\$ (90)
	—	—

The accrued benefit liability for pension and other postretirement benefits is included in Other liabilities in the Consolidated Balance Sheets.

Pension plans with projected benefit obligations and accumulated obligations in excess of the fair value of assets are summarized as follows at December 31:

Millions of dollars	2005		2004	
	U.S.	Non-U.S.	U.S.	Non-U.S.

Edgar Filing: MILLENNIUM CHEMICALS INC - Form 10-K

Projected benefit obligations	\$ 725	\$ 197	\$ 747	\$ 187
Accumulated benefit obligations	649	149	672	146
Fair value of assets	553	107	571	101

Net periodic pension costs included the following components for the year ended December 31:

Millions of dollars	2005		2004		2003	
	U.S.	Non-U.S.	U.S.	Non-U.S.	U.S.	Non-U.S.
Service cost	\$ 8	\$ 7	\$ 8	\$ 6	\$ 7	\$ 6
Interest cost	41	11	42	10	42	10
Actual gain on plan assets	(46)	(23)	(67)	(13)	(128)	(15)
Less-unrecognized gain (loss)	(1)	13	12	5	69	6
Recognized gain on plan assets	(47)	(10)	(55)	(8)	(59)	(9)
Unrecognized net loss amortization	15	5	10	3	5	1
Prior service cost amortization	1		1		1	
Net effect of curtailments, settlements and special termination benefits	1		13		3	
Net periodic benefit cost (income)	\$ 19	\$ 13	\$ 19	\$ 11	\$ (1)	\$ 8

Table of ContentsIndex to Financial Statements

## MILLENNIUM CHEMICALS INC.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

## 17. Pension and Other Postretirement Benefits (Continued)

Net periodic other postretirement benefit costs included the following components for the year ended December 31:

Millions of dollars	2005	2004	2003
Interest cost	\$ 2	\$ 3	\$ 6
Unrecognized net loss (gain) amortization	1	1	(1)
Prior service cost amortization	(7)	(7)	(2)
Net effect of curtailments, settlements and special termination benefits		(4)	(1)
Net periodic benefit cost (income)	\$ (4)	\$ (7)	\$ 2

The assumptions used in determining the net benefit liabilities for Millennium's pension and other postretirement benefit plans were as follows at December 31:

	2005		2004	
	U.S.	Non-U.S.	U.S.	Non-U.S.
<b>Weighted-average assumptions as of December 31:</b>				
Discount rate	5.50%	5.03%	5.75%	5.41%
Rate of compensation increase	4.50%	4.27%	4.50%	4.31%

The assumptions used in determining net periodic pension cost were as follows for the year ended December 31:

2005		2004		2003	
U.S.	Non-U.S.	U.S.	Non-U.S.	U.S.	Non-U.S.

## Edgar Filing: MILLENNIUM CHEMICALS INC - Form 10-K

### Weighted-average assumptions for the year:

Discount rate	5.75%	5.41%	6.00%	5.66%	6.00%	5.66%
Expected return on plan assets	8.00%	6.92%	8.50%	7.38%	8.50%	7.28%
Rate of compensation increase	4.50%	4.31%	3.50%	3.90%	3.50%	3.82%

The discount rates used in determining net postretirement benefit cost were 5.75% for 2005 and 6.0% for 2004 and 2003.

Management's goal is to manage pension investments over the long term to achieve optimal returns with an acceptable level of risk and volatility. Investment policies limit the concentration of investments in one industry to 20% and in one company to 5%. Pension investments at December 31, 2004, included Lyondell's common stock. Total plan assets at December 31, 2005 did not include any Lyondell common stock. At December 31, 2004, Lyondell's common stock was approximately 1% of total plan assets. The investments are marketable securities that provide sufficient liquidity to pay benefits as required.

As part of the Lyondell consolidated group, management reviewed its asset allocation and expected long-term rate of return assumptions, and obtained an updated asset allocation study from the independent pension investment advisor, including updated expectations for long-term market earnings rates for various classes of investments. Based on this review, management reduced its expected long-term rate of return on plan assets to 8% beginning December 1, 2004.

Table of ContentsIndex to Financial Statements

## MILLENNIUM CHEMICALS INC.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

## 17. Pension and Other Postretirement Benefits (Continued)

Millennium's pension plan weighted-average asset allocations by asset category for its pension plans generally are as follows at December 31:

Asset Category:	Policy	2005		2004	
		U.S.	Non-U.S.	U.S.	Non-U.S.
U.S. equity securities	14% - 55%	53%	13%	51%	11%
Non-U.S. equity securities	15% - 52%	16%	51%	20%	60%
Fixed income securities	30% - 33%	30%	33%	28%	29%
Cash equivalents	% - 1%	1%	3%	1%	%
Total		100%	100%	100%	100%

Millennium expects to contribute approximately \$14 million to its pension plans in 2006.

As of December 31, 2005, future expected benefit payments, which reflect expected future service, as appropriate, were as follows:

Millions of dollars	Pension Benefits	Other Benefits
2006	\$ 62	\$ 3
2007	61	3
2008	62	3
2009	64	3
2010	62	3
2011 through 2015	320	12

## Edgar Filing: MILLENNIUM CHEMICALS INC - Form 10-K

Millennium also maintains defined contribution savings plans for eligible employees. Contributions to the plans by Millennium were \$3 million in 2005 and \$4 million in each of 2004 and 2003.

Assumed healthcare cost trend rates have a significant effect on the amounts reported for the healthcare plans. The assumed annual rate of increase in the per capita cost of covered health care benefits as of December 31, 2005 was 10% for 2006 through 2007, decreasing 1% per year to 5% for 2011 and thereafter. A 1% increase or decrease in assumed health care cost trend rates in each year would change the accumulated postretirement benefit liability as of December 31, 2005 by \$1 million and would not have a material effect on the aggregate service and interest components of the net periodic postretirement benefit cost for the year then ended.

The *Medicare Prescription Drug, Improvement and Modernization Act of 2003* (the Act) was enacted in December 2003. The effect of the Act was not significant to Millennium's consolidated financial statements and was recognized in the December 31, 2004 accumulated other postretirement benefit obligation. The effect of the subsidy on the measurement of net periodic benefit cost for 2005 was not significant.

In April 2004, Millennium reduced the level of retiree medical benefits provided to essentially all of its retirees by offering a monthly subsidy to retirees that enroll in designated preferred provider organization plans or Medicare supplement insurance plans. This reduction in benefits is expected to reduce Millennium's accumulated postretirement benefit obligation by approximately \$47 million. Beginning in 2004, this reduction is being recognized ratably over approximately thirteen years through net periodic benefit cost for other postretirement benefits. As a result of Millennium's transition to the subsidy plan, cash payments for retiree medical and insurance benefits decreased from \$12 million in 2003 to \$4 million in 2005.

**Table of Contents****Index to Financial Statements****MILLENNIUM CHEMICALS INC.****NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)****18. Income Taxes**

Under a tax-sharing agreement between Millennium and Lyondell, Millennium's U.S. federal income tax is substantially the same as it would have been had Millennium not been included in Lyondell's consolidated U.S. income tax return, but filed a separate return. Any resulting receivable or payable is settled with Lyondell. The agreement provides for the calculation of the current U.S. tax considering all statutory limitations on the utilization of carryforward benefits resulting from the acquisition transaction itself. In addition, any current cash benefit resulting from utilization of certain carryforward attributes with respect to which benefits have not been recognized for financial reporting purposes is not remitted to Millennium until the related issues have been resolved with the appropriate taxing authority. The same principles apply to tax sharing for unitary, consolidated and combined state income taxes.

The significant components of the provision for income taxes were as follows for the years ended December 31:

<u>Millions of dollars</u>	<u>2005</u>	<u>2004</u>	<u>2003</u>
<b>Current:</b>			
Federal	\$ 36	\$ 5	\$
Non-U.S.	33	100	12
State	2	3	
<b>Total current</b>	<b>71</b>	<b>108</b>	<b>12</b>
<b>Deferred:</b>			
Federal		(23)	(27)
Non-U.S.	(6)	(48)	6
State	2	(4)	(2)
<b>Total deferred</b>	<b>(4)</b>	<b>(75)</b>	<b>(23)</b>
<b>Provision for (benefit from) income taxes before tax effects of other comprehensive income</b>	<b>67</b>	<b>33</b>	<b>(11)</b>
<b>Tax effects of elements of other comprehensive income:</b>			
Minimum pension liability	4	(7)	(16)
Other		(1)	
<b>Total income tax expense (benefit) in comprehensive income</b>	<b>\$ 71</b>	<b>\$ 25</b>	<b>\$(27)</b>

**Table of Contents****Index to Financial Statements****MILLENNIUM CHEMICALS INC.****NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)****18. Income Taxes (Continued)**

Deferred income taxes reflect the net tax effects of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes, as well as the net tax effects of operating loss carryforwards. Significant components of Millennium's deferred tax liabilities and assets were as follows as of December 31:

<u>Millions of dollars</u>	<u>2005</u>	<u>2004</u>
Deferred tax liabilities:		
Accelerated tax depreciation	\$ 95	\$ 80
Investment in Equistar	365	369
Other liabilities	78	11
	<u>538</u>	<u>460</u>
Total deferred tax liabilities		
Deferred tax assets:		
Net operating loss carryforwards	147	88
Employee benefit plans	75	83
Environmental remediation liabilities	78	34
AMT credits	78	112
Other	107	89
	<u>485</u>	<u>406</u>
Total deferred tax assets		
Deferred tax asset valuation allowance	(99)	(98)
	<u>386</u>	<u>308</u>
Net deferred tax assets		
Net deferred tax liabilities	152	152
Add current portion of deferred tax assets	15	12
	<u>\$ 167</u>	<u>\$ 164</u>
Long-term deferred income taxes		

Millennium has U.S. federal, state and non-U.S. tax loss carryforwards, the tax benefit of which would be \$147 million at current statutory rates. The federal loss carryforward benefits of \$78 million will begin expiring in 2022, and the other tax loss carryforward benefits generally have no expiration date. However, tax loss carryforward benefits generated in the United Kingdom (the U.K.) are subject to certain limitations. Federal AMT credits of \$78 million have no expiration date.



Deferred tax asset valuation allowances included \$94 million and \$88 million for the net deferred tax assets of Millennium's French subsidiaries at December 31, 2005 and 2004, respectively. No income tax benefits were recognized with respect to the 2005 and 2004 operating losses of these French subsidiaries. Additionally, valuation allowances totaling \$5 million and \$10 million are included at December 31, 2005 and 2004, respectively, due to the uncertainty of the realization of deferred tax assets for certain state net operating loss carryforwards. Provisions of \$12 million in 2005 and \$1 million in 2004 increased the allowance, primarily for net operating loss carryforwards. Other changes in the valuation allowance reflected the effects of foreign currency translation. The deferred tax asset valuation allowance at December 31, 2003 was \$97 million.

Certain income tax returns for Millennium's U.S. and non-U.S. subsidiaries are currently under examination by the Internal Revenue Service (IRS), Revenue and Customs (formerly Inland Revenue) of the U.K. and various other non-U.S. and state tax authorities. In many cases, these audits result in proposed assessments by the tax authority. Millennium believes that its tax positions comply with applicable tax law and intends to defend its positions through appropriate administrative and judicial processes. Accrued liabilities for the resolution of probable tax assessments that are expected to result in the reduction of tax attributes recognized in deferred tax assets, rather than a cash payment to the taxing authorities, are included as a component of deferred tax

Table of Contents

Index to Financial Statements

MILLENNIUM CHEMICALS INC.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

**18. Income Taxes (Continued)**

liabilities. Other accrued liabilities for the resolution of probable tax assessments that are expected to result in cash payments in future years are included in Other liabilities. Millennium believes it has adequately provided for any probable outcome related to these matters.

Millennium has entered into tax-sharing and indemnification agreements with Hanson plc ( Hanson ) in which Millennium and Hanson generally agreed to indemnify each other for certain income tax liabilities attributable to periods prior to the demerger.

The American Jobs Creation Act of 2004 (the Act ) provides a tax deduction for qualified production activities. During 2005, Millennium had significant federal tax loss carryforwards and, as a result did not benefit from these provisions. Millennium is currently evaluating the application of these provisions to its production activities. It is anticipated that the deduction for qualified production activities under the Act will provide a benefit to Millennium during 2006, although the level of the potential benefit has not yet been determined.

The Act also provides tax benefits with respect to repatriation of non-U.S. earnings. The benefit can result in a significant reduction in the effective tax rate on certain non-U.S. earnings repatriated during a one year period.

Accordingly, during 2005, Millennium repatriated certain non-U.S. earnings that had previously been identified as likely to be repatriated as well as additional earnings previously expected to be indefinitely invested.

Deferred tax expense on certain unremitted earnings of non-U.S. subsidiaries of \$19 million was recognized in 2003 due to Millennium's plan to repatriate approximately \$100 million from its Australian and European businesses by implementing certain intercompany financing strategies. The planned taxable distributions were deferred from 2004 to 2005 in order to take full advantage of the Act, and the tax provision was adjusted accordingly. During 2005, \$297 million, including non-U.S. Millennium earnings and returns of investment were repatriated. The associated tax provisions were a net benefit of approximately \$1 million in 2004 (after taking into effect the deferred tax provision previously recorded with respect to deferred non-U.S. earnings) and an additional tax provision of \$3 million in 2005. As a result of the repatriation of earnings under the Act in 2005, Millennium has no undistributed foreign subsidiary earnings and no related income tax liability at December 31, 2005.



Table of ContentsIndex to Financial Statements

## MILLENNIUM CHEMICALS INC.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

## 18. Income Taxes (Continued)

The U.S. and non-U.S. components of income (loss) before income taxes and a reconciliation of the income tax provision to theoretical income tax computed by applying the U.S. federal statutory tax rate are as follows:

Millions of dollars	2005	2004	2003
Income (loss) before income taxes:			
U.S.	\$ 87	\$ (45)	\$ (154)
Non-U.S.	8	51	(37)
<b>Total</b>	<b>\$ 95</b>	<b>\$ 6</b>	<b>\$ (191)</b>
Theoretical income tax at U.S. statutory rate	\$ 33	\$ 2	\$ (67)
Increase (reduction) resulting from:			
State tax, net of federal	2		
Effect of non-U.S. tax incentives, net of rate differences for non-U.S. taxes	7	(16)	(23)
Changes in estimates for prior year items	13	28	(1)
Valuation allowance for French deferred tax assets	16	20	56
Provision for unremitted earnings of non-U.S. subsidiaries	3	(1)	19
Other, net	(7)		5
<b>Provision for (benefit from) income taxes</b>	<b>\$ 67</b>	<b>\$ 33</b>	<b>\$ (11)</b>
<b>Effective income tax rate</b>	<b>70.3%</b>	<b>567.7%</b>	<b>(5.8)%</b>

Millennium recorded tax expense of \$13 million and \$28 million in 2005 and 2004, respectively, which were unrelated to transactions that occurred during those years. During 2004, Millennium reached an agreement with the IRS concerning tax issues relating to the years 1993 through 1996. In connection with this agreement, Millennium recorded net tax expense of \$7 million in 2004, including the effect of the U.S. audit settlement on U.K. tax liabilities related to Millennium's tax sharing agreement with Hanson. Millennium recorded associated accruals of interest expense of \$29 million in 2005 and reversals of accrued interest of \$6 million and \$55 million in 2004 and 2003, respectively, related to income tax issues. The accrued interest reversals have been included in pre-tax income as Other income (expense), net.

