

Lyondell Chemical Company

2001 Annual Report



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Solid Strategy, Confident Execution



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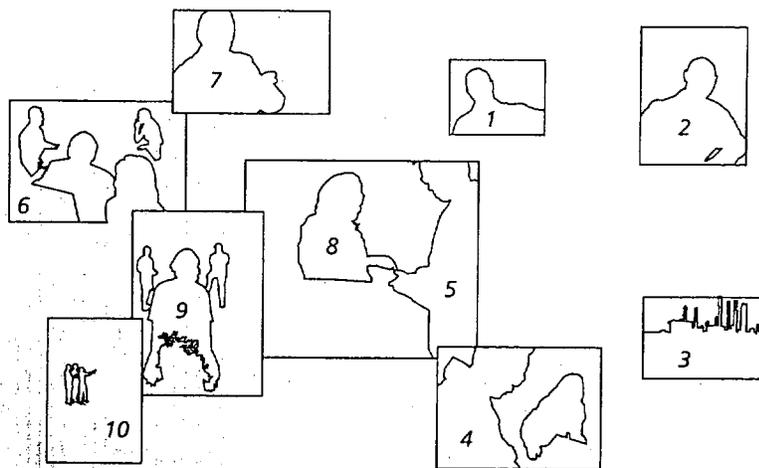
is a major global chemical company. The Lyondell enterprise specializes in basic chemicals, such as ethylene and propylene, and key derivatives, such as polyethylene and propylene oxide.

Lyondell has approximately 7,700 employees worldwide and more than \$14 billion in assets under management, including our joint ventures. Our joint venture companies – Equistar Chemicals, LP, LYONDELL-CITGO Refining LP and Lyondell Methanol Company, L.P. – are reported as equity investments in Lyondell's consolidated financial statements.

Lyondell is a key player in an important industry making products that are the building blocks for materials that make our lives better, safer and more convenient. We provide the basic elements that go into clothing, food packaging, construction and home building materials, household furnishings and automobile parts.

This annual report emphasizes how, despite the many challenges that characterized the year 2001, Lyondell produced significant results by focusing on the things we can control.

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Front cover (clockwise from upper left):

1. *Duston LaBarbera, Principal Lab Associate, Equistar Technology Center.*
2. *Michael Richardson, Senior Technician, Equistar Technology Center.*
3. *Lyondell's propylene oxide plant at Fos sur Mer, France.*
4. *Jim Greaney and Jennifer Jewson, Research Scientists, Lyondell Newtown Square Technology Center.*
5. *Adam Chan, Research Scientist, Lyondell Newtown Square Technology Center.*

Back cover (clockwise from upper left):

6. *Jan Miller, Customer Support Manager, and Samantha Toms, Customer Support Representative, Lyondell Service Center Europe.*
7. *Jeff Michener, Senior Research Technician, Lyondell Newtown Square Technology Center.*
8. *Elise Ann Kraus, Market Development Specialist, Lyondell Newtown Square Technology Center.*
9. *Ed Lively, spouse of Ed Lively, Operations Supervisor, Lyondell Bayport plant.*
10. *Russell J. Crockett, Vice President, Responsible Care® and Engineering; Joe Bernard, plant manager, Lyondell Channelview plant; Dick Sloan, Environmental Remediation Manager.*

Highlights of Consolidated Financial Statements

<i>Millions of dollars, except per share data</i>	2001	2000	1999
Sales and other revenues	\$ 3,226	\$ 4,036	\$ 3,693
Operating income	112	339	404
Income from equity investments	40	199	76
Net income (loss) ^(a)	(150)	437	(115)
Earnings (loss) per share ^(a)	(1.28)	3.72	(1.10)
Dividends per share	.90	.90	.90
Cash flow from operations	199	61	300
Capital expenditures ^(b)	68	104	131
Depreciation and amortization	269	279	330

(a) The 2001 net loss, 2000 net income and the 1999 net loss include after-tax extraordinary losses on early extinguishment of debt of \$5 million, or \$.04 per share, \$33 million, or \$.28 per share, and \$35 million, or \$.33 per share, respectively. In addition, net income for 2000 included an after-tax gain on asset sales of \$400 million, or \$3.40 per share.

(b) Does not include \$119 million of contributions to PO-11 and U.S. PO joint ventures in 2001.

2001 Selected Financial Data for Lyondell and its Venture Companies

<i>Millions of dollars</i>	Lyondell Chemical Company	Joint Ventures			Lyondell and Proportionate Share of Equity Investments ^(d)
		Equistar ^(a) 100%	LYONDELL- CITGO Refining ^(b) 100%	Lyondell Methanol ^(c) 100%	
Sales and other revenues	\$ 3,226	\$ 5,909	\$ 3,284	\$ 151	\$ 7,691
Cost of sales	2,771	5,733	2,967	159	6,984
Selling, general, administrative and R&D expenses	181	220	61	8	313
EBITDA ^{(e)(f)}	425	250	364	(5)	738
Depreciation and amortization ^(g)	269	321	108	11	472
Interest expense, net ^(g)	369	189	51	-	476
Capital expenditures ^(h)	68	110	109	-	177
Operating income (loss) ^(f)	112	(99)	256	(16)	210
Net income (loss) ⁽ⁱ⁾	(150)	(283)	203	(16)	(150)
Number of employees	3,300	3,400	1,000	-	-

(a) Lyondell's ownership percentage is 41%.

(b) Lyondell's ownership percentage is 58.75%.

(c) Lyondell's ownership percentage is 75%.

(d) This column reflects a combined total for Lyondell's 100% owned operations and its pro rata share of each venture company, and is not a presentation in accordance with generally accepted accounting principles.

(e) Earnings before net interest, taxes, depreciation, amortization, and unusual and extraordinary charges.

(f) For Lyondell, this excludes income from equity investments.

(g) Lyondell "interest expense, net" includes \$15 million of noncash amortization of debt issuance costs.

(h) Does not include \$119 million of contributions to PO-11 and U.S. PO joint ventures in 2001.

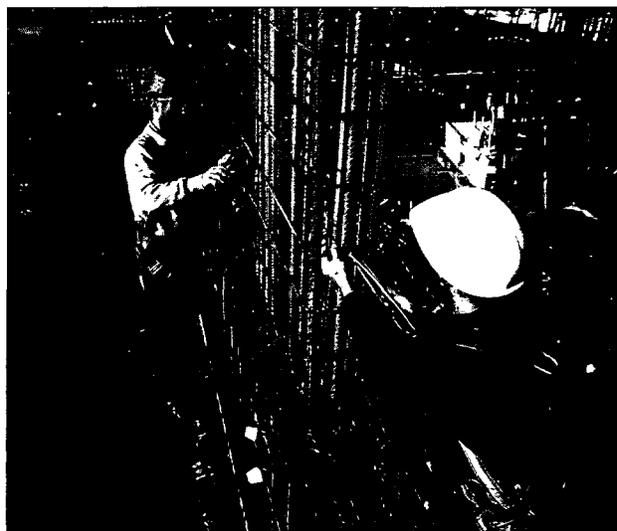
(i) The net losses for Lyondell and Equistar and net income for LCR include after-tax extraordinary losses on early extinguishment of debt of \$5 million, \$3 million and \$2 million, respectively.

To Our Shareholders

2001 was a challenging year, as the chemical industry faced the worst business climate in almost two decades. Increased industry capacity and decreased demand due to weak economic conditions kept the industry at the bottom of the chemical cycle throughout the year.

While we were not satisfied with our overall financial results for the year, our continued focus on those things that we can control yielded important results. These included:

- Strong performance in health, safety and environmental through continued improvement in Operational Excellence. In safety, we achieved a recordable incident rate of 0.80, the best safety performance in our history and among the Best in Class of the American Chemistry Council.
- Record overall profitability for LYONDELL-CITGO Refining (LCR) and improved polymer production efficiency for Equistar, both the result of ongoing focus on improving reliability.
- Successful conversion to SAP globally, which will enable improved productivity. This facilitates the use of a single business model enterprise-wide and improves our financial controls.
- Enhanced liquidity through reductions in working capital and capital expenditures at both Lyondell and Equistar.
- Improved capital structure through refinancing of \$1.5 billion of Equistar debt and \$393 million of Lyondell debt.



Lyondell is the technological and low-cost leader in the production of propylene oxide. Scheduled for start-up in 2003, a new world-scale PO plant, under construction in The Netherlands through a joint venture with Bayer, will solidify our leadership in the industry.

Over the long term, despite the cyclical nature of our industry, we must deliver acceptable returns to our shareholders. We also are committed to further reducing debt using cash flows from operations. We continue to believe the best route to delivering value in a consolidating industry is through our strategy of *Accumulate, Optimize/Rationalize, Grow*. This means we will:

- Continue to evaluate opportunities to accumulate assets that are a good fit with our existing businesses.
- Optimize the financial performance of our portfolio by reducing costs and improving operational efficiency, as well as by rationalizing businesses that do not fit the long-term strategic plan or cannot meet our performance criteria.

In 2001, Lyondell achieved the best safety record in enterprise history, placing us among the Best in Class of the American Chemistry Council. Our plant in Fos sur Mer, France, led the enterprise with zero recordable injuries in 2001. Pictured: Claude Royer and Patrick Gimenez, Safety Agents.



- Grow only those businesses where we have sustainable competitive advantages.

The industry has experienced significant consolidation over the past five years, and Lyondell will continue to evaluate opportunities to increase the depth and breadth of our product lines and expand globally in areas where we can excel by participating in this ongoing consolidation.

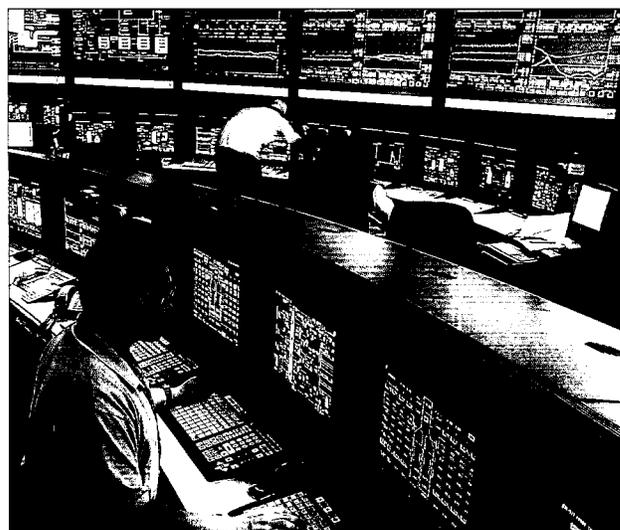
In 2001, we took a number of steps in pursuit of our strategy:

- In response to deteriorating business conditions, we took higher cost, less efficient capacity out of our system. This included idling Equistar's Lake Charles, Louisiana, olefins plant and shutting down Equistar's polyethylene facility in Port Arthur, Texas. We also exited the aliphatic diisocyanates (ADI) business, which was not a core business for us.
- We reduced capital expenditures overall, but continued to invest in new European capacity to maintain our leadership position in propylene oxide and to establish a leadership position in butanediol (BDO). These plants are scheduled to come on line over the next two years.
- We reached agreement early in 2002 to acquire Occidental Petroleum's 29.5% interest in Equistar. Under terms of the transactions, Occidental will purchase an equity position in Lyondell, the cash proceeds from which Lyondell will use to purchase Occidental's stake in Equistar. This preserves

Lyondell's cash during the current downturn, but gives us access to significant additional cash flow from Equistar as business conditions improve.

As we look longer-term, we know that the chemical cycle will turn up, although no one can predict with certainty when that will happen. But as conditions improve, Lyondell is positioned to generate significant excess cash flow. We will use this cash to generate value for our shareholders by:

A new central control room at LCR enables improved yield, increases throughput and lowers operating costs by allowing supervisors and engineers to optimize the refinery as a whole facility, rather than as individual units. Pictured: Jeffrey Rombs, Crude Still Console Operator.





The implementation of SAP, an enterprise-wide resource planning system, throughout Lyondell's global operations provides a single business model and will lead to further improvements in productivity and financial control.

Pictured: Pauline Hawkins, Enterprise Resource Planning Manager for Supply Chain; Glenn Levengood, Manager, Accounting Processes & Systems; Bill Steckiel, Internal Audit Manager and former IT Manager, SAP International Project; Leo Valk, Manager, Human Resources International.

- Returning cash through dividends.
- Rebuilding and maintaining a strong balance sheet through substantial debt repayment.
- Investing carefully in our businesses, expanding only where we have sustainable competitive advantages.

While it is uncertain what level of economic recovery will occur in 2002, our business approach remains the same. We continue to focus on those activities that we can control, including low cost and Operational Excellence. In addition, our focus will be on:

- Finalizing the transactions to acquire Occidental's stake in the Equistar joint venture.
- Completing the BDO project in The Netherlands and continuing progress on the PO-11 plant.
- Protecting our partnership interests in LCR by enforcing the terms of the long-term crude oil supply contract with Venezuela.
- Vigorously defending our oxygenated fuels business from unwarranted and unwise attempts to eliminate the use of these valuable products, which contribute to cleaner-burning gasoline, better air quality and ample gasoline supplies.

- Continuing to increase the capabilities of our talented workforce to manage our growing asset base.

Reflecting on the past year, I want to thank our employees worldwide for their hard work and continued dedication to helping us manage through this difficult environment.

Our future direction is set. We are building for the long term by carefully managing through the cycle, and we will not compromise our values or our future.

Dan F. Smith

President and Chief Executive Officer



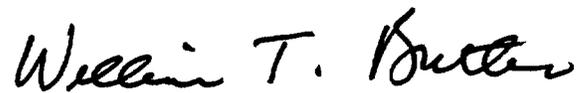
Message from the Chairman

This was a difficult year for the chemical industry and for Lyondell. Yet Lyondell's management and employees made significant progress in improving the balance sheet, reliability and safety, and advancing the use of technology, while managing the company through the trough of the chemical cycle and positioning it for the future.

Lyondell's Board takes seriously its responsibility to review not only the results of the company, but also the manner in which those results were achieved. We have confidence that management has created a foundation of solid values that ensure integrity and appropriate decision making and control throughout the organization. Lyondell's culture emphasizes the basic values of treating people with respect, utilizing people's full abilities, promoting

workforce diversity, conducting business in an ethical and environmentally responsible manner, complying with the law, and providing a safe and satisfying work environment. The culture stresses open and honest communication, both inside the company and with external stakeholders.

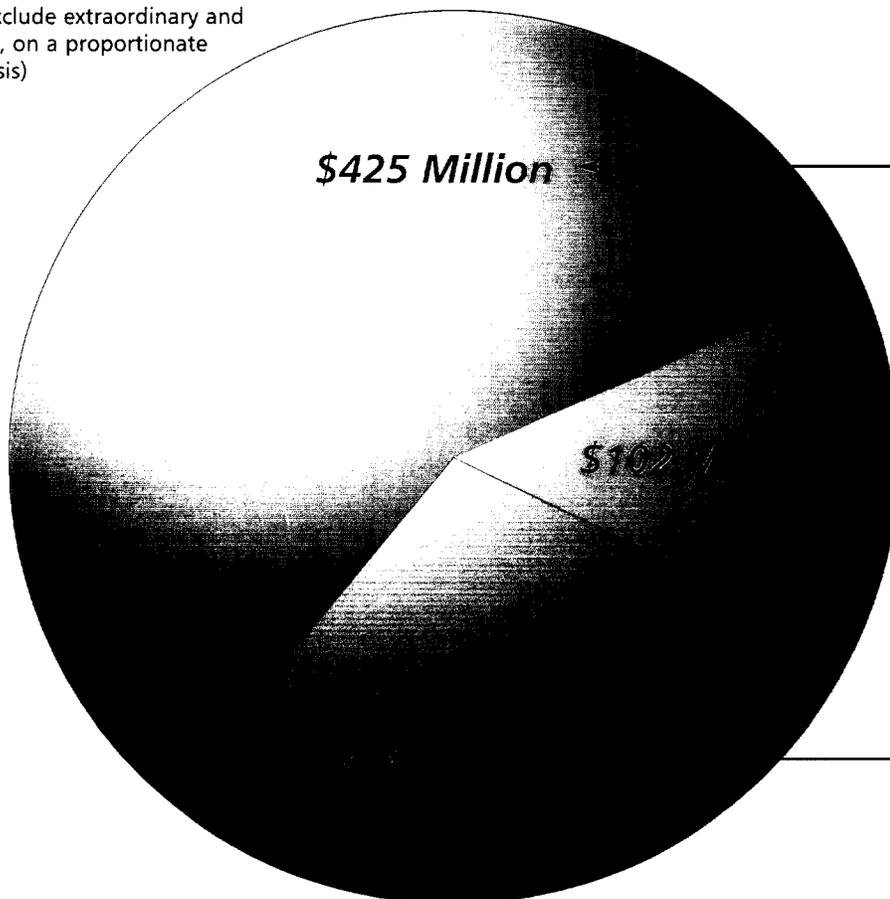
This report, which includes the full Form 10-K filed with the Securities and Exchange Commission, provides a complete overview of the current state of the company as well as its future direction.



William T. Butler
Chairman of the Board

The Lyondell Enterprise at a Glance

Lyondell Total 2001 EBITDA
(earnings before net interest, taxes,
depreciation and amortization,
adjusted to exclude extraordinary and
unusual items, on a proportionate
ownership basis)



For the past several years, Lyondell has pursued a strategy consisting of three elements: *Accumulate, Optimize/Rationalize, Grow*. This strategy, which we believe will continue to create shareholder value, is driven by our belief that to succeed in an increasingly competitive global chemical industry, Lyondell must possess and continually enhance our cost and technology advantages, scale, product line depth and breadth, global presence, and financial flexibility to turn plans into reality.

Today Lyondell has more than \$14 billion in assets under management. These assets have been accumulated over the past several years by employing a variety of creative management strategies – joint venturing, partnering, buying and building.

Lyondell operates in three major business areas: Intermediate Chemicals & Derivatives, which is wholly owned by Lyondell; Petrochemicals and Polymers, through our ownership position in Equistar Chemicals, LP; and Refining, through our ownership position in LYONDELL-CITGO Refining LP. These business lines provide Lyondell with a stable earnings platform and strong cyclical cash flow generation, which we believe enhances the value of the enterprise for our shareholders.

Intermediate Chemicals & Derivatives

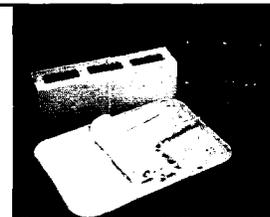
The wholly owned Intermediate Chemicals & Derivatives (IC&D) business includes propylene oxide (PO) and derivatives, styrene monomer and MTBE.

2001 revenues: \$3.2 billion

2001 Total EBITDA: \$425 million

Key Data

Major Products	Rated Capacity (Million Lb/Yr)	2001 Major Capacity Positions	
		Global	N. America
Propylene oxide (PO)	3,870	1	1
Styrene monomer (SM)	3,650	3	1
MTBE (bbl/day)	58,500	1	1
Propylene glycol (PG) & Propylene glycol ethers (PGE)	1,260	2	1
Toluene diisocyanate (TDI)	574	3	4
Butanediol (BDO)	120		4



Strengths

- World's leading producer of propylene oxide (PO), used in numerous consumer and industrial applications.
- Growing producer of butanediol (BDO), a PO derivative and key intermediate chemical for engineering plastics and urethanes.
- A leading global producer of propylene glycol (PG), a PO derivative and key component of aircraft deicers and fiberglass resins, and propylene glycol ethers (PGE), key components of coatings, cleaners and solvents.
- Major global producer of styrene monomer (SM) and MTBE as co-products of PO production.

Petrochemicals & Polymers

Lyondell has a 41% interest in Equistar Chemicals, LP, a venture with Millennium Chemicals Inc. and Occidental Petroleum Corporation. Lyondell operates the venture for the partnership.

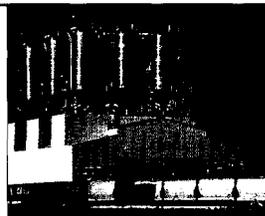
2001 revenues: \$5.9 billion

2001 EBITDA: \$250 million

2001 Lyondell proportionate share EBITDA: \$102 million

Key Data

Major Products	Rated Capacity (Million Lb/Yr)	2001 Major Capacity Positions	
		Global	N. America
Ethylene	11,600	3	2
Propylene	5,000		2
Butadiene	1,200	2	1
Benzene (million gal/yr)	310		3
Ethylene glycol (EG)	1,000		3
Ethylene oxide (EO)	1,100		4
Polyethylene			
- High-density polyethylene (HDPE)	3,100		3
- Low-density polyethylene (LDPE)	1,500		2
- Linear low-density polyethylene (LLDPE)	1,100		4
Polypropylene	680		
Toluene (million gal/yr)	66		



Strengths

- A leading producer of olefins and polymers, ethylene oxide and ethylene oxide derivatives.
- A leading producer of polymer resins for plastic films, blow-molded and extruded products, and wire and cable insulating resins and compounds for electrical, electronic, telecommunications and automotive markets.
- 1,400-mile ethylene/propylene pipeline distribution system that spans the Texas Gulf Coast to Louisiana.
- Feedstock flexibility across manufacturing facilities enables production optimization by switching to lowest-cost feedstock alternatives, differentiating Equistar in the industry.

Refining

LYONDELL-CITGO Refining LP, in which Lyondell has a 58.75% interest, is a venture between Lyondell and CITGO Petroleum Corporation.

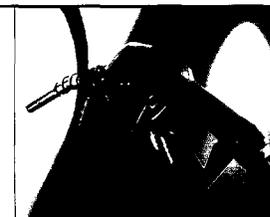
2001 revenues: \$3.3 billion

2001 Total EBITDA: \$364 million

2001 Lyondell proportionate share EBITDA: \$214 million

Key Data

Major Products	Rated Capacity
Crude run capacity (thousand bbl/day)	268
Gasoline (thousand bbl/day)	120
Diesel (thousand bbl/day)	90
Benzene (million gal/yr)	50
Paraxylene (million lb/yr)	400
Orthoxylene (million lb/yr)	270



Strengths

- World's premier extra-heavy crude oil refinery using Venezuelan crude oil.
- Leader in production of clean fuels – capable of producing 100% distillate as low-sulfur diesel fuel and more than 70% of gasoline as higher-value reformulated or oxygenated fuel.

Board of Directors



Dr. William T. Butler
Chairman of the Board,
Lyondell Chemical
Company
Chancellor, Baylor
College of Medicine



Carol A. Anderson
Managing Director,
New Century
Investors, LLC



Travis Engen
President and Chief
Executive Officer,
Alcan Inc.



Stephen F. Hinchliffe, Jr.
Chairman of the
Board and Chief
Executive Officer, BHH
Management, Inc.



David J. Lesar
Chairman, President
and Chief Executive
Officer, Halliburton
Company



Dudley C. Mecum II
Managing Director,
Capricorn Holdings
LLC



Dan F. Smith
President and Chief
Executive Officer,
Lyondell Chemical
Company



Dr. William R. Spivey
Retired President and
Chief Executive Officer,
Luminent Inc.



Paul R. Staley
Chairman, National
Vision Foundation
Retiring from the Board in 2002

Executive Management

EXECUTIVE OFFICERS

*Dan F. Smith**
President and Chief
Executive Officer
Equistar - Chief Executive
Officer

*Eugene R. Allspach**
Executive Vice President
Equistar - President and
Chief Operating Officer
Retiring effective March 31, 2002

Robert T. Blakely
Executive Vice President
& Chief Financial Officer

Morris Gelb
Executive Vice President
& Chief Operating Officer

John R. Beard
President, Lyondell
Chemical Europe

Edward J. Dineen
Senior Vice President,
Intermediates and
Performance Chemicals

T. Kevin DeNicola
Vice President, Corporate
Development

Kerry A. Galvin
Vice President, General
Counsel and Secretary

*John A. Hollinshead**
Vice President, Human
Resources

OFFICERS

*James W. Bayer**
Senior Vice President,
Manufacturing

*Russell T. Crockett**
Vice President,
Responsible Care®
and Engineering

*J. Rick Fontenot**
Vice President, Research
& Development

*Charles L. Hall**
Vice President and
Controller

*Jeffrey L. Hemmer**
Vice President, Supply
Chain

Allen C. Holmes
Vice President and
General Tax Officer

*Gerald A. O'Brien**
Vice President and
Deputy General Counsel

*W. Norman Phillips, Jr.**
Senior Vice President
Polymers

*José L. Rodriguez**
Vice President, Supply
and Optimization

*Robert E. Tolbert**
Vice President and Chief
Information Officer

Karen A. Twitchell
Vice President and
Treasurer

Charles C. Yang
President, Lyondell
Chemical Asia Pacific

* Also an Equistar officer

**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, 2001.

Transition Report Pursuant to Section 13 or 15(D) of the Securities Exchange Act of 1934

Commission File No. 1-10145

LYONDELL CHEMICAL COMPANY

(Exact name of Registrant as specified in its charter)

Delaware
(State or other jurisdiction of
Incorporation or organization)

95-4160558
(I.R.S. Employee Identification No.)