## 19. Commitments and Contingencies

Edgar Filing: MILLENNIUM CHEMICALS INC - Form 10-K

*Commitments* Millennium has various agreements for the purchase of ore used in the production of TiO<sub>2</sub> and certain other agreements to purchase raw materials, utilities and services with various terms extending through 2020. At December 31, 2005, estimated future minimum payments under these contracts with noncancelable contract terms in excess of one year were as follows:

<u>Millions of dollars</u>	<u>Ore</u>	<u>Other</u>	<u>Total</u>
2006	\$ 201	\$ 181	\$ 382
2007	143	161	304
2008	42	156	198
2009	23	151	174
2010		150	150
Thereafter		956	956
<b>Total</b>	<b>\$ 409</b>	<b>\$ 1,755</b>	<b>\$ 2,164</b>

Millennium's total purchases under these agreements were \$544 million and \$474 million, respectively in 2005 and 2004.

Table of ContentsIndex to Financial Statements

## MILLENNIUM CHEMICALS INC.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

**19. Commitments and Contingencies (Continued)**

Under an agreement with an unrelated party to process acetic acid through that party's VAM plant, Millennium will purchase all VAM production at such plant not utilized by the unrelated party through December 31, 2006. The total commitment over the remaining term of the contract is expected to be \$87 million.

*Asset Retirement Obligation* Certain manufacturing facilities are held under land lease arrangements that require the lessee to return the land to substantially the same condition as at the inception of the lease. Generally, these leases would terminate if Millennium discontinued use of the land. It is not possible at this time to estimate the costs that could be incurred upon termination of these leases, nor to reasonably estimate the likely timing of such costs upon termination of the lease.

*Environmental Remediation* Millennium's accrued environmental liability for future environmental remediation costs at current and former plant sites and other remediation sites totaled \$168 million and \$122 million as of December 31, 2005 and 2004, respectively. The remediation expenditures are expected to occur over a number of years, and not to be concentrated in any single year. In the opinion of management, there is no material estimable range of reasonably possible loss in excess of the liabilities recorded for environmental remediation. However, it is possible that new information about the sites for which the accrual has been established, new technology or future developments such as involvement in investigations by regulatory agencies, could require Millennium to reassess its potential exposure related to environmental matters.

The following table summarizes the activity in Millennium's accrued environmental liability for the years ended December 31, 2005 and 2004:

Millions of dollars	2005	2004
Balance at January 1	\$ 122	\$ 107
Additional accruals	58	31
Amounts paid	(7)	(16)
Other	(5)	
Balance at December 31	\$ 168	\$ 122

## Edgar Filing: MILLENNIUM CHEMICALS INC - Form 10-K

The liabilities for individual sites range from less than \$1 million to \$103 million. The \$103 million liability relates to the Kalamazoo River Superfund Site.

A Millennium subsidiary has been identified as a Potential Responsible Party ( PRP ) with respect to the Kalamazoo River Superfund Site. The site involves cleanup of river sediments and floodplain soils contaminated with polychlorinated biphenyls, cleanup of former paper mill operations, and cleanup and closure of landfills associated with the former paper mill operations. In 2000, the Kalamazoo River Study Group (the KRSG ), of which the Millennium subsidiary and other PRPs are members, submitted to the State of Michigan a Draft Remedial Investigation and Draft Feasibility Study, which evaluated a number of remedial options for the river. The estimated costs for these remedial options ranged from \$0 to \$2.5 billion.

At the end of 2001, the U.S. Environmental Protection Agency ( EPA ) took lead responsibility for the river portion of the site at the request of the State of Michigan. In 2004, the EPA initiated a confidential process to facilitate discussions among the agency, the Millennium subsidiary, other PRPs, the Michigan Departments of Environmental Quality and Natural Resources, and certain federal natural resource trustees about the need for additional investigation activities and different possible approaches for addressing the contamination in and along the Kalamazoo River. These discussions are continuing.

Table of Contents

Index to Financial Statements

MILLENNIUM CHEMICALS INC.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

**19. Commitments and Contingencies (Continued)**

As of December 31, 2005, the probable future remediation spending associated with the river cannot be determined with certainty. Although the KRSG study identified a broad range of remedial options, not all of those options would represent reasonably possible outcomes. Management does not believe that it can identify a single remedy among those options that would represent the highest-cost reasonably possible outcome. However, Millennium recognized a liability of \$40 million at December 31, 2004, representing Millennium's interim allocation of 55% of the \$73 million total of estimated cost of bank stabilization, recommended as the preferred remedy in 2000 by the KRSG study, and of certain other costs. During 2005, this liability was increased by \$19 million to reflect new information obtained during the period about expected costs of regulatory oversight, modeling, and other associated remediation costs. At December 31, 2005, the balance of this liability, net of related spending, was \$57 million.

In addition, Millennium recognized a liability of \$38 million as of December 31, 2004, primarily related to Millennium's estimated share of remediation costs for two former paper mill sites and associated landfills, which are also part of the Kalamazoo River Superfund Site. The liability was increased in 2005 by \$9 million to reflect new information obtained during the period regarding the probable costs associated with the remediation activity. At December 31, 2005, the balance of the liability, net of related spending, was \$46 million. Although no final agreement has been reached as to the ultimate remedy for these locations, Millennium has begun remediation activity related to these sites.

Millennium's ultimate liability for the Kalamazoo River Superfund Site will depend on many factors that have not yet been determined, including the ultimate remedy selected, the determination of natural resource damages, the number and financial viability of the other PRPs, and the determination of the final allocation among the PRPs.

Also, based on additional information obtained during 2005, regarding remediation liabilities related to Millennium sites other than the Kalamazoo River Superfund Site, Millennium increased the estimated remediation liabilities for those sites by \$30 million. The balance of these liabilities at December 31, 2005 was \$65 million.

Millennium currently estimates that environmentally related capital expenditures at its facilities will be approximately \$11 million in 2006 and \$6 million in 2007. These amounts include estimated expenditures related to air emission reductions.

*Litigation* Together with alleged past manufacturers of lead-based paint and lead pigments for use in paint, Millennium has been named as a defendant in various legal proceedings alleging personal injury, property damage, and remediation costs allegedly associated with the use of these products. The majority of these legal proceedings assert unspecified monetary damages in excess of the statutory minimum and, in certain



## Edgar Filing: MILLENNIUM CHEMICALS INC - Form 10-K

cases, equitable relief such as abatement of lead-based paint in buildings. Legal proceedings relating to lead pigment or paint are in various trial stages and post-dismissal settings, some of which are on appeal.

One legal proceeding relating to lead pigment or paint was tried in 2002. On October 29, 2002, the judge in that case declared a mistrial after the jury declared itself deadlocked. The sole issue before the jury was whether lead pigment in paint in and on Rhode Island buildings constituted a public nuisance. The re-trial of this case began on November 1, 2005. On February 22, 2006, a jury returned a verdict in favor of the State of Rhode Island finding that the cumulative presence of lead pigments in paints and coatings on buildings in the state constitutes a public nuisance; that a Millennium subsidiary and other defendants either caused or substantially contributed to the creation of the public nuisance; and that those defendants, including the Millennium subsidiary, should be ordered to abate the public nuisance. On February 28, 2006, the judge held that the state could not proceed with

---

**Table of Contents**

**Index to Financial Statements**

**MILLENNIUM CHEMICALS INC.**

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**19. Commitments and Contingencies (Continued)**

its claim for punitive damages. As a result, the jury was discharged. There will be further proceedings by the judge to determine the scope of any abatement. Millennium is considering its options, including all appropriate appeals.

Millennium's defense costs to date for lead-based paint and lead pigment litigation largely have been covered by insurance. Millennium has insurance policies that potentially provide approximately \$1 billion in indemnity coverage for lead-based paint and lead pigment litigation. Millennium's ability to collect under the indemnity coverage would depend upon, among other things, the resolution of certain potential coverage defenses that the insurers have asserted or are likely to assert and the solvency of the various insurance carriers that are part of the coverage block at the time of such a request.

While Millennium believes that it has valid defenses to all the lead-based paint and lead pigment proceedings and is vigorously defending them, litigation is inherently subject to many uncertainties. Any liability that Millennium may ultimately incur, net of any insurance or other recoveries, cannot be estimated at this time.

*Other Contingencies* Millennium is organized under the laws of Delaware and is subject to United States Federal income taxation of corporations. However, in 1996, in order to obtain clearance from the United Kingdom Inland Revenue as to the tax-free treatment of the demerger stock dividend for United Kingdom tax purposes for Hanson plc (Hanson) and Hanson's shareholders, Hanson agreed with the United Kingdom Inland Revenue that Millennium would continue to be centrally managed and controlled in the United Kingdom at least until September 30, 2001. Millennium agreed with Hanson not to take, or fail to take, during such five-year period, any action that would result in a breach of, or constitute non-compliance with, any of the representations and undertakings made by Hanson in its agreement with the United Kingdom Inland Revenue. Effective February 4, 2002, Millennium ceased being centrally managed and controlled in the United Kingdom. Millennium believes that it has satisfied all obligations that it be managed and controlled in the United Kingdom for the requisite five-year period.

*Indemnification* Millennium and its joint ventures are parties to various indemnification arrangements, including arrangements entered into in connection with acquisitions, divestitures and the formation of joint ventures. For example, Millennium entered into indemnification arrangements in connection with its demerger from Hanson, and Equistar and its owner companies (including Millennium) entered into indemnification arrangements in connection with the formation of Equistar. Pursuant to these arrangements, Millennium and its joint ventures provide indemnification to and/or receive indemnification from other parties in connection with liabilities that may arise in connection with the transactions and in connection with activities prior to completion of the transactions. These indemnification arrangements typically include provisions pertaining to third party claims relating to environmental and tax matters and various types of litigation. As of December 31, 2005, Millennium has not accrued any significant amounts for such indemnification obligations, other than amounts under tax sharing agreements that have been reflected in the provision for income taxes, and is not aware of other circumstances that would be likely to lead to significant future

## Edgar Filing: MILLENNIUM CHEMICALS INC - Form 10-K

indemnification claims against Millennium. Millennium cannot determine with certainty the potential amount of future payments under the indemnification arrangements until events arise that would trigger a liability under the arrangements.

*Other* Millennium and its joint ventures are, from time to time, defendants in lawsuits and other commercial disputes, some of which are not covered by insurance. Many of these suits make no specific claim for relief. Although final determination of any liability and resulting financial impact with respect to any such matters cannot be ascertained with any degree of certainty, management does not believe that any ultimate uninsured

Table of ContentsIndex to Financial Statements

## MILLENNIUM CHEMICALS INC.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

**19. Commitments and Contingencies (Continued)**

liability resulting from these matters in which it, its subsidiaries or its joint ventures currently are involved (directly or indirectly) will individually, or in the aggregate, have a material adverse effect on the financial position, liquidity or results of operations of Millennium.

*General* In the opinion of management, the matters discussed in this note are not expected to have a material adverse effect on the financial position or liquidity of Millennium. However, the adverse resolution in any reporting period of one or more of these matters could have a material impact on Millennium's results of operations for that period, which may be mitigated by contribution or indemnification obligations of others, or by any insurance coverage that may be available.

**20. Stockholder's Deficit**

*Preferred Stock* Millennium has authorized 1,000 shares of \$.01 par value preferred stock at December 31, 2005 and 2004. As of December 31, 2005 and 2004, none was issued and outstanding.

*Common Stock* As a result of Lyondell's acquisition of Millennium on November 30, 2004, each issued and outstanding share of Millennium's common stock, excluding shares held directly by Lyondell and Millennium, was converted to a right to receive 0.95 shares of Lyondell common stock in return for the cancellation of such shares. Substantially all of the approximately 66 million shares of the Millennium common stock outstanding immediately prior to the acquisition, were converted to Lyondell common stock. As of December 31, 2005 approximately 5 million shares of Millennium common stock were held by Millennium America and were reflected as treasury stock in the Consolidated Balance Sheet.

*Accumulated Other Comprehensive Loss* The components of accumulated other comprehensive loss were as follows at December 31:

Millions of dollars	2005	2004
Foreign currency translation	\$ 55	\$ 79
Minimum pension liability	(180)	(184)

Total accumulated other comprehensive loss	\$ (125)	\$ (105)
--------------------------------------------	----------	----------

*Omnibus Incentive Compensation Plan* Millennium's Incentive Compensation Plan (the Omnibus Incentive Plan) provided for awards to employee and non-employee directors in the form of (i) stock options, including incentive stock options and non-qualified stock options, (ii) stock appreciation rights, (iii) restricted shares, (iv) performance units, (v) performance shares, (vi) stock awards and (vii) cash based awards. During 2003, Millennium granted non-qualified stock option awards for 445,800 shares, to a limited number of Millennium's executive officers and key employees. No compensation expense was recognized in 2005, 2004 and 2003 for such equity-related awards under this plan. In addition, in 2004 and 2003, Millennium granted 91,500 shares and 122,100 shares, respectively, of restricted stock and performance units to a limited number of Millennium's officers and key employees. Compensation expense related to these grants was \$2 million in 2004 and was less than \$1 million in 2003. No further grants will be made under this plan.

Millennium's Long Term Incentive Plan and Executive Long Term Incentive Plan provided for the award of shares of Millennium common stock to certain management personnel and senior executives, respectively, if certain performance targets were achieved. The Executive Long Term Incentive Plan also provided for a cash award based on the total shareholder return of Millennium's common stock when compared to total shareholder return of Millennium's peer group (companies in the Standard & Poor's Chemical Composite Index) over a

Table of ContentsIndex to Financial Statements

## MILLENNIUM CHEMICALS INC.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

**20. Stockholder s Deficit (Continued)**

three-year period. Beginning in 2001, these awards were granted under the Omnibus Incentive Plan by reference to the Long Term Incentive Plan. The obligations under these plans were funded by shares of Millennium s common stock that were held in trusts established for that purpose. No shares remained in the trusts at December 31, 2004. Unvested shares will be forfeited. Compensation expense related to these plans for 2004 and 2003 and was \$12 million and \$3 million, respectively.

*Long Term Stock Incentive Plan* Millennium s Long Term Stock Incentive Plan ( Stock Incentive Plan ) provided for the following types of awards to its employees: (i) stock options, including incentive stock options and non-qualified stock options, (ii) stock appreciation rights, (iii) restricted shares, (iv) performance units and (v) performance shares. All stock options awarded under this plan were granted at exercise prices equal to the market price of Millennium s common stock. Compensation expense related to this plan was \$2 million in 2004 and less than \$1 million in 2003.

As a result of Lyondell s acquisition of Millennium on November 30, 2004, each outstanding option under the Omnibus Incentive Compensation Plan and the Long Term Stock Incentive Plan to acquire Millennium common stock was converted into an option to acquire 0.95 shares of Lyondell common stock. The exercise price of the converted option will be the exercise price of the original Millennium option divided by the exchange ratio. All converted options vested immediately pursuant to the change in control provisions of the plan.

The following table summarizes activity, in thousands of shares and the weighted-average exercise price per share, relating to restricted stock and stock options for all employees, including executive officers and key employees, under the Omnibus Incentive Plan and the Stock Incentive Plan. As of November 30, 2004, the date of acquisition by Lyondell, all outstanding options vested and were converted into options to purchase Lyondell common stock. As of December 31, 2005, there were no options to purchase Millennium common stock outstanding.

	<b>Restricted Shares</b>	<b>Weighted- Average Grant Price</b>	<b>Stock Options</b>	<b>Weighted- Average Exercise Price</b>
<b>Balance at January 1, 2003</b>	66	\$ 21.19	2,197	\$ 15.73
Vested and issued	(50)	\$ 24.63		
Exercised			(8)	\$ 11.68
Cancelled			(44)	\$ 18.31
Granted	122	\$ 10.02	486	\$ 11.68
<b>Balance at December 31, 2003</b>	138	\$ 10.07	2,631	\$ 14.94

Edgar Filing: MILLENNIUM CHEMICALS INC - Form 10-K

Vested and issued	(226)	\$	12.95		
Exercised				(1,162)	\$ 14.23
Cancelled	(4)	\$	10.02	(1,469)	\$ 15.50
Granted	92	\$	12.85		
<b>Balance at December 31, 2004</b>					

*Stock-based Compensation* SFAS No. 123, *Accounting for Stock-Based Compensation*, as amended by SFAS No. 148, *Accounting for Stock-Based Compensation Transition and Disclosure*, encourages, but does not require, a fair-value based method of accounting for employee stock options and similar equity instruments, which generally would result in the recording of additional compensation expense in Millennium's consolidated financial statements. Millennium accounts for stock-based employee compensation using the intrinsic value

Table of ContentsIndex to Financial Statements

## MILLENNIUM CHEMICALS INC.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

## 20. Stockholder s Deficit (Continued)

method prescribed in APB Opinion No. 25 and related interpretations. Accordingly, no compensation cost was recognized for the stock option plans in the accompanying financial statements as all options granted had an exercise price equal to the market value of the underlying common stock on the date of grant.

The pro forma effect on net income (loss) and net loss per share before cumulative effect of accounting change of measuring compensation expense for such grants in the manner prescribed in SFAS No. 123 is summarized in the table below for the years ended December 31:

<u>Millions of dollars</u>	<u>2004</u>	<u>2003</u>
Net income (loss) before cumulative effect of accounting change	\$ (31)	\$ (185)
Deduct: Stock-based compensation using fair-value method for all options awarded, net of tax	(1)	(2)
Pro forma net income (loss) before cumulative effect of accounting change	<u>\$ (32)</u>	<u>\$ (187)</u>
<b>Basic and diluted loss per share before cumulative effect of accounting change:</b>		
Reported		\$ (2.89)
Pro forma		<u>\$ (2.91)</u>
<b>Assumptions:</b>		
Fair value per share of options granted		\$ 4.06
Fair value assumptions:		
Dividend yield		4.6%
Expected volatility		49.3%
Risk-free interest rate		3.8%
Maturity, in years		10

As of November 30, 2004, the date of acquisition by Lyondell, all outstanding options vested and were converted into options to purchase Lyondell common stock. There were no option grants in 2004. Earnings per share data for 2005 and 2004 are not meaningful since Lyondell owns 100% of the shares.



## Edgar Filing: MILLENNIUM CHEMICALS INC - Form 10-K

*Salary and Bonus Deferral Plan* Millennium had a deferred compensation plan under which officers and certain management employees had deferred a portion of their compensation on a pre-tax basis in the form of the share of Millennium's common stock. A rabbi trust (the Trust) was established to hold shares of Millennium's common stock purchased in open market transactions to fund this obligation. Shares purchased by the Trust were reflected as Treasury stock, at cost, and, along with the related obligation for this plan, were included in Stockholder's deficit. At November 30, 2004, the plan was no longer active; however, the Trust held 228,543 shares at a total cost of approximately \$5 million. As a result of Lyondell's acquisition of Millennium on November 30, 2004, the shares of Millennium common stock held by the Trust were converted to shares of Lyondell common stock based on the exchange ratio of 0.95, and were paid out.

**Table of Contents****Index to Financial Statements****MILLENNIUM CHEMICALS INC.****NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)****21. Per Share Data**

Basic loss per share for the period presented is computed based upon the weighted average number of shares of common stock outstanding during the period. Outstanding stock options and restricted stock were antidilutive in 2003.

Loss per share data was as follows for the year ended December 31:

<b>Millions of dollars, except per share data</b>	<b>2003</b>
Loss before cumulative effect of accounting change	\$ (185)
Cumulative effect of accounting change	(1)
Net loss available for common shareholders - basic and diluted	\$ (186)
Basic and diluted weighted average shares, in millions	64.0
Basic and diluted loss per share:	
Loss before cumulative effect of accounting change	\$ (2.89)
Cumulative effect of accounting change	(0.02)
Net loss	\$ (2.91)

As a result of the November 30, 2004 acquisition of Millennium by Lyondell, Lyondell owns all of Millennium's outstanding stock; therefore, per share data for 2005 and 2004 has been omitted.

**22. Supplemental Cash Flow Information**

Supplemental cash flow information is summarized as follows for the years ended December 31:

<b>Millions of dollars</b>	<b>2005</b>	<b>2004</b>	<b>2003</b>
----------------------------	-------------	-------------	-------------

Cash paid (received) for interest and taxes:			
Interest, net	\$ 100	\$ 96	\$ 95
Taxes, net	28	5	38

In 2005, taxes were paid to Lyondell pursuant to a tax-sharing agreement between Millennium and Lyondell (see Note 18).

### 23. Segment and Related Information

Millennium, a wholly owned subsidiary of Lyondell, sells its products on a global basis primarily to other industrial concerns in the coatings and petrochemicals industries. Millennium's principal operations are part of two Lyondell business segments:

Inorganic chemicals, primarily manufacturing and marketing of TiO<sub>2</sub> and related products, and

EC&D, including Millennium's acetyls business, which produces VAM, acetic acid and methanol; and Millennium's equity investment in Equistar, which produces primarily ethylene, co-products such as propylene, butadiene and aromatics, and derivatives such as ethylene oxide, ethylene glycol and polyethylene.

At the time of Lyondell's acquisition of Millennium, Millennium reassessed segment reporting based on the current management structure, including the impact of the integration of Millennium's businesses into the Lyondell portfolio of existing businesses. Based on this analysis, Millennium concluded that management is focused on the two segments listed previously.

**Table of Contents****Index to Financial Statements****MILLENNIUM CHEMICALS INC.****NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)****23. Segment and Related Information (Continued)**

The accounting policies of the segments are the same as those described in Summary of Significant Accounting Policies (see Note 2). No customer accounted for 10% or more of consolidated sales during any year in the three-year period ended December 31, 2005.

Summarized financial information concerning reportable segments is shown in the following table.

<u>Millions of dollars</u>	<b>Inorganic</b>			<b>Total</b>
	<b>Chemicals</b>	<b>EC&amp;D</b>	<b>Other</b>	
<b>2005</b>				
Sales and other operating revenue	\$ 1,360	\$ 504	\$ 95	\$ 1,959
Operating income (loss)	24	45	(59)	10
Income from equity investment		221		221
Goodwill	55	49		104
Total assets	1,242	764	467	2,473
Capital expenditures	53	2	5	60
Depreciation and amortization expense	82	16	9	107
<b>2004</b>				
Sales and other operating revenue	\$ 1,340	\$ 453	\$ 95	\$ 1,888
Operating income (loss)	51	59	(103)	7
Income from equity investment		81		81
Goodwill	56	48		104
Total assets	1,258	767	505	2,530
Capital expenditures	51	1	3	55
Depreciation and amortization expense	87	18	9	114
<b>2003</b>				
Sales and other operating revenue	\$ 1,172	\$ 421	\$ 94	\$ 1,687
Operating income (loss)	(53)	26	(30)	(57)
Income from equity investment		(100)		(100)
Goodwill	56	48		104
Total assets	1,318	749	331	2,398
Capital expenditures	42	3	3	48
Depreciation and amortization expense	101	17	8	126

Edgar Filing: MILLENNIUM CHEMICALS INC - Form 10-K

Operating income (loss) in the Other column above includes businesses that are not reportable segments and costs not allocated to Millennium's business segments, including costs from predecessor businesses, costs associated with Millennium's cost reduction program and business combination costs.

**Table of Contents****Index to Financial Statements****MILLENNIUM CHEMICALS INC.****NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)****23. Segment and Related Information (Continued)**

The following table presents the details of Total assets as presented above in the Other column as of December 31, for the years indicated:

Millions of dollars	2005	2004	2003
Cash and cash equivalents	\$ 279	\$ 344	\$ 209
Non reportable segment assets	86	84	94
All other	102	77	28
<b>Total assets</b>	<b>\$ 467</b>	<b>\$ 505</b>	<b>\$ 331</b>

Millennium's non-U.S. operations are primarily conducted by subsidiaries in the United Kingdom, France, Brazil and Australia. Sales between Millennium's operations are made on terms similar to those of its third-party distributors. The following Revenues by country data are based upon the delivery location of the product.

Millions of dollars	2005	2004	2003
United States	\$ 877	\$ 730	\$ 667
Non-U.S.	1,082	1,158	1,020
<b>Total</b>	<b>\$ 1,959</b>	<b>\$ 1,888</b>	<b>\$ 1,687</b>

The following Long-lived assets by country data are based upon the location of the assets.

Millions of dollars	2005	2004	2003
United States	\$ 318	\$ 341	\$ 370
Non-U.S.:			

Edgar Filing: MILLENNIUM CHEMICALS INC - Form 10-K

United Kingdom	158	190	191
France	53	66	66
Asia/Pacific	32	33	36
Brazil	86	77	75
	<u>      </u>	<u>      </u>	<u>      </u>
Total non-U.S.	329	366	368
	<u>      </u>	<u>      </u>	<u>      </u>
Total	\$ 647	\$ 707	\$ 738
	<u>      </u>	<u>      </u>	<u>      </u>

**24. Supplemental Guarantor Information**

Millennium America Inc., a 100% owned indirect subsidiary of Millennium ( Millennium America ), is a holding company that owns Millennium's operating subsidiaries other than its operations in the United Kingdom, France, Brazil and Australia. Millennium America is the issuer of the 7% Senior Notes, the 7.625% Senior Debentures, and the 9.25% Senior Notes. Millennium is the issuer of the 4% Convertible Senior Debentures. Millennium America fully and unconditionally guarantees all obligations under the 4% Convertible Senior Debentures. The 7% Senior Notes, the 7.625% Senior Debentures and the 9.25% Senior Notes are fully and unconditionally guaranteed by Millennium. The following condensed consolidating financial information present supplemental information for Millennium Chemicals Inc., the parent, and Millennium America as of December 31, 2005 and 2004 and for each of the three years in the period ended December 31, 2005.

Table of ContentsIndex to Financial Statements

## MILLENNIUM CHEMICALS INC.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

## CONDENSED CONSOLIDATING FINANCIAL INFORMATION

As of and for the year ended December 31, 2005

Millions of dollars	Millennium Chemicals Inc.	Millennium America Inc.	Non-Guarantor Subsidiaries	Eliminations	Millennium Chemicals Inc. and Subsidiaries
<b>BALANCE SHEET</b>					
Inventories	\$	\$	\$ 429		\$ 429
Other current assets		211	508		719
Property, plant and equipment, net			647		647
Investment in Equistar Chemicals, LP			464		464
Investment in subsidiaries	117	97	3	(214)	3
Long-term receivables affiliates		301	107	(301)	107
Goodwill, net			104		104
Other assets, net	3	8	(11)		
<b>Total assets</b>	<b>\$ 120</b>	<b>\$ 617</b>	<b>\$ 2,251</b>	<b>\$ (515)</b>	<b>\$ 2,473</b>
Current maturities of long-term debt	\$	\$ 158	\$ 11	\$	\$ 169
Other current liabilities	1	9	513		523
Long-term debt	150	709	107		966
Other liabilities		4	640		644
Deferred income taxes			167		167
Long-term payables affiliates	7		294	(301)	
<b>Total liabilities</b>	<b>158</b>	<b>880</b>	<b>1,732</b>	<b>(301)</b>	<b>2,469</b>
Minority interests			42		42
Stockholder s (deficit) equity	(38)	(263)	477	(214)	(38)
<b>Total liabilities and stockholder s (deficit) equity</b>	<b>\$ 120</b>	<b>\$ 617</b>	<b>\$ 2,251</b>	<b>\$ (515)</b>	<b>\$ 2,473</b>
<b>STATEMENT OF INCOME</b>					
Sales and other operating revenues	\$	\$	\$ 1,959	\$	\$ 1,959
Cost of sales			1,715		1,715
Selling, general and administrative expenses		1	193		194
Research and development expenses			23		23
Business combination costs			2		2
Asset impairments			15		15



Edgar Filing: MILLENNIUM CHEMICALS INC - Form 10-K

Operating income (loss)		(1)	11		10
Interest income (expense), net	(6)	(89)	(17)		(112)
Intercompany interest income (expense), net	(1)	110	(109)		
Income from equity investment in Equistar			221		221
Equity in income of subsidiaries	33	78		(111)	
Other expense, net		(11)	(13)		(24)
(Provision for) benefit from income taxes	2	(3)	(66)		(67)
Net income	\$ 28	\$ 84	\$ 27	\$ (111)	\$ 28

Table of ContentsIndex to Financial Statements

## MILLENNIUM CHEMICALS INC.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

## CONDENSED CONSOLIDATING FINANCIAL INFORMATION

For the year ended December 31, 2005

Millions of dollars	Millennium Chemicals Inc.	Millennium America Inc.	Non-Guarantor Subsidiaries	Eliminations	Millennium Chemicals Inc. and Subsidiaries
<b>STATEMENT OF CASH FLOWS</b>					
Net cash provided by (used in) operating activities	\$ (6)	\$ (4)	\$ 285	\$	\$ 275
Expenditures for property, plant and equipment			(60)		(60)
Distributions from affiliates in excess of earnings		21		(21)	
Net cash used in investing activities		21	(60)	(21)	(60)
Repayment of long-term debt		(366)	(8)		(374)
Contribution from affiliate	6				6
Distributions to minority interests			(6)		(6)
Issuance of long-term debt		(2)	102		100
Dividends paid			(21)	21	
Intercompany (payments) receipts		472	(472)		
Other			2		2
Net cash provided by (used in) financing activities	6	(104)	(403)	21	(272)
Effect of exchange rate changes on cash			(8)		(8)
Increase (decrease) in cash and cash equivalents		121	(186)		(65)
Cash and cash equivalents at beginning of period		90	254		344
Cash and cash equivalents at end of period	\$	\$ 211	\$ 68	\$	\$ 279

Table of ContentsIndex to Financial Statements

## MILLENNIUM CHEMICALS INC.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

## CONDENSED CONSOLIDATING FINANCIAL INFORMATION

As of and for the year ended December 31, 2004

Millions of dollars	Millennium Chemicals Inc.	Millennium America Inc.	Non-Guarantor Subsidiaries	Eliminations	Millennium Chemicals Inc. and Subsidiaries
<b>BALANCE SHEET</b>					
Inventories	\$	\$	\$ 414	\$	\$ 414
Other current assets		94	647		741
Property, plant and equipment, net			707		707
Investment in Equistar Chemicals, LP			457		457
Investment in subsidiaries	99	352		(451)	
Goodwill, net			104		104
Other assets, net	3	7	97		107
Long-term receivables affiliates		773		(773)	
<b>Total assets</b>	<b>\$ 102</b>	<b>\$ 1,226</b>	<b>\$ 2,426</b>	<b>\$ (1,224)</b>	<b>\$ 2,530</b>
Current maturities of long-term debt	\$	\$	\$ 7		7
Other current liabilities	1	9	437		447
Long-term debt	150	1,232	16		1,398
Other liabilities		1	535		536
Deferred income taxes			164		164
Long-term payables affiliates	6		767	(773)	
<b>Total liabilities</b>	<b>157</b>	<b>1,242</b>	<b>1,926</b>	<b>(773)</b>	<b>2,552</b>
Minority interests			33		33
Stockholder s (deficit) equity	(55)	(16)	467	(451)	(55)
<b>Total liabilities and stockholder s (deficit) equity</b>	<b>\$ 102</b>	<b>\$ 1,226</b>	<b>\$ 2,426</b>	<b>\$ (1,224)</b>	<b>\$ 2,530</b>
<b>STATEMENT OF INCOME</b>					
Sales and other operating revenues	\$	\$	\$ 1,888	\$	\$ 1,888
Cost of sales			1,602		1,602
Selling, general and administrative expenses	1	1	162		164
Research and development expenses			21		21
Business combination costs			71		71
Asset impairments			14		14
Reorganization and other costs			9		9