**1221 McKinney Street,
Suite 700, Houston, Texas**
(Address of principal executive offices)

77010
(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>
Common Stock (\$1.00 par value)	New York Stock Exchange
Preferred Share Purchase Rights	New York Stock Exchange

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

None

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.

There were 117,564,920 shares of the registrant's common stock outstanding on March 1, 2002. The aggregate market value of the voting stock held by non-affiliates of the registrant on March 1, 2002 based on the closing price on the New York Stock Exchange composite tape on that date, was \$1,937,714,084.

DOCUMENTS INCORPORATED BY REFERENCE

The registrant's definitive proxy statement, which will be filed with the Securities and Exchange Commission within 120 days after December 31, 2001, is incorporated by reference under Part III.

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PART I

Items 1 and 2. *Business and Properties*

Lyondell Chemical Company ("Lyondell" or the "Company") is a global chemical company with low cost operations and leading producer positions in all of its major products. Lyondell manufactures and markets a variety of intermediate and performance chemicals, including propylene oxide ("PO"), propylene glycol ("PG"), propylene glycol ethers ("PGE"), butanediol ("BDO"), toluene diisocyanate ("TDI"), styrene monomer ("SM"), and tertiary butyl alcohol ("TBA") and its derivative, methyl tertiary butyl ether ("MTBE"), which are collectively known as the Company's intermediate chemicals and derivatives business.

The Company owns 41% of Equistar Chemicals, LP, a Delaware limited partnership ("Equistar"), which operates petrochemicals and polymers businesses. Equistar's petrochemicals business manufactures and markets olefins, oxygenated products, aromatics and specialty products. Equistar's olefins are ethylene, propylene and butadiene and its oxygenated products include ethylene oxide ("EO") and its derivatives, ethylene glycol ("EG"), ethanol and MTBE. Equistar's aromatics are benzene and toluene. Equistar's polymers business manufactures and markets polyolefins, including high density polyethylene ("HDPE"), low density polyethylene ("LDPE"), linear low density polyethylene ("LLDPE"), polypropylene and performance polymers. Equistar's performance polymers include enhanced grades of polyethylene such as wire and cable insulating resins, and polymeric powders.

The Company also owns 58.75% of LYONDELL-CITGO Refining LP, a Delaware limited partnership ("LCR"), which produces refined petroleum products, including gasoline, low sulfur diesel, jet fuel, aromatics and lubricants ("lube oils"). LCR sells its principal refined products primarily to CITGO Petroleum Corporation ("CITGO").

In addition, the Company owns 75% of Lyondell Methanol Company, L.P., a Texas limited partnership ("LMC"), which produces methanol.

Development of Business

Lyondell has been a leader in the ongoing restructuring of the chemical industry, taking a series of steps to reposition and strengthen its business portfolio over the past several years.

In July 1993, the Company contributed to LCR the Company's refining business, including its Houston, Texas refinery (the "Refinery"), its lube oil blending and packaging plant in Birmingham, Alabama and working capital. The Company retained an approximately 86% interest in LCR, while CITGO held the remaining interest. Following completion of a major upgrade project at the Refinery in the first quarter of 1997, the Company's interest in LCR was reduced to 58.75%. On December 31, 1998, LCR converted from a Texas limited liability company to a Delaware limited partnership.

In May 1995, the Company acquired Occidental Chemical Corporation's ("Occidental Chemical") ALATHON® HDPE business. Assets involved in this acquisition included HDPE production facilities in Matagorda and Victoria, Texas, related research and development activities and the rights to the ALATHON® trademark.

In December 1996, the Company formed LMC with MCN Investment Corporation ("MCNIC"), a division of MCN Corporation, to own the Company's 248 million gallons per year methanol plant. Under the terms of the agreement, MCNIC purchased a 25% interest in the methanol plant. Lyondell retained a 75% interest and serves as managing partner. Since December 1997, Equistar has served as the operator of LMC. The 25% interest purchased by MCNIC currently is held by MCN Energy Enterprises, successor to MCNIC.

In December 1997, Lyondell and Millennium Chemicals Inc. ("Millennium") combined most of their petrochemicals and polymers businesses to form Equistar. Lyondell contributed substantially all of the assets comprising its petrochemicals and polymers business segments, as well as a \$345 million note, in exchange for a 57% interest in Equistar. Equistar also assumed \$745 million of Lyondell's debt. Millennium contributed substantially all of the assets comprising its olefins, ethanol, polyethylene, polypropylene and performance polymers

businesses, which had been held in Millennium Petrochemicals Inc. ("Millennium Petrochemicals"), a wholly owned subsidiary of Millennium. In exchange, Millennium received a 43% interest in Equistar, Equistar repaid \$750 million of debt due to Millennium from its contributed businesses and Millennium retained \$250 million of its accounts receivable.

In May 1998, Lyondell and Millennium expanded Equistar with the addition of the ethylene, propylene, EO, EG and other EO derivatives businesses (the "Occidental Contributed Business") of Occidental Chemical Corporation, a subsidiary of Occidental Petroleum Corporation ("Occidental"). This addition included two olefins plants, a plant that produces EO and EO derivatives, including EG, and Occidental's 50% interest in a joint venture with E.I. DuPont de Nemours and Company ("DuPont"), which operates an EO/EG plant. Occidental also contributed more than 950 miles of owned and leased pipelines located on the Gulf Coast of the United States and the lease of a Lake Charles, Louisiana olefins plant. Equistar assumed approximately \$205 million of Occidental's debt. In June 1998, Equistar borrowed approximately \$500 million of additional debt and distributed cash of approximately \$420 million to Occidental and \$75 million to Millennium. Since the May 1998 transaction, Lyondell has owned 41% of Equistar, and Millennium and Occidental each have owned 29.5%.

Early in 2002, Lyondell and Occidental agreed in principle for Lyondell's acquisition of Occidental's 29.5% interest in Equistar and for Occidental's acquisition of an equity interest in Lyondell. Upon consummation of these transactions, Occidental would receive the following from Lyondell:

- 30 to 34 million shares of newly issued Lyondell Series B Common Stock, with the final number to be determined at closing of this transaction. These shares would have the same rights as Lyondell's regular common stock with the exception of the dividend. The Series B Common Stock would pay a dividend at the same rate as the regular common stock but, at Lyondell's option, the dividend may be paid in additional shares of Series B Common Stock or in cash. These new Series B shares also would include provisions for conversion to regular common stock three years after issuance or earlier in certain circumstances;
- five-year warrants to acquire five million shares of Lyondell regular common stock at \$25 per share, subject to adjustment upon the occurrence of certain events; and
- a contingent payment equivalent in value to 7.38% of Equistar's cash distributions for 2002 and 2003, up to a total of \$35 million, payable in cash, Series B Common Stock or regular common stock, as determined by Lyondell.

In addition, it is anticipated that two Occidental executives, Dr. Ray R. Irani, Chairman and Chief Executive Officer, and Stephen I. Chazen, Chief Financial Officer and Executive Vice President, would become members of Lyondell's Board of Directors so long as Occidental continues to own specified amounts of Lyondell's equity. These transactions are subject to negotiation, completion and execution of definitive documentation, compliance with the applicable provisions of the partnership agreement and the parent agreement, approval by the Boards of Directors of Lyondell and Occidental, approval by Lyondell's stockholders and other customary conditions. There can be no assurance that the proposed transactions will be completed. See "Equistar Chemicals, LP—Agreements between Lyondell and Equistar." The partnership agreement and the parent agreement are filed as exhibits hereto.

In July 1998, Lyondell completed the acquisition (the "ARCO Chemical Acquisition") of all the outstanding shares of ARCO Chemical Company ("ARCO Chemical"), the world's largest producer of PO and a leading worldwide producer of polyols, PG, PGE, BDO, TDI, SM and MTBE. The ARCO Chemical Acquisition was financed through a bank credit facility providing for aggregate borrowings of up to \$7 billion. The acquired business is referred to as "ARCO Chemical" for actions or events prior to the ARCO Chemical Acquisition.

On March 31, 2000, Lyondell completed the sale of the polyols business and ownership interests in its U.S. PO manufacturing operations to Bayer AG and Bayer Corporation (collectively, "Bayer") for approximately \$2.45 billion. Lyondell used net proceeds of the asset sale to retire a significant portion of its outstanding debt under its credit facility. As part of the transaction, Lyondell entered into a U.S. PO manufacturing joint venture with Bayer (the "PO Joint Venture") and a separate joint venture with Bayer for certain related PO/SM technology (the "PO Technology Joint Venture"). Bayer's ownership interest in the PO Joint Venture represents ownership of an in-kind portion of the PO production of the PO Joint Venture. Bayer's share of PO production from the PO Joint

Venture will increase from approximately 1.5 billion pounds in 2001 to approximately 1.6 billion pounds annually in 2004 and thereafter. Lyondell takes in-kind the remaining PO production and all of the co-product (SM and TBA) production from the PO Joint Venture. In addition, on December 19, 2000, Lyondell and Bayer formed a separate 50/50 joint venture for the construction of PO-11, a previously announced world-scale PO/SM plant being constructed near Rotterdam, The Netherlands. Lyondell and Bayer do not share marketing or product sales under either the PO Joint Venture or PO-11.

Lyondell was incorporated under the laws of Delaware in 1985. Its principal executive offices are located at 1221 McKinney Street, Suite 700, Houston, Texas 77010 (Telephone: (713) 652-7200).

Strategy

For the last several years, Lyondell has pursued its strategic plan consisting of three elements:

- Accumulate;
- Optimize/Rationalize; and
- Grow.

This strategy, which Lyondell believes will continue to create value for its investors, is driven by Lyondell's basic belief that to be a successful competitor in the chemical industry, the Company must have:

- low total production costs;
- sustainable competitive advantage (driven by technology or market position);
- scale;
- product line depth and breadth;
- global presence; and
- financial flexibility.

Accumulate

Key elements of Lyondell's accumulate strategy to date include:

- creation of LCR with CITGO in 1993;
- formation of Equistar with Millennium in 1997, and the subsequent addition of Occidental as an Equistar partner in 1998;
- acquisition of ARCO Chemical in 1998; and
- strategic alliances established with Bayer in 2000.

These actions increased the global asset base that Lyondell manages by a factor of four, from approximately \$3 billion at the beginning of 1997 to more than \$14 billion today, which Lyondell owns in whole or in part with others. In addition, Lyondell acquired considerable intellectual capital and brought together talented employees through these actions.

Optimize/Rationalize

Lyondell continues to maximize the value of each of the businesses it owns and/or operates through intense management focus on operating cost and working capital efficiency, while maintaining or exceeding current safety and environmental performance. In addition, Lyondell and Equistar have rationalized businesses that either do not fit the long-term strategic plan or that cannot meet acceptable performance criteria. Actions taken have led to:

- significant reductions in fixed costs through the formation of Equistar, establishing and extending shared services arrangements and continuing to consolidate the management structure of Lyondell and Equistar;
- improved operational efficiency by shifting production to lower cost, more efficient sites and simplifying production scheduling, such as by idling Equistar's Lake Charles olefins facility and shutting down Equistar's Port Arthur, Texas polyethylene facility;
- the divestiture of non-strategic assets, such as by exiting the ADI business, which was not a core business for Lyondell;
- reduced supply chain costs while improving customer service and responsiveness, such as through the implementation of CustomerXPRESS.com, an e-business initiative which allows customers to access information regarding their business 24 hours a day, 7 days a week.

Lyondell's actions enabled it to reduce long-term debt by more than \$2.4 billion in 2000, which improved financial flexibility, including reducing annual interest expense by more than \$200 million. In 2001, Lyondell and Equistar further increased financial flexibility by refinancing \$1.5 billion of Equistar debt and \$393 million of Lyondell debt.

Grow

Lyondell's growth strategy focuses on those businesses where Lyondell believes it has long-term sustainable competitive advantages.

Lyondell currently has competitive advantages in its core businesses due to its size, cost structure, technology and operating know-how. These businesses serve numerous markets that are expected to grow. On January 31, 2002, Lyondell and Occidental announced reaching agreement in principle for Lyondell to acquire Occidental's interest in Equistar, a business which is expected to add significant cash flow to Lyondell as petrochemical business conditions improve.

Other major projects that Lyondell currently is undertaking include:

- constructing a world-scale PO plant in The Netherlands with an expected start up in the second half of 2003, through a joint venture with Bayer that links Lyondell with a strong partner in the urethanes market (the major use for PO);
- constructing a BDO plant in The Netherlands for start up in the middle of 2002 to enable Lyondell to serve the growing needs of BDO customers in Europe and elsewhere internationally;
- participating with Reliant Energy in the construction of a cogeneration facility at Equistar's Channelview, Texas complex for startup in 2002, which will enable Equistar to lower energy costs; and
- continuing focused research and development programs to strengthen Lyondell's technology portfolio in its core businesses.

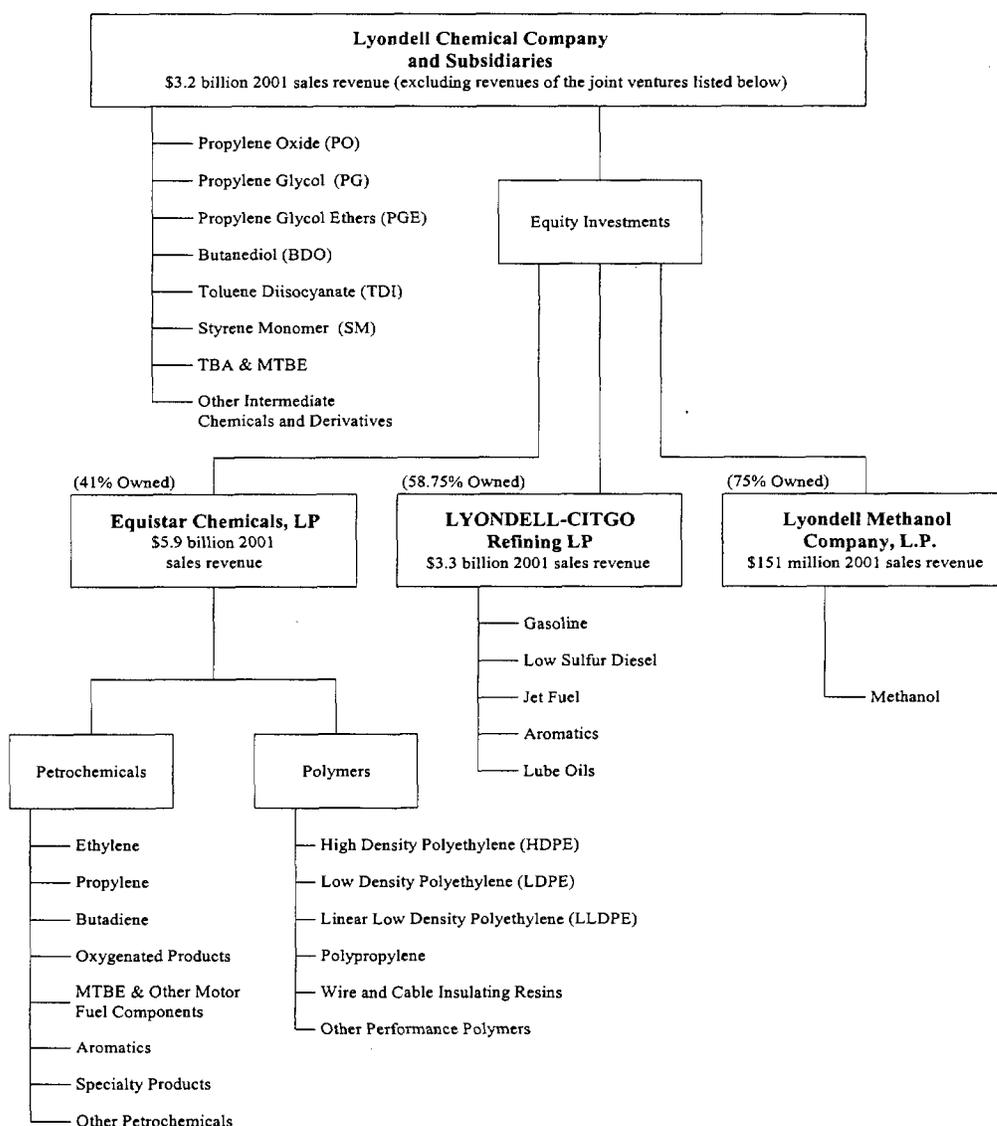
Lyondell will continue to pursue growth opportunities that are cash flow and earnings accretive to Lyondell with returns in excess of the cost of capital.

Summary Description of Business Segments

The Company reports its results of operations in four segments: intermediate chemicals and derivatives; petrochemicals; polymers; and refining. The Company's petrochemicals and polymers segments are conducted through Equistar, and the Company's refining segment is conducted through LCR. The methanol business conducted through LMC is not a reportable segment for financial disclosure purposes.

THE COMPANY BUSINESS

The following chart shows the organization of Lyondell, as well as 2001 sales revenues for Lyondell, Equistar, LCR and LMC.



Sales revenues shown above include sales to affiliates. Sales revenues shown do not include Bayer's share of production from the PO Joint Venture. For additional segment information for each of the years in the three-year period ended December 31, 2001, see Notes 8, 9 and 22 of Notes to Consolidated Financial Statements.

INTERMEDIATE CHEMICALS AND DERIVATIVES

Overview

Lyondell is a leading global manufacturer and marketer of intermediate chemicals and performance chemical products used in a broad range of consumer goods. The segment's core product is PO, which is produced through two distinct technologies based on indirect oxidation processes that yield co-products. One process yields TBA as the co-product; the other yields SM as the co-product. The two technologies are mutually exclusive, necessitating that a manufacturing facility be dedicated either to PO/TBA or to PO/SM. The intermediate chemicals and derivatives segment also manufactures numerous derivatives of PO and TBA. PG, PGE and BDO are among the derivatives of PO manufactured by the intermediate chemicals and derivatives segment. MTBE is the principal derivative of TBA manufactured by the intermediate chemicals and derivatives segment. This segment also manufactures and markets TDI.

In North America, the Company produces PO, TBA, PG and PGE at its Bayport (Pasadena), Texas plants and PO, SM, MTBE and BDO at its Channelview, Texas plants. The Bayport PO/TBA plants and the Channelview PO/SM I plant are held by the PO Joint Venture. The Channelview PO/SM II plant is owned by the Company together with third-party equity investors. The Company produces TDI at its Lake Charles, Louisiana plant. In Europe, the Company produces PO, TBA, PG, PGE and MTBE at plants near Rotterdam, The Netherlands, and Fos-sur-Mer, France. In the Asia Pacific region, the Company has a 50% interest in the joint venture Nihon Oxirane Co., Ltd. ("Nihon Oxirane"), which operates a PO/SM plant in Chiba, Japan. In Europe, the Company also currently obtains TDI and toluene diamine, a precursor of TDI, through agreements with Rhodia Intermediaries ("Rhodia"). In the third quarter of 2000, construction began on a new BDO facility near Rotterdam, with a planned 275 million pound annual capacity and expected startup mid-year 2002. Additionally, construction of a world-scale PO/SM plant, known as PO-11, located near Rotterdam, The Netherlands, began in the second quarter of 2001. PO-11, which has a planned total capacity of 625 million pounds of PO and 1.4 billion pounds of SM, is owned 50% by Lyondell and 50% by Bayer and will be operated by Lyondell. PO-11 currently is expected to start up in the second half of 2003. Lyondell and Bayer take production in kind and do not share marketing or product sales under either the PO Joint Venture or PO-11.

The Company estimates, based in part on published data, that worldwide demand for PO was approximately 10 billion pounds in 2001. Approximately 90% of that volume was consumed in the manufacture of three families of PO derivative products: polyols, PG and PGE. The remainder was consumed in the manufacture of a growing segment of performance products, including BDO and its derivatives. The Company sells less than one billion pounds of its annual capacity of PO in the merchant market and consumes the rest in the production of derivatives. PG principally is used to produce unsaturated polyester resins and also is used in certain food, cosmetic and pharmaceutical applications and in automotive coolants and aircraft deicers. PGE are used as high performance solvents. BDO and its derivatives are utilized in the production of fibers, engineering plastics, pharmaceuticals, personal care products and high performance coatings.

TDI is used in the production of urethanes for cushioning products such as automotive seating and home furnishings.

SM is produced and traded worldwide for commodity and specialty polymer applications, such as polystyrene and unsaturated polyester resins, as well as various uses in the rubber industry. Based on published data, worldwide demand for SM in 2001 was approximately 45 billion pounds.

Lyondell converts most of its TBA to isobutylene, which is reacted with methanol to produce MTBE, an oxygenated gasoline blending component that increases octane and reduces automotive emissions. Worldwide demand for MTBE in 2001 was approximately 480,000 barrels per day, based on published data. This demand had increased over the past several years as a result of the Clean Air Act Amendments of 1990 (the "Clean Air Act Amendments"), state and local regulations and the need for incremental octane in gasoline in the United States and other countries. In the United States, the Clean Air Act Amendments set minimum levels for oxygenates, such as MTBE, in gasoline sold in areas not meeting specified air quality standards. In Europe, demand for MTBE has benefited from new legislation in the 15-nation European Union. The so-called "Auto/Oil Legislation" aimed at

reducing air pollution from vehicle emissions was enacted in 1998, and refineries increased consumption of MTBE to meet the new blending requirements. However, while studies by federal and state agencies and other world organizations have shown that MTBE is safe for use in gasoline, is not carcinogenic and is effective in reducing automotive emissions, 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 has led to public concern that MTBE may, in certain limited circumstances, affect the taste and odor of drinking water supplies. Certain federal and state governmental initiatives have sought either to rescind the oxygenate requirement for reformulated gasoline or to restrict or ban the use of MTBE.

At the state level, certain states, including California, have initiated actions, supported by legislation, to reduce, limit or eliminate the use of MTBE. Such actions, to be effective, would require (1) a waiver of the state's oxygenate mandate, (2) Congressional action in the form of an amendment to the Clean Air Act or (3) replacement of MTBE with another oxygenate such as ethanol, a more costly, untested, and less widely available additive. California has twice sought a waiver of its oxygenate mandate. California's request was denied by both the Clinton Administration and the current Bush Administration. California is challenging the denial in court.

At the federal level, a blue ribbon panel appointed by the U.S. Environmental Protection Agency (the "EPA") issued its report on July 27, 1999. That report recommended, among other things, reducing the use of MTBE in gasoline. During 2000, the EPA announced its intent to seek legislative changes from Congress to give the EPA authority to ban MTBE over a three-year period. Such action would only be granted through amendments to the Clean Air Act. Additionally, the EPA is seeking a ban of MTBE utilizing rulemaking authority contained in the Toxic Substance Control Act. It would take at least three years for such a rule to issue. In January 2001, however, senior policy analysts at the U.S. Department of Energy presented a study stating that banning MTBE would create significant economic risk. The study did not identify any benefits from banning MTBE.

The formal risk assessment of MTBE conducted by the European Commission concluded that the use of MTBE in gasoline does not present an unacceptable risk to either the health of the community or to the environment. The European Commission decided not to restrict the use of MTBE in the European Union and agreed to a formal risk management strategy.

The EPA initiatives mentioned above or other governmental actions could result in a significant reduction in Lyondell's MTBE sales, which represented approximately 35% of its total 2001 revenues. The Company has developed technologies to convert TBA into alternate gasoline blending components should it be necessary to reduce MTBE production in the future. However, implementation of such technologies would require additional capital investment. The profit margins on such alternate gasoline blending components could differ from those historically realized on MTBE. See "Environmental Matters."

The following table outlines the intermediate chemicals and derivatives segment's primary products, annual processing capacities as of January 1, 2002, and the primary uses for such products. Unless otherwise specified, annual processing capacities were calculated by estimating the 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 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 capacities set forth below. Capacities shown include 100% of the capacity of joint venture facilities.

<u>Product</u>	<u>Annual Capacity</u>	<u>Primary Uses</u>
Propylene Oxide (PO)	3.87 billion pounds (a)	PO is a key component of polyols, PG, PGE and BDO.
Propylene Glycol (PG)	960 million pounds	PG is used to produce unsaturated polyester resins for bathroom fixtures and boat hulls; lower toxicity antifreeze, coolants and aircraft deicers; and cosmetics and cleaners.
Propylene Glycol Ethers (PGE)	300 million pounds	PGE are used as lower toxicity solvents for paints, coatings and cleaners.
Butanediol (BDO)	120 million pounds	BDO is used in the manufacture of engineering resins, films, personal care products, pharmaceuticals, coatings, solvents and adhesives.
Toluene Diisocyanate (TDI)	574 million pounds (b)	TDI is combined with polyols to produce flexible foam for automotive seating and home furnishings.
Styrene Monomer (SM)	3.65 billion pounds (c)	SM is used to produce plastics, such as expandable polystyrene for packaging, foam cups and containers, insulation products and durables and engineering resins.
Methyl Tertiary Butyl Ether (MTBE)	897 million gallons (58,500 barrels/day)	MTBE is a gasoline component for reducing emissions in reformulated gasolines and enhancing octane value.