Edgar Filing: MILLENNIUM CHEMICALS INC - Form 10-K

Operating income (loss)	(1)	(1)	9		7
Interest income (expense), net	(7)	(95)	8		(94)
Intercompany interest income (expense), net	(1)	102	(101)		
Income from equity investment in Equistar			81		81
Equity in loss of subsidiaries	(23)	(21)		44	
Other income, net			8		8
(Provision for) benefit from income taxes	1	(2)	(32)		(33)
	<u>          </u>	<u>          </u>	<u>          </u>	<u>          </u>	<u>          </u>
Net loss	\$ (31)	\$ (17)	\$ (27)	\$ 44	\$ (31)
	<u>          </u>	<u>          </u>	<u>          </u>	<u>          </u>	<u>          </u>

Table of ContentsIndex to Financial Statements

## MILLENNIUM CHEMICALS INC.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

## CONDENSED CONSOLIDATING FINANCIAL INFORMATION

For the year ended December 31, 2004

Millions of dollars	Millennium Chemicals Inc.	Millennium America Inc.	Non-Guarantor Subsidiaries	Eliminations	Millennium Chemicals Inc. and Subsidiaries
<b>STATEMENT OF CASH FLOWS</b>					
Net cash provided by (used in) operating activities	\$ (5)	\$ 3	\$ 197	\$	\$ 195
Expenditures for property, plant and equipment			(55)		(55)
Distributions from affiliates in excess of earnings			12		12
Proceeds from sales of assets			2		2
Net cash used in investing activities			(41)		(41)
Repayment of long-term debt		(83)	(6)		(89)
Issuance of long-term debt		27	7		34
Intercompany (payments) receipts	(12)	123	(111)		
Proceeds from exercise of stock options	17				17
Net cash provided by (used in) financing activities	5	67	(110)		(38)
Effect of exchange rate change on cash			19		19
Increase in cash and cash equivalents		70	65		135
Cash and cash equivalents at beginning of period		20	189		209
Cash and cash equivalents at end of period	\$	\$ 90	\$ 254	\$	\$ 344

**Table of Contents****Index to Financial Statements****MILLENNIUM CHEMICALS INC.****NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)****CONDENSED CONSOLIDATING FINANCIAL INFORMATION****For the year ended December 31, 2003**

<u>Millions of dollars</u>	<u>Millennium Chemicals Inc.</u>	<u>Millennium America Inc.</u>	<u>Non-Guarantor Subsidiaries</u>	<u>Eliminations</u>	<u>Millennium Chemicals Inc. and Subsidiaries</u>
<b>STATEMENT OF INCOME</b>					
Sales and other operating revenues	\$	\$	\$ 1,687	\$	\$ 1,687
Cost of sales			1,470		1,470
Selling, general and administrative expenses	1		129		130
Research and development expenses			23		23
Asset impairments			103		103
Reorganization and other costs			18		18
Operating loss	(1)		(56)		(57)
Interest income (expense), net		(94)	2		(92)
Intercompany interest income (expense), net	(3)	98	(95)		
Loss from equity investment in Equistar			(100)		(100)
Equity in loss of subsidiaries	(182)	(112)		294	
Other income (expense), net		(1)	54		53
(Provision for) benefit from income taxes	1	(1)	11		11
Cumulative effect of accounting change	(1)	1	(1)		(1)
Net loss	\$ (186)	\$ (109)	\$ (185)	\$ 294	\$ (186)
<b>STATEMENT OF CASH FLOWS</b>					
Net cash provided by (used in) operating activities	\$ (2)	\$ 7	\$ (97)	\$	\$ (92)
Expenditures for property, plant and equipment			(48)		(48)
Net cash used in investing activities			(48)		(48)
Issuance of long-term debt	146	478	2		626
Repayment of long-term debt		(378)	(26)		(404)
Dividends paid	(17)				(17)
Intercompany (payments) receipts	(127)	(93)	220		
Net cash provided by financing activities	2	7	196		205

Edgar Filing: MILLENNIUM CHEMICALS INC - Form 10-K

Effect of exchange rate change on cash			19		19
Increase in cash and cash equivalents		14	70		84
Cash and cash equivalents at beginning of period		6	119		125
Cash and cash equivalents at end of period	\$	\$ 20	\$ 189	\$	\$ 209

**Table of Contents**

**Index to Financial Statements**

**Item 9. *Changes in and Disagreements With Accountants on Accounting and Financial Disclosure***

None.

**Item 9A. *Controls and Procedures***

Millennium performed an evaluation, under the supervision and with the participation of its management, including the Chief Executive Officer (principal executive officer) and the Senior Vice President and Chief Financial Officer (principal financial officer), of the effectiveness of Millennium's disclosure controls and procedures, as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as of December 31, 2005. Based upon that evaluation, the Chief Executive Officer and the Senior Vice President and Chief Financial Officer concluded that Millennium's disclosure controls and procedures are effective.

There were no changes in Millennium's internal control over financial reporting that occurred during Millennium's last fiscal quarter (the fourth quarter 2005) that have materially affected, or are reasonably likely to materially affect, Millennium's internal control over financial reporting.

Millennium's management's report on internal control over financial reporting appears on page 54 of this Annual Report on Form 10-K. In addition, PricewaterhouseCoopers LLP, the independent registered public accounting firm that audited the financial statements included in this Annual Report on Form 10-K, has audited management's assessment of the effectiveness of Millennium's internal control over financial reporting, as of December 31, 2005, as stated in their report that appears on page 55 of this Annual Report on Form 10-K.

**Item 9B. *Other Information***

None.



**Table of Contents**

**Index to Financial Statements**

**PART III**

**Item 10. *Directors and Executive Officers of the Registrant***

Omitted pursuant to General Instruction I of Form 10-K. See Item 1. Business Additional Information Available for information regarding Millennium's code of ethics.

**Item 11. *Executive Compensation***

Omitted pursuant to General Instruction I of Form 10-K.

**Item 12. *Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters***

Omitted pursuant to General Instruction I of Form 10-K.

**Item 13. *Certain Relationships and Related Transactions***

Omitted pursuant to General Instruction I of Form 10-K.

**Item 14. *Principal Accountant Fees and Services***

**Audit and Non-Audit Fees**

The following table presents fees for audit services rendered by PricewaterhouseCoopers LLP ( PricewaterhouseCoopers ) for the audit of Millennium's annual financial statements for the years ended December 31, 2005 and 2004, and fees billed or expected to be billed for audit-related, tax and all other services rendered by PricewaterhouseCoopers during those periods.

Thousands of dollars

2005

2004

Index to Financial Statements

185

Edgar Filing: MILLENNIUM CHEMICALS INC - Form 10-K

Audit fees (a)	\$ 4,397	\$ 5,391
Audit-related fees (b)	226	89
Tax fees (c)	774	437
All other fees (d)		3
<b>Total</b>	<b>\$ 5,397</b>	<b>\$ 5,920</b>

- (a) Audit fees consist of the aggregate fees billed or expected to be billed for professional services rendered by PricewaterhouseCoopers for the audit of Millennium's annual financial statements, the review of financial statements included in Millennium's Form 10-Qs or for services that are normally provided by the independent auditors in connection with statutory and regulatory filings or engagements for those fiscal years. Of the 2004 audit fees shown in the table, \$102,000 represents fees billed in 2005 related to 2004 audit services. Of the 2005 audit fees shown in the table, \$2,092,000 represents fees expected to be billed in 2006 related to 2005 audit services.
- (b) Audit-related fees consist of the aggregate fees billed for assurance and related services by PricewaterhouseCoopers that are reasonably related to the performance of the audit or review of Millennium's financial statements. This category includes fees related to: the performance of audits of Millennium's benefit plans; agreed-upon or expanded audit procedures relating to accounting records required to respond to or comply with financial, accounting or regulatory reporting matters; and consultations as to the accounting or disclosure treatment of transactions or events and/or the actual or potential impact of final or proposed rules, standards or interpretations by regulatory or standard setting bodies. Of the 2005 audit-related fees shown in the table, \$115,000 represents fees expected to be billed in 2006 related to 2005 audit-related services.

**Table of Contents**

**Index to Financial Statements**

- (c) Tax fees consist of the aggregate fees billed for professional services rendered by PricewaterhouseCoopers for federal, state and international tax compliance and advice.
- (d) All other fees consist of the aggregate fees billed for products and services provided by PricewaterhouseCoopers, other than the services described in notes (a) through (c) above. In 2004, these fees reflected the cost of an on-line reference service provided by PricewaterhouseCoopers.

**Pre-Approval Policy**

Generally, the Board of Directors of Millennium serves as Millennium's Audit Committee, and is directly responsible for overseeing the work of the independent registered public accounting firm. However, as a result of Lyondell's November 30, 2004 acquisition of Millennium, Millennium is now a wholly owned, consolidated subsidiary of Lyondell. Therefore, to protect the independence of Millennium's independent registered public accounting firm and to ensure that services provided by the independent registered public accounting firm are pre-approved by an independent governing body, on December 1, 2004, Millennium's Board of Directors revised its pre-approval policy. Under the revised pre-approval policy, Millennium's Board of Directors has delegated to Lyondell's Audit Committee, which is comprised entirely of independent directors, the responsibility for reviewing and pre-approving all audit and non-audit services to be provided for Millennium by Millennium's independent registered public accounting firm (including affiliates or related member firms).

Under the revised policy, a centralized service request procedure is used for all requests for the independent registered public accounting firm to provide services to Millennium. Under this procedure, all requests for the independent registered public accounting firm to provide services to Millennium initially are submitted to Lyondell's Vice President and Controller. Each such request must include a detailed description of the services to be rendered. If the proposed services have not already been pre-approved by Lyondell's Audit Committee, Lyondell's Vice President and Controller will submit the request and a detailed description of the proposed services to Lyondell's Audit Committee. Requests to provide services that require pre-approval by Lyondell's Audit Committee also must include a statement as to whether, in the view of Lyondell's Vice President and Controller, the request is consistent with the SEC's rules on independent registered public accounting firm independence.

Pursuant to the revised policy, Millennium's Board of Directors has designated Lyondell's Senior Vice President and Chief Financial Officer to review compliance with the pre-approval policy. Lyondell's Senior Vice President and Chief Financial Officer will report to Lyondell's Audit Committee periodically on the results of the monitoring.

**Table of Contents****Index to Financial Statements****PART IV****Item 15. Exhibits and Financial Statement Schedules**

(a) The Following Documents are Filed as Part of This Report:

1. Supplemental Financial Information.

The Supplemental Financial Information relating to Equistar, which is contained in the Annual Report on Form 10-K, consists of the following:

	<b>Page of The Report</b>
<b>Financial Statements of Equistar:</b>	
Management's Report on Internal Control Over Financial Reporting	F-1
Report of Independent Registered Public Accounting Firm	F-2
Consolidated Statements of Income Years Ended December 31, 2005, 2004, and 2003	F-4
Consolidated Balance Sheets December 31, 2005 and 2004	F-5
Consolidated Statements of Cash Flows Years Ended December 31, 2005, 2004 and 2003	F-6
Consolidated Statements of Partners' Capital Years Ended December 31, 2005, 2004 and 2003	F-7
Notes to the Consolidated Financial Statements	F-8 to F-26

2. Schedules None

3. Exhibits

<b>Exhibit Number</b>	<b>Description of Document</b>
2.1	Agreement and Plan of Merger, dated March 28, 2004, by and among Lyondell Chemical Company, the Registrant and Millennium Subsidiary LLC (11)
3.1	Restated Certificate of Incorporation of the Registrant (12)
3.2	Amended and Restated By-laws of the Registrant (13)
4.1	Form of Indenture, dated as of November 27, 1996, among Millennium America Inc. (formerly named Hanson America Inc.), the Registrant and The Bank of New York, as Trustee, in respect of the 7% Senior Notes due November 15, 2006 and the 7.625% Senior Debentures due November 15, 2026 (2)
4.1(a)	First Supplemental Indenture dated as of November 21, 1997 among Millennium America Inc., the Registrant and The Bank of New York, as Trustee (5)
4.2	

## Edgar Filing: MILLENNIUM CHEMICALS INC - Form 10-K

Indenture, dated as of June 18, 2001, among Millennium America Inc., as Issuer, the Registrant, as Guarantor, and The Bank of New York, as Trustee (including the form of 9 1/4% Senior Notes due 2008 and the Note Guarantee) (7)

4.3 Indenture, dated as of November 25, 2003, among the Registrant, as Issuer, Millennium America Inc., as Guarantor, and the Bank of New York, as Trustee, in respect to the 4% Convertible Senior Debentures due November 15, 2023 (10)

4.3(a) First Supplemental Indenture, dated as of November 30, 2004, among Lyondell Chemical Company, the Registrant, Millennium America Inc. and the Bank of New York, as Trustee (12)

**Table of Contents**

**Index to Financial Statements**

- 4.4 Credit Agreement, dated August 22, 2005, among Millennium America Inc., as Borrower, Millennium Inorganic Chemicals Ltd, as Borrower, the Registrant, as Guarantor, the lenders from time to time party thereto, Bank of America, N.A., as Syndication Agent, JP Morgan Chase Bank, N.A. as Administrative Agent and Collateral Agent and JP Morgan Securities Inc. and Banc of America Securities LLC as Co-Lead Arrangers and Joint Bookrunners (14)
- 4.5 Revolving Credit Agreement, dated January 31, 2006, by and among Millennium Inorganic Chemicals Limited as Borrower, Banc of America Securities LLC as Arranger, Bank of America, National Association as Agent, Swingline Lender, Issuer and Security Trustee, and The Banks and Financial Institutions named in Schedule 1 as Original Lenders (15)
- 4.5(a) Receivables Purchase Agreement, dated January 31, 2006, by and among Millennium Inorganic Chemicals Limited, Banc of America Securities LLC as Arranger, Bank of America, N.A. as Agent of the Receivables Purchaser and the RP Funders, Bank of America, N.A. as Receivables Purchaser, and The Banks and Financial Institutions named in Schedule 1 as original RP Funders (15)
- 4.5(b) Common Terms Deed, dated as of January 31, 2006, by and among Millennium Inorganic Chemicals Limited, Millennium Inorganic Chemicals Europe Spri as Collection Agent, Banc of America Securities LLC as Arranger, Bank of America, National Association, as Receivables Purchaser, Bank of America, National Association, as Agent, Swingline Lender and Issuer, and certain banks and financial institutions named in Part I of Schedule 1 as Original Lenders and Part II of Schedule 1 as Original RP Funders; and Bank of America, National Association as Security Trustee (15)
- 4.5(c) Inventory and Non-Vesting Debts Charge, dated January 31, 2006, between Millennium Inorganic Chemicals Limited and Bank of America N.A. as Security Trustee (15)

The Registrant is a party to several long-term debt instruments under which the total amount of long-term debt securities authorized does not exceed 10% of the total assets of the Registrant and its subsidiaries on a consolidated basis. Pursuant to paragraph 4(iii)(A) of Item 601(b) of Registration S-K, the Registrant agrees to furnish a copy of such instruments to the Commission upon request.

- 10.1 Form of Indemnification Agreement, dated as of September 30, 1996, between Hanson and the Registrant (1)
- 10.2 Form of Tax Sharing and Indemnification Agreement, dated as of September 30, 1996, between Hanson, Millennium Overseas Holdings Ltd., Millennium America Holdings Inc. (formerly HM Anglo American Ltd.), Hanson North America Inc. and the Registrant (1)
- 10.3 Form of Deed of Tax Covenant, dated as of September 30, 1996, between Hanson, Millennium Overseas Holdings Ltd., Millennium Inorganic Chemicals Limited (formerly SCM Chemicals Limited), SCMC Holdings B.V. (formerly Hanson SCMC B.V.), Millennium Inorganic Chemicals Ltd. (formerly SCM Chemicals Ltd.), and the Registrant (the Deed of Tax Covenant ) (1)
- 10.3(a) Amendment to the Deed of Tax Covenant dated January 28, 1997 (3)
- 10.4 Amended and Restated Limited Partnership Agreement of Equistar Chemicals, LP dated as of November 29, 2004 (12)
- 10.5 Asset Contribution Agreement (the Millennium Asset Contribution Agreement ) among Millennium Petrochemicals, Millennium Petrochemicals LP LLC and Equistar Chemicals, LP (4)
- 10.5(a) First Amendment to the Millennium Asset Contribution Agreement dated as of May 15, 1998 (6)
- 10.5(b) Second Amendment to the Millennium Asset Contribution Agreement among the Registrant, Millennium Petrochemicals LP LLC, and Equistar Chemicals, LP (8)
- 10.6 Amended and Restated Parent Agreement among Lyondell Chemical Company, the Registrant and Equistar Chemicals, LP, dated as of November 6, 2002 (9)

**Table of Contents****Index to Financial Statements**

The Registrant is party to several compensatory plans, contracts or arrangements that the Registrant has not included herein based on paragraph 10(iii)(C)(6) of Item 601(b) of Regulation S-K since the Registrant is a wholly owned subsidiary of Lyondell Chemical Company, a company that has a class of securities registered pursuant to section 12 or files reports pursuant to section 15(d) of the Exchange Act and is filing a report on Form 10-K.

12	Statement Setting Forth Detail for Computation of Ratio of Earnings to Fixed Charges
23	Consent of PricewaterhouseCoopers LLP
31.1	Rule 13a 14(a)/15d 14(a) Certification of Principal Executive Officer
31.2	Rule 13a 14(a)/15d 14(a) Certification of Principal Financial Officer
32.1	Section 1350 Certification of Principal Executive Officer
32.2	Section 1350 Certification of Principal Financial Officer

- 
- (1) Filed as an exhibit to the Registrant's Registration Statement on Form 10 (No. 1-12091) and incorporated herein by reference.
  - (2) Filed as an exhibit to the Registrant's Registration Statement on Form S-1 (No. 333-15975) and incorporated herein by reference.
  - (3) Filed as an exhibit to the Registrant's Annual Report on Form 10-K for the year ended December 31, 1996 and incorporated herein by reference.
  - (4) Filed as an exhibit to the Registrant's Current Report on Form 8-K dated as of December 10, 1997 and incorporated herein by reference.
  - (5) Filed as an exhibit to the Registrant's Annual Report on Form 10-K for the year ended December 31, 1997 and incorporated herein by reference.
  - (6) Filed as an exhibit to the Registrant's Annual Report on Form 10-K for the year ended December 31, 1999 and incorporated herein by reference.
  - (7) Filed as an exhibit to the Registrant's Registration Statement on Form S-4 (No. 333-65650-1) and incorporated herein by reference.
  - (8) Filed as an exhibit to the Registrant's Quarterly Report on Form 10-Q for the quarter ended September 30, 2001 and incorporated herein by reference.
  - (9) Filed as an exhibit to the Registrant's Current Report on Form 8-K dated as of November 26, 2002 and incorporated herein by reference.
  - (10) Filed as an exhibit to the Registrant's Current Report on Form 8-K dated as of November 25, 2003 and incorporated herein by reference.
  - (11) Filed as an exhibit to the Registrant's Current Report on Form 8-K dated as of March 28, 2004 and incorporated herein by reference.
  - (12) Filed as an exhibit to the Registrant's Current Report on Form 8-K dated as of November 30, 2004 and incorporated herein by reference.
  - (13) Filed as an exhibit to the Registrant's Annual Report on Form 10-K for the year ended December 31, 2004 and incorporated herein by reference.
  - (14) Filed as an exhibit to the Registrant's Current Report on Form 8-K dated as of August 22, 2005 and incorporated herein by reference.
  - (15) Filed as an exhibit to the Registrant's Current Report on Form 8-K dated as of January 31, 2006 and incorporated herein by reference.

**Table of Contents**

**Index to Financial Statements**

Copies of exhibits will be furnished upon prepayment of 25 cents per page.

Requests should be addressed to the Secretary.

(b) Consolidated Financial Statements and Financial Statement Schedules

(1) Consolidated Financial Statements

Consolidated Financial Statements filed as part of this Annual Report on Form 10-K are listed in the Index to Financial Statements on page 53.

(2) Financial Statement Schedules

Financial statement schedules are omitted because they are not applicable or the required information is contained in the Financial Statements or notes thereto.



**Table of Contents**

**Index to Financial Statements**

**SIGNATURES**

Pursuant to the requirements of Section 13 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.

**MILLENNIUM CHEMICALS INC.**

By: */s/ DAN F. SMITH*  
**Dan F. Smith**

**Chief Executive Officer**

Date: March 15, 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 indicated on March 15, 2006.

<u>Name</u>	<u>Title</u>
<i>/s/ DAN F. SMITH</i> _____ <b>(Dan F. Smith, Principal Executive Officer)</b>	Chief Executive Officer
<i>/s/ T. KEVIN DeNICOLA</i> _____ <b>(T. Kevin DeNicola, Principal Financial Officer)</b>	Senior Vice President and Chief Financial Officer
<i>/s/ CHARLES L. HALL</i> _____ <b>(Charles L. Hall, Principal Accounting Officer)</b>	Vice President and Controller
<i>/s/ BART DE JONG</i> _____ <b>(Bart de Jong)</b>	Director
<i>/s/ EDWARD J. DINEEN</i> _____ <b>(Edward J. Dineen)</b>	Director
<i>/s/ MORRIS GELB</i> _____ <b>(Morris Gelb)</b>	Director

**Table of Contents**

**Index to Financial Statements**

**MANAGEMENT'S REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING**

The management of Equistar is responsible for establishing and maintaining adequate internal control over financial reporting. Equistar's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external reporting in accordance with generally accepted accounting principles.

Equistar management assessed the effectiveness of Equistar's internal control over financial reporting as of December 31, 2005. In making this assessment, management used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission in *Internal Control - Integrated Framework*. Based on its assessment, Equistar's management has concluded that Equistar's internal control over financial reporting was effective as of December 31, 2005 based on those criteria.

PricewaterhouseCoopers LLP, the independent registered public accounting firm that audited the financial statements included in this Annual Report on Form 10-K, has audited management's assessment of the effectiveness of Equistar's internal control over financial reporting as of December 31, 2005, as stated in their report that appears on the following page.

F-1

**Table of Contents**

**Index to Financial Statements**

**REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

To the Partnership Governance Committee and Partners

of Equistar Chemicals, LP

We have completed integrated audits of Equistar Chemicals, LP's 2005 and 2004 consolidated financial statements and of its internal control over financial reporting as of December 31, 2005, and an audit of its 2003 consolidated financial statements in accordance with the standards of the Public Company Accounting Oversight Board (United States). Our opinions, based on our audits, are presented below.

**Consolidated financial statements**

In our opinion, the accompanying consolidated balance sheet and the related consolidated statements of income, of partner's capital and of cash flows present fairly, in all material respects, the financial position of Equistar Chemicals, LP (the Partnership) and its subsidiaries at December 31, 2005 and 2004, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2005 in conformity with accounting principles generally accepted in the United States of America. These financial statements are the responsibility of the Partnership's management. Our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits of these statements in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit of financial statements includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

**Internal control over financial reporting**

Also, in our opinion, management's assessment, included in Management's Report on Internal Control Over Financial Reporting appearing under Item 8, that the Partnership maintained effective internal control over financial reporting as of December 31, 2005 based on criteria established in *Internal Control - Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO), is fairly stated, in all material respects, based on those criteria. Furthermore, in our opinion, the Partnership maintained, in all material respects, effective internal control over financial reporting as of December 31, 2005, based on criteria established in *Internal Control - Integrated Framework* issued by the COSO. The Partnership's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting. Our responsibility is to express opinions on management's assessment and on the effectiveness of the Partnership's internal control over financial reporting based on our audit. We conducted our audit of internal control over financial reporting in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. An audit of internal control over financial reporting includes obtaining an understanding of internal control over financial reporting, evaluating management's assessment, testing and evaluating the design and operating effectiveness of internal control, and performing such other procedures as we consider necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinions.

## Edgar Filing: MILLENNIUM CHEMICALS INC - Form 10-K

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) provide reasonable

F-2

**Table of Contents**

**Index to Financial Statements**

assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ PricewaterhouseCoopers LLP

PRICEWATERHOUSECOOPERS LLP

Houston, Texas

March 14, 2005

F-3

Table of ContentsIndex to Financial Statements

## EQUISTAR CHEMICALS, LP

## CONSOLIDATED STATEMENTS OF INCOME

Millions of dollars	For the year ended December 31,		
	2005	2004	2003
<b>Sales and other operating revenues</b>			
Trade	\$ 8,725	\$ 6,952	\$ 4,908
Related parties	2,961	2,364	1,637
	<u>11,686</u>	<u>9,316</u>	<u>6,545</u>
<b>Operating costs and expenses</b>			
Cost of sales	10,487	8,587	6,387
Selling, general and administrative expenses	198	205	191
Research and development expenses	33	34	38
(Gain) loss on asset dispositions		(4)	27
	<u>10,718</u>	<u>8,822</u>	<u>6,643</u>
Operating income (loss)	968	494	(98)
Interest expense	(227)	(227)	(215)
Interest income	9	7	8
Other income (expense), net	(2)	2	(34)
<b>Net income (loss)</b>	<u>\$ 748</u>	<u>\$ 276</u>	<u>\$ (339)</u>

See Notes to the Consolidated Financial Statements.

**Table of Contents****Index to Financial Statements****EQUISTAR CHEMICALS, LP****CONSOLIDATED BALANCE SHEETS**

<b>Millions of dollars</b>	<b>December 31,</b>	
	<b>2005</b>	<b>2004</b>
<b>ASSETS</b>		
Current assets:		
Cash and cash equivalents	\$ 215	\$ 39
Accounts receivable:		
Trade, net	685	615
Related parties	239	211
Inventories	657	582
Prepaid expenses and other current assets	53	43
	<u>          </u>	<u>          </u>
Total current assets	1,849	1,490
Property, plant and equipment, net	3,063	3,167
Investments	58	60
Other assets, net	350	357
	<u>          </u>	<u>          </u>
Total assets	\$ 5,320	\$ 5,074
	<u>          </u>	<u>          </u>
<b>LIABILITIES AND PARTNERS' CAPITAL</b>		
Current liabilities:		
Current maturities of long-term debt	\$ 150	\$ 1
Accounts payable:		
Trade	623	447
Related parties	112	85
Accrued liabilities	275	273
	<u>          </u>	<u>          </u>
Total current liabilities	1,160	806
Long-term debt	2,161	2,312
Other liabilities and deferred revenues	416	395
Commitments and contingencies		
Partners' capital:		
Partners' accounts	1,603	1,580
Accumulated other comprehensive loss	(20)	(19)
	<u>          </u>	<u>          </u>
Total partners' capital	1,583	1,561
	<u>          </u>	<u>          </u>
Total liabilities and partners' capital	\$ 5,320	\$ 5,074
	<u>          </u>	<u>          </u>

See Notes to the Consolidated Financial Statements.





Table of ContentsIndex to Financial Statements

## EQUISTAR CHEMICALS, LP

## CONSOLIDATED STATEMENTS OF CASH FLOWS

Millions of dollars	For the year ended December 31,		
	2005	2004	2003
<b>Cash flows from operating activities:</b>			
Net income (loss)	\$ 748	\$ 276	\$ (339)
Adjustments to reconcile net income (loss) to cash provided by operating activities:			
Depreciation and amortization	322	313	307
Deferred revenues	18	3	159
Deferred maintenance turnaround expenditures	(51)	(55)	(97)
Debt prepayment premiums and charges			30
Net (gains) losses on asset dispositions		(4)	27
Changes in assets and liabilities that provided (used) cash:			
Accounts receivable	(96)	(216)	26
Inventories	(69)	(174)	4
Accounts payable	197	30	40
Other, net	(22)	42	7
Net cash provided by operating activities	1,047	215	164
<b>Cash flows from investing activities:</b>			
Expenditures for property, plant and equipment	(153)	(101)	(106)
Proceeds from sales of assets	3	41	69
Net cash used in investing activities	(150)	(60)	(37)
<b>Cash flows from financing activities:</b>			
Distributions to owners	(725)	(315)	
Issuance of long-term debt			695
Repayment of long-term debt	(1)		(642)
Other	5		(8)
Net cash provided by (used in) financing activities	(721)	(315)	45
<b>Increase (decrease) in cash and cash equivalents</b>	176	(160)	172
Cash and cash equivalents at beginning of period	39	199	27
Cash and cash equivalents at end of period	\$ 215	\$ 39	\$ 199

See Notes to the Consolidated Financial Statements.



Table of ContentsIndex to Financial Statements

## EQUISTAR CHEMICALS, LP

## CONSOLIDATED STATEMENTS OF PARTNERS' CAPITAL

Millions of dollars	Lyondell	Millennium	Total	Accumulated Other Comprehensive Income (Loss)	Net Partners Capital	Comprehensive Income (Loss)
<b>Balance at January 1, 2003</b>	\$ 908	\$ 1,050	\$ 1,958	\$ (37)	\$ 1,921	
Net loss	(239)	(100)	(339)		(339)	\$ (339)
Other comprehensive loss:						
Minimum pension liability				16	16	16
Derivative instruments				3	3	3
Comprehensive loss						\$ (320)
<b>Balance at December 31, 2003</b>	\$ 669	\$ 950	\$ 1,619	\$ (18)	\$ 1,601	
Net income	195	81	276		276	\$ 276
Other comprehensive income - minimum pension liability				(1)	(1)	(1)
Distributions to partners	(222)	(93)	(315)		(315)	
Comprehensive income						\$ 275
<b>Balance at December 31, 2004</b>	\$ 642	\$ 938	\$ 1,580	\$ (19)	\$ 1,561	
Net income	527	221	748		748	\$ 748
Other comprehensive income:						
Minimum pension liability				1	1	1
Derivative instruments				(2)	(2)	(2)
Distributions to partners	(511)	(214)	(725)		(725)	
Comprehensive income						\$ 747
<b>Balance at December 31, 2005</b>	\$ 658	\$ 945	\$ 1,603	\$ (20)	\$ 1,583	

See Notes to the Consolidated Financial Statements.