(a) Includes approximately 1.5 billion pounds in 2001 that represents Bayer's share under the PO Joint Venture, and 100% of the 385 million pounds of capacity of Nihon Oxirane, a joint venture of which the Company owns 50%. See "Joint Ventures and Other Agreements."

(b) Includes approximately 274 million pounds of average annual TDI capacity processed by Rhodia at its plant in Pont de Claix, France. See "Joint Ventures and Other Agreements."

(c) Includes approximately 1.1 billion pounds committed to third party investors under long-term processing agreements and 100% of the 830 million pounds of capacity of Nihon Oxirane, of which the Company owns 50%. See "Joint Ventures and Other Agreements."

Raw Materials

The principal hydrocarbon raw materials purchased by the intermediate chemicals and derivatives segment are propylene, butanes, ethylene, benzene and methanol. The market prices of these raw materials historically have been related to the price of crude oil and its principal refinery derivatives and natural gas liquids. These materials are received in bulk quantities via pipeline or marine vessels. The segment's raw materials requirements are purchased from numerous suppliers in the United States and Europe with which the Company has established contractual relationships, as well as in the spot market.

The Company's raw material suppliers include Equistar, which is a leading producer of propylene, ethylene and benzene and is expected to be the major supplier of these raw materials to Lyondell's U.S. business in 2002. See Note 8 of Notes to Consolidated Financial Statements.

The intermediate chemicals and derivatives segment is a large volume consumer of isobutane for chemical production. The Company has invested in facilities, or entered into processing agreements with unrelated third parties, to convert the widely available commodity, normal butane, to isobutane. The Company is also a large consumer of oxygen for its PO/TBA plants at Bayport, Texas; Botlek (Rotterdam), The Netherlands; and Fos-sur-Mer, France. In order to assure adequate and reliable sources of supply at competitive prices and rates, the Company is a party to long-term agreements and other arrangements with suppliers of raw materials, products, industrial gas and other utilities.

Marketing and Sales

In 2001, most of the segment's revenues were derived from sales to, or processing agreements with, unrelated third parties. In 2001, no single customer accounted for 10% or more of Lyondell's total revenues.

The intermediate chemicals and derivatives segment delivers products through sales agreements, processing agreements and spot sales as well as product exchanges. Production levels for co-products are based upon the demand for PO and the relative market economics of the co-products. SM, MTBE and limited amounts of BDO are purchased for resale to the extent that customer demand for these co-products exceeds its production.

The segment has a number of multi-year PO processing (or tolling) and sales agreements. This reflects an effort to mitigate the adverse impact of competitive factors and economic business cycles on demand for the segment's PO. In addition, Bayer's ownership interest in the PO Joint Venture represents ownership of an in-kind portion of the PO production of the PO Joint Venture. See "Joint Ventures and Other Agreements."

The majority of the segment's PO derivatives are sold through market-based sales contracts under annual or multi-year arrangements.

Lyondell sells most of its SM production into the United States merchant market and to selected export markets through sales or processing agreements, including a number of multi-year SM sales and processing agreements. See "Joint Ventures and Other Agreements."

The Company sells MTBE pursuant to a take-or-pay MTBE sales contract with Atlantic Richfield Company ("ARCO"), now wholly owned by BP p.l.c. ("BP"). The contract has an initial term expiring December 31, 2002 and provides for formula-based prices, which have been higher than market prices. In addition, the Company also sells its MTBE production under market-based sales agreements, including multi-year agreements, and in the spot market. After the expiration of the MTBE sales contract with BP referenced above, the Company anticipates that this MTBE production will be sold under market-based sales agreements, including multi-year agreements, and in the spot market.

The segment's sales are made by Company marketing and sales personnel and through distributors and independent agents located in the Americas, Europe and the Asia Pacific region. The Company has centralized certain sales and order fulfillment functions in regional customer service centers located in Houston, Texas and Rotterdam, The Netherlands. Lyondell also has long-term contracts for distribution and logistics to ensure reliable supply to its customers.

For data relating to foreign operations, see Note 22 of Notes to Consolidated Financial Statements.

Joint Ventures and Other Agreements

On March 31, 2000, Lyondell contributed its Channelview, Texas PO/SM I plant and its Bayport, Texas PO/TBA plants to the PO Joint Venture. Bayer's ownership interest in the PO Joint Venture represents ownership of an in-kind portion of the PO production of the PO Joint Venture. Bayer's share of PO production from the PO Joint Venture will increase from approximately 1.5 billion pounds in 2001 to approximately 1.6 billion pounds annually in 2004 and thereafter. Lyondell takes in kind the remaining PO production and all co-product (SM and TBA) production from the PO Joint Venture. As part of the transaction, Lyondell and Bayer also formed the separate PO Technology Joint Venture through which Bayer was granted a non-exclusive and non-transferable right

to use certain PO/SM technology in the PO Joint Venture. Under the terms of the operating and logistics agreements, Lyondell operates the PO Joint Venture plants and arranges and coordinates the logistics of PO delivery. Lyondell and Bayer also have formed a separate joint venture for the construction of PO-11 near Rotterdam, The Netherlands with an expected startup date in the second half of 2003. Lyondell and Bayer each have a 50% share in the PO-11 joint venture, pursuant to which they each take in kind 50% of the PO and SM production of PO-11. Lyondell and Bayer do not share marketing or product sales under either the PO Joint Venture or PO-11.

Lyondell's PO/SM II plant at the Channelview, Texas complex is owned by the Company together with third-party equity investors. The Company retains a majority interest in the PO/SM II plant and is the operator of the plant. A portion of the SM output of the PO/SM II plant is committed to the third-party investors under long-term processing agreements. As of December 31, 2001, the Company had more than 1.1 billion pounds of SM capacity, or 30% of its worldwide capacity, committed to third party investors under long-term processing arrangements.

The Company has a 50% equity interest in Nihon Oxirane, a joint venture with Sumitomo Chemical Co., Ltd. ("Sumitomo") and Showa Denko K.K. Since 1976, Nihon Oxirane has operated a PO/SM plant in Chiba, Japan. Lyondell and Sumitomo conduct joint research and development programs under various agreements in connection with the Nihon Oxirane joint venture.

In January 1995, ARCO Chemical entered into agreements with Rhodia covering the entire TDI output of Rhodia's Pont de Claix and Lille plants in France, which had a combined average annual capacity of approximately 264 million pounds. In the second quarter 2000, Lyondell entered into a series of arrangements with Rhodia to expand the TDI capacity at the Pont de Claix plant, resulting in a total average annual capacity of approximately 274 million pounds. Since the completion of the expansion at the end of 2001, all of the TDI that Lyondell receives from Rhodia comes from the Pont de Claix plant, which is designed to have a more efficient cost structure by introducing Lyondell's proprietary technology for TDI. Lyondell's average minimum TDI purchase commitment under the revised tolling agreement is approximately 200 million pounds of TDI per year. The revised tolling agreement has been extended through 2016. The agreement that covered TDI output from Rhodia's Lille plant expired December 31, 2001. The TDI Lyondell purchases from Rhodia is marketed principally in Europe, the Middle East, Africa and Asia. Lyondell purchases toluene diamine ("TDA"), a precursor of TDI, from Rhodia's Lille plant pursuant to an agreement that expires December 31, 2005. Under the agreement, Lyondell can purchase up to a maximum of approximately 70 million pounds of TDA per year. The TDA that Lyondell purchases from the Lille plant is used in the production of the TDI that Lyondell purchases from the Pont de Claix plant.

Competition and Industry Conditions

Competition within the intermediate chemicals and derivatives segment of the chemical industry is significant and is based on a variety of factors, including quality, product price, reliability of supply, technical support, customer service and potential substitute materials. Profitability in this segment is affected by the worldwide level of demand along with vigorous price competition which may intensify due to, among other things, new industry capacity. Demand is a function of economic growth in the United States and elsewhere in the world, which fluctuates. It is not possible to predict accurately the changes in raw material costs, market conditions and other factors that will affect industry margins in the future. Capacity share figures for the segment 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 agreements.

The Company's major worldwide PO competitors are The Dow Chemical Company ("Dow") and Shell Chemical Company ("Shell"). Dow's operations are based on chlorohydrin technology. Shell utilizes a proprietary PO/SM technology. Based on published data relating to the PO market, including the PO Joint Venture's total capacity, the Company believes it owns and/or operates approximately 31% of the total worldwide capacity for PO.

As part of the Bayer transaction, Lyondell and Bayer formed a separate joint venture for the construction of PO-11 near Rotterdam, The Netherlands with an expected startup in the second half of 2003. The Company is also cooperating with Sumitomo on the commercialization of new PO technology, which is scheduled to be available in 2003. Shell and BASF AG ("BASF"), as 50/50 partners, are constructing a PO/SM plant in Singapore, which is scheduled for start up in the last half of 2002. The Company believes that a significant amount of this additional

capacity already has been absorbed by the market. The Company also expects increasing integration to occur as current merchant-market buyers establish their own sources of PO supply.

The Company both manufactures and has long-term tolling agreements for TDI. The Company competes with many TDI producers worldwide, including BASF, Bayer and Dow. Based on published data regarding TDI capacity, the Company believes it is the third largest producer of TDI worldwide and has approximately 16% of total worldwide capacity.

The Company competes with many MTBE producers worldwide, the most significant of which is Saudi Basic Industries Corp. ("SABIC"). Based on published data regarding MTBE capacity, the Company believes that, combined with Equistar, it is one of the largest producers of MTBE worldwide. MTBE also faces competition from substitute products such as ethanol as well as other octane components.

The Company competes with several SM producers worldwide, among which are BASF, BP, Chevron Phillips Chemical Company LP ("Chevron Phillips"), Shell and TotalFinaElf. Based on published data regarding SM capacity, the Company believes that it is one of the largest producers of SM worldwide.

Properties

The Company leases its corporate offices located in Houston, Texas. Lyondell also maintains a research facility in Newtown Square, Pennsylvania, which is leased from a third party. The Company's European headquarters are located in leased facilities in Maidenhead, England, and its Asia Pacific headquarters are located in leased facilities in Hong Kong. The regional customer service center for Europe, the Middle East and Africa is located in leased facilities in Rotterdam, The Netherlands.

Depending on location and market needs, the Company's production facilities can receive primary raw materials by pipeline, railcar, truck, barge or ship and can deliver finished products by pipeline, railcar, truck, barge, isotank, ship or in drums. The Company charters ships, owns and charters barges and leases isotanks and railcars for the dedicated movement of products between plants, products to customers or terminals, or raw materials to plants, as necessary. The Company leases liquid and bulk storage and warehouse facilities at terminals in the Americas, Europe and the Asia Pacific region. In the Rotterdam outer harbor area, the Company owns and operates an on-site butane storage tank, propylene spheres, pipeline connections and a jetty that accommodates deep-draft vessels.

The principal manufacturing facilities of the segment are set forth below. These facilities are wholly owned by Lyondell unless otherwise noted.

<u>Location</u>	<u>Principal Products</u>
Bayport (Pasadena), Texas (a).....	PO, PG, PGE, TBA, isobutylene
Channelview, Texas (a)(b).....	PO, BDO, SM, MTBE
Lake Charles, Louisiana.....	TDI
Fos-sur-Mer, France.....	PO, PG, TBA, MTBE
Botlek, Rotterdam, The Netherlands.....	PO, PG, PGE, TBA, MTBE, isobutylene
Chiba, Japan (c).....	PO, SM

(a) The Bayport PO/TBA plants and the Channelview PO/SM I plant are held by the PO Joint Venture.

(b) Third-party equity investors hold a minority ownership interest in the PO/SM II plant at the Channelview facility.

(c) The PO/SM plant located in Chiba, Japan is owned by Nihon Oxirane, a joint venture in which the Company holds a 50% interest through a subsidiary.

Research and Technology; Patents and Trademarks

Lyondell conducts research and development principally at its Newtown Square, Pennsylvania technical center. The Company's research and development expenditures were \$32 million for 2001, \$35 million for 2000 and \$58 million for 1999, all of which were expensed as incurred. The decrease in the Company's research and development expenditures following 1999 is the result of the sale of the polyols business to Bayer on March 31, 2000.

The Company maintains an extensive patent portfolio related to its intermediate chemicals and derivatives business, and continues to grow its patent portfolio by filing new United States and foreign patent applications. As of December 31, 2001, Lyondell owned 338 United States patents and 899 worldwide patents. Lyondell has numerous trademark and trademark registrations in the United States and other countries, including the Lyondell logo. The Company does not regard its business as being materially dependent upon any single patent or trademark.

Employee Relations

On December 31, 2001, Lyondell had approximately 3,300 full-time employees, approximately 900 of whom were located in Europe, approximately 50 of whom were located in Asia and approximately 10 of whom were located in Brazil. As of December 31, 2001, approximately 21% of the U.S. employees were represented by labor unions. Lyondell also uses the services of independent contractors in the routine conduct of its business. The Company believes its relations with its employees are good.

EQUISTAR CHEMICALS, LP

Management of Equistar

Equistar is a limited partnership organized under the laws of the State of Delaware. Each owner holds its interest in Equistar through wholly owned subsidiaries, one of which serves as a general partner of Equistar and one or more of which serves as a limited partner. Lyondell holds a 41% interest, and Millennium and Occidental each hold a 29.5% interest in Equistar.

The Amended and Restated Partnership Agreement of Equistar (the "Equistar Partnership Agreement") governs, among other things, ownership, cash distributions, capital contributions and management of Equistar. The Equistar Partnership Agreement provides that Equistar is governed by a Partnership Governance Committee, consisting of nine representatives, three appointed by each general partner. Matters requiring approval by two or more of the representatives of each of Lyondell, Millennium and Occidental include changes in the scope of Equistar's business, the five-year strategic plan (and annual updates thereof), the sale or purchase of assets or capital expenditures of more than \$30 million not contemplated by the strategic plan, capital contributions to Equistar by Equistar's owners over certain amounts, merging or combining with another business and certain other matters. All decisions of the Partnership Governance Committee that do not require at least two of the three representatives of each of Lyondell, Millennium and Occidental may be made by Lyondell's representatives alone, except in situations where Lyondell has a conflict. In situations where Lyondell has a conflict, decisions are made by the representatives of Millennium and Occidental. The day-to-day operations of Equistar are managed by the executive officers of Equistar. Dan F. Smith, the President and Chief Executive Officer of Lyondell, also serves as Chief Executive Officer of Equistar.

Agreements between Lyondell and Equistar

Lyondell and Equistar entered into an asset contribution agreement on December 1, 1997, providing for the transfer of assets to Equistar. Among other things, the agreement sets forth representations and warranties by Lyondell with respect to the transferred assets and requires indemnification by Lyondell with respect thereto. The agreement also provides for the assumption by Equistar of, among other things, third party claims that are related to certain preclosing contingent liabilities that are asserted prior to December 1, 2004, to the extent the aggregate

thereof does not exceed \$7 million, third party claims related to preclosing contingent liabilities that are asserted for the first time after December 1, 2004, certain obligations for indebtedness, liabilities for products sold after December 1, 1997, regardless of when manufactured, and certain long-term liabilities. Millennium Petrochemicals and certain subsidiaries of Occidental (the "Occidental Subsidiaries") entered into similar asset contribution agreements with Equistar with respect to the transfer of their respective assets and Equistar's assumption of liabilities. As of September 30, 2001, Lyondell, Equistar, Millennium Petrochemicals and the Occidental Subsidiaries amended the asset contribution agreements governing these indemnification obligations to clarify the treatment of, and procedures pertaining to the management of, certain claims arising under the asset contribution agreements.

If Lyondell, Millennium or Occidental or any of their affiliates desires to initiate or pursue any opportunity to undertake, engage in, acquire or invest in a business or activity or operation within the scope of the business of Equistar, the opportunity must first be offered to Equistar as provided in the Equistar Partnership Agreement. Equistar has certain options to participate in the opportunity, but if it determines not to participate, the party offering the opportunity is free to pursue the opportunity on its own. If the opportunity within Equistar's scope of business constitutes less than 25% of an acquisition or investment that is otherwise not within the scope of its business, Lyondell, Millennium or Occidental, as the case may be, may make the acquisition or investment, provided that the portion within the scope of Equistar's business is offered to Equistar pursuant to the foregoing provisions as provided in the Equistar Partnership Agreement.

During 1999, Lyondell provided certain administrative services to Equistar, including certain legal, risk management and treasury services, tax services and employee benefit plan administration, and Equistar provided services to Lyondell in the areas of health, safety and environmental, human resources, information technology and legal. As a consequence of these services, Equistar made a monthly payment to Lyondell as described in Note 8 of Notes to Consolidated Financial Statements. Effective January 1, 2000, Lyondell and Equistar implemented a revised agreement to utilize shared services over a broader range, including information technology, human resources, raw material supply, supply chain, health, safety and environmental, engineering and research and development, facility services, legal, accounting, treasury, internal audit, and tax (the "Shared Services Agreement"). Beginning January 1, 2000, employee-related and indirect costs are allocated between the two companies in the manner prescribed in the Shared Services Agreement while direct third party costs, incurred exclusively for either Lyondell or Equistar, are charged directly to that entity. Equistar and Millennium Petrochemicals are also parties to a number of agreements for the provision of services, utilities and materials from one party to the other at common locations, principally LaPorte, Texas and Cincinnati, Ohio.

Lyondell, Millennium Petrochemicals and Occidental Chemical each entered into a Master Intellectual Property Agreement and other related agreements with respect to intellectual property with Equistar. These agreements provide for (1) the transfer of certain intellectual property of Lyondell, Millennium Petrochemicals and Occidental Chemical related to the businesses each contributed to Equistar, (2) the grant of irrevocable, non-exclusive, royalty-free licenses to Equistar (without the right to sublicense) with respect to intellectual property retained by Lyondell, Millennium Petrochemicals or Occidental Chemical that is related to Equistar's business and (3) the grant of irrevocable, non-exclusive, royalty-free licenses (without the right to sublicense) from Equistar to Lyondell, Millennium Petrochemicals and Occidental Chemical, respectively, with respect to intellectual property each contributed to Equistar.

Lyondell, Millennium, Occidental and certain of its affiliates and Equistar are parties to an Amended and Restated Parent Agreement dated as of May 15, 1998, which provides that, among other things, each of Lyondell, Millennium and an Occidental affiliate guarantees the performance by their respective subsidiaries under various agreements entered into in connection with the formation of Equistar, including the Equistar Partnership Agreement and the asset contribution agreements providing for the transfer of assets by Lyondell, Millennium Petrochemicals and the Occidental Subsidiaries, respectively, to Equistar.

The Equistar Partnership Agreement and the Parent Agreement also provide each owner a right of first option if either of the other owners wishes to sell its partnership interest or the stock of its partner subsidiaries. These agreements also set forth other limitations on the right to transfer the interests or stock.

EQUISTAR PETROCHEMICALS

Overview

Petrochemicals are fundamental to many segments of the economy, including the production of consumer products, housing and automotive components and other durable and nondurable goods. Equistar produces a variety of petrochemicals, including olefins, oxygenated products, aromatics and specialty products, at twelve facilities located in six states. Olefins include ethylene, propylene and butadiene. Oxygenated products include EO and derivatives, EG, ethanol and MTBE. Aromatics produced are benzene and toluene. Equistar's petrochemical products are used to manufacture polymers and intermediate chemicals, which are used in a variety of consumer and industrial products. 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.

The Chocolate Bayou, Corpus Christi and two Channelview, Texas olefins plants use petroleum liquids, including naphtha, condensates and gas oils (collectively "Petroleum Liquids"), to produce ethylene. Assuming the co-products are recovered and sold, the cost of ethylene production from Petroleum Liquids historically has been less than the cost of producing ethylene from natural gas liquids, including ethane, propane and butane (collectively, "NGLs"). The use of Petroleum Liquids results in the production of a significant amount of co-products such as propylene, butadiene, benzene and toluene, and specialty products, such as dicyclopentadiene ("DCPD"), isoprene, resin oil, and piperylenes. Based upon independent third-party surveys, management believes that its Channelview facility is one of the lowest cash production cost olefins facilities in the United States. Equistar's Morris, Illinois; Clinton, Iowa; Lake Charles, Louisiana; and LaPorte, Texas plants are designed to consume primarily NGLs to produce ethylene with some co-products such as propylene. A comprehensive pipeline system connects the Gulf Coast plants with major olefins customers. Raw materials are sourced both internationally and domestically and are shipped via vessel and pipeline. Equistar's Lake Charles, Louisiana facility has been idled since the first quarter of 2001.

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

Equistar produces synthetic ethanol at its Tuscola, Illinois plant by a direct hydration process that combines water and ethylene. Equistar also owns and operates facilities in Newark, New Jersey and Anaheim, California for denaturing ethanol by the addition of certain chemicals. In addition, it produces small volumes of diethyl ether, a by-product of its ethanol production, at its Tuscola facility. These ethanol products are ingredients in various consumer and industrial products as described more fully in the table below. Equistar is outsourcing the operations of its Anaheim, California facility and anticipates shutting down the facility in the second quarter of 2002.

The following table outlines Equistar's primary petrochemical products, annual processing capacity as of January 1, 2002, and the primary uses for such products. Unless otherwise specified, annual processing capacity was calculated by estimating the 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 represent 100% of the capacity of Equistar, of which the Company owns 41%.

<u>Product</u>	<u>Annual Capacity</u>	<u>Primary Uses</u>
<u>OLEFINS:</u>		
Ethylene	11.6 billion pounds (a)	Ethylene is used as a raw material to manufacture polyethylene, EO, ethanol, ethylene dichloride and ethylbenzene.
Propylene	5.0 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 and engineered plastics.
<u>OXYGENATED PRODUCTS:</u>		
Ethylene Oxide (EO)	1.1 billion pounds ethylene oxide equivalents; 400 million pounds as pure ethylene oxide	EO is used to produce surfactants, industrial cleaners, cosmetics, emulsifiers, paint, heat transfer fluids and ethylene glycol.
Ethylene Glycol (EG)	1 billion pounds	EG is used to produce polyester fibers and film, polyethylene terephthalate ("PET") resin, heat transfer fluids and automobile antifreeze.
Ethylene Oxide Derivatives	225 million pounds	EO derivatives 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.
MTBE	284 million gallons (18,500 barrels/day) (c)	MTBE is a gasoline component for reducing emissions in reformulated gasolines and enhancing octane value.
<u>AROMATICS:</u>		
Benzene	310 million gallons	Benzene is used to produce styrene, phenol and cyclohexane. These products are used in the production of nylon, plastics, 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 feedstock for benzene and/or paraxylene production, and a core ingredient in TDI, a compound used in urethane production.
<u>SPECIALTY PRODUCTS:</u>		
Dicyclopentadiene (DCPD)	130 million pounds	DCPD is a component of inks, adhesives and polyester resins for molded parts such as tub and shower stalls and boat hulls.
Isoprene	145 million pounds	Isoprene is a component of premium tires, adhesive sealants and other rubber products.
Resin Oil	150 million pounds	Resin oil is used in the production of hot-melt-adhesives, inks, sealants, paints and varnishes.
Piperylenes	100 million pounds	Piperylenes are used in the production of adhesives, inks and sealants.
Alkylate	337 million gallons (d)	Alkylate is a premium gasoline blending component used by refiners to meet Clean Air Act standards for reformulated gasoline.
Diethyl Ether	5 million gallons	Diethyl ether is used in laboratory reagents, gasoline and diesel engine starting fluid, liniments, analgesics and smokeless gunpowder.

- (a) Includes 850 million pounds/year of ethylene capacity and 200 million pounds/year of propylene capacity at Equistar's Lake Charles, Louisiana facility. Equistar's Lake Charles facility has been idled since the first quarter of 2001.
- (b) Does not include refinery-grade material or production from the product flexibility unit at Equistar's Channelview facility, which can convert ethylene and other light petrochemicals into propylene. This facility has an annual processing capacity of one billion pounds per year of propylene.
- (c) Includes up to 44 million gallons/year of capacity operated for the benefit of LCR.
- (d) Includes up to 172 million gallons/year of capacity operated for the benefit of LCR.