**Table of Contents**

**Index to Financial Statements**

**EQUISTAR CHEMICALS, LP**

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

**TABLE OF CONTENTS**

	<b>Page</b>
1. Formation of the Partnership and Operations	F-9
2. Summary of Significant Accounting Policies	F-9
3. Hurricane Effects	F-11
4. Related Party Transactions	F-12
5. Accounts Receivable	F-14
6. Inventories	F-14
7. Property, Plant and Equipment and Other Assets	F-15
8. Accounts Payable	F-16
9. Accrued Liabilities	F-16
10. Deferred Revenues	F-16
11. Long-Term Debt	F-17
12. Lease Commitments	F-18
13. Financial Instruments and Derivatives	F-18
14. Pension and Other Postretirement Benefits	F-19
15. Commitments and Contingencies	F-23
16. Supplemental Cash Flow Information	F-25
17. Segment and Related Information	F-25

**Table of Contents**

**Index to Financial Statements**

**EQUISTAR CHEMICALS, L.P.**

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**1. Formation of the Partnership and Operations**

Equistar Chemicals, LP, together with its consolidated subsidiaries (collectively, Equistar or the Partnership), a Delaware limited partnership which commenced operations on December 1, 1997, was formed by Lyondell Chemical Company and subsidiaries (Lyondell) and Millennium Chemicals Inc. and subsidiaries (Millennium). On May 15, 1998, Equistar was expanded with the contribution of certain assets from Occidental Petroleum Corporation and subsidiaries (Occidental). Prior to August 22, 2002, Equistar was owned 41% by Lyondell, 29.5% by Millennium and 29.5% by Occidental. On August 22, 2002, Lyondell purchased Occidental's interest in Equistar and, as a result, Lyondell's ownership interest in Equistar increased to 70.5%. Equistar became a wholly owned subsidiary of Lyondell as a result of Lyondell's acquisition of Millennium on November 30, 2004. The consolidated financial statements of Equistar reflect its historical cost basis, and, accordingly, do not reflect any purchase accounting adjustments related to the acquisition by Lyondell of Millennium and Millennium's interest in Equistar or of Occidental's interest in Equistar.

Equistar manufactures and markets ethylene and its co-products, primarily propylene, butadiene, fuels and aromatics. Equistar also manufactures and markets ethylene derivatives, primarily ethylene oxide, ethylene glycol and polyethylene.

**2. Summary of Significant Accounting Policies**

*Basis of Presentation* The consolidated financial statements include the accounts of Equistar and its subsidiaries.

*Revenue Recognition* Revenue from product sales is recognized at the time of transfer of title and risk of loss to the customer, which usually occurs at the time of shipment. Revenue is recognized at the time of delivery if Equistar retains the risk of loss during shipment. For products that are shipped on a consignment basis, revenue is recognized when the customer uses the product. Costs incurred in shipping products sold are included in cost of sales. Billings to customers for shipping costs are included in sales revenue.

*Cash and Cash Equivalents* Cash equivalents consist of highly liquid debt instruments such as certificates of deposit, commercial paper and money market accounts. Cash equivalents include instruments with maturities of three months or less when acquired. Cash equivalents are stated at cost, which approximates fair value. Equistar's policy is to invest cash in conservative, highly rated instruments and to limit the amount of credit exposure to any one institution.

Equistar has no requirements for compensating balances in a specific amount at a specific point in time. The Partnership does maintain compensating balances for some of its banking services and products. Such balances are maintained on an average basis and are solely at

Equistar's discretion.

*Allowance for Doubtful Accounts* Equistar establishes provisions for doubtful accounts receivable based on management's estimates of amounts that it believes are unlikely to be collected. Collectability of receivables is reviewed and the allowance for doubtful accounts is adjusted at least quarterly, based on aging of specific accounts and other available information about the associated customers.

*Inventories* Inventories are stated at the lower of cost or market. Cost is determined using the last-in, first-out ( LIFO ) method for substantially all inventories, except for materials and supplies, which are valued using the average cost method.

Inventory exchange transactions, which involve fungible commodities and do not involve the payment or receipt of cash, are not accounted for as purchases and sales. Any resulting volumetric exchange balances are accounted for as inventory in accordance with the normal LIFO valuation policy.

F-9

**Table of Contents**

**Index to Financial Statements**

**EQUISTAR CHEMICALS, LP**

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**2. Summary of Significant Accounting Policies (Continued)**

*Property, Plant and Equipment* Property, plant and equipment are recorded at cost. Depreciation is computed using the straight-line method over the estimated useful asset lives, generally 25 years for major manufacturing equipment, 30 years for buildings, 5 to 15 years for light equipment and instrumentation, 15 years for office furniture and 3 to 5 years for information systems equipment. Upon retirement or sale, Equistar removes the cost of the asset and the related accumulated depreciation from the accounts and reflects any resulting gain or loss in the Consolidated Statements of Income. Equistar's policy is to capitalize interest cost incurred on debt during the construction of major projects exceeding one year.

*Long-Lived Asset Impairment* Equistar evaluates long-lived assets, including identifiable intangible assets, for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. When it is probable that undiscounted future cash flows will not be sufficient to recover an asset's carrying amount, the asset is written down to its estimated fair value.

*Investments* Equistar's investments primarily consist of a 50% interest in a joint venture that owns an ethylene glycol facility in Beaumont, Texas ( PD Glycol ). The investment in PD Glycol is accounted for using the equity method.

*Identifiable Intangible Assets* Costs to purchase and to develop software for internal use are deferred and amortized on a straight-line basis over periods of 3 to 10 years.

Costs of maintenance and repairs exceeding \$5 million incurred as part of turnarounds of major units at Equistar's manufacturing facilities are deferred and amortized using the straight-line method over the period until the next planned turnaround, predominantly 4 to 7 years. These costs are necessary to maintain, extend and improve the operating capacity and efficiency rates of the production units.

Other intangible assets are carried at cost or amortized cost and primarily consist of deferred debt issuance costs, patents and license costs, capacity reservation fees and other long-term processing rights and costs. These assets are amortized using the straight-line method over their estimated useful lives or over the term of the related agreement, if shorter.

*Environmental Remediation Costs* Anticipated expenditures related to investigation and remediation of contaminated sites, which include current and former plant sites and other remediation sites, are accrued when it is probable that a liability has been incurred and the amount of the

## Edgar Filing: MILLENNIUM CHEMICALS INC - Form 10-K

liability can be reasonably estimated. Only ongoing operations and monitoring costs, the timing of which can be determined with reasonable certainty, are discounted to present value. Future legal costs associated with such matters, which generally are not estimable, are not included in these liabilities.

*Legal Costs* Equistar expenses legal costs, including those incurred in connection with loss contingencies, as incurred.

*Income Taxes* The Partnership is not subject to federal income taxes as income is reportable directly by the individual partners; therefore, there is no provision for income taxes in the accompanying financial statements.

*Use of Estimates* The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities at the date of the financial statements, and the reported amount of revenues and expenses during the reporting periods. Actual results could differ from those estimates.

F-10



**Table of Contents**

**Index to Financial Statements**

**EQUISTAR CHEMICALS, LP**

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**2. Summary of Significant Accounting Policies (Continued)**

*Reclassifications* Certain previously reported amounts have been reclassified to conform to classifications adopted in 2005.

*Accounting and Reporting Changes* Effective October 1, 2005, Equistar implemented Financial Accounting Standards Board ( FASB ) Interpretation ( FIN ) No. 47, Accounting for Conditional Asset Retirement Obligations, which clarifies the term conditional asset retirement obligation as used in Statement of Financial Accounting Standards ( SFAS ) No. 143, Accounting for Conditional Asset Retirement Obligations, as an obligation that is conditional only as to timing or amount. Equistar's application of this interpretation had no material effect on its consolidated financial statements.

Effective July 1, 2005, Equistar implemented SFAS No. 153, *Exchanges of Nonmonetary Assets*, which amends Accounting Principles Board ( APB ) Opinion No. 29, *Accounting for Nonmonetary Transactions*, to replace the exception to fair value recognition for nonmonetary exchanges of similar productive assets with a general exception for exchanges of nonmonetary assets that do not have commercial substance. Equistar's application of SFAS No. 153 had no material effect on its consolidated financial statements.

In December 2004, the FASB issued SFAS No. 123 (revised 2004), *Share-Based Payment*. A primary focus of this Statement is accounting for transactions in which an entity obtains employee services in share-based payment transactions, such as by the granting of stock options and phantom stock options. Equistar does not expect the application of these provisions to have a material effect on its consolidated financial statements.

In September 2005, the Emerging Issues Task Force ( EITF ) of the FASB reached consensus on one issue of EITF Issue No. 04-13, *Accounting for Purchases and Sales of Inventory with the Same Counterparty*, that inventory purchase and sales transactions with the same counterparty that are entered into in contemplation of one another should be combined for purposes of applying APB Opinion No. 29, *Accounting for Nonmonetary Transactions*. Equistar currently records certain purchases and sales of chemical products entered into contemporaneously with the same counterparty as cost of sales and revenues. The EITF consensus could result in a reduction of Equistar's reported revenues and cost of sales for affected transactions. The consensus on this issue would apply to transactions entered into beginning in the second quarter of 2006. Equistar is evaluating the effect of EITF 04 -13 on its consolidated financial statements.

**3. Hurricane Effects**

## Edgar Filing: MILLENNIUM CHEMICALS INC - Form 10-K

During 2005, two major hurricanes impacted the chemical and related industries in the coastal and off-shore regions of the Gulf of Mexico. Net income in 2005 reflected charges totaling \$20 million representing Equistar's exposure to industry losses expected to be underwritten by industry insurance consortia, primarily resulting from hurricane damages.

As a result of Hurricane Rita, Equistar also incurred various costs that are subject to insurance reimbursements. Such costs included those incurred in conjunction with suspending operations at substantially all of its Gulf Coast plants, minor damage to facilities, and costs to restore operations. Net income in 2005 included \$19 million of such costs incurred by Equistar, of which all but a \$5 million deductible under the relevant insurance policies are subject to reimbursement through insurance. Equistar has not recognized, in 2005, any benefits of expected insurance reimbursements.

F-11

Table of Contents

Index to Financial Statements

**EQUISTAR CHEMICALS, LP**

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**4. Related Party Transactions**

Equistar is a wholly owned subsidiary of Lyondell. As of December 31, 2005, Occidental owns approximately 12% of Lyondell, and has two representatives on the Lyondell Board of Directors. Lyondell owns 58.75% of LYONDELL-CITGO Refining, LP ( LCR ) and 100% of Millennium. All of the above companies are considered related parties of Equistar. In the discussion of related party transactions below, Lyondell refers to Lyondell Chemical Company and its wholly owned subsidiaries other than Millennium and Equistar and their respective subsidiaries.

*Product Transactions with Lyondell* Lyondell purchases ethylene, propylene and benzene at market-related prices from Equistar under various agreements expiring in 2013 and 2014. With the exception of one pre-existing third-party product supply agreement expiring in 2015, Lyondell is required, under the agreements, to purchase 100% of its ethylene, propylene and benzene requirements for its Channelview and Bayport, Texas facilities from Equistar. Lyondell licenses methyl tertiary butyl ether ( MTBE ) technology to Equistar, and purchases a portion of the MTBE produced by Equistar at market-related prices.

Through December 31, 2004, Equistar acted as sales agent for the methanol products of Lyondell. Equistar also provided operating and other services for Lyondell including the lease to Lyondell by Equistar of the real property on which the methanol plant was located. Pursuant to the terms of the agreement, Lyondell paid Equistar a management fee and reimbursed certain expenses of Equistar at cost.

*Product Transactions with Millennium* Equistar sells ethylene to Millennium at market-related prices pursuant to an agreement entered into in connection with the formation of Equistar. Under this agreement, Millennium is required to purchase 100% of its ethylene requirements for its LaPorte, Texas facility from Equistar. The initial term of the contract expired December 31, 2000 and it continues thereafter for one-year periods unless either party serves notice twelve months in advance.

Also Equistar is required to purchase 100% of its vinyl acetate monomer raw material requirements at market-related prices from Millennium for the production of ethylene vinyl acetate products at its LaPorte, Texas; Clinton, Iowa and Morris, Illinois plants, and 100% of its glacial acetic acid requirements at market-related prices from Millennium for the production of glycol ether acetate at its Bayport, Texas plant. The initial terms of these agreements expired December 31, 2005 and continue year to year thereafter unless terminated by either party.

*Product Transactions with Occidental* Equistar and Occidental entered into an ethylene sales agreement on May 15, 1998, which was amended effective April 1, 2004, pursuant to which Occidental agreed to purchase a substantial amount of its ethylene raw material requirements from Equistar. Either party has the option to phase down volumes over time. However, a phase down cannot begin until January 1, 2014 and the

## Edgar Filing: MILLENNIUM CHEMICALS INC - Form 10-K

annual minimum requirements cannot decline to zero prior to December 31, 2018, unless certain specified force majeure events occur. In addition to the sales of ethylene, from time to time Equistar has made sales of ethers and glycols to Occidental, and Equistar has purchased various other products from Occidental, all at market-related prices.

*Product Transactions with LYONDELL-CITGO Refining LP* Equistar has product sales and raw material purchase agreements with LCR, a joint venture investment of Lyondell. Certain ethylene co-products and MTBE are sold by Equistar to LCR for processing into gasoline and certain refined products are sold by LCR to Equistar as raw materials. Equistar also has processing and storage arrangements with LCR and provides certain marketing services for LCR. All of the agreements between LCR and Equistar are on terms generally representative of prevailing market prices.

*Shared Services Agreement with Lyondell* Under a shared services agreement, Lyondell provides office space and various services to Equistar including information technology, human resources, sales and marketing, raw

Table of ContentsIndex to Financial Statements

## EQUISTAR CHEMICALS, LP

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

## 4. Related Party Transactions (Continued)

material supply, supply chain, health, safety and environmental, engineering, research and development, facility services, legal, accounting, treasury, internal audit and tax. Lyondell charges Equistar for Equistar's share of the cost of such services. Direct costs, incurred exclusively for Equistar, also are charged to Equistar. Costs related to a limited number of shared services, primarily engineering, continue to be incurred by Equistar on behalf of Lyondell. In such cases, Equistar charges Lyondell for its share of such costs.

*Shared Services and Shared-Site Agreements with Millennium* Equistar and Millennium provide operating services, utilities and raw materials to each other at common locations. Millennium and Equistar have various operating, manufacturing and technical service agreements under which, Millennium billed Equistar for certain operational services, including utilities, plant-related transportation and other services, and Equistar billed Millennium for utilities and fuel streams.

*Lease Agreements with Occidental* Equistar subleases certain railcars from Occidental and leases its Lake Charles ethylene facility and the land related thereto from Occidental see Leased Facility section of Note 15.

Related party transactions are summarized as follows:

Millions of dollars	For the year ended December 31,		
	2005	2004	2003
<b>Equistar billed related parties for:</b>			
Sales of products and processing services:			
Lyondell	\$ 1,209	\$ 931	\$ 621
LCR	944	747	467
Occidental	755	634	503
Millennium	53	52	46
Shared services and shared site agreements:			
Millennium	27	19	8
LCR	4	4	3
Lyondell	13	22	18

Edgar Filing: MILLENNIUM CHEMICALS INC - Form 10-K

Natural gas purchased for Lyondell		81	98
------------------------------------	--	----	----

**Related parties billed Equistar for:**

Purchases of products:			
LCR	\$ 394	\$ 425	\$ 227
Lyondell	307	54	5
Millennium	8	10	10
Occidental	20	3	1

Shared services, transition and lease agreements:			
Lyondell	183	182	154
Millennium	1	2	15
Occidental	7	9	7
LCR	1	1	

F-13

**Table of Contents**

**Index to Financial Statements**

**EQUISTAR CHEMICALS, LP**

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**5. Accounts Receivable**

Equistar sells its products primarily to other chemical manufacturers in the petrochemical industry. Equistar performs ongoing credit evaluations of its customers' financial condition and, in certain circumstances, requires letters of credit from them. The Partnership's allowance for doubtful accounts receivable, which is reflected in the accompanying Consolidated Balance Sheets as a reduction of accounts receivable, totaled \$7 million and \$8 million at December 31, 2005 and 2004, respectively. The Consolidated Statements of Income for 2004 and 2003 included provisions for doubtful accounts of less than \$1 million and \$9 million, respectively. There were no provisions for doubtful accounts receivable in 2005.

In November 2005, Equistar amended its \$450 million accounts receivable sales facility increasing the availability to \$600 million and extending the maturity to November 2010. Pursuant to this facility, Equistar sells, through a wholly owned bankruptcy-remote subsidiary, on an ongoing basis and without recourse, an interest in a pool of domestic accounts receivable to financial institutions participating in the facility. Equistar is responsible for servicing the receivables. The \$600 million accounts receivable sales facility is subject to substantially the same minimum unused availability requirements and covenant requirements as the \$400 million inventory-based revolving credit facility, which also is secured by a pledge of accounts receivable (see Note 11).

The amount of the interest in the pool of receivables permitted to be sold is determined by a formula. Accounts receivable in the Consolidated Balance Sheets are reduced by the sales of interests in the pool. Upon termination of the facility, cash collections related to accounts receivable then in the pool would first be applied to the outstanding interest sold. Increases and decreases in the amount sold are reflected in operating cash flows in the Consolidated Statements of Cash Flows, representing collections of sales revenue. Fees related to the sales are included in Selling, general and administrative expenses in the Consolidated Statements of Income. The outstanding amount of receivables sold under the facility was \$200 million as of both December 31, 2005 and 2004.

In consideration of discounts offered to certain customers for early payment for product, some receivable amounts were collected in December 2005 and 2004, respectively, that otherwise would have been expected to be collected in January 2006 and 2005, respectively. This included collections of \$84 million and \$66 million in December 2005 and 2004, respectively, from Occidental.

**6. Inventories**

Inventories consisted of the following components at December 31:

<b>Millions of dollars</b>	<b>2005</b>	<b>2004</b>
Finished goods	\$ 400	\$ 355
Work-in-process	11	13
Raw materials	132	117
Materials and supplies	114	97
<b>Total inventories</b>	<b>\$ 657</b>	<b>\$ 582</b>

At December 31, 2005, approximately 86% of Equistar's inventories, excluding materials and supplies, were valued using the LIFO method.

The excess of the current replacement cost over book value of those inventories that are carried at cost using the LIFO method was approximately \$465 million and \$305 million at December 31, 2005 and 2004, respectively.



Table of ContentsIndex to Financial Statements

## EQUISTAR CHEMICALS, LP

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

**6. Inventories (Continued)**

In December 2003, Equistar entered into a \$250 million, four-year, inventory-based revolving credit facility, which was amended November 2005, increasing the availability from \$250 million to \$400 million and extending the maturity to November 2010. This facility was undrawn at December 31, 2005 and 2004 (see Note 11).

**7. Property, Plant and Equipment and Other Assets**

The components of property, plant and equipment, at cost, and the related accumulated depreciation were as follows at December 31:

<u>Millions of dollars</u>	<u>2005</u>	<u>2004</u>
Land	\$ 78	\$ 77
Manufacturing facilities and equipment	6,184	6,079
Construction in progress	98	64
Total property, plant and equipment	6,360	6,220
Less accumulated depreciation	(3,297)	(3,053)
Property, plant and equipment, net	\$ 3,063	\$ 3,167

Maintenance and repair expenses were \$261 million, \$246 million and \$253 million for the years ended December 31, 2005, 2004 and 2003, respectively. No interest was capitalized to property, plant and equipment during 2005, 2004 and 2003.

In 2004, Equistar sold certain railcars for \$37 million and leased the railcars from the buyer under an operating lease agreement. The sale resulted in a book gain of \$7 million that is being recognized over the 10 year term of the lease as a reduction in monthly lease rent expense. In addition, in January 2004, Equistar sold its alcohol-blending plant located in Anaheim, California for a gain of \$4 million. The effects of these transactions were included in Gain (loss) on asset dispositions in the Consolidated Statements of Income.

Edgar Filing: MILLENNIUM CHEMICALS INC - Form 10-K

The components of other assets, at cost, and the related accumulated amortization were as follows at December 31:

Millions of dollars	2005			2004		
	Cost	Accumulated Amortization	Net	Cost	Accumulated Amortization	Net
<b>Identifiable intangible assets:</b>						
Turnaround costs	\$ 337	\$ (142)	\$ 195	\$ 297	\$ (113)	\$ 184
Software costs	97	(53)	44	87	(35)	52
Debt issuance costs	46	(22)	24	45	(16)	29
Catalyst costs	39	(25)	14	25	(17)	8
Other	72	(20)	52	73	(18)	55
<b>Total intangible assets</b>	<b>\$ 591</b>	<b>\$ (262)</b>	<b>329</b>	<b>\$ 527</b>	<b>\$ (199)</b>	<b>328</b>
Pension asset			15			17
Other			6			12
<b>Total other assets, net</b>			<b>\$ 350</b>			<b>\$ 357</b>

F-15

**Table of Contents****Index to Financial Statements****EQUISTAR CHEMICALS, LP****NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)****7. Property, Plant and Equipment and Other Assets (Continued)**

Amortization of these intangible assets for the next five years is expected to be \$67 million in 2006, \$58 million in 2007, \$50 million in 2008, \$36 million in 2009 and \$24 million in 2010.

Depreciation and amortization expense is summarized as follows:

<u>Millions of dollars</u>	<u>2005</u>	<u>2004</u>	<u>2003</u>
Property, plant and equipment	\$ 254	\$ 248	\$ 246
Turnaround costs	38	38	30
Software costs	18	16	16
Other	12	11	15
<b>Total depreciation and amortization</b>	<b>\$ 322</b>	<b>\$ 313</b>	<b>\$ 307</b>

In addition to the depreciation and amortization shown above, amortization of debt issuance costs of \$5 million, \$6 million and \$7 million in 2005, 2004 and 2003, respectively, is included in interest expense in the Consolidated Statements of Income.

**8. Accounts Payable**

Accounts payable at December 31, 2005 included liabilities in the amount of \$6 million for checks issued in excess of associated bank balances but not yet presented for collection.

**9. Accrued Liabilities**

## Edgar Filing: MILLENNIUM CHEMICALS INC - Form 10-K

Accrued liabilities consisted of the following components at December 31:

Millions of dollars	2005	2004
Payroll and benefits	\$ 75	\$ 70
Taxes other than income taxes	68	72
Interest	64	64
Product sales rebates	36	38
Deferred revenues	28	24
Other	4	5
	\$ 275	\$ 273
	\$ 275	\$ 273

### 10. Deferred Revenues

Deferred revenues at December 31, 2005 and 2004 of \$171 million and \$170 million, respectively, represent advances from customers for partial prepayments for products to be delivered under long-term product supply contracts. In March 2003, Equistar received an advance of \$159 million, representing a partial prepayment for product to be delivered under a long-term product supply arrangement, primarily at cost-based prices. Equistar is recognizing this deferred revenue over 15 years, as the associated product is delivered.

Trade sales and other operating revenues included \$22 million, \$17 million and \$12 million in 2005, 2004 and 2003, respectively, of such previously deferred revenues.

Table of ContentsIndex to Financial Statements

## EQUISTAR CHEMICALS, LP

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

**11. Long-Term Debt**

Long-term debt consisted of the following at December 31:

<u>Millions of dollars</u>	<u>2005</u>	<u>2004</u>
\$400 million inventory-based revolving credit facility	\$	\$
Other debt obligations:		
Senior Notes due 2008, 10.125%	700	700
Senior Notes due 2011, 10.625% (\$8 million of premium)	708	710
Debentures due 2026, 7.55%	150	150
Notes due 2006, 6.5%	150	150
Notes due 2009, 8.75%	600	599
Other	3	4
	<u>          </u>	<u>          </u>
Total long-term debt	2,311	2,313
Less current maturities	(150)	(1)
	<u>          </u>	<u>          </u>
Total long-term debt, net	\$ 2,161	\$ 2,312
	<u>          </u>	<u>          </u>

Aggregate maturities of long-term debt during the next five years are \$150 million in 2006, \$700 million in 2008, \$600 million in 2009, \$3 million in 2010 and \$858 million thereafter.

Equistar may currently redeem its 10.125% Senior Notes due 2008, 10.625% Senior Notes due 2011 and 8.75% Notes due 2009 upon payment of the present value of future interest and principal amounts, using a specified discount rate. Alternatively, Equistar may redeem the 10.625% Senior Notes due 2011 beginning in 2007, at a price of 105.3% of the principal amount that declines over three years to 100% of the principal amount.

Lyondell remains a guarantor of \$300 million of Equistar debt, consisting of the 6.5% Notes due 2006 and the 7.55% Debentures due 2026. The consolidated financial statements of Lyondell are filed as an exhibit to Equistar's Annual Report on Form 10-K for the year ended December 31, 2005.

In December 2003, Equistar entered into a \$250 million, four-year, inventory-based revolving credit facility, which replaced Equistar's previous \$354 million revolving credit facility. In November 2005, Equistar amended the \$250 million inventory-based revolving credit facility, increasing the availability to \$400 million, extending the maturity to November 2010 and reducing the interest rate from LIBOR plus 2.25% to LIBOR plus 1.5%. The total amount available at December 31, 2005 under both the \$400 million inventory-based revolving credit facility and the \$600 million accounts receivable sales facility (see Note 5) was \$734 million, which gave effect to the borrowing base less a \$50 million unused availability requirement and was net of the \$200 million sold under the accounts receivable facility and \$16 million of outstanding letters of credit under the revolving credit facility as of December 31, 2005. The borrowing base is determined using a formula applied to accounts receivable and inventory balances. The revolving credit facility requires that the unused available amounts under that facility and the \$600 million accounts receivable sales facility equal or exceed \$50 million, or \$100 million if the Interest Coverage Ratio, as defined, at the end of any period of four consecutive fiscal quarters is less than 2:1. The revolving credit facility is secured by a lien on all inventory and certain personal property, including a pledge of accounts receivable. There was no borrowing under the revolving credit facility at December 31, 2005.

In November 2003, Equistar issued \$250 million of 10.625% Senior Unsecured Notes due in 2011. The gross proceeds of \$262 million, net of related fees, were used to prepay in full \$173 million of the outstanding term

**Table of Contents****Index to Financial Statements****EQUISTAR CHEMICALS, LP****NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)****11. Long-Term Debt (Continued)**

loan under Equistar's previous \$354 million revolving credit facility and to repay borrowing under that revolving credit facility. In September 2003, \$29 million of Equistar's Medium Term Notes matured and were repaid using funds borrowed under Equistar's revolving credit facility. In April 2003, Equistar issued \$450 million of 10.625% Senior Unsecured Notes due in 2011. The proceeds, net of related fees, were used to prepay \$300 million of 8.5% Notes due in the first quarter 2004, \$122 million of term loans under Equistar's previous \$354 million revolving credit facility and prepayment premiums of \$17 million.

In March 2003, Equistar obtained amendments to its previous \$354 million revolving credit facility that provided additional financial flexibility by generally making certain financial ratio requirements less restrictive.

The \$400 million revolving credit facility and the indentures contain covenants that, subject to certain exceptions, restrict, among other things, lien incurrence, debt incurrence, sales of assets, investments, capital expenditures, certain other payments, affiliate transactions, restrictive agreements and mergers. The credit facility does not require the maintenance of specified financial ratios as long as certain conditions are met. In addition, some of Equistar's indentures require additional interest payments to the note holders if Equistar makes distributions when its Fixed Charge Coverage Ratio, as defined, is less than 1.75 to 1.

**12. Lease Commitments**

Equistar leases various facilities and equipment under noncancelable operating lease arrangements for varying periods. Operating leases include leases of railcars used in the distribution of products in Equistar's business. As of December 31, 2005, future minimum lease payments for the next five years and thereafter, relating to all noncancelable operating leases with lease terms in excess of one year were as follows:

**Millions of dollars**

2006	\$ 87
2007	76
2008	65
2009	63
2010	57
Thereafter	361

Total minimum lease payments	\$ 709
------------------------------	--------

Net rental expense for 2005, 2004 and 2003 was \$103 million, \$94 million and \$106 million, respectively.

### 13. Financial Instruments and Derivatives

The fair value of all nonderivative financial instruments included in current assets and current liabilities, including cash and cash equivalents, accounts receivable, accounts payable and accrued liabilities, approximated their carrying value due to their short maturity. Based on the borrowing rates currently available to Equistar for debt with terms and average maturities similar to Equistar's debt portfolio, the fair value of Equistar's long-term debt, including amounts due within one year, was approximately \$2,456 million and \$2,597 million at December 31, 2005 and 2004, respectively.



**Table of Contents**

**Index to Financial Statements**

**EQUISTAR CHEMICALS, LP**

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**14. Pension and Other Postretirement Benefits**

All full-time regular employees are covered by defined benefit pension plans sponsored by Equistar. Retirement benefits are generally based upon years of service and the employee's highest compensation for any consecutive 36-month period during the last 120 months of service or other compensation measures as defined under the respective plan provisions. Equistar funds the plans through contributions to pension trust funds, generally subject to minimum funding requirements as provided by applicable law. Equistar also has unfunded supplemental nonqualified retirement plans, which provide pension benefits for certain employees in excess of the U.S. tax-qualified plans' limits. In addition, Equistar sponsors unfunded postretirement benefit plans other than pensions, which provide medical and life insurance benefits. The postretirement medical plans are contributory, while the life insurance plans are generally non contributory. The life insurance benefits are provided to employees who retired before July 1, 2002.

F-19

Table of ContentsIndex to Financial Statements

## EQUISTAR CHEMICALS, LP

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

## 14. Pension and Other Postretirement Benefits (Continued)

The following table provides a reconciliation of benefit obligations, plan assets and the funded status of these plans:

Millions of dollars	Pension Benefits		Other Postretirement Benefits	
	2005	2004	2005	2004
<b>Change in benefit obligation:</b>				
Benefit obligation, January 1	\$ 223	\$ 190	\$ 117	\$ 119
Service cost	21	18	3	3
Interest cost	13	12	6	7
Actuarial (gain) loss	9	14	(1)	(8)
Plan amendments			(10)	
Benefits paid	(10)	(11)	(5)	(4)
Benefit obligation, December 31	256	223	110	117
<b>Change in plan assets:</b>				
Fair value of plan assets, January 1	152	132		
Actual return on plan assets	10	15		
Partnership contributions	17	16		
Benefits paid	(10)	(11)		
Fair value of plan assets, December 31	169	152		
Funded status	(87)	(71)	(110)	(117)
Unrecognized actuarial and investment loss	66	61	3	4
Unrecognized prior service cost (benefit)	(2)	(2)	(3)	10
Net amount recognized	\$ (23)	\$ (12)	\$ (110)	\$ (103)
<b>Amounts recognized in the Consolidated Balance Sheets consist of:</b>				
Prepaid benefit cost	\$ 15	\$ 17	\$	\$
Accrued benefit liability	(58)	(50)	(110)	(103)
Accumulated other comprehensive income	20	21		

Edgar Filing: MILLENNIUM CHEMICALS INC - Form 10-K

Net amount recognized	\$ (23)	\$ (12)	\$ (110)	\$ (103)
	<u>          </u>	<u>          </u>	<u>          </u>	<u>          </u>
<b>Additional Information:</b>				
Accumulated benefit obligation for defined benefit plans, December 31	\$ 209	\$ 184		
Increase (decrease) in minimum liability included in other comprehensive income	(1)	1		

The 2005 decrease in the benefit obligation and increase in unrecognized prior service benefit reflect the amendment of the Equistar postretirement medical plan, effective January 1, 2006, that reduced retiree medical benefits.