Raw Materials and Ethylene Purchases

The raw materials cost for olefins production is generally the largest component of total cost for the petrochemicals business. Olefins plants with the flexibility to consume a wide range of raw materials historically have had lower variable costs than olefins plants that are restricted in their raw material processing capability to NGLs. The primary raw materials used in the production of olefins are Petroleum Liquids (also referred to as "heavy raw materials") and NGLs (also referred to as "light raw materials"). Petroleum Liquids generally are delivered by ship or barge. NGLs are delivered to Equistar's facilities primarily via pipeline. Petroleum Liquids have had a historical cost advantage over NGLs such as ethane and propane, assuming the co-products were recovered and sold. For example, facilities using Petroleum Liquids historically have generated approximately four cents additional variable margin on average per pound of ethylene produced compared 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. The recent advantage has been less than the historical average. Equistar has the capability to realize this margin advantage due to its ability to process Petroleum Liquids at the Channelview, Corpus Christi and Chocolate Bayou, Texas facilities.

The Channelview facility is particularly flexible because it can process 100% Petroleum Liquids or up to 80% NGLs. The Corpus Christi plant can process up to 70% Petroleum Liquids or up to 70% NGLs. The Chocolate Bayou facility processes 100% Petroleum Liquids. Equistar's LaPorte facility can process natural gasoline and NGLs, including heavier ones such as butane. Equistar's three other olefins facilities currently process only NGLs.

The majority of Equistar's Petroleum Liquids requirements are purchased via contractual arrangement from a variety of third-party domestic and foreign sources. Equistar also purchases Petroleum Liquids on the spot market from third-party domestic and foreign sources. Equistar purchases a majority of its NGLs requirements via contractual arrangements from a variety of third-party sources. Equistar also purchases NGLs on the spot market from third-party sources. Equistar obtains a portion of its Petroleum Liquids requirements from LCR at market-related prices. In addition to producing its own ethylene, Equistar purchases ethylene via contractual arrangements from Gulf Coast producers at market-based prices.

In addition, Equistar purchases large amounts of natural gas to be used as energy for consumption in its business via contractual arrangements with a variety of third-party sources, typically with a term of 12 to 18 months.

Marketing and Sales

Ethylene produced by the Clinton and Morris facilities generally is consumed as a raw material by the polymers operations at those sites, or is transferred to Tuscola from Morris by pipeline for the production of ethanol. Ethylene produced by Equistar's LaPorte facility is consumed as a raw material by Equistar's polymers operations and Millennium's vinyl acetate operations in LaPorte and also is distributed by pipeline for other internal uses and to third parties. Ethylene and propylene produced at the Channelview, Chocolate Bayou, Corpus Christi and Lake Charles olefins plants are generally distributed by pipeline or via exchange agreements to Equistar's Gulf Coast polymer and EO and EG facilities as well as to Equistar's affiliates and third parties. Equistar's Lake Charles facility has been idled since the first quarter of 2001. For the year ended December 31, 2001, approximately 85% of Equistar's ethylene production, based on sales dollars, was consumed by Equistar's polymers or oxygenated products businesses or sold to Equistar's owners and their affiliates at market-related prices.

With respect to sales to third parties, Equistar sells a majority of its olefins products to customers with whom it has had long-standing relationships. Sales to third parties generally are made under written agreements that typically provide for monthly negotiation of price; customer purchases of a specified minimum quantity; and three- to six-year terms with automatic one- or two-year term extension provisions. Some contracts may be terminated early if deliveries have been suspended for several months. No single customer accounted for 10% or more of Equistar's total revenues in 2001.

EO and EG are sold under three- to five-year contracts to third party customers, with pricing negotiated on a quarterly basis to reflect market conditions. Glycol ethers are sold primarily into the solvent and distributor markets under one-year contracts at market prices, as are ethanolamines and brake fluids. Ethanol and ethers primarily are sold to third-party customers under one-year contracts at market prices.

Equistar licenses MTBE technology under a license from an affiliate of Lyondell and sells a significant portion of MTBE produced at one of its two Channelview units to Lyondell at market-related prices. The production from the second unit is sold to and consumed by LCR for gasoline blending. MTBE produced at Chocolate Bayou is sold at market-related prices to Lyondell for resale.

Equistar sells most of its aromatics production under contracts that have initial terms ranging from one to three years and that typically contain automatic one-year term extension provisions. These contracts generally provide for monthly price adjustments based upon current market prices. Benzene produced by LCR is sold directly to Equistar at market-related prices. In accordance with a marketing services agreement currently being extended from month to month, Equistar currently serves as LCR's sole agent to market aromatics products produced by LCR, other than benzene.

Most of the ethylene and propylene production of the Channelview, Chocolate Bayou, Corpus Christi and Lake Charles facilities is shipped via a 1,430-mile 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 olefins 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. A pipeline owned and operated by Williams Pipeline Company is used to transport ethylene from Morris, Illinois to Tuscola, Illinois. Some propylene is shipped by ocean-going vessel. Ethylene oxide is shipped by railcar, and its derivatives are shipped by railcar, truck, isotank or ocean-going vessel. Butadiene, aromatics and other petrochemicals are distributed by pipeline, railcar, truck, barge or ocean-going vessel.

Competition and Industry Conditions

The bases for competition in Equistar's petrochemicals products are price, product quality, product deliverability and customer service. Equistar competes with other large domestic producers of petrochemicals, including BP, Chevron Phillips, Dow, Exxon Mobil Corporation ("ExxonMobil"), Huntsman Chemical Company, NOVA Chemicals Corporation ("NOVA Chemicals") and Shell. Industry consolidation, including the combinations of British Petroleum and Amoco, Exxon and Mobil, and Dow and Union Carbide Corporation and the formation of Chevron Phillips, has brought North American production capacity under control of fewer, although larger and stronger, competitors.

Equistar's combined rated ethylene capacity at January 1, 2002 was approximately 11.6 billion pounds of ethylene per year or approximately 16% of total North American production capacity. Based on published rated production capacities, Equistar believes it is currently the second largest producer of ethylene in North America. North American ethylene rated capacity at January 1, 2002 was approximately 72 billion pounds per year. Of the total ethylene production capacity in North America, approximately 85% is located along the Gulf Coast.

Petrochemicals profitability is affected by raw materials costs and the level of demand for petrochemicals and derivatives, along with vigorous 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. Capacity additions in excess of annual growth also put pressure on margins. It is not possible to predict accurately the changes in raw material costs, market conditions and other factors that will affect petrochemical industry margins in the future.

The petrochemicals industry historically has experienced significant volatility in profitability due to fluctuations in capacity utilization. Producers of olefins primarily for merchant supply to unaffiliated customers typically experience greater variations in their sales volumes and profitability when industry supply and demand relationships are not balanced in comparison to more integrated competitors, i.e., those with a higher proportion of captive

demand for olefins derivatives production. For the year ended December 31, 2001, approximately 85% of Equistar's ethylene production, based on sales dollars, was consumed by Equistar's polymers or oxygenated products businesses or sold to Equistar's owners and their affiliates. This has the effect of reducing sales volume volatility.

Equistar's other major commodity chemical products also experience cyclical market conditions similar to, although not necessarily coincident with, those of ethylene.

EQUISTAR POLYMERS

Overview

Through facilities located at ten plant sites in five states, Equistar's polymers segment manufactures a wide variety of polyolefins, including polyethylene, polypropylene and various performance polymers. Polyolefins are 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.

Equistar currently manufactures polyethylene using a variety of technologies at five facilities in Texas and at its Morris, Illinois and Clinton, Iowa facilities. The Morris and Clinton facilities are located in the U.S. Midwest and enjoy a freight cost advantage over Gulf Coast producers in delivering products to customers in the U.S. Midwest and on the East Coast of the United States. Equistar produces performance polymer products, which include enhanced grades of polyethylene and polypropylene, at several of its polymers facilities. The Company 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. Equistar also produces wire and cable insulating resins and compounds at LaPorte, Texas; and Morris, Illinois, and wire and cable insulating compounds at Fairport Harbor, Ohio; Peachtree City, Georgia; and Tuscola, Illinois. Wire and cable insulating resins and compounds are used to insulate copper and fiber optic wiring in power, telecommunication, computer and automobile applications. Equistar's Morris, Illinois and Bayport (Pasadena), Texas facilities manufacture polypropylene using propylene produced as a co-product of Equistar's ethylene production as well as propylene purchased from third parties. Polypropylene is sold for various applications in the automotive, housewares and appliance industries.

The following table outlines Equistar's polymers and performance polymers products, annual processing capacity at January 1, 2002, and the primary uses for such products. Unless otherwise specified, annual processing capacity was calculated by estimating the 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 represent 100% of the capacity of Equistar, of which the Company owns 41%.

Product	Annual Capacity	Primary Uses
<u>POLYETHYLENE:</u>		
High density polyethylene (HDPE)	3.1 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 and pails for items from paint to fresh fruits and vegetables; safety equipment such as hard hats; house wrap for insulation; bottles for household/industrial chemicals and motor oil; milk/water/juice bottles; and large (rotomolded) tanks for storing liquids like agricultural and lawn care chemicals.
Low density polyethylene (LDPE)	1.5 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. Specialized forms of LDPE are ethyl methyl acrylate, which provides adhesion in a variety of applications, and ethylene vinyl acetate, which is used in foamed sheets, bag-in-box bags, vacuum cleaner hoses, medical tubing, clear sheet protectors and flexible binders.
Linear low density polyethylene (LLDPE)	1.1 billion pounds	LLDPE is used to manufacture garbage and lawn-leaf bags; housewares; lids for coffee cans and margarine tubs; and large (rotomolded) toys like outdoor gym sets.
<u>POLYPROPYLENE:</u>		
Polypropylene	680 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.
<u>PERFORMANCE POLYMERS:</u>		
Wire and Cable Insulating Resins and Compounds	(a)	Wire and cable insulating resins and compounds are used to insulate copper and fiber optic wiring in power, telecommunication, computer and automobile applications.
Polymeric Powders	(a)	Polymeric powders are component products in structural and bulk molding compounds, parting agents and filters for appliance, automotive and plastics processing industries.
Polymers for Adhesives, Sealants and Coatings	(a)	Polymers are components in hot-melt-adhesive formulations for case, carton and beverage package sealing, glue sticks, automotive sealants, carpet backing and adhesive labels.
Reactive Polyolefins	(a)	Reactive polyolefins are functionalized polymers used to bond non-polar and polar substrates in barrier food packaging, wire and cable insulation and jacketing, automotive gas tanks and metal coating applications.
Liquid Polyolefins	(a)	Liquid polyolefins are a diesel fuel additive to inhibit freezing.

(a) These are enhanced grades of polyethylene and are included in the capacity figures for HDPE, LDPE and LLDPE above, as appropriate.

Raw Materials

The primary raw materials for Equistar's polymers segment are ethylene and propylene. With the exception of the Chocolate Bayou polyethylene plant, Equistar's polyethylene and polypropylene production facilities can receive their ethylene and propylene directly from Equistar's petrochemical facilities via Equistar's olefins pipeline system, third-party pipelines or from on-site production. Most of the raw materials consumed by Equistar's polymers segment are produced internally by Equistar's petrochemicals segment. The polyethylene plants at Chocolate Bayou, LaPorte and Bayport, Texas are pipeline-connected to third parties and can receive ethylene via exchanges or purchases. The polypropylene facility at Morris, Illinois also receives propylene from third parties.

Marketing and Sales

Equistar's polymers products are primarily sold to an extensive base of established customers. Approximately 50% of Equistar's polymers products volumes are sold to customers under term contracts, typically having a duration of one to three years. The remainder is generally sold without contractual term commitments. In either case, in most of the continuous supply relationships, prices are subject to change upon mutual agreement between Equistar and the customer. No single customer accounted for 10% or more of Equistar's total revenues in 2001.

Polymers are primarily distributed via railcar. Equistar owns or leases, pursuant to long-term lease arrangements, approximately 7,870 railcars for use in its polymers business. Equistar sells the vast majority of its polymers products in the United States and Canada, and such sales primarily are through its own sales organization. It generally engages sales agents to market its polymers in the rest of the world.

Competition and Industry Conditions

The bases for competition in Equistar's polymers products are price, product performance, product quality, product deliverability and customer service. Equistar competes with other large producers of polymers, including Atofina, BP Solvay Polyethylene, Chevron Phillips, Dow, Eastman Chemical Company, ExxonMobil, Formosa Plastics, Huntsman Chemical Company, NOVA Chemicals and Westlake Polymers. Industry consolidation, including the combinations of British Petroleum and Amoco, Exxon and Mobil, and Dow and Union Carbide Corporation, the formation of Chevron Phillips, and the polymers business combinations between BP and Solvay, has brought North American production capacity under control of fewer, although larger and stronger, competitors.

Based on published rated industry capacities, Equistar is the third largest producer of polyethylene in North America and is a leading domestic producer of polyolefins powders, compounds, wire and cable insulating resins, and polymers for adhesives. The combined rated capacity of Equistar's polyethylene units as of January 1, 2002 was approximately 5.7 billion pounds per year or approximately 13% of total industry capacity in North America. There are approximately 15 other North American producers of polyethylene, including BP Solvay Polyethylene, Chevron Phillips, Dow, ExxonMobil and NOVA Chemicals. Equistar's polypropylene capacity, 680 million pounds per year as of January 1, 2002, represents approximately 4% of the total North American polypropylene capacity. There are approximately 15 other North American competitors in the polypropylene business, including Atofina, Basell, BP, Chevron Phillips, Dow and ExxonMobil.

Polymers profitability is affected by raw material costs and the worldwide level of demand for polymers, along with vigorous 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. Capacity additions in excess of annual growth also put pressure on margins. It is not possible to predict accurately the changes in raw material costs, market conditions and other factors which will affect polymers industry margins in the future.

EQUISTAR PROPERTIES AND EMPLOYEE RELATIONS

Equistar's principal manufacturing facilities and principal products are set forth below. All of these facilities are wholly owned by Equistar unless otherwise noted.

Location	Principal Products
Beaumont, Texas (a)*	EG
Channelview, Texas (b)*	Ethylene, Propylene, Butadiene, Benzene, Toluene, DCPD, Isoprene, Resin Oil, Piperylenes, Alkylate and MTBE
Corpus Christi, Texas*	Ethylene, Propylene, Butadiene and Benzene
Chocolate Bayou, Texas (c).....	HDPE
Chocolate Bayou, Texas (c)(d)*	Ethylene, Propylene, Butadiene, Benzene, Toluene, DCPD, Isoprene, Resin Oil and MTBE
LaPorte, Texas*	Ethylene, Propylene, LDPE, LLDPE, Liquid Polyolefins, Wire and Cable Insulating Resins and Polymers for Adhesives, Sealants and Coatings
Matagorda, Texas*	HDPE
Bayport (Pasadena), Texas (e)*	EO, EG and Other EO Derivatives
Bayport (Pasadena), Texas (e)*	Polypropylene and LDPE
Victoria, Texas (d)*	HDPE
Peachtree City, Georgia	Wire and Cable Insulating Compounds
Lake Charles, Louisiana (f)*	Ethylene and Propylene
Morris, Illinois*	Ethylene, Propylene, LDPE, LLDPE and Polypropylene
Tuscola, Illinois*	Ethanol, Diethyl Ether, Wire and Cable Insulating Compounds and Polymeric Powders
Clinton, Iowa	Ethylene, Propylene, LDPE, HDPE and Reactive Polyolefins
Fairport Harbor, Ohio (g)	Wire and Cable Insulating Compounds
Anaheim, California (h).....	Denatured Alcohol
Newark, New Jersey	Denatured Alcohol

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

- (a) The Beaumont facility is owned by PD Glycol, a partnership owned 50% by Equistar and 50% by DuPont.
- (b) The Channelview facility has two ethylene processing units. LMC owns a methanol plant located within the Channelview facility on property LMC leases from Equistar. A third party owns and operates a facility on land leased from Equistar that is used to purify hydrogen from LMC's methanol plant. Equistar also operates a styrene maleic anhydride unit and a polybutadiene unit, which are owned by a third party and are located on property leased from Equistar within the Channelview facility.
- (c) Millennium and Occidental each contributed a facility located in Chocolate Bayou. These facilities are not on contiguous property.
- (d) The land is leased, and the facility is owned.
- (e) Occidental and Lyondell each contributed facilities located in Pasadena. These facilities are nearly contiguous, and Equistar operates them as one site to the extent practicable. These facilities are operated in conjunction with the LaPorte facility.
- (f) The Lake Charles facility has been idled since the first quarter of 2001. The facilities and land are leased from an affiliate of Occidental under a lease, which expires in May 2003.
- (g) The building and land are leased.
- (h) Equistar is outsourcing the operations of its Anaheim, California facility and anticipates shutting down the facility in the second quarter of 2002.

In February 2001, Equistar discontinued production at its Port Arthur, Texas polyethylene facility and shut down the facility. Closed production units included a 240 million pounds per year HDPE reactor and an LDPE reactor with annual capacity of 160 million pounds. These units and a 300 million pounds per year HDPE reactor mothballed in 1999 have been permanently shut down and are being dismantled.

Equistar owns a storage facility, a brine pond and a tract of vacant land in Mont Belvieu, Texas, located approximately 15 miles east of the Channelview facility. Storage capacity for up to approximately 13 million barrels of NGLs, ethylene, propylene and other hydrocarbons is provided in salt domes at the Mont Belvieu facility.

There are an additional 3 million barrels of ethylene and propylene storage operated by Equistar on leased property in Markham, Texas.

Equistar uses an extensive olefins 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 Tuscola, Chocolate Bayou, Matagorda, Victoria, Corpus Christi and LaPorte facilities. Equistar uses a pipeline owned and operated by Williams Pipeline Company to transport ethylene from its Morris facility to its Tuscola facility. Equistar owns and leases several pipelines connecting the Channelview facility, the Refinery and the Mont Belvieu storage facility. These pipelines are used to transport feedstocks, butylenes, hydrogen, butane, MTBE and unfinished gasolines. Equistar also owns a barge docking facility near the Channelview facility capable of berthing eight barges and related terminal equipment for loading and unloading raw materials and products. Equistar owns or leases pursuant to long-term lease arrangements approximately 9,440 railcars for use in its business.

Equistar sub-leases its executive offices and corporate headquarters from Lyondell in downtown Houston. In addition, Equistar owns facilities, which house the Morris, Cincinnati and Chocolate Bayou research operations. Equistar also leases sales facilities and leases storage facilities, primarily in the Gulf Coast area, from various third parties for the handling of products.

As of December 31, 2001, Equistar employed approximately 3,400 full-time employees. Equistar uses the services of Lyondell employees pursuant to a Shared Services Agreement and also uses the services of independent contractors in the routine conduct of its business. Approximately 105 hourly workers are covered by collective bargaining agreements. Equistar believes that its relations with its employees are good. See "Equistar Chemicals, LP—Agreements between Lyondell and Equistar" above.

EQUISTAR RESEARCH AND TECHNOLOGY; PATENTS AND TRADEMARKS

Equistar conducts research and development principally at its Cincinnati, Ohio technical center, with additional facilities located in Morris, Illinois and Chocolate Bayou, Texas. Equistar's research and development expenditures were \$39 million for 2001, \$38 million for 2000 and \$42 million for 1999, all of which were expensed as incurred.

Equistar maintains a growing patent portfolio that is continuously supplemented by new patent applications related to its petrochemicals and polymers businesses. As of December 31, 2001, Equistar owned 220 United States patents and 343 worldwide patents. Equistar has numerous trademark and trademark registrations in the United States and other countries, including the Equistar logo. Equistar does not regard its business as being materially dependent upon any single patent or trademark.

LYONDELL-CITGO REFINING LP

Overview

Lyondell participates in petroleum refining through an equity interest in LCR. Lyondell holds a non-controlling 58.75% interest and CITGO holds a 41.25% interest in LCR. LCR owns and operates the Refinery, which is located on the Houston Ship Channel in Houston, Texas. The Refinery is a full conversion refinery designed to run extra heavy (17 degree API), high sulfur crude oil which is less expensive than other grades of crude. Processing extra heavy, high sulfur crude oil in significant quantities requires a refinery with extensive coking, catalytic cracking, hydrotreating and desulfurization capabilities, i.e., a "complex refinery." The Refinery's complexity enables it to operate in full conversion mode producing a slate of products that consists primarily of high value, clean products (many refineries produce significant quantities of lower value products such as conventional gasoline, high sulfur diesel and heavy fuel oil due to a lack of equipment to convert these fuels into premium products). In addition, the Refinery's complexity allows it to produce most of these clean products as premium grades such as reformulated gasoline, jet fuel, low sulfur diesel and aromatics chemicals. The Refinery's products include conventional and reformulated gasoline, low sulfur diesel, jet fuel, aromatics, lubricants (industrial lubricants, white oils and process oils), carbon black oil, sulfur, residual fuel and petroleum coke. The aromatics chemicals produced by the Refinery are benzene, toluene, orthoxylene and paraxylene. These products are sold to manufacturers of intermediate chemicals and polyester intermediates and are ultimately used in clothing, soft drink bottles and drink cups, audio and video tapes, and resins. LCR was formed in 1993 to upgrade the Refinery's ability to process substantial additional volumes of lower cost, extra heavy, higher margin crude oil. The upgrade project completed in 1997 (the "Upgrade Project") increased the extra heavy crude oil processing capability of the Refinery from 130,000 barrels per day of 22 degree API gravity crude oil to approximately 260,000 barrels per day of 17 degree API gravity crude oil. The 17 degree API gravity crude oil is more viscous and dense than traditional crude oil and contains higher concentrations of sulfur and heavy metals, making it more difficult to refine into gasoline and other high value fuel products but less costly to purchase. The Upgrade Project also included expansion of the Refinery's reformulated gasoline and low sulfur diesel production capability. The results of various ongoing reliability projects have increased the Refinery's capacity to approximately 268,000 barrels of 17 degree API gravity crude oil per day.

The Upgrade Project, which cost approximately \$1.1 billion, was funded through a combination of approximately \$485 million in capital contributions to LCR by CITGO (including cash contributions for financing costs and reinvestment of operating cash distributions), a \$450 million construction loan credit facility (the "Construction Facility") provided by a group of banks, and \$166 million and \$16 million in subordinated loans to LCR from Lyondell and CITGO, respectively. In exchange for CITGO's Upgrade Project capital contributions, together with an additional \$130 million in equity contributions CITGO had previously made to LCR, CITGO's participation interest in LCR increased effective April 1, 1997, and is currently 41.25%. On May 5, 2000, Lyondell and CITGO arranged interim financing for LCR to repay the \$450 million outstanding under the LCR Construction Facility. On September 15, 2000, Lyondell and CITGO completed the syndication of one-year credit facilities, including a \$450 million term loan to replace the interim financing and a \$70 million revolving credit facility to be used for working capital and other general business purposes. On July 20, 2001, LCR obtained new credit facilities consisting of a \$450 million term loan and a \$70 million revolving credit facility, both of which mature in January 2003. These new facilities replace the similar facilities, which matured September 15, 2001, and will be used for general business purposes.

The following table outlines LCR's primary products, annual rated capacity as of January 1, 2002, and the primary uses for such products. The term "rated capacity," as used in this table, is calculated by estimating the 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 feedstock mix. Because the rated capacity of a production unit is an estimated amount, the actual production volumes may be more or less than the rated capacity. Capacities shown represent 100% of the capacity of LCR, of which the Company owns 58.75%.

<u>Product</u>	<u>Rated Capacity</u>	<u>Primary Uses</u>
Gasoline (a)	120,000 barrels per day	Automotive fuel
Diesel (#2 Distillate) (a)	90,000 barrels per day	Fuel for diesel cars and trucks
Jet Fuel (a)	25,000 barrels per day	Aviation fuel
Benzene (b)	50 million gallons per year	Nylon for clothing and consumer items; polystyrene for insulation, packaging and drink cups
Toluene (c)	46 million gallons per year	Gasoline component and chemical feedstock for producing benzene
Paraxylene (c)	400 million pounds per year	Polyester fibers for clothing and fabrics, PET soft drink bottles and films for audio and video tapes
Orthoxylene (c)	270 million pounds per year	Plasticizer in products such as rainwear, shower curtains, toys and auto upholstery and an intermediate in paints and fiberglass
Lube Oils (a)	4,000 barrels per day	Automotive and industrial engine and lube oils, railroad engine additives and white oils for food-grade applications

- (a) Produced by LCR and sold to CITGO.
- (b) Produced by LCR and sold to Equistar.
- (c) Produced by LCR and marketed for LCR by Equistar.

Management of LCR

LCR is a limited partnership organized under the laws of the state of Delaware. Lyondell owns its interest in LCR through two wholly owned subsidiaries, one of which serves as a general partner and one of which serves as a limited partner. Similarly, CITGO, which is an indirect wholly owned subsidiary of Petr leos de Venezuela, S.A. ("PDVSA"), the national oil company of the Republic of Venezuela, owns its interest in LCR through two wholly owned subsidiaries, a general partner and a limited partner.

LCR is governed by a Limited Partnership Agreement (the "LCR Partnership Agreement"), which provides for, among other things, the ownership and cash distribution rights of the partners. The LCR Partnership Agreement also provides that LCR is managed by a Partnership Governance Committee, which is composed of six representatives, three appointed by each general partner. Actions requiring unanimous consent of the representatives include amendment of the LCR Partnership Agreement, borrowing money, delegations of authority to committees, certain purchase commitments and capital expenditures. The day-to-day operations of the Refinery are managed by two general managers, one of which is a loaned employee of Lyondell and the other of which is a loaned employee of CITGO.

Agreements between Lyondell or CITGO and LCR

LCR is a party to a number of agreements with Lyondell and CITGO. Under the terms of a long-term product sales agreement ("Products Agreement"), CITGO purchases from LCR substantially all of the refined products produced at the Refinery. Lyondell and CITGO currently perform administrative services for LCR pursuant to an Administrative Services Agreement, which is renegotiated annually. Under the terms of lubricant sales agreements, CITGO purchases all of the lubricant products manufactured by LCR. In conjunction therewith, CITGO operates LCR's Birmingham, Alabama lubricants plant.

Agreements between Equistar and LCR

Prior to the formation of Equistar, Lyondell was a party with LCR to multiple agreements designed to preserve many of the synergies between the Refinery and the Channelview petrochemicals facility. These agreements were assumed by Equistar from Lyondell effective December 1, 1997. Economic evaluations at the Channelview facility and the Refinery are made to maximize product utilization, which may be local use, use at the other site, or third party sales. Certain Refinery products (propane, butane, low-octane naphthas, heating oils, and gas oils) can be used as raw materials for olefins production, and certain Channelview facility olefins by-products can be processed by the Refinery into gasoline. Butylenes from the Refinery are tolled through the Channelview facility for the production of alkylate and MTBE for gasoline blending. Hydrogen from the Channelview facility is used at the Refinery for sulfur removal and product stabilization. Benzene produced by LCR is sold directly to Equistar at market-related prices. In accordance with a marketing service agreement currently being extended from month to month, Equistar currently serves as LCR's sole agent to market aromatics products produced by LCR, other than benzene. See Notes 8 and 9 of Notes to Consolidated Financial Statements.

Raw Materials

In 1993, LCR entered into a long-term crude supply agreement ("Crude Supply Agreement") with Lagoven, S.A., now known as PDVSA Petróleo, S.A. ("PDVSA Oil"), an affiliate of CITGO and of PDVSA. Most of the crude oil used by LCR as a raw material for the Refinery is purchased under the Crude Supply Agreement. Both PDVSA Oil and CITGO are direct or indirect wholly owned subsidiaries of PDVSA.

The Crude Supply Agreement, which expires on December 31, 2017, incorporates formula prices to be paid by LCR for the crude oil supplied based on the market value of a slate of refined products deemed to be produced from each particular crude oil or feedstock, less: (1) certain deemed refining costs, adjustable for inflation and energy costs; (2) certain actual costs; and (3) a deemed margin, which varies according to the grade of crude oil or other feedstock delivered. The actual refining margin earned by LCR may vary from the formula amount depending on, among other things, the efficiency with which LCR conducts its operations from time to time. Although LCR believes that the Crude Supply Agreement reduces the volatility of LCR's earnings and cash flows, the Crude Supply Agreement also limits LCR's ability to enjoy higher margins during periods when the market price of crude oil is low relative to then-current market prices for refined products. In addition, if the actual yields, costs or volumes of the LCR refinery differ substantially from those contemplated by the Crude Supply Agreement, the benefits of this agreement to LCR could be substantially diminished, and could result in lower earnings and cash flow for LCR. Furthermore, there may be periods during which LCR's costs for crude oil under the Crude Supply Agreement may be higher than might otherwise be available to LCR from other sources. A disparate increase in the price of heavy crude oil relative to the prices for its products, such as experienced in 1999, has the tendency to make continued performance of its obligations under the Crude Supply Agreement less attractive to PDVSA Oil.

Under the Crude Supply Agreement, PDVSA Oil is required to sell, and LCR is required to purchase, 230,000 barrels per day of extra heavy crude oil, which constitutes approximately 86% of the Refinery's refining capacity of 268,000 barrels per day of crude oil. By letter dated April 16, 1998, PDVSA Oil informed LCR that the Venezuelan government, through the Ministry of Energy and Mines, had instructed that production of certain grades of crude oil be reduced. The letter stated that PDVSA Oil declared itself in a force majeure situation and that PDVSA Oil would reduce deliveries of crude oil. Such reductions in deliveries were purportedly based on announced OPEC production cuts. LCR began receiving reduced deliveries of crude oil from PDVSA Oil in August 1998, of 195,000 barrels per day in that month. LCR was advised by PDVSA Oil in May 1999 of a further reduction in the deliveries of crude oil supplied under the Crude Supply Agreement to 184,000 barrels per day, effective May 1999.

On several occasions since then, PDVSA Oil further reduced crude oil deliveries, although it made payments under a different provision of the Crude Supply Agreement in partial compensation for such reductions. Subsequently, PDVSA Oil unilaterally increased deliveries of crude oil to LCR to 195,000 barrels per day effective April 2000, to 200,000 barrels per day effective July 2000 and to 230,000 barrels per day effective October 2000.

During 2001, PDVSA Oil informed LCR that the Venezuelan government, through the Ministry of Energy and Mines, had instructed that production of certain grades of crude oil be reduced effective February 1, 2001. PDVSA Oil declared itself in a force majeure situation, but did not reduce crude oil deliveries to LCR during 2001. In January 2002, PDVSA Oil again declared itself in a force majeure situation and stated that crude oil deliveries could be reduced by up to 20.3% beginning March 1, 2002. In February 2002, LCR was advised by PDVSA Oil that deliveries of crude oil to LCR in March 2002 would be reduced to approximately 198,000 barrels per day. Although additional reductions may be forthcoming, PDVSA Oil has not specified the level of reductions after March 2002.

LCR has consistently contested the validity of PDVSA Oil's and PDVSA's reductions in deliveries under the Crude Supply Agreement. The parties have different interpretations of the provisions of the contracts concerning the delivery of crude oil. The contracts do not contain dispute resolution procedures, and the parties have been unable to resolve their commercial dispute. As a result, on February 1, 2002, LCR filed a lawsuit against PDVSA and PDVSA Oil in connection with the January 2002 force majeure declaration, as well as the claimed force majeure from April 1998 to September 2000. See "Item 3. Legal Proceedings—Litigation Matters."

The Crude Supply Agreement provides that Lyondell controls all of LCR's decisions and enforcement rights in connection with the Crude Supply Agreement so long as PDVSA has a direct or indirect ownership interest in LCR.

There are risks associated with enforcing the provisions of contracts with companies such as PDVSA Oil that are non-United States affiliates of a foreign sovereign nation. All of the crude oil supplied by PDVSA Oil under the Crude Supply Agreement is produced in the Republic of Venezuela, which has experienced economic difficulties and attendant social and political changes in recent years. It is impossible to predict how governmental policies may change under the current or any subsequent Venezuelan government. In addition, there are risks associated with enforcing judgments of United States courts against entities whose assets are located outside of the United States and whose management does not reside in the United States. Although the parties have negotiated alternative arrangements in the event of certain force majeure conditions, including Venezuelan governmental or other actions restricting or otherwise limiting PDVSA Oil's ability to perform its obligations, any such alternative arrangements may not be as beneficial to LCR as the Crude Supply Agreement.

In 1999, PDVSA announced its intention to renegotiate its crude supply agreements with all third parties, including LCR. In light of PDVSA's announced intent, there can be no assurance that PDVSA Oil will continue to perform its obligations under the Crude Supply Agreement. However, PDVSA has confirmed that it expects to honor its commitments if a mutually acceptable restructuring of the Crude Supply Agreement is not achieved. From time to time, the Company and PDVSA have had discussions covering both a restructuring of the Crude Supply Agreement and a broader restructuring of the LCR partnership. The Company is unable to predict whether changes in either arrangement will occur.

If the Crude Supply Agreement is modified or terminated or this source of crude oil is otherwise interrupted, due to production difficulties, OPEC-mandated supply cuts, political or economic events in Venezuela or other factors, LCR could experience significantly lower earnings and cash flows. The parties each have a right to transfer their interests in LCR to unaffiliated third parties in certain circumstances, subject to reciprocal rights of first refusal. In the event that CITGO were to transfer its interest in LCR to an unaffiliated third party, PDVSA Oil would have an option to terminate the Crude Supply Agreement. Depending on then-current market conditions, any modification, breach or termination of the Crude Supply Agreement could adversely affect LCR, since LCR would have to purchase all or a portion of its crude oil feedstocks in the merchant market, which could subject LCR to significant volatility and price fluctuations. There can be no assurance that alternative crude oil supplies with similar margins would be available for purchase by LCR.

Marketing and Sales

The Refinery produces gasoline, low sulfur diesel, jet fuel, aromatics, lubricants and certain industrial products. On a weekly basis, LCR evaluates and determines the optimal product output mix for the Refinery, based on spot market prices and conditions. Under the Products Agreement, CITGO is obligated to purchase and LCR is required to sell 100% of the finished gasoline, jet fuel, heating oil, diesel fuel, coke and sulfur produced by the Refinery. CITGO purchases these products at prices based on industry benchmark indexes. For example, the price for

gasoline is based on prices published by Platts Oilgram, an industry trade publication. The Products Agreement provides that Lyondell controls all of LCR's material decisions and enforcement rights in connection with the Products Agreement so long as CITGO has a direct or indirect ownership interest in LCR. The Products Agreement expires on December 31, 2017.

Competition and Industry Conditions

All of LCR's finished gasoline, jet fuel, heating oil, diesel fuel, coke, sulfur and lube oils are sold to CITGO at market-related prices.

The refining business tends to be volatile as well as cyclical. Crude oil prices, which are impacted by worldwide political events and the economics of exploration and production in addition to refined products demand, are the largest source of this volatility. Demand for refined products is influenced by seasonal and short-term factors such as weather and driving patterns, as well as by longer term issues such as the economy, energy conservation and alternative fuels. Industry refined products supply is also dependent on industry operating capabilities and on long-term refining capacity trends. However, management believes that the combination of the Crude Supply Agreement and the Products Agreement generally has the effect of stabilizing earnings and cash flows and reducing the market-driven aspects of such volatility.

With a capacity of approximately 268,000 barrels per day, the Company believes that the Refinery is North America's largest full conversion (i.e., not producing asphalt or high sulfur heavy fuel) refinery capable of processing 100% 17 API crude oil.

Among LCR's refining competitors are major integrated oil companies and domestic refiners that are owned by or affiliated with major integrated oil companies. Based on published industry data, as of January 1, 2002, there were 143 crude oil refineries in operation in the United States, and total domestic refinery capacity was approximately 16.5 million barrels per day. During 2001, LCR processed an average of 242,000 barrels per day of crude oil or approximately 1.5% of all U.S. crude runs.

Properties

LCR owns the real property, plant and equipment, which comprise the Refinery, located on approximately 700 acres in Houston, Texas. Units include a fluid catalytic cracking unit, cokers, reformers, crude distillation units, sulfur recovery plants and hydrodesulfurization units, as well as a lube oil manufacturing plant and an aromatics recovery unit. LCR also owns the real property, plant and equipment, which comprise a lube oil blending and packaging plant in Birmingham, Alabama. LCR owns a pipeline used to transport gasoline, kerosene and heating oil from the Refinery to the GATX Terminal located in Pasadena, Texas to interconnect with common carrier pipelines.

Employee Relations

At December 31, 2001, LCR employed approximately 1,000 full-time employees. LCR also uses the services of independent contractors in the routine conduct of its business. Approximately 600 hourly workers are covered by a collective bargaining agreement between LCR and the Paper, Allied-Industrial, Chemical and Energy Workers International Union (formerly the Oil, Chemical and Atomic Workers Union). The agreement, which expired in January 2002, has been renewed and will expire in January 2006. LCR believes that relations with its employees are good.

LYONDELL METHANOL COMPANY, L.P.

Overview

Lyondell produces methanol through its 75% interest in LMC, of which Lyondell serves as the managing partner. The remaining 25% interest in LMC is held by MCN Energy Enterprises. LMC owns a methanol plant located within Equistar's Channelview facility. Effective December 1, 1997, Equistar began serving as the operator of the LMC plant pursuant to an operating agreement with LMC. The LMC plant is a heat-integrated plant, which includes extraction capabilities for co-product hydrogen.

Methanol is used to produce MTBE and a variety of chemical intermediates, including formaldehyde, acetic acid and methyl methacrylate. These intermediates are used to produce bonding adhesives for plywood, personal care products, polyester fibers and plastics. Other end uses include solvents, windshield wash and antifreeze applications. LMC is advantageously located near its Gulf Coast customer base.

Management of Lyondell Methanol

LMC is a limited partnership organized under the laws of the State of Texas. Lyondell owns its interest in LMC through two wholly owned subsidiaries, one of which serves as a general partner and the managing partner of LMC and one of which serves as a limited partner. Similarly, MCN Energy Enterprises owns its interest in LMC through two wholly owned subsidiaries, one a general partner and one a limited partner.

Agreements between Equistar and Lyondell Methanol

Certain agreements entered into by Lyondell and LMC were assigned to Equistar effective December 1, 1997. Equistar acts as operator of the LMC plant pursuant to an operating agreement with LMC. In addition, Equistar markets LMC's product pursuant to agreements with LMC. LMC also leases the real property on which its methanol plant is located from Equistar.

Raw Materials

LMC's plant processes natural gas as its primary raw material. The Channelview facility is connected to a diverse natural gas supply network. The natural gas for LMC's plant is purchased by Equistar as agent for LMC under Equistar master agreements with various third party suppliers, which master agreements are administered by Lyondell personnel under the Shared Services Agreement.

Marketing and Sales

LMC sells all of its methanol output to Equistar, which then sells a large portion of it to third parties and Lyondell. The agreement between LMC and Equistar concerning sales provides that LMC bears the market risk associated with Equistar's sales of methanol to third parties. Equistar's sales agreements with third parties for the methanol have initial terms ranging from two to three years and typically contain automatic one-year term extension provisions. These contracts generally provide for monthly price adjustments based upon current market prices. Methanol is distributed by pipeline, railcar, truck, barge or ocean-going vessel.

Competition and Industry Conditions

The basis for competition in the methanol business is raw material acquisition price, product deliverability, product quality and price. LMC competes with other large producers of methanol, including Atlantic Methanol, Methanex, Millennium, SABIC, Southern Chemical and Terra Industries, many of which have the advantage of significantly lower raw material acquisition costs as a result of their investments in locations with an abundance of low priced natural gas.

The annual rated capacity of LMC's processing unit at January 1, 2002 was 248 million gallons. Based on published rated production capacities, the Company believes that LMC is the third largest methanol producer in the United States.

Methanol profitability is affected by the level of demand for products in which methanol is used, including MTBE and plywood (the production of which involves the use of formaldehyde), demand for which in turn is driven by the gasoline and housing markets, respectively. Methanol profitability is also affected by the price of its feedstock, natural gas. This has led many of LMC's competing methanol producers to invest in locations with an abundance of low priced natural gas.

Properties

LMC's only property is the methanol plant it owns, which is located within Equistar's Channelview complex on property leased from Equistar.

Employee Relations

LMC has no employees. Equistar serves as its operator and marketer.

INDUSTRY CYCLICALITY AND OVERCAPACITY

Lyondell's historical operating results reflect the cyclical and volatile nature of the supply-demand balance in both the chemical and refining industries. These industries historically have experienced alternating periods of inadequate capacity and tight supply, causing prices and profit margins to increase, followed by periods when substantial capacity is added, resulting in oversupply, declining capacity utilization rates and declining prices and profit margins. The cyclical nature of these industries results in volatile profits and cash flow over the business cycle.

Currently, there is overcapacity in the chemical industry. Moreover, a number of participants in the chemical industry either have added or are expected to add capacity. There can be no assurance that future growth in product demand will be sufficient to utilize this additional, or even current, capacity. Excess industry capacity has depressed and may continue to depress Lyondell's and its joint ventures' volumes and margins.

RAW MATERIALS AND ENERGY COSTS

Lyondell 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 Lyondell's and its joint ventures' operating expenses. The prices of raw materials and energy generally follow price trends of, and vary with the market conditions for, crude oil and natural gas, which may be highly volatile and cyclical. Results of operations for Lyondell and its joint ventures have at times in the past and could in the future be significantly affected by increases in these costs.

In addition, higher natural gas prices early in 2001 adversely affected the ability of many domestic chemicals producers to compete internationally since U.S. producers are disproportionately reliant on natural gas as a feedstock and energy source. In addition to the impact that this has had on Equistar's exports, reduced competitiveness of U.S. producers also has in the past increased the availability of chemicals in North America, as U.S. production that would otherwise have been sold overseas was instead offered for sale domestically.

GENERAL ECONOMIC CONDITIONS AND OTHER EXTERNAL FACTORS

External factors beyond Lyondell's and its joint ventures' control, such as general economic conditions, competitor actions, international events and circumstances, and governmental regulation in the United States and abroad, can cause volatility in the price of raw materials and other operating costs, as well as significant fluctuations in demand for Lyondell's and its joint ventures' products, and can magnify the impact of economic cycles on Lyondell's and its joint ventures' businesses. A number of Lyondell's and its joint ventures' products are highly dependent on durable goods markets, such as the housing and automotive markets, that are themselves particularly cyclical. Many of Lyondell's and its joint ventures' products are components of other chemical products that, in turn, are subject to the supply-demand balance of both the chemical and refining industries and general economic

conditions. For example, MTBE is used as a blending component in gasoline, and therefore a substantial decline in gasoline prices could result in decreased profitability from MTBE sales. With respect to Lyondell's refining joint venture, management believes that the combination of the Crude Supply Agreement and the Products Agreement generally tends to stabilize earnings and to reduce market driven volatility.

Lyondell and its joint ventures may reduce production at or idle a facility for an extended period of time or exit a business because of high raw material prices, an oversupply of a particular product and/or a lack of demand for that particular product, which makes production uneconomical. These temporary outages sometimes last for several quarters and cause Lyondell or its joint ventures to incur costs, including the expenses of the outages and the restart of these facilities. It is possible that factors like increases in raw material costs or lower demand in the future will cause Lyondell or its joint ventures to further reduce operating rates or idle facilities or exit uncompetitive businesses.

COMMODITY PRODUCTS

Lyondell and its joint ventures sell their products in highly competitive markets. Due to the commodity nature of most of the products of Lyondell and its joint ventures, Lyondell and its joint ventures generally are not able to protect market position by product differentiation or to pass on cost increases to customers. Accordingly, increases in raw material and other costs do not necessarily correlate with changes in prices for these products, either in the direction of the price change or in magnitude. Specifically, timing differences in pricing between raw material prices, which may change daily, and contract product prices, which in many cases are negotiated only monthly, sometimes with an additional lag in effective dates for increases, can have a negative effect on profitability.

FOREIGN OPERATIONS AND COUNTRY RISKS

International operations and exports to foreign markets are subject to a number of risks, including currency exchange rate fluctuations, trade barriers, exchange controls, national and regional labor strikes, political risks and risks of increases in duties and taxes, as well as changes in laws and policies governing operations of foreign-based companies. In addition, earnings of foreign subsidiaries and intercompany payments may be subject to foreign income tax rules that may reduce cash flow available to meet required debt service and other obligations of Lyondell.

As discussed earlier, LCR is party to a long-term crude supply agreement with PDVSA Oil, a wholly owned subsidiary of PDVSA. There are risks associated with enforcing the provisions of contracts with companies such as PDVSA Oil that are non-United States affiliates of a foreign sovereign nation. Additionally, all of the crude oil supplied by PDVSA Oil under the Crude Supply Agreement is produced in the Republic of Venezuela, which has experienced economic difficulties and attendant social and political changes in recent years. See "LYONDELL-CITGO Refining LP—Raw Materials" and "Item 3. Legal Proceedings—Litigation Matters."

JOINT VENTURE RISKS

A substantial portion of the Company's operations is conducted through joint ventures. The Company shares control of these joint ventures with unaffiliated third parties.

The Company's forecasts and plans with respect to these joint ventures assume that its joint venture partners will observe their obligations with respect to the joint ventures. In the event that any of the Company's joint venture partners do not observe their commitments, it is possible that the affected joint venture would not be able to operate in accordance with its business plans or that the Company would be required to increase its level of commitment in order to give effect to such plans.

As with any such joint venture arrangements, differences in views among the joint venture participants may result in delayed decisions or in failures to agree on major matters, potentially adversely affecting the business and operations of the joint ventures and in turn the business and operations of the Company.

Lyondell or any of the other owners of the joint ventures may transfer control of their joint venture interests or engage in mergers or other business combination transactions with a third party or with one or more of the other owners that could result in a change in control of Lyondell or the joint venture or the other owners. In many instances, such a transfer would be subject to an obligation to first offer the other owners an opportunity to purchase the interest. Lyondell and the other joint venture owners have discussed, and from time to time may continue to discuss, in connection with their ordinary course dialog regarding the joint ventures or otherwise, transactions that could result in a transfer or modification, directly or indirectly, of their ownership in a joint venture.

Lyondell cannot be certain that any of the joint venture owners will not sell, transfer or otherwise modify their ownership interest in a joint venture, whether in a transaction involving third parties and/or one or more of the other owners. Upon a transfer of an interest in Equistar, the partnership agreement and key agreements between Equistar and its owners would remain in place, and may not be modified without the consent of all of the owners, but the transfer could affect the governance of Equistar, particularly because Equistar's partnership agreement requires unanimous approval for some decisions.

Equistar's credit facility provides that an event of default occurs if any combination of Lyondell, Millennium and Occidental cease to collectively hold at least a 50% interest. LCR's credit facility provides that an event of default occurs if Lyondell and CITGO cease to individually or collectively hold at least a 35% interest. In addition, LCR's credit facility provides that an event of default occurs if (1) Lyondell transfers its interest as a member of LCR to a person other than an affiliate or (2) neither CITGO nor any of its affiliates is a member of LCR.

OPERATING HAZARDS

The occurrence of material operating problems, including, but not limited to, the events described below, may have a material adverse effect on the productivity and profitability of a particular manufacturing facility, or on the Company as a whole, during and after the period of such operational difficulties. The Company's income and cash flow are dependent on the continued operation of the Company's and its joint ventures' various production facilities and the ability to complete construction projects on schedule.

Although the Company and its joint ventures take precautions to enhance the safety of their operations and minimize the risk of disruptions, the Company's and its joint ventures' operations, along with the operations of other members of the chemical and refining industries, are subject to hazards inherent in chemical manufacturing and refining and the related storage and transportation of raw materials, products and wastes. These hazards include: pipeline leaks and ruptures; explosions; fires; inclement weather and natural disasters; mechanical failure; unscheduled downtime; labor difficulties; transportation interruptions; remediation complications; chemical spills; discharges or releases of toxic or hazardous substances or gases; storage tank leaks; and other environmental risks. 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, the Company is also subject to present and future claims with respect to workplace exposure, workers' compensation and other matters. The Company maintains property, business interruption and casualty insurance which it believes is in accordance with customary industry practices, but it is not fully insured against all potential hazards incident to its business and certain losses, including losses resulting from terrorist acts, may be either uninsurable or not economically insurable, in whole or in part.

ENVIRONMENTAL MATTERS

The Company cannot predict with certainty the extent of its, its subsidiaries' or its joint ventures' future liabilities and costs under environmental, health and safety laws and regulations and the Company cannot guarantee that they will not be material. In addition, the Company, its subsidiaries and its joint ventures may face liability for alleged personal injury or property damage due to exposure to chemicals and other hazardous substances at their facilities or chemicals that they otherwise manufacture, handle or own. Although these claims have not historically

had a material impact on the Company's, its subsidiaries' or its joint ventures' operations, a significant increase in the number or success of these claims could materially adversely affect the Company's, its subsidiaries' or its joint ventures' business, financial condition, operating results or cash flow.

The production facilities of Lyondell, Equistar, LCR and LMC are generally required to have permits and licenses regulating air emissions, discharges to land or water and storage, treatment and disposal of hazardous wastes. Companies such as Lyondell and its joint ventures that are permitted to treat, store or dispose of hazardous waste and maintain underground storage tanks pursuant to the Resource Conservation and Recovery Act ("RCRA") also are required to meet certain financial responsibility requirements. The Company believes that it and its joint ventures have all permits and licenses generally necessary to conduct its business or, where necessary, are applying for additional, amended or modified permits and that it and its joint ventures meet applicable financial responsibility requirements.

The policy of each of Lyondell, Equistar, LCR and LMC is to be in compliance with all applicable environmental laws. Lyondell and Equistar also are each committed to Responsible Care®, an international chemical industry initiative to enhance the industry's responsible management of chemicals. The Company's subsidiaries and joint ventures (together with the industries in which they operate) are subject to extensive national, state and local environmental laws and regulations concerning 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, the Company cannot accurately predict future developments, such as increasingly strict environmental laws, and inspection and enforcement policies, as well as higher compliance costs therefrom, 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 particular operations and products of the Company, and its joint ventures, 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 capital expenditures and risks described above, the Company does not expect that it or its joint ventures will be affected differently than the rest of the chemicals and refining industry where the Company's or its joint ventures' 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 the Company) may be required to bear all of such costs regardless of fault, legality of the original disposal or ownership of the disposed site.

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, 2001, 2000 and 1999, the Company, its subsidiaries and its joint ventures (on a 100% basis) spent, in the aggregate, approximately \$34 million, \$20 million and \$21 million, respectively, for environmentally related capital expenditures at existing facilities. The Company currently estimates that environmentally related capital expenditures at Company facilities and existing subsidiary and joint venture facilities will be approximately \$99 million for 2002 and approximately \$240 million for 2003. The increased level of such expenditures for 2001, 2002 and 2003 is a result of, among other things, implementation of a plan for the Houston/Galveston region to comply with the ozone standard, as discussed below. The Refinery contains on-site solid-waste landfills, which were used in the past to dispose of waste generated at this facility. It is anticipated that corrective measures will be necessary to comply with federal and state requirements with respect to this facility. The Company is also subject to certain assessment and remedial actions at the Refinery under RCRA. In addition, the Company negotiated an order with the Texas Natural Resource Conservation Commission ("TNRCC") for assessment and remediation of groundwater and soil contamination at the Refinery. The Company also has liabilities under RCRA and various state and foreign government regulations related to five current plant sites and three former plant sites. The Company is also responsible for a portion of the remediation of certain off-site waste disposal facilities. The Company currently is contributing funds to the cleanup of two waste sites located near Houston, Texas under CERCLA and the Superfund Amendments and Reauthorization Act of 1986. The Company also has been named, along with several other companies, as a potentially responsible party for a third

CERCLA site near Houston, Texas. The Company'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 responsible parties under applicable statutes. The Company, its subsidiaries and its joint ventures, to the extent appropriate, have accrued amounts (without regard to potential insurance recoveries or other third party reimbursements) believed to be sufficient to cover current estimates of the cost for remedial measures at manufacturing facilities and off-site waste disposal facilities based upon their interpretation of current environmental standards. In the opinion of management, there is currently no material range of loss in excess of the amount recorded. Based on the establishment of such accruals, and the status of discussions with regulatory agencies described in this paragraph, the Company does not anticipate any material adverse effect upon its financial statements or competitive position as a result of compliance with the laws and regulations described in this or the preceding paragraphs. See also "Item 3. Legal Proceedings" and "Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations."

The eight-county Houston/Galveston region has been designated a severe non-attainment area for ozone by the EPA. As a result, in December 2000, the TNRCC submitted a plan to the EPA to reach and demonstrate compliance with the ozone standard by November 2007. Ozone is a product of the reaction between volatile organic compounds and nitrogen oxides ("NOx") in the presence of sunlight, and is a principal component of smog. The proposed plans for meeting the ozone standard focus on significant reductions in NOx emissions. NOx emission reduction controls must be installed at the Refinery and each of Lyondell's two facilities and Equistar's six facilities in the Houston/Galveston region during the next several years, well in advance of the 2007 deadline. Compliance with the provisions of the plan will result in increased capital investment during the next several years and higher annual operating costs for Equistar, Lyondell and LCR. As a result, Lyondell estimates that aggregate related capital expenditures could total between \$400 million and \$500 million for Lyondell, Equistar and LCR before the 2007 deadline. Lyondell's direct expenditures could total between \$65 million and \$80 million. Lyondell's proportionate share of Equistar's expenditures could total between \$85 million and \$105 million, and Lyondell's proportionate share of LCR's expenditures could total between \$75 million and \$95 million. The timing and amount of the expenditures are subject to regulatory and other uncertainties, as well as obtaining the necessary permits and approvals. See "Item 3. Legal Proceedings—Environmental Proceedings."

Lyondell has been actively involved with a number of organizations to help solve the ozone problem in the most cost-effective manner and, in January 2001, Lyondell and the BCCA Appeal Group (a group of industry participants) filed a lawsuit against the TNRCC to encourage adoption of their alternative plan to achieve the same air quality improvement with less negative economic impact on the region. In June 2001, the parties entered into a consent order with respect to the lawsuit. Pursuant to the consent order, the TNRCC agreed to review, by June 2002, the scientific data for ozone formation in the Houston/Galveston region. In October 2001, the EPA approved the TNRCC plan, and the BCCA Appeal Group filed a timely petition for judicial review of that action on January 11, 2002. If the TNRCC scientific review supports the industry group proposal, the TNRCC has agreed to revise the NOx emission reduction requirements set forth in its original plan. Any revisions will have to be approved by the EPA. Such revisions of the NOx emission reduction requirements are expected to reduce the estimated capital investments for NOx reductions required by Lyondell, Equistar and LCR to comply with the plans for meeting the ozone standard. However, there can be no guarantee as to the ultimate capital cost of implementing any final plan developed to ensure ozone attainment by the 2007 deadline.

In the United States, the Clean Air Act Amendments of 1990 set minimum levels for oxygenates, such as MTBE, in gasoline sold in areas not meeting specified air quality standards. In Europe, demand for MTBE has benefited from new legislation in the 15-nation European Union. The so-called "Auto/Oil Legislation" aimed at reducing air pollution from vehicle emissions was enacted in 1998, and refineries increased consumption of MTBE to meet the new blending requirements. However, while studies by federal and state agencies and other world organizations have shown that MTBE is safe for use in gasoline, is not carcinogenic and is effective in reducing automotive emissions, 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 has led to public concern that MTBE may, in certain limited circumstances, affect the taste and odor of drinking water supplies.

Certain federal and state governmental initiatives have sought either to rescind the oxygenate requirement for reformulated gasoline or to restrict or ban the use of MTBE. Such actions, to be effective, would require (1) a waiver of the state's oxygenate mandate, (2) Congressional action in the form of an amendment to the Clean Air Act or (3) replacement of MTBE with another oxygenate such as ethanol, a more costly, untested, and less widely available additive.

California has twice sought a waiver of its oxygenate mandate. California's request was denied by both the Clinton Administration and the current Bush Administration. California is challenging the denial in court.

At the federal level, a blue ribbon panel appointed by the EPA issued its report on July 27, 1999. That report recommended, among other things, reducing the use of MTBE in gasoline. During 2000, the EPA announced its intent to seek legislative changes from Congress to give the EPA authority to ban MTBE over a three-year period. Such action would only be granted through amendments to the Clean Air Act. Additionally, the EPA is seeking a ban of MTBE utilizing rulemaking authority contained in the Toxic Substance Control Act. It would take at least three years for such a rule to issue. In January 2001, however, senior policy analysts at the U.S. Department of Energy presented a study stating that banning MTBE would create significant economic risk. The study did not identify any benefits from banning MTBE.

The formal risk assessment on MTBE conducted by the European Commission concluded that the use of MTBE in gasoline does not present an unacceptable risk to either the health of the community or to the environment. The European Commission decided not to restrict the use of MTBE in the European Union and agreed to a formal risk management strategy.

The EPA initiatives mentioned above or other governmental actions could result in a significant reduction in Lyondell's MTBE sales, which represented approximately 35% of its total 2001 revenues. The Company has developed technologies to convert TBA into alternate gasoline blending components should it be necessary to reduce MTBE production in the future. However, implementation of such technologies would require additional capital investment. The profit margin on such alternate gasoline blending components could differ from those historically realized on MTBE. See "Intermediate Chemicals and Derivatives—Overview."

Additionally, the Clean Air Act specified certain emissions standards for vehicles beginning in the 1994 model year and required the EPA to study whether further emissions reductions from vehicles were necessary, starting no earlier than the 2004 model year. In 1998, the EPA concluded that more stringent vehicle emission standards were needed and that additional controls on gasoline and diesel were necessary to meet these emission standards. New standards for gasoline were finalized in 1999 and will require refiners to produce a low sulfur gasoline by 2004, with final compliance by 2006. A new "on-road" diesel standard was adopted in January 2001 and will require refiners to produce ultra low sulfur diesel by June 2006, with some allowance for a conditional phase-in period that could extend final compliance until 2009. Lyondell estimates that these standards will result in increased capital investment for LCR, totaling between \$175 million to \$225 million for the new gasoline standards and \$250 million to \$300 million for the new diesel standard, between now and the implementation dates. Lyondell's share of LCR's capital expenditures would be between \$250 million and \$300 million. In addition, these standards could result in higher operating costs for LCR. Equistar's business may also be impacted if these standards increase the cost for processing fuel components.

Item 3. *Legal Proceedings*

Litigation Matters

In June 2001, Bayer AG delivered a notice of claim to Lyondell in relation to its March 2000 purchase of Lyondell's polyols business, asserting various claims relating to alleged breaches of representations and warranties related to condition of the business and assets. The notice of claim seeks damages in excess of \$100 million. Lyondell has vigorously contested the claims. The agreement governing the transaction with Bayer provides a

formal dispute resolution process, the final step of which would be binding arbitration in Houston, Texas. Currently, as part of the process, the parties are engaged in negotiations to resolve the claims. Lyondell does not expect the resolution of the claims to result in any material adverse effect on its business, financial condition, liquidity or results of operations.

On February 1, 2002, LCR filed a lawsuit against PDVSA and PDVSA Oil in the United States District Court, Southern District of New York in connection with the January 2002 force majeure declaration, as well as the claimed force majeure from April 1998 to September 2000. In the lawsuit, LCR alleges that the force majeure declarations by PDVSA and PDVSA Oil are invalid and that PDVSA and PDVSA Oil have breached the contracts related to the delivery of crude oil by PDVSA and PDVSA Oil to LCR. LCR is seeking monetary damages of at least \$90 million resulting from PDVSA Oil's failure to pay LCR the amounts required by contract relating to past crude oil deliveries of less than the contractual amount. LCR is also seeking declaratory relief relating to the January 2002 force majeure declaration and past force majeure declarations, and is seeking a declaratory interpretation of the disputed contract provisions in order to clarify the rights and obligations of the parties for the remaining duration of the contracts, which expire in December 2017.

The Company 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, the Company 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 condition of the Company. However, the adverse resolution in any reporting period of one or more of these suits could have a material impact on Lyondell's results of operations for that period without giving effect to contribution or indemnification obligations of co-defendants or others, or to the effect of any insurance coverage that may be available to offset the effects of any such award.

Although Lyondell and its joint ventures are involved in numerous and varied legal proceedings, a significant portion of its outstanding litigation arose in four contexts: (1) claims for personal injury or death allegedly arising out of exposure to the products produced by 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 and/or property damage allegedly arising out of operations and air, noise and water pollution allegedly arising out of operations; and (4) employment related claims.

Environmental Proceedings

On January 19, 2001, Equistar and LCR, individually, and Lyondell, individually and as part of the BCCA Appeal Group (a group of industry participants), filed a lawsuit against the TNRCC in State District Court in Travis County, Texas to encourage the adoption of the plaintiffs' alternative plan to achieve the same air quality improvement as the TNRCC plan, with less negative economic impact on the region. In June 2001, the parties entered into a consent order with respect to the lawsuit. Pursuant to the consent order, the TNRCC agreed to review by June 2002, the scientific data for ozone formation in the Houston/Galveston region. In October 2001, the EPA approved the TNRCC plan, and the BCCA Appeal Group filed a timely petition for judicial review of that action on January 11, 2002. If the TNRCC scientific review supports the industry group proposal, the TNRCC has agreed to revise the NOx emission reduction requirements set forth in its original plan. Any revisions will have to be approved by the EPA.

In addition, from time to time the Company receives notices 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. Although the Company has not been the subject of significant penalties to date, such alleged violations may become the subject of enforcement actions or other legal proceedings and may (individually or in the aggregate) involve monetary sanctions of \$100,000 or more (exclusive of interest and costs).

In April 1997, the Illinois Attorney General's Office filed a complaint in Grundy County, Illinois Circuit Court seeking monetary sanctions for releases into the environment at Millennium's Morris, Illinois plant in alleged violation of state regulations. The Morris, Illinois plant was contributed to Equistar on December 1, 1997 in connection with the formation of Equistar. Equistar now believes that a civil penalty in excess of \$100,000 could result, without giving effect to contribution or indemnification obligations of others. Lyondell would bear its proportionate share of such civil penalty. Equistar does not believe that the ultimate resolution of this complaint will have a material adverse effect on the business or financial condition of Equistar.

In connection with the transfer of assets and liabilities from ARCO to the Company prior to its initial public offering in 1988, the Company agreed to assume certain liabilities arising out of the operation of the Company's integrated petrochemicals and refining business prior to July 1, 1988. The Company and ARCO entered into an agreement, updated in 1997 (the "Revised Cross-Indemnity Agreement"), whereby the Company agreed to defend and indemnify ARCO against certain uninsured claims and liabilities which ARCO may incur relating to the operation of the business of the Company prior to July 1, 1988, including certain liabilities that may arise out of pending and future lawsuits. For current and future cases related to Company products and Company operations, ARCO and the Company bear a proportionate share of judgment and settlement costs according to a formula that allocates responsibility based on years of ownership during the relevant time period. Under the Revised Cross-Indemnity Agreement, the Company assumed responsibility for its proportionate share of future costs for waste site matters not covered by ARCO insurance. In connection with the ARCO Chemical Acquisition, the Company is successor to a cross-indemnity agreement between ARCO and ARCO Chemical relating to claims or liabilities that ARCO may incur relating to its former ownership and operation of the oxygenates and polystyrenics businesses of ARCO Chemical for periods after July 1, 1987. On April 18, 2000, ARCO was acquired by BP. Subject to the uncertainty inherent in all litigation, management believes the resolution of the matters pursuant to these indemnity agreements will not have a material adverse effect upon the Consolidated Financial Statements of the Company.

Lyondell's environmental liability totaled \$26 million at December 31, 2001 based on the Company's latest assessment of potential future remediation costs. This amount comprises liability for remediation responsibility retained by ARCO Chemical in connection with the sale of a plant in 1996 and liability related to several owned plant facilities, including the Channelview facility, and federal Superfund sites for amounts ranging from less than \$1 million to \$11 million per site. Lyondell is involved in administrative proceedings or lawsuits relating to a minimal number of other Superfund sites. The Company estimates, based on currently available information, that potential loss contingencies associated with these sites, individually and in the aggregate, are not significant. 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 other CERCLA, RCRA, TNRCC or other comparable state or foreign law investigations, could require the Company to reassess its potential exposure related to environmental matters. Substantially all amounts accrued are expected to be paid out over the next two to seven years. See "Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations."

Lyondell, Millennium Petrochemicals and certain subsidiaries of Occidental have each agreed to provide certain indemnifications to Equistar with respect to the petrochemicals and polymers businesses contributed by the partners. In addition, Equistar agreed to assume third party claims that are related to certain pre-closing contingent liabilities that are asserted prior to December 1, 2004 as to Lyondell and Millennium Petrochemicals, and May 15, 2005 as to certain Occidental subsidiaries, to the extent the aggregate thereof does not exceed \$7 million to each partner, subject to certain terms of the respective asset contribution agreements. As of December 31, 2001, Equistar had incurred approximately \$5 million under the \$7 million indemnification basket with respect to the business contributed by Lyondell. Equistar also agreed to assume third party claims that are related to certain pre-closing contingent liabilities that are asserted for the first time after December 1, 2004 as to Lyondell and Millennium Petrochemicals, and for the first time after May 15, 2005 as to certain Occidental subsidiaries. As of September 30, 2001, Equistar, Lyondell, Millennium Petrochemicals and certain subsidiaries of Occidental amended the asset contribution agreements governing these indemnification obligations to clarify the treatment of, and procedures pertaining to the management of, certain claims arising under the asset contribution agreements. Lyondell believes that these amendments do not materially change the asset contribution agreements.

EXECUTIVE OFFICERS OF THE REGISTRANT

Set forth below are the executive officers of the Company as of March 1, 2002. The By-Laws of the Company provide that each officer shall hold office until the officer's successor is elected or appointed and qualified or until the officer's death, resignation or removal by the Board of Directors.

<u>Name, Age and Present Position with Lyondell</u>	<u>Business Experience During Past Five Years and Period Served as Officer(s)</u>
Dan F. Smith, 55..... Director, President and Chief Executive Officer	Mr. Smith was named Chief Executive Officer in December 1996 and President of the Company in August 1994. Mr. Smith has been a director since October 1988. Since December 1, 1997, Mr. Smith has also served as the Chief Executive Officer of Equistar. Mr. Smith served as Chief Operating Officer of the Company from May 1993 to December 1996. Prior thereto, Mr. Smith held various positions including Executive Vice President and Chief Financial Officer of the Company, Vice President, Corporate Planning of ARCO and Senior Vice President in the areas of management, manufacturing, control and administration for the Company and the Lyondell Division of ARCO. Mr. Smith is a director of Cooper Industries, Inc. and ChemFirst, Inc. and is a member of the Partnership Governance Committee of Equistar. Mr. Smith also is a member of the Board and the Executive Committee for the American Chemistry Council and is Chairman of the Operating Board and the Executive Committee for the American Plastics Council.
Eugene R. Allspach, 55..... Executive Vice President	Mr. Allspach was appointed Executive Vice President of Lyondell on December 2, 1999, and has served as President and Chief Operating Officer of Equistar since December 1997. Mr. Allspach served as Group Vice President, Manufacturing and Technology for Millennium Petrochemicals from 1993 to 1997. Before 1993, Mr. Allspach held various senior executive positions with Millennium, including Group Vice President, Manufacturing and Manufacturing Services and Vice President, Specialty Polymers and Business Development. Mr. Allspach is a member of the Board of the American Chemistry Council and the Operating Board for the American Plastics Council. Mr. Allspach also is a director, a member of the Executive Committee and the Treasurer for the National Petrochemical and Refiners Association. Effective March 31, 2002, Mr. Allspach is retiring from Lyondell and Equistar.
Robert T. Blakely, 60..... Executive Vice President and Chief Financial Officer	Mr. Blakely was appointed to his present position effective November 1, 1999. Prior thereto, he served as Executive Vice President and Chief Financial Officer of Tenneco, Inc. from 1981 to 1999. Mr. Blakely is a member of the Partnership Governance Committees of Equistar and LCR.
Morris Gelb, 55..... Executive Vice President and Chief Operating Officer	Mr. Gelb was appointed to his current position in December 1998. Prior to this appointment, he served as Senior Vice President, Manufacturing, Process Development and Engineering of Lyondell from July 1998. He was named Vice President for Research and Engineering of ARCO Chemical in 1986 and Senior Vice President of ARCO Chemical in July 1997. Mr. Gelb also serves as a member of the Partnership Governance Committee of LCR.
John R. Beard, 49..... President, Lyondell Chemical Europe	Mr. Beard was appointed to his present position in October 2000. He previously served as Senior Vice President of Manufacturing for Equistar since May 1998. In this position, he was also responsible for Lyondell's U.S. manufacturing sites beginning in late 1999. From 1997 to May 1998, Mr. Beard held the position of Vice President, Manufacturing for Equistar. Prior to this, Mr. Beard held positions as Vice President, Petrochemicals Manufacturing and Vice President, Quality Supply and Planning for Lyondell. Mr. Beard originally joined the Company in 1974.

**Name, Age and Present
Position with Lyondell**

**Business Experience During Past
Five Years and Period Served as Officer(s)**

Edward J. Dineen, 47..... Senior Vice President, Intermediates and Performance Chemicals	Mr. Dineen was appointed to his current position in May 2000. Prior thereto, he served as Senior Vice President, Urethanes and Performance Chemicals since July 1998. Prior to this position, he served as Vice President, Performance Products and Development for ARCO Chemical beginning in June 1997. He served as Vice President, Planning and Control for ARCO Chemical European Operations from 1993 until his appointment as Vice President, Worldwide CoProducts and Raw Materials in 1995.
T. Kevin DeNicola, 47..... Vice President, Corporate Development	Mr. DeNicola has been Vice President, Corporate Development since April 1998, overseeing strategic planning. From 1996 until April 1998, Mr. DeNicola was Director of Investor Relations of Lyondell. Mr. DeNicola served as Ethylene Products Manager of Lyondell from 1993 until 1996. Mr. DeNicola also serves as a member of the Partnership Governance Committee of Equistar.
Kerry A. Galvin, 41..... Vice President, General Counsel and Secretary	Ms. Galvin was appointed Vice President, General Counsel and Secretary of the Company in July 2000. Ms. Galvin originally joined the Company in 1990 and most recently served as the Associate General Counsel with responsibility for international legal affairs.
John A. Hollinshead, 52..... Vice President, Human Resources	Mr. Hollinshead was appointed to his current position in July 1998. Mr. Hollinshead has also served as Vice President, Human Resources of Equistar since July 1998. Prior to his appointment as Vice President, Human Resources, he was Director, Human Resources, Manufacturing and Engineering for Equistar since 1997. Mr. Hollinshead served as Manager, Human Resources with Lyondell from 1985 to 1997.

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

None.

PART II

Item 5. Market for Registrant's Common Equity and Related Stockholder Matters

The Company's common stock, \$1.00 par value ("Common Stock"), is listed on the New York Stock Exchange. The reported high and low sale prices of the Common Stock on the New York Stock Exchange (New York Stock Exchange Composite Tape) for each quarter from January 1, 2000 through December 31, 2001, inclusive, were as set forth below.

<u>Period</u>	<u>High</u>	<u>Low</u>
2000:		
First Quarter.....	\$ 14.875	\$ 8.4375
Second Quarter.....	19.500	13.5000
Third Quarter.....	17.750	11.0000
Fourth Quarter.....	16.750	11.3125
2001:		
First Quarter.....	\$ 17.950	\$ 12.625
Second Quarter.....	17.650	13.940
Third Quarter.....	15.400	9.450
Fourth Quarter.....	15.930	10.900

On March 1, 2002, the closing sale price of the Common Stock was \$16.55, and there were approximately 1,789 holders of record of the Common Stock.

During the last two years, Lyondell has declared \$.225 per share quarterly cash dividends (which were paid in the subsequent quarter). During 2001, Lyondell paid \$106 million in dividends. The declaration and payment of dividends is at the discretion of the Board of Directors. The future declaration and payout of dividends and the amount thereof will be dependent upon Lyondell's results of operations, financial condition, cash position and requirements, investment opportunities, future prospects, contractual restrictions and other factors deemed relevant by the Board of Directors. Subject to these considerations and to the legal considerations discussed in the following paragraph, Lyondell currently intends to distribute to its stockholders cash dividends on its Common Stock at a quarterly rate of \$.225 per share. It is possible that all or a portion of the dividends paid by Lyondell during 2002 could represent a return of capital distribution to recipients. The determination of the actual characterization of distributions made during 2002 cannot be determined until after the close of the year, and will be reflected in the 2002 Form 1099-DIV to be sent in early 2003.

Lyondell's credit facilities and indentures could limit Lyondell's ability to pay dividends under certain circumstances. See "Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations." In addition, pursuant to a settlement agreement entered into with the Pension Benefit Guaranty Corporation in 1998, Lyondell may not pay extraordinary dividends (as defined by regulations under the Employee Retirement Income Security Act of 1974, as amended) without providing a letter of credit meeting certain specified requirements. In January 2002, Lyondell provided a letter of credit meeting these requirements.

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."

<u>Millions of dollars, except per share data</u>	<u>For the year ended December 31,</u>				
	<u>2001</u>	<u>2000</u>	<u>1999</u>	<u>1998(a)</u>	<u>1997(b)</u>
Results of Operations Data:					
Sales and other operating revenues	\$ 3,226	\$ 4,036	\$ 3,693	\$ 1,447	\$ 2,878
Income from equity investments	40	199	76	235	108
Net income (loss) (c)	(150)	437	(115)	52	286
Basic earnings (loss) per share (c)	(1.28)	3.72	(1.10)	.67	3.58
Diluted earnings (loss) per share (c)	(1.28)	3.71	(1.10)	.67	3.58
Dividends per share	.90	.90	.90	.90	.90
Balance Sheet Data:					
Total assets	6,703	7,047	9,498	9,156	1,559
Long-term debt	3,846	3,844	6,046	5,391	345

- (a) The financial information for 1998 included five months of operating results for ARCO Chemical, acquired as of July 28, 1998 and accounted for using the purchase method of accounting. It also included twelve months of Equistar, LCR and LMC; each accounted for as an equity investment.
- (b) The financial information for 1997 included twelve months of consolidated operating results of Lyondell and LMC, and Lyondell's equity income from LCR for twelve months and from Equistar for one month.
- (c) The net loss for 2001, net income for 2000 and the net loss for 1999 included extraordinary losses on early extinguishment of debt, net of income taxes, of \$5 million, \$33 million and \$35 million, or \$.04, \$.28 and \$.33 per basic and diluted share, respectively. In addition, net income for 2000 included an after-tax gain on asset sales of \$400 million, or \$3.40 per share.

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

This discussion should be read in conjunction with the information contained in the Consolidated Financial Statements and the notes thereto.

Overview

General—The three-year period from 1999 to 2001 was marked by considerable volatility in the chemical industry. Costs began increasing during 1999 due to higher crude oil and natural gas prices, which affect raw material and energy costs in the production of chemicals. These cost increases continued through 1999 into 2000 and remained at high levels during 2000. At the same time, approximately 1 billion pounds of new industry propylene oxide ("PO") capacity, or more than 10% of existing worldwide capacity, was added in late 1999 and early 2000 in Europe. Also during 2000, worldwide ethylene industry capacity increased 3%. These capacity additions put pressure on sales prices, which, combined with rising raw material costs, negatively affected margins. Surging natural gas costs late in 2000 increased the cost of natural gas liquids ("NGL"), primarily ethane, as well as the cost of utilities. Benchmark natural gas prices in the U.S. initially spiked to nearly \$10 per million BTUs in January 2001, compared to a historical price range of \$1.50 to \$2.50 per million BTUs in the period from 1991 to 1999. As a result, some U.S.-based producers, including Equistar, idled plants that use NGL-based raw materials. During the latter half of 2000, demand began to weaken as a result of an industrial recession in the U.S. that included the chemical sector.

Demand continued to decrease during 2001 as the industrial recession spread to other segments of the economy. Industrial production in the U.S. grew at a 4.5% annual rate in 2000, but contracted an estimated 3.7% in 2001. European and Asian economies also weakened in 2001. Despite the decreased demand, the industry increased worldwide ethylene capacity by an estimated 7.6% during 2001. Meanwhile, crude oil and natural gas prices began

a downward trend that continued throughout 2001. Benchmark crude oil prices in the U.S. averaged 14% lower in 2001 compared to 2000. After the January 2001 spike, natural gas prices also began to decrease, reaching \$2.30 per million BTUs in December 2001, however average benchmark natural gas prices for the year still averaged \$4.28 per million BTUs, or 10% higher than in 2000.

Net Income (Loss)—The net loss of \$150 million in 2001 compares to net income of \$437 million in 2000 and a net loss of \$115 million in 1999. Each year was affected by unusual items at Lyondell, Equistar or LCR as follows:

<u>Millions of dollars</u>	<u>For the year ended December 31,</u>		
	<u>2001</u>	<u>2000</u>	<u>1999</u>
Net income (loss)	\$ (150)	\$ 437	\$ (115)
Add (deduct) after-tax effect of:			
Gains on asset sales	--	(400)	(10)
Other unusual items	47	--	42
Extraordinary losses	5	33	35
Adjusted net income (loss)	<u>\$ (98)</u>	<u>\$ 70</u>	<u>\$ (48)</u>

During the third quarter 2001, Lyondell exited the aliphatic diisocyanates (“ADI”) business and shut down its ADI operations at its Lake Charles, Louisiana facility. The decision reflected the limited ongoing strategic value to Lyondell of the ADI business and Lyondell’s poor competitive position. The decision resulted in a pretax charge of \$63 million, or \$41 million after tax, in 2001. The net loss for 2001 included this \$41 million after-tax charge and Lyondell’s \$6 million after-tax share of Equistar’s Port Arthur shutdown costs as well as a \$5 million extraordinary loss on early debt retirement.

On March 31, 2000, Lyondell completed the sale of the polyols business and ownership interests in its U.S. PO manufacturing operations to Bayer for approximately \$2.45 billion. Lyondell used the net proceeds, as well as cash flows from operations, to retire \$2.4 billion of debt during 2000. The lower debt levels have resulted in significantly lower interest expense for Lyondell. Including post-closing adjustments that were recorded in the third quarter 2000, the sale of assets generated a total pretax gain of \$590 million, or \$400 million after tax, during 2000. Net income for 2000 included the \$400 million after-tax gain on the sale and a \$33 million extraordinary loss on early debt retirement.

The net loss for 1999 included Lyondell’s \$10 million after-tax share of an Equistar gain on asset sale, Lyondell’s after-tax, LIFO (last-in, first-out)-related charge of \$10 million and a \$32 million charge for Lyondell’s after-tax share of Equistar restructuring costs and LCR labor agreement charges as well as Lyondell’s \$35 million extraordinary loss on early debt retirement.

After excluding the items discussed above, the adjusted net loss of \$98 million in 2001 compares to adjusted net income of \$70 million in 2000. The \$168 million decrease primarily was due to lower product margins and volumes at Lyondell and Equistar as a result of weaker global economies in 2001, partly offset by Lyondell’s lower interest expense and higher earnings at LCR. Lyondell’s 2001 interest expense decreased compared to 2000 due to the full-year effect of debt reductions made during 2000. LCR’s refining operations benefited from higher margins and increased deliveries under the long-term crude supply agreement (“Crude Supply Agreement”) with PDVSA Petróleo, S.A. (“PDVSA OIL”).

Adjusted net income of \$70 million in 2000 increased \$118 million compared to the adjusted net loss of \$48 million in 1999, primarily due to lower net interest expense and higher equity earnings from Equistar and LCR. These benefits were partly offset by lower operating income for the Intermediate Chemicals and Derivatives (“IC&D”) business segment. The decrease in net interest expense reflected the retirement of \$2.4 billion of debt during 2000. Equistar operating results improved due to higher petrochemicals margins in 2000. The increase in LCR operating results reflected higher deliveries and a more favorable mix of crude oil under the Crude Supply Agreement. The decrease in operating income for the IC&D business primarily was due to the sale of the polyols business and lower margins for PO and derivatives, partly offset by higher margins and volumes for methyl tertiary butyl ether (“MTBE”) and styrene monomer (“SM”).

RESULTS OF OPERATIONS

Lyondell's operating income relates to the IC&D business segment. Lyondell's activities in the petrochemicals, polymers and refining business segments are conducted through its interests in Equistar and LCR. The methanol business conducted through Lyondell Methanol Company, L.P. ("LMC") is not a reportable segment for financial disclosure purposes. Lyondell accounts for its investments in Equistar, LCR and LMC using the equity method of accounting.

Lyondell Chemical Company

Revenues, Operating Costs and Expenses, and Unusual Charges—Lyondell's operating results are reviewed in the discussion of the IC&D segment below.

Gain on Sale of Assets—As discussed above, in 2000, Lyondell sold the polyols business and ownership interests in its U.S. PO manufacturing operations to Bayer for approximately \$2.45 billion. As part of the transaction, Lyondell and Bayer entered into the PO Joint Venture and a separate PO Technology Joint Venture. Including post-closing adjustments, the sale of assets to Bayer generated a pretax gain of \$590 million, or \$400 million after tax.

Income from Equity Investment in Equistar—Lyondell's equity investment in Equistar resulted in a loss of \$77 million in 2001 compared to income of \$101 million in 2000 and \$52 million in 1999. The decrease of \$178 million from 2000 to 2001 primarily reflected lower petrochemicals segment margins, as well as lower volumes for both the petrochemicals and polymers segments. The lower petrochemicals margins were due to lower sales prices, which decreased more than raw material costs, in 2001 compared to 2000. Petrochemical margins were also negatively affected by decreases in co-product prices during 2001. The lower sales prices and volumes reflected weaker demand in 2001. Polymers segment 2001 operating results were comparable to 2000. Results for 2001 also included Lyondell's \$9 million pretax proportionate share of shutdown costs for Equistar's Port Arthur, Texas polymer facility. The Port Arthur facility was permanently closed in February 2001.

The \$49 million increase in income from 1999 to 2000 was due to higher petrochemical margins, which were partly offset by lower polymer margins. In the petrochemicals segment, sales prices for ethylene increased more than costs for raw materials, leading to higher margins, primarily in the first nine months of 2000. In the polymers segment, 2000 margins were lower as sales price increases lagged behind raw material cost increases. In the fourth quarter 2000, margins in both segments were negatively affected by rapid increases in natural gas costs, which caused raw material and utility costs to increase, and a decline in sales prices due to decreased demand. Lyondell's 1999 equity income from Equistar was also negatively affected by its pretax share of restructuring and other unusual charges of \$39 million, which was partly offset by its pretax share of gains on asset sales of \$17 million.

Income from Equity Investment in LCR—Lyondell's income from its equity investment in LCR was \$129 million in 2001, \$86 million in 2000 and \$23 million in 1999. The improvement in 2001 primarily was due to higher deliveries and increased margins under the Crude Supply Agreement as well as higher margins on spot market volumes through the first nine months of 2001. This was partially offset by the negative effect of a major maintenance turnaround during the fourth quarter 2001.

The \$63 million increase in income from 1999 to 2000 primarily was due to increased deliveries and an improved mix of crude oil under the Crude Supply Agreement in the latter half of 2000 and higher margins on spot crude oil. The higher spot margins primarily reflected a stronger gasoline market in 2000 compared to 1999.

Interest Expense—Interest expense was \$386 million in 2001, \$514 million in 2000 and \$616 million in 1999. The decrease in interest expense in 2000 principally was due to the retirement of a total of \$2.4 billion of debt during 2000, primarily using net proceeds of the March 31, 2000 asset sale to Bayer. The decrease in 2001 compared to 2000 was due to the full-year effect of the debt reductions made in 2000. Lower interest rates in 2001 also benefited Lyondell's variable rate debt.

Interest Income—Interest income was \$17 million in 2001, \$52 million in 2000 and \$27 million in 1999. The increase in 2000 reflected higher cash balances for part of the year as a result of proceeds from the asset sale to Bayer. The cash proceeds were used to retire debt during 2000, resulting in lower cash balances and lower interest income during 2001.

Income Tax—The effective tax rate, including extraordinary items, was a benefit of 34% in 2001, a provision of 32% in 2000 and a benefit of 27% in 1999. The 2001 effective tax rate reflected the expected tax benefit of domestic operating losses incurred during the year. A benefit from a change in estimate of prior year items was substantially offset by the effect of foreign earnings taxed at higher rates. The change in estimate of prior year items primarily represented certain tax effects related to the sale of assets to Bayer in 2000. The 2000 tax rate of 32% reflected, in part, a federal tax benefit from a financial restructuring of Lyondell's European operations and the attendant recognition of certain foreign exchange translation losses. Lyondell's lower 1999 tax benefit rate was a result of a federal income tax benefit from a domestic loss incurred in 1999, which was partially offset by tax provisions in foreign jurisdictions.

Extraordinary Losses—Extraordinary losses, net of income taxes, were \$5 million in 2001, \$33 million in 2000, and \$35 million in 1999. The extraordinary item for 2001 consisted of the write-off of \$7 million of unamortized debt issuance costs and amendment fees related to the early repayment of \$384 million of variable-rate debt outstanding under Lyondell's credit facility. The charge, less a tax benefit of \$2 million, was reported as an extraordinary loss on extinguishment of debt. The debt was retired using net proceeds from \$393 million of fixed rate debt issued in December 2001. The extraordinary item for 2000 consisted of the write-off of unamortized debt issuance costs and amendment fees of \$40 million and the payment of call premiums of \$10 million. The total of \$50 million, or \$33 million after tax, related to the early retirement of \$2.2 billion of debt, primarily using net proceeds from the Bayer asset sale. The 1999 extraordinary item consisted of the write-off of unamortized debt issuance costs and amendment fees totaling \$54 million, or \$35 million after tax, related to early retirement and partial refinancing of \$4.1 billion of debt. During May 1999, Lyondell issued \$2.4 billion of fixed-rate debt, \$1 billion of variable-rate debt and 40.25 million shares of common stock, using the net proceeds to reduce variable-rate debt by a net \$3.1 billion.

Pro Forma

On March 31, 2000, Lyondell completed the sale of the polyols business and ownership interests in its U.S. PO manufacturing operations to Bayer for approximately \$2.45 billion in cash. The following condensed income statements present the unaudited pro forma consolidated operating results for 2000 and 1999 as if the transaction had occurred as of the beginning of 2000 and 1999, respectively. The pro forma income statements assume that net proceeds of \$2.05 billion were used to retire debt in accordance with the provisions of Lyondell's credit facility and indentures as of the beginning of each period. The operating results for 2000 exclude the after-tax gain on the asset sale of \$400 million, or \$3.40 per share.

<u>In millions, except per share data</u>	<u>For the year ended</u>	
	<u>December 31,</u>	
	<u>2000</u>	<u>1999</u>
Sales and other operating revenues	\$ 3,816	\$ 2,864
Operating income	324	308
Interest expense	451	426
Income from equity investments	199	76
Net income (loss) from continuing operations	95	(11)
Basic and diluted income (loss) per share from continuing operations	.81	(.11)

The unaudited pro forma data presented above are not necessarily indicative of the results of operations of Lyondell that would have occurred had such transactions actually been consummated as of the indicated dates, nor are they necessarily indicative of future results.

Fourth Quarter 2001 versus Third Quarter 2001

Lyondell's fourth quarter 2001 net loss of \$53 million compares to a net loss for the third quarter 2001 of \$67 million. The fourth quarter 2001 included a \$10 million after-tax benefit, representing a reduction in the third quarter 2001 after-tax charge of \$51 million for the estimated costs of exiting the ADI business. This fourth quarter 2001 benefit reflected better than anticipated results from asset sales and contract negotiations. The fourth quarter 2001 also included a \$5 million extraordinary charge relating to early debt retirement. Excluding these items, the fourth quarter 2001 adjusted net loss of \$58 million compares to a third quarter 2001 adjusted net loss of \$16 million. The increased net loss in the fourth quarter 2001 reflects the negative effects of the fourth quarter 2001 turnaround at the LCR refinery as well as a seasonal decrease in MTBE profitability at Lyondell.

Intermediate Chemicals and Derivatives (IC&D) Segment

Overview—Beginning in early 1999, the cost of raw materials began escalating, following the general trend in the commodity petrochemical industry. Benchmark prices of propylene, one of the major raw materials for the IC&D segment, more than doubled from the end of 1998 to the end of 2000. At the same time, approximately 1 billion pounds of new industry PO capacity, or more than 10% of existing worldwide capacity, was added in late 1999 and early 2000 in Europe. This new capacity limited the ability to raise sales prices as the cost of propylene increased, putting pressure on margins during 1999 and 2000.

Weaker demand for most products during 2001 put pressure on prices and margins despite decreasing raw material costs. Demand for products in the IC&D segment in 2001 was negatively affected by the weaker U.S. economy as well as lower demand in Europe and Asia. The cost of propylene in the U.S. trended downwards after peaking in mid-2000. Average benchmark propylene costs decreased 23% in 2001 compared to 2000. The costs of other raw materials also showed dramatic decreases. Natural gas costs, which affect the cost of methanol, a raw material used in MTBE, as well as energy costs, decreased steadily during 2001 from the high levels reached in the first quarter 2001. However, average benchmark natural gas costs in the U.S. in 2001 were still 10% higher compared to 2000.

The following table sets forth volumes, including processing volumes, included in sales and other operating revenues for this segment. Co-product tertiary butyl alcohol ("TBA") is principally used to produce the derivative MTBE. Volumes for the polyols business, sold on March 31, 2000, are included through the date of sale. Bayer's ownership interest in the PO Joint Venture entered into by Lyondell and Bayer as part of the asset sale transaction, represents ownership of an in-kind portion of the PO production of the PO Joint Venture. Bayer's share of the PO production from the PO Joint Venture will increase from approximately 1.5 billion pounds in 2001 to approximately 1.6 billion pounds annually in 2004 and thereafter. Lyondell takes in kind the remaining PO production and all SM and TBA co-product production from the PO Joint Venture. Bayer's PO volumes are not included in sales and are excluded from the table below.

	<u>For the year ended December 31,</u>		
	<u>2001</u>	<u>2000</u>	<u>1999</u>
<u>Volumes, in millions</u>			
PO, PO derivatives, TDI (pounds)	2,803	3,393	4,464
Co-products:			
SM (pounds)	3,132	3,475	3,129
TBA and derivatives (gallons)	1,157	1,211	1,071
<u>Millions of dollars</u>			
Sales and other operating revenues	\$ 3,226	\$ 4,036	\$ 3,693
Unusual charges	63	--	--
Operating income	112	339	404

Revenues—Revenues of \$3.2 billion in 2001 decreased from \$4.0 billion in 2000 partly due to the sale of the polyols business as of March 31, 2000. The polyols business accounted for \$220 million in sales revenues and 408 million pounds in sales volumes in 2000. Excluding the effect of the sale of the polyols business, sales revenues decreased \$590 million, or 15%, compared to 2000 due to lower prices and lower volumes, reflecting weaker demand in 2001. SM accounted for nearly half of this decrease on significantly lower prices and 10% lower volumes. Benchmark spot SM prices in the U.S. averaged 24% lower in 2001 than in 2000 when SM markets were stronger in the first half of the year. Volumes for PO and derivatives, including toluene diisocyanate (“TDI”), were 6% lower on weak demand, particularly in urethanes markets. MTBE prices and volumes also declined from 2000 when gasoline markets and demand for MTBE were much stronger than in 2001.

Revenues in 2000 increased \$343 million, or 9%, compared to 1999, despite the March 31, 2000 sale of the polyols business. The sale of the polyols business resulted in a decrease of \$609 million in sales revenues and a decrease of 1.1 billion pounds in sales volumes, comparing 2000 to 1999. Excluding the effect of polyols, sales revenues increased 33%, primarily due to higher prices and volumes for MTBE and SM. The higher MTBE prices and 13% increase in MTBE sales volumes reflected higher gasoline prices, increased global demand, and tighter supplies. New regulations in Europe contributed to higher global demand, while new U.S. reformulated gasoline standards affected supplies. The higher SM prices and an 11% increase in volumes reflected stronger demand in the first half of 2000. For 2000, sales price increases for PO and derivatives, excluding polyols, were tempered by new industry PO capacity and the foreign exchange effects of a stronger U.S. dollar. PO and derivatives volumes, excluding polyols, were comparable to 1999 as the negative effect of new industry capacity in Europe was offset by higher U.S. volumes.

Unusual Charges—During 2001, Lyondell recorded a pretax charge of \$63 million associated with its decision to exit the ADI business. The decision reflected the limited ongoing strategic value to Lyondell of the ADI business and Lyondell’s poor competitive position. The decision involved the shutdown of Lyondell’s ADI manufacturing unit at the Lake Charles, Louisiana facility. The action included a 20% reduction of the Lake Charles workforce as well as ADI-related research and sales positions at other locations. The \$63 million charge included \$45 million to adjust the carrying values of the ADI assets to their net realizable value and accruals of \$15 million for exit costs and \$3 million for severance and other employee-related costs for the positions that are being eliminated.

Operating Income—Operating income in 2001, excluding the \$63 million unusual charge described above, was \$175 million, a decrease of \$164 million from operating income of \$339 million in 2000. The decrease primarily was due to lower margins and volumes for TDI, SM and PO in 2001 and the sale of the polyols business on March 31, 2000. TDI margins and volumes were down significantly due to weak demand in urethanes markets, which also affected PO. SM margins and volumes decreased significantly due to trough conditions in 2001. Decreases in selling, general and administrative expenses, as well as in research and development expenses in 2001 compared to 2000 reflected the effects of the sale of the polyols business, cost reduction efforts and a lower level of business activity in 2001.

Operating income of \$339 million in 2000 decreased from \$404 million in 1999. The decrease primarily was due to the sale of the polyols business and lower margins for PO and derivatives, partly offset by higher margins and volumes for MTBE and SM. PO and derivatives product margins, excluding polyols, decreased as raw material costs, primarily propylene, rose in 2000, while the new industry PO capacity constrained price increases. Average benchmark propylene costs increased about 70% compared to 1999. The improvement in MTBE margins reflected significantly higher prices primarily due to a stronger gasoline market. Decreases in selling, general and administrative expenses, as well as in research and development expense in 2000 compared to 1999 reflected the effects of the sale of the polyols business and benefits from cost reduction efforts.

Fourth Quarter 2001 versus Third Quarter 2001

Operating income of \$26 million in the fourth quarter 2001 decreased from \$52 million in the third quarter 2001, excluding the fourth quarter 2001 pretax credit of \$15 million and the third quarter 2001 pretax charge of \$78 million related to the ADI shutdown. The \$26 million decrease in adjusted operating income primarily was due to lower MTBE margins, which reflected the seasonality of the MTBE business. Based on industry data, spot U.S. Gulf Coast MTBE raw material margins decreased from about 33 cents per gallon in the third quarter 2001 to about

23 cents per gallon in the fourth quarter 2001. The decrease in MTBE margins primarily was due to decreasing MTBE prices, both in the U.S. and Europe, as the summer driving season ended. Prices of key raw materials, butane and methanol, also decreased quarter to quarter partially offsetting the negative effects of the MTBE price decreases. MTBE's contribution to operating income decreased an estimated \$30 million in the fourth quarter 2001 compared to the third quarter 2001. Volumes for MTBE decreased modestly in the fourth quarter 2001 compared to the third quarter 2001.

PO and derivatives, which includes TDI, experienced lower margins in the fourth quarter 2001 due to further weakness in urethanes markets. PO and derivatives volumes increased 6%, reflecting sales increases for PO and butanediol ("BDO") in preparation for Lyondell's new European capacity for those products. SM volumes increased slightly versus the third quarter 2001, but market demand remained very weak. Lyondell's SM margins were largely unchanged as raw material and product price changes had comparable effects.

Equistar Chemicals, LP

Lyondell's activities in the petrochemicals and polymers business segments are conducted through its interest in Equistar.

Overview

General—The three-year period from 1999 to 2001 was marked by considerable volatility in the chemical industry. The fourth quarter of 1998 marked a trough in the commodity petrochemical cycle due to a combination of new capacity, high inventory levels and the Asian financial crisis. In 1999, ethylene and derivatives prices rebounded from year end 1998 lows as domestic ethylene demand grew by more than 6.5%, while the industry experienced both planned and unplanned outages. As a result, benchmark ethylene prices increased every quarter from the end of 1998, peaking in mid-2000. Raw material costs also began increasing during 1999 due to higher crude oil and natural gas prices, which affect raw material and energy costs in the production of chemicals. These cost increases continued through 1999 into 2000 and remained at high levels during 2000. From the end of 1998 to the end of 2000, the weighted-average cost of raw materials for the industry rose 150%. Surging natural gas costs late in 2000 increased the costs of natural gas liquids ("NGL"), primarily ethane, as well as the cost of utilities. In response, some U.S.-based producers, including Equistar, idled plants using NGL-based raw materials. Demand began to weaken in the third quarter 2000 due to an industrial recession that included the chemical sector. Domestic ethylene demand for all of 2000 contracted nearly 1%. Meanwhile, total worldwide ethylene-industry capacity increased by 3% as a result of new plants added during 2000.

During 2001, the industry was negatively affected by weak demand and new capacity. Domestic ethylene demand decreased nearly 10% in 2001 as the industrial recession spread to other segments of the economy. Customer inventory reductions contributed to the decrease. Due to the continuing weak demand, Equistar further reduced the state of readiness of its previously idled Lake Charles, Louisiana plant in the second quarter 2001. The idled plant represents 7% of Equistar's ethylene capacity. Meanwhile, the industry added an estimated 16.4 billion pounds of annual ethylene capacity, or 7.6% of worldwide capacity, in 2001.

In addition to the weak demand, high NGL costs early in 2001 had a significant impact in reducing the competitive position of North American exports, such as polyethylene, to other regions of the world. Natural gas costs spiked to nearly \$10 per million BTUs in January 2001. This compared to a price range of \$1.50 to \$2.50 per million BTUs in the period from 1991 to 1999. After the January 2001 spike, natural gas prices decreased steadily to historical price levels, but still averaged \$4.28 per million BTUs, or 10% higher than in 2000. As a result of the decreases in natural gas prices, North American exports returned to their historical competitive cost position. The high NGL costs also caused producers to switch to crude oil based raw materials. This resulted in an increased supply of co-products such as propylene, butadiene and benzene, putting downward pressure on the prices of those co-products for most of 2001.

The decreased demand in 2001 combined with increased industry capacity put downward pressure on product sales prices. Although crude oil and natural gas prices also decreased during 2001, product sales prices declined at a faster rate. These combined factors resulted in lower product margins for the industry and for Equistar during 2001 compared to 2000.

Net Income (Loss)—Equistar had a net loss in 2001 of \$283 million compared to net income of \$153 million for 2000. The significant decrease of \$436 million primarily reflected lower petrochemicals segment margins as well as lower volumes for both the petrochemicals and polymers segments. The lower petrochemicals margins were due to lower sales prices, which decreased more than raw material costs, in 2001 compared to 2000. Petrochemical margins were also negatively affected by decreases in co-product prices during 2001. The lower sales prices and volumes reflected weaker demand in 2001. Polymers segment 2001 operating results were comparable to 2000. Results for 2001 also included \$22 million of costs associated with the shutdown of the Port Arthur, Texas polyethylene facility in the first quarter 2001.

Equistar's 2000 net income of \$153 million increased \$71 million from net income, excluding unusual items, of \$82 million in 1999. The increase reflected the benefits of higher petrochemicals segment margins and lower selling, general and administrative expenses partly offset by lower polymers segment margins and lower sales volumes in both segments. The unusual items in 1999 included restructuring and other unusual charges of \$96 million and gains on asset sales of \$46 million. Petrochemicals margins improved in 2000 as average sales prices increased more than raw material costs. However, polymers sales price increases in 2000 lagged behind raw material cost increases, leading to reduced margins. Lower 2000 volumes in both segments primarily reflected a slow down in demand in the latter half of 2000.

Fourth Quarter 2001 compared to Third Quarter 2001

Equistar's net loss of \$94 million in the fourth quarter 2001 increased from a net loss of \$82 million in the third quarter 2001. Improvements in petrochemicals segment operating results were more than offset by lower polymers segment results.

Equistar's petrochemicals segment had operating income of \$50 million in the fourth quarter of 2001 compared to \$29 million in the third quarter. The increase primarily was due to higher margins and was partially offset by lower sales volumes. Ethylene margins in the fourth quarter 2001 increased from the third quarter 2001 as prices for ethylene decreased less than raw material and energy costs. The fourth quarter 2001 benchmark price for ethylene was 20.9 cents per pound compared to 23.9 cents per pound in the third quarter 2001. However, costs decreased due to lower raw material prices as well as higher co-product propylene prices. Benchmark propylene prices increased an estimated 2.3 cents per pound in the fourth quarter 2001. Sales volumes for petrochemical products decreased 2% in the fourth quarter 2001 compared to the third quarter 2001 as customers reduced inventory levels in late December 2001.

The impact of certain fixed price natural gas and NGL supply contracts reduced the potential benefit from the decreases in energy and raw material costs. These contracts were entered into during 2001, while natural gas costs were at relatively high levels. The market prices of these commodities subsequently trended downwards with the result that the fixed prices were significantly in excess of market prices by the fourth quarter 2001. In the fourth quarter 2001, Equistar's costs under the fixed price contracts were approximately \$23 million higher than they would have been under market-based contracts.

Equistar's polymers segment had a fourth quarter 2001 operating loss of \$48 million compared to a loss of \$26 million in the third quarter 2001. Results for the polymers segment deteriorated in the fourth quarter 2001 due to both lower margins and volumes. Margins were lower as polyethylene price decreases exceeded decreases in ethylene prices. In comparison to the third quarter 2001, average benchmark polyethylene prices decreased an estimated 3.8 cents per pound in the fourth quarter 2001 compared to an estimated decrease of 3 cents per pound for ethylene. Equistar's polymer volumes in the fourth quarter 2001 decreased nearly 7% compared to the third quarter 2001. Polymer volumes were affected by reduced U.S. demand in December 2001 as customers sought to further reduce inventories.

Segment Data

The following tables reflect selected sales volume data, including intersegment sales volumes, and summarized financial information for Equistar's business segments.

<u>In millions</u>	<u>For the year ended December 31,</u>		
	<u>2001</u>	<u>2000</u>	<u>1999</u>
Selected petrochemicals products:			
Olefins (pounds)	16,236	18,490	18,574
Aromatics (gallons)	366	397	367
Polymers products (pounds)	5,862	6,281	6,388
<u>Millions of dollars</u>			
Sales and other operating revenues:			
Petrochemicals segment	\$ 5,384	\$ 7,031	\$ 4,759
Polymers segment	1,980	2,351	2,159
Intersegment eliminations	(1,455)	(1,887)	(1,324)
Total	<u>\$ 5,909</u>	<u>\$ 7,495</u>	<u>\$ 5,594</u>
Operating income (loss):			
Petrochemicals segment	\$ 275	\$ 694	\$ 447
Polymers segment	(186)	(185)	51
Unallocated	(188)	(175)	(336)
Total	<u>\$ (99)</u>	<u>\$ 334</u>	<u>\$ 162</u>

Petrochemicals Segment

Revenues—Revenues of \$5.4 billion in 2001 decreased 23% compared to revenues of \$7.0 billion for 2000 as a result of lower average sales prices and lower sales volumes in 2001. Benchmark ethylene prices averaged 13% lower in 2001 compared to 2000. Sales volumes decreased 12% due to weaker business conditions in 2001.

Revenues of \$7.0 billion in 2000 increased 48% from \$4.8 billion in 1999. The increase primarily was due to higher average sales prices, as sales volumes were comparable to 1999. Sales prices rose rapidly in 1999, and remained at higher levels throughout 2000, resulting in higher average prices for 2000. Average benchmark ethylene prices were 37% higher in 2000 than in 1999. Volumes were flat due to a slow down in demand in the latter half of 2000, reflecting the industrial recession in the U.S. As a result of the slower demand and the adverse effects of the rapid fourth quarter 2000 increase in natural gas costs, Equistar idled its Lake Charles, Louisiana plant, which uses NGL-based raw materials, early in 2001.

Operating Income—Operating income of \$275 million in 2001 decreased 60% from \$694 million in 2000. The decrease primarily was due to lower margins and, to a lesser extent, lower sales volumes. The lower margins primarily reflected lower prices for ethylene and for co-products such as propylene and benzene in 2001 compared to 2000. The lower prices and volumes were due to weaker demand in 2001 compared to 2000.

Operating income of \$694 million in 2000 increased 55% compared to \$447 million in 1999 on higher margins. Margins improved as Equistar generally was able to increase sales prices more than the increases in raw material costs, primarily in the first half of the year.

Polymers Segment

Revenues—Revenues of \$2.0 billion in 2001 decreased 16% compared to revenues of \$2.4 billion in 2000 due to a decrease in average sales prices and a 7% decrease in sales volumes. The decreases in sales prices and volumes were both due to weaker demand in 2001.

Revenues of \$2.4 billion in 2000 increased 9% compared to revenues of \$2.2 billion in 1999 due to higher sales prices partly offset by lower sales volumes. Average sales prices were 9% higher, primarily in response to higher raw material costs for ethylene and propylene. Sales volumes declined 2% due to a combination of a planned maintenance turnaround at the Morris, Illinois plant in the second quarter 2000 and a slow down in demand in the latter half of 2000, reflecting the industrial recession in the U.S.

Operating Income—The 2001 operating loss of \$186 million was comparable to the operating loss of \$185 million in 2000 as the effect of lower polymers prices was offset by lower raw material costs.

The operating loss of \$185 million in 2000 decreased \$236 million from operating income of \$51 million in 1999. The decrease was primarily due to substantially lower margins for 2000 compared to 1999 as raw material cost increases outpaced sales price increases.

Unallocated Items

The following discusses expenses that were not allocated to the petrochemicals and polymers segments.

Other Operating Expenses—These include unallocated general and administrative expenses and goodwill amortization. Unallocated expenses were \$166 million in 2001, \$175 million in 2000, and \$240 million in 1999. The decrease from 2000 to 2001 was due to cost reduction efforts and a lower level of business activity in 2001. The decrease from 1999 to 2000 reflected a reduction in compensation and employee benefit expenses and Year 2000 costs, as well as savings realized from the consolidation of certain administrative functions under the Shared Services Agreement with Lyondell Chemical Company (“Lyondell”) beginning January 1, 2000.

Unusual Charges—Unusual charges were \$22 million in 2001 and \$96 million in 1999. In 2001, Equistar discontinued production at its higher-cost Port Arthur, Texas polyethylene facility in February and shut down the facility. Closed production units included a 240 million pounds per year high-density polyethylene (“HDPE”) reactor and an low-density polyethylene (“LDPE”) reactor with annual capacity of 160 million pounds. These units and a 300 million pounds per year HDPE reactor mothballed in the fourth quarter of 1999 have been permanently shut down and are being dismantled. The asset values of these production units were previously adjusted as part of the \$96 million restructuring charge recognized in 1999. In 2001, Equistar recorded the \$22 million charge which included environmental remediation liabilities of \$7 million, other exit costs of \$3 million and severance and pension benefits of \$7 million for approximately 125 people employed at the Port Arthur facility. The remaining \$5 million balance primarily related to the write down of certain assets.

During 1999, Equistar recorded a charge of \$96 million for costs associated with a decision to shut down several polyethylene reactors, including a Port Arthur HDPE reactor and two LaPorte, Texas LDPE reactors, and severance costs. The severance costs were primarily related to the consolidation of certain administrative functions between Lyondell and Equistar. Approximately \$72 million of the total charge was an adjustment of the asset carrying values of the reactors. The remaining \$24 million represented severance and other employee-related costs for approximately 500 employee positions that were eliminated. The eliminated positions, primarily administrative functions, resulted from opportunities to consolidate such services among Lyondell and Equistar.

Other Income, Net—Other income of \$46 million in 1999 primarily consisted of net gains on asset sales, including the sale of the concentrates and compounds business in April 1999.

Extraordinary Loss—As part of a 2001 refinancing, Equistar wrote off unamortized debt issuance costs and amendment fees of \$3 million related to the early repayment of the \$1.25 billion bank credit facility and reported the charge as an extraordinary loss on early extinguishment of debt.

LYONDELL-CITGO Refining LP

Lyondell's activities in the refining segment are conducted through its interest in LCR.

Refining Segment

Overview—Beginning in 1998, PDVSA Oil reduced deliveries to LCR under the Crude Supply Agreement from the 230,000 barrels per day contractual rate to 195,000 barrels per day. In May 1999, the deliveries were further reduced to 184,000 barrels per day. PDVSA Oil increased deliveries to 195,000 barrels per day in April 2000, to 200,000 barrels per day in July 2000 and restored them to the 230,000 barrels per day contractual level in October 2000. During 1999 and 2000, processing of Crude Supply Agreement volumes averaged 182,000 and 196,000 barrels per day, respectively, which forced LCR to make spot purchases of crude oil to maintain production levels. A strong gasoline market during 2000 helped improve the margins that LCR realized on its spot purchases of crude oil.

During 2001, processing of extra heavy Venezuelan crude oil under the Crude Supply Agreement averaged 229,000 barrels per day, compared to the contractual rate of 230,000 barrels per day, despite a major maintenance turnaround in the fourth quarter 2001 as volumes were accelerated into the first nine months. The strong gasoline market continued through the third quarter 2001, benefiting LCR's margins on spot purchases of crude oil.

The following table sets forth, in thousands of barrels per day, sales volumes for LCR's refined products and processing rates at the Refinery for the periods indicated:

	<u>For the year ended December 31,</u>		
	<u>2001</u>	<u>2000</u>	<u>1999</u>
Refined products sales volumes:			
Gasoline	101	118	118
Diesel and heating oil	71	72	68
Jet fuel	20	19	18
Aromatics	8	11	10
Other refined products	107	105	104
Total refined products volumes	<u>307</u>	<u>325</u>	<u>318</u>
Crude processing rates:			
Crude Supply Agreement – coked	229	196	182
Other heavy crude oil – coked	9	19	14
Other crude oil	10	30	43
Total crude processing rates	<u>248</u>	<u>245</u>	<u>239</u>

Revenues—Revenues for LCR, including intersegment sales, were \$3.3 billion in 2001, \$4.1 billion in 2000 and \$2.6 billion in 1999. Revenues for 2001 decreased 19% compared to 2000. The decrease primarily was attributable to lower sales prices. Sales volumes decreased nearly 6%. The lower sales prices generally reflected downward pressure from lower crude oil prices in 2001 compared to 2000. The lower volumes primarily were due to the effects of the fourth quarter 2001 turnaround.

The 58% increase in 2000 revenues compared to 1999 is primarily due to higher sales prices. Sales volumes increased 2%. Prices of refined products increased in 2000, reflecting a stronger gasoline market in 2000 compared to 1999. Sales volumes and Crude Supply Agreement processing rates were higher in 2000 compared to 1999 as PDVSA Oil increased deliveries of crude oil under the Crude Supply Agreement during 2000 after reducing deliveries in 1999.

Interest Expense—LCR's net interest expense was \$51 million in 2001, \$61 million in 2000 and \$44 million in 1999. Interest expense included interest on loans payable to partners of \$12 million in 2001, \$18 million in 2000, and \$16 million in 1999. Interest expense decreased in 2001 compared to 2000 due to lower interest rates, which benefited LCR's variable-rate debt. Interest expense increased in 2000 from 1999 due to fees and higher interest rates associated with the refinancing of LCR's debt in May and September 2000.

Extraordinary Loss—LCR had a \$2 million extraordinary loss in 2001 related to the early retirement of its \$450 million term loan and \$70 million revolving credit facility, which were replaced by similar facilities maturing in January 2003. The extraordinary loss consisted of the write-off of unamortized debt issuance costs.

Net Income—LCR's net income was \$203 million in 2001, \$128 million in 2000 and \$24 million in 1999. The \$75 million improvement in 2001 compared to 2000 primarily was due to higher margins and increased deliveries under the Crude Supply Agreement, higher margins on spot market volumes and lower fixed costs. These benefits were partly offset by the effect of the major fourth quarter 2001 turnaround and higher natural gas costs. The negative impact of the turnaround on operating results was estimated at approximately \$60 million. LCR had unplanned outages in 2001 that negatively affected operating results during the first nine months of 2001. However, LCR had a major planned turnaround in the second quarter 2000 that had a similar negative effect on operating results during 2000.

The \$104 million improvement in 2000 net income compared to 1999 was due to increased deliveries and an improved mix of Crude Supply Agreement crude oil, higher spot margins, reflecting a stronger gasoline market in 2000, and higher margins for reformulated gasoline due to industry supply shortages. These improvements were partly offset by higher fuels and utility costs and interest expense. While the second quarter 2000 was negatively impacted by a major planned turnaround, this was more than offset by the effect of unplanned production unit outages in the second quarter 1999.

Fourth Quarter 2001 versus Third Quarter 2001

LCR had net income of \$17 million in the fourth quarter 2001, a decrease of \$61 million compared to \$78 million in the third quarter 2001. The decrease primarily was due to the impact of the fourth quarter 2001 turnaround, which is estimated at approximately \$60 million. The turnaround significantly reduced the refinery's crude oil processing capacity in the fourth quarter 2001. Total crude processing rates during the fourth quarter 2001 were 207,000 barrels per day compared to 269,000 barrels per day in the third quarter 2001. Volumes processed under the Crude Supply Agreement for the fourth quarter 2001 averaged 196,000 barrels per day. Spot market crude processing volumes averaged 11,000 barrels per day.

FINANCIAL CONDITION

Operating Activities—Lyondell's operating activities in 2001 generated cash of \$199 million. The \$150 million net loss included significant noncash charges, including \$89 million of equity losses from affiliates, primarily Equistar, and \$63 million of unusual charges related to the ADI shutdown. Operating cash flow benefited from a \$154 million decrease in accounts receivable and a \$48 million decrease in inventories, partially offset by a \$74 million decrease in accounts payable. Accounts receivable decreased primarily due to the effect of lower sales prices in 2001. Accounts payable decreased due to significant decreases in the costs of raw materials and natural gas.

In addition, cash provided by operating activities was reduced, compared to the net loss as adjusted for depreciation and other items, by the increase in prepaid expenses and other current assets of \$85 million, primarily representing refundable federal income taxes. The federal income tax benefit was recognized in 2001 earnings, but the refund will not be received in cash until early 2002. Cash provided by operating activities also was less than indicated by the net loss adjusted for depreciation and other items by \$127 million due to changes in other assets and liabilities, reflecting spending of \$61 million on deferred turnaround and software development costs, together with decreased accruals for expenses that had not been paid at year end. Although other noncurrent liabilities increased \$142 million on the Consolidated Balance Sheet, this primarily was due to the minimum pension liability, which did not affect cash flow. See "Pension" below.

During 2001, Lyondell exited the ADI business and shut down the related operations. The decision reflected the limited ongoing strategic value of the ADI business to Lyondell and Lyondell's poor competitive position. The decision resulted in a pretax charge of \$63 million, or \$41 million after tax, in 2001. Lyondell expects the cash flow impact of the action to be neutral or slightly positive.

Investing Activities—Lyondell's capital expenditures were \$68 million in 2001. Capital expenditures by the joint ventures were \$110 million by Equistar and \$109 million by LCR in 2001, of which Lyondell's pro rata share was \$45 million and \$64 million, respectively. Contributions to affiliates in 2001 were \$173 million and included \$110 million contributed to the joint venture with Bayer for the construction of PO-11 and \$45 million contributed to LCR. In addition to contributions for the PO-11 project, the 2001 capital amounts reflected spending by Lyondell for a TDI facility in France, spending by Equistar for regulatory compliance, cost reduction and yield improvement projects, and spending by LCR for regulatory compliance, maintenance and cost reduction projects.

Lyondell's 2002 budgeted capital spending, including contributions for the PO-11 project, is approximately \$130 million, and its pro rata share of Equistar's and LCR's 2002 budgeted capital spending is \$39 million and \$61 million, respectively. The reduced 2002 capital budget reflects the completion of the TDI project in France, lower spending levels as the PO-11 project nears completion as well as the weaker current business environment.

Distributions from affiliates in excess of earnings for 2001 were \$50 million, primarily from LCR. Equistar did not make any distributions during 2001.

Financing Activities—In December 2001, Lyondell issued \$393 million of 9.5% senior secured notes due December 15, 2008. The net proceeds were used to prepay \$384 million of variable-rate debt outstanding under Lyondell's credit facility. Also in December 2001, Lyondell renewed a receivables sales agreement originally scheduled to expire in December 2001. The agreement was extended to December 2004.

In September 2001, Lyondell amended its credit facility and the transaction documents governing the operating lease for BDO-2, a new 275 million pound-per-year BDO facility currently under construction. As a result of the September 2001 amendment, the margin used to calculate the variable interest rate under the credit facility increased by 0.5% per annum. Lyondell had previously obtained an amendment to the credit facility and BDO-2 transaction documents in March 2001, easing certain financial ratio requirements.

Lyondell paid regular quarterly dividends of \$.225 per share of common stock in 2001 for a total of \$106 million. On February 8, 2002, the board of directors of Lyondell declared a regular quarterly dividend of \$.225 per share of common stock, payable March 15, 2002.

Lyondell also made scheduled debt payments of \$10 million during 2001.

Pension—During 2001, Lyondell recorded an additional minimum pension liability of \$130 million with a charge primarily to other comprehensive income. The accrual recognized accumulated pension benefit obligations in excess of pension plan assets at December 31, 2001. The excess reflected a decrease in the market value of pension plan assets as well as the impact of a lower discount rate on the accumulated pension benefit obligation. Although the accrual did not have an earnings or cash impact in 2001, pension expense will increase in 2002 and Lyondell may be required to make larger future contributions to the pension plan than it has historically.

Liquidity and Capital Resources—At December 31, 2001, Lyondell had cash on hand of \$146 million. The \$500 million revolving credit facility, which matures in July 2003, was undrawn at December 31, 2001. Amounts available under the revolving credit facility are reduced to the extent of outstanding letters of credit, which were minimal as of December 31, 2001.

Lyondell believes that conditions will be such that cash balances, cash generated from operating activities, and funds from lines of credit will be adequate to meet anticipated future cash requirements, including scheduled debt repayments, necessary capital expenditures, ongoing operations and dividends.

In addition to long-term debt, Lyondell also is obligated to make payments relating to various other types of obligations, some of which were incurred in lieu of financing to obtain the right to use assets. The following tables summarize Lyondell's minimum payments for long-term debt, operating leases, and other contractual obligations and guarantees for the next five years and thereafter.

Millions of dollars	Payments Due By Period						
	Total	2002	2003	2004	2005	2006	Thereafter
Contractual obligations							
Long-term debt	\$ 3,853	\$ 7	\$ 7	\$ 7	\$ 107	\$ 608	\$ 3,117
Operating leases	310	52	48	45	42	37	86
Residual value guarantee	181	--	--	--	--	--	181
Capital commitments	117	60	57	--	--	--	--
Total contractual obligations	\$ 4,461	\$ 119	\$ 112	\$ 52	\$ 149	\$ 645	\$ 3,384
Commitment Expiration Per Period							
	Total	2002	2003	2004	2005	2006	Thereafter
Other commercial commitments							
Guarantees of Equistar debt	\$ 431	\$ 101	\$ 29	\$ --	\$ 1	\$ 150	\$ 150

Purchase Obligations—In addition to the items shown in the table above, Lyondell is committed to purchase minimum quantities of TDI at plant cost from Rhodia through 2016. Such annual commitments currently are estimated at approximately 200 million pounds of TDI per year. Lyondell also is party to various other volume-based purchase obligations for raw materials. These commitments are designed to assure sources of supply and are not expected to be in excess of normal requirements. See Note 19 to the Consolidated Financial Statements for a description of Lyondell's commitments and contingencies, including these purchase obligations.

Long-Term Debt—The credit facility and the indentures under which Lyondell's senior secured notes and senior subordinated notes were issued contain covenants that, subject to exceptions, restrict sale and leaseback transactions, lien incurrence, debt incurrence, dividends, investments, certain payments, sales of assets and mergers and consolidations. In addition, the credit facility requires Lyondell to maintain specified financial ratios and consolidated net worth, in all cases as provided in the credit facility. The breach of these covenants could permit the lenders to declare the loans immediately payable and could permit the lenders under Lyondell's credit facility to terminate future lending commitments. Lyondell was in compliance with all such covenants as of December 31, 2001. See Note 14 to the Consolidated Financial Statements for a description of Lyondell's long-term debt and credit facility.

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

Residual Value Guarantee—During the third quarter 2000, construction began on a new butanediol ("BDO") production facility in Europe known as BDO-2. Construction is being financed by an unaffiliated entity that was established for the purpose of serving as lessor with respect to this facility. Construction spending through December 31, 2001, including the lessor's interest capitalized during construction, totaled 144 million euros, or

approximately \$127 million using December 31, 2001 exchange rates. Upon completion in 2002, Lyondell will lease the facility under the operating lease for an initial term of five years. Minimum payments under the operating lease will approximate an amount equivalent to interest on the final construction costs at the interest rate implicit in the lease. Lyondell may, at its option, purchase the facility at any time during the lease term for the unrecovered construction costs of the lessor or may renew the lease for four successive five-year terms. If Lyondell does not exercise the purchase option before the end of the last renewal period, the facility will be sold. In the event the sales proceeds are less than the guaranteed residual value, Lyondell will pay the difference to the lessor. The residual value at the end of the lease term is estimated at approximately 206 million euros, or \$181 million using December 31, 2001 exchange rates. In the transaction documents, Lyondell agreed to comply with certain financial and other covenants that are substantially the same as those contained in the credit facility. A breach of those covenants could result in, among other things, Lyondell having to pay immediately the project costs incurred to date. Lyondell was in compliance with all such covenants as of December 31, 2001. Note 19 to the Consolidated Financial Statements on commitments and contingencies includes a description of this construction and lease obligation.

Capital Commitments—At December 31, 2001, major capital commitments primarily consisted of Lyondell's 50% share of those related to the construction of a world-scale PO facility, known as PO-11, in The Netherlands. See Note 19 to the Consolidated Financial Statements for related capital commitment disclosures.

Guarantees of Equistar Debt—Lyondell is guarantor of \$400 million of Equistar debt and a co-obligor with Equistar for \$31 million of debt as described in Note 14 to the Consolidated Financial Statements.

Joint Venture Debt—At December 31, 2001, the outstanding debt of Lyondell's joint ventures to parties other than Lyondell was \$2.3 billion for Equistar and \$535 million for LCR. This debt is not carried on Lyondell's balance sheet because, except for the amounts described in the preceding section, Lyondell has no obligation with respect to that debt. The ability of the joint ventures to distribute cash to Lyondell is reduced by current weak business conditions and their respective debt service obligations.

Equistar Liquidity and Capital Resources—In August 2001, Equistar completed a \$1.5 billion debt refinancing. The refinancing included an amended and restated bank credit facility consisting of a \$500 million secured revolving credit facility maturing in August 2006 and a \$300 million secured term loan maturing in August 2007. The refinancing also included the issuance of \$700 million of new unsecured 10.125% senior