The accrued benefit liability for pension and other postretirement benefits is included in Other liabilities in the Consolidated Balance Sheets.

**Table of Contents****Index to Financial Statements****EQUISTAR CHEMICALS, LP****NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)****14. Pension and Other Postretirement Benefits (Continued)**

Pension plans with projected benefit obligations and accumulated benefit obligations in excess of the fair value of assets are summarized as follows at December 31:

<u>Millions of dollars</u>	<u>2005</u>	<u>2004</u>
Projected benefit obligation	\$ 237	\$ 203
Accumulated benefit obligations	190	164
Fair value of assets	146	129

Net periodic pension and other postretirement benefit costs included the following components:

<u>Millions of dollars</u>	<u>Pension Benefits</u>			<u>Other Postretirement Benefits</u>		
	<u>2005</u>	<u>2004</u>	<u>2003</u>	<u>2005</u>	<u>2004</u>	<u>2003</u>
Service cost	\$ 21	\$ 18	\$ 17	\$ 3	\$ 3	\$ 3
Interest cost	13	12	10	6	7	7
Actual gain on plan assets	(10)	(15)	(23)			
Less-unrecognized gain (loss)	(2)	5	15			
Recognized gain on plan assets	(12)	(10)	(8)			
Prior service cost amortization				2	2	2
Actuarial and investment loss amortization	6	5	7			
Net periodic benefit cost	\$ 28	\$ 25	\$ 26	\$ 11	\$ 12	\$ 12

The assumptions used in determining the net benefit liability were as follows at December 31:

	Pension Benefits		Other Postretirement Benefits	
	2005	2004	2005	2004
	<b>Weighted-average assumptions as of December 31:</b>			
Discount rate	5.50%	5.75%	5.50%	5.75%
Rate of compensation increase	4.50%	4.50%		

The assumptions used in determining net benefit cost were as follows for the year ended December 31:

	Pension Benefits			Other Postretirement Benefits		
	2005	2004	2003	2005	2004	2003
	<b>Weighted-average assumptions for the year:</b>					
Discount rate	5.75%	6.25%	6.50%	5.75%	6.25%	6.50%
Expected return on plan assets	8.00%	8.00%	8.00%			
Rate of compensation increase	4.50%	4.50%	4.50%			

Table of ContentsIndex to Financial Statements

## EQUISTAR CHEMICALS, LP

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

**14. Pension and Other Postretirement Benefits (Continued)**

The assumed annual rate of increase in the per capita cost of covered health care benefits as of December 31, 2005 was 10% for 2006 through 2007, decreasing 1% per year to 5% in 2011 and thereafter. The health care cost trend rate assumption does not have a significant effect on the amounts reported due to limits on Equistar's maximum contribution level to the medical plan. To illustrate, increasing or decreasing the assumed health care cost trend rates by one percentage point in each year would change the accumulated other postretirement benefit liability as of December 31, 2005 by less than \$1 million and would not have a material effect on the aggregate service and interest cost components of the net periodic other postretirement benefit cost for the year then ended.

The *Medicare Prescription Drug, Improvement and Modernization Act of 2003* (the Act) was enacted in December 2003. The effect of the Act was not significant to Equistar's consolidated financial statements and was recognized in the December 31, 2004 accumulated postretirement benefit obligation. The effect of the subsidy on the measurement of net periodic benefit cost for 2005 was not significant.

Management's goal is to manage pension investments over the long term to achieve optimal returns with an acceptable level of risk and volatility. Targeted asset allocations of 55% U.S. equity securities, 15% non-U.S. equity securities, and 30% fixed income securities were adopted in 2003 for the plans based on recommendations by Equistar's independent pension investment advisor. Investment policies prohibit investments in securities issued by Equistar or an affiliate, such as Lyondell or Millennium, or investment in speculative derivative instruments. The investments are marketable securities that provide sufficient liquidity to meet expected benefit obligation payments.

Equistar's expected long-term rate of return on plan assets of 8% is based on the average level of earnings that its independent pension advisor has advised could be expected to be earned over time, using the expected returns based on an asset allocation of 55% U.S. equity securities, 15% non-U.S. equity securities and 30% fixed income securities recommended by the advisor, and adopted for the plans.

Equistar's pension plan weighted-average asset allocations by asset category were as follows at December 31:

Asset Category:	2005		
	Policy	2005	2004
U.S. equity securities	55%	54%	57%
Non-U.S. equity securities	15%	16%	15%

Edgar Filing: MILLENNIUM CHEMICALS INC - Form 10-K

Fixed income securities	30%	30%	28%
Total	100%	100%	100%

Equistar expects to contribute approximately \$17 million to its pension plans in 2006.

**Table of Contents****Index to Financial Statements****EQUISTAR CHEMICALS, LP****NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)****14. Pension and Other Postretirement Benefits (Continued)**

As of December 31, 2005, future expected benefit payments, which reflect expected future service, as appropriate, were as follows:

<u>Millions of dollars</u>	<u>Pension Benefits</u>	<u>Other Benefits</u>
2006	\$ 14	\$ 7
2007	15	7
2008	16	8
2009	18	8
2010	18	8
2011 through 2015	109	44

Equistar also maintains voluntary defined contribution savings plans for eligible employees. Contributions to the plans by Equistar were \$12 million in each of 2005, 2004 and 2003.

**15. Commitments and Contingencies**

*Commitments* Equistar has various purchase commitments for materials, supplies and services incident to the ordinary conduct of business, generally for quantities required for its businesses and at prevailing market prices. Equistar is also a party to various obligations to purchase products and services, principally for utilities and industrial gases. These commitments are designed to assure sources of supply and are not expected to be in excess of normal requirements. See also Note 4, describing related party transactions. At December 31, 2005, future minimum payments under those contracts with noncancelable contract terms in excess of one year and fixed minimum payments were as follows:

<u>Millions of dollars</u>	
2006	\$ 290
2007	282
2008	279
2009	277



Edgar Filing: MILLENNIUM CHEMICALS INC - Form 10-K

2010	276
Thereafter through 2023	2,651
	<hr/>
Total minimum contract payments	\$ 4,055
	<hr/>

Equistar's total purchases under these agreements were \$494 million, \$378 million and \$317 million for the years ended December 31, 2005, 2004 and 2003, respectively.

*Leased Facility* Equistar has an ethylene facility in Lake Charles, Louisiana, which has been idled since the first quarter of 2001, pending sustained improvement in market conditions. The facility and land, which are included in property, plant and equipment at a net book value of \$137 million, are leased from Occidental. In May 2003, Equistar and Occidental entered into a new one-year lease, which had renewal provisions for two additional one-year periods at either party's option. Equistar exercised the second one-year renewal option that expires in May 2006. If the Lake Charles lease terminates, Occidental will either (1) allow Equistar to acquire, operate or receive the benefit of operating the Lake Charles facility, (2) pay Equistar \$75 million in cash or (3) transfer or pay to Equistar 5.4 million shares of Lyondell common stock or the sale proceeds from 5.4 million shares of Lyondell common stock or a combination of both if the value is greater than \$75 million. The parties are investigating alternatives related to the facility and land.

Table of Contents

Index to Financial Statements

**EQUISTAR CHEMICALS, LP**

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**15. Commitments and Contingencies (Continued)**

*Environmental Remediation* Equistar's accrued liability for future environmental remediation costs at three of its plant sites totaled \$1 million as of December 31, 2005 and 2004. In the opinion of management, there is no material estimable range of reasonably possible loss in excess of the liability recorded for environmental remediation. However, it is possible that new information about the sites for which the accrual has been established, new technology or future developments such as involvement in investigations by regulatory agencies, could require Equistar to reassess its potential exposure related to environmental matters.

Equistar currently estimates that environmentally related capital expenditures at its facilities will be approximately \$71 million for 2006 and \$27 million in 2007.

*MTBE* In the U.S., the Clean Air Act Amendments of 1990 set minimum levels for oxygenates, such as MTBE, used in gasoline sold as reformulated fuel in areas not meeting specified air quality standards. However, the presence of MTBE in some water supplies in California and other states due to gasoline leaking from underground storage tanks and in surface water from recreational water craft led to public concern about the use of MTBE and resulted in the U.S. federal Energy Policy Act of 2005 and U.S. state governmental initiatives to reduce the use of MTBE.

The federal Energy Policy Act of 2005, which was enacted in the U.S. in August 2005, does not phase-down or ban the use of MTBE. However, the Act eliminates the oxygen standard for reformulated fuels, effective May 6, 2006, and also contains a renewable fuel standard that mandates the use of ethanol in gasoline. As a result of the elimination of the oxygen standard for reformulated fuels, companies may choose to no longer use MTBE or any other oxygenate. Various U.S. states have banned or are considering banning the use of MTBE. For example, California, Connecticut and New York banned MTBE, effective January 2004, and New Jersey banned MTBE, effective January 2009. In addition, beginning in 2003, several major oil companies substantially reduced or discontinued the use of MTBE in gasoline produced for California markets and several refiners have indicated their intent to completely discontinue the use of MTBE in the U.S. In addition to decisions by certain refiners and blenders to discontinue use of MTBE, some common carrier pipelines have announced that they will not carry reformulated gasoline containing MTBE beginning as early as March 2006. It is not clear whether these actions by pipelines are consistent with regulatory requirements and Lyondell, which owns Equistar, is contesting these actions by pipelines.

The combination of these actions is expected to negatively affect U.S. MTBE demand and, therefore, negatively impact Equistar's revenues. Equistar's North American MTBE business accounted for approximately \$378 million of Equistar's revenues in 2005. However, at this time, Equistar cannot predict the full impact that the U.S. federal legislation, state governmental initiatives and bans, and these commercial actions will have on MTBE margins or volumes longer term. Equistar intends to continue offering MTBE in the U.S., as well as outside of the U.S. However, should it become necessary or desirable to significantly reduce MTBE production as a result of state bans or commercial decisions by refiners, blenders and pipelines to discontinue use or transportation of MTBE, Equistar may make capital expenditures to add the

## Edgar Filing: MILLENNIUM CHEMICALS INC - Form 10-K

flexibility to produce alternative gasoline blending components, such as iso-octane, iso-octene (also known as di-isobutylene ) or ethyl tertiary butyl ether ( ETBE ), at its MTBE plant. Conversion and product decisions will be influenced by further regulatory and market developments. The profit contribution related to the non-ether alternative gasoline blending components is likely to be lower than that historically realized on MTBE. In addition, there likely will be higher distribution costs associated with exporting MTBE outside of the U.S., and the increased supply of MTBE may reduce profitability of MTBE in these export markets.

*Other* Equistar is, from time to time, a defendant in lawsuits and other commercial disputes, some of which are not covered by insurance. Many of these suits make no specific claim for relief. Although final

**Table of Contents****Index to Financial Statements****EQUISTAR CHEMICALS, LP****NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)****15. Commitments and Contingencies (Continued)**

determination of any liability and resulting financial impact with respect to any such matters cannot be ascertained with any degree of certainty, management does not believe that any ultimate uninsured liability resulting from these matters in which it currently is involved (directly or indirectly) will individually, or in the aggregate, have a material adverse effect on the financial position, liquidity or results of operations of Equistar.

*General* In the opinion of management, the matters discussed in this note are not expected to have a material adverse effect on the financial position or liquidity of Equistar. However, the adverse resolution in any reporting period of one or more of these matters could have a material impact on Equistar's results of operations for that period, which may be mitigated by contribution or indemnification obligations of others, or by any insurance coverage that may be available.

**16. Supplemental Cash Flow Information**

Supplemental cash flow information is summarized as follows for the periods presented:

Millions of dollars	For the year ended December 31,		
	2005	2004	2003
Cash paid for interest	\$ 221	\$ 220	\$ 208

**17. Segment and Related Information**

Equistar operates in one reportable segment, ethylene, co-products and derivatives ( EC&D ), which includes: the ethylene and co-products product group, including primarily manufacturing and marketing of ethylene, its co-products, including propylene, butadiene, fuels and aromatics; and the derivatives product group, including primarily manufacturing and marketing of ethylene oxide, ethylene glycol and polyethylene (see Note 1).

The accounting policies of the segment are the same as those described in Summary of Significant Accounting Policies (see Note 2). Transfers of product from the ethylene and co-products product group to the derivatives product group are made at prices approximating prevailing market prices. No trade customer accounted for 10% or more of Equistar's consolidated sales during any year in the three-year period ended December 31, 2005; however, sales to Lyondell were approximately 10% in both 2005 and 2004.

F-25

Table of ContentsIndex to Financial Statements

## EQUISTAR CHEMICALS, LP

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

## 17. Segment and Related Information (Continued)

Although Equistar operates in one integrated reportable segment, Equistar has provided certain additional data, as shown below, for two product groups: the ethylene and co-products group, reflecting the products of the core ethylene manufacturing processes, and the derivatives products group.

Millions of dollars	Ethylene & co-products	Derivatives	Other	Eliminations	Consolidated
<b>2005</b>					
Sales and other operating revenues:					
Customers	\$ 7,893	\$ 3,793	\$	\$	\$ 11,686
Inter-product group	2,451			(2,451)	
	10,344	3,793		(2,451)	11,686
Operating income	891	77			968
Total assets	3,198	1,803	319		5,320
Capital expenditures	109	43	1		153
Depreciation and amortization expense	224	98			322
<b>2004</b>					
Sales and other operating revenues:					
Customers	\$ 6,059	\$ 3,257	\$	\$	\$ 9,316
Inter-product group	2,077			(2,077)	
	8,136	3,257		(2,077)	9,316
Operating income	476	18			494
Total assets	3,095	1,808	171		5,074
Capital expenditures	79	22			101
Depreciation and amortization expense	225	88			313
<b>2003</b>					
Sales and other operating revenues:					
Customers	\$ 4,023	\$ 2,522	\$	\$	\$ 6,545
Inter-product group	1,514			(1,514)	
	5,537	2,522		(1,514)	6,545
Operating income (loss)	56	(154)			(98)
Total assets	2,950	1,721	357		5,028

Edgar Filing: MILLENNIUM CHEMICALS INC - Form 10-K

Capital expenditures	71	35	106
Depreciation and amortization expense	216	91	307

The following table presents the details of Total assets as presented above in the Other column as of December 31, for the years indicated:

<u>Millions of dollars</u>	<u>2005</u>	<u>2004</u>	<u>2003</u>
Cash and cash equivalents	\$ 215	\$ 39	\$ 199
Accounts receivable trade and related parties	2	11	2
Prepaid expenses and other current assets	12	7	17
Property, plant and equipment, net	6	9	13
Other assets, net	84	105	126
<b>Total assets</b>	<b>\$ 319</b>	<b>\$ 171</b>	<b>\$ 357</b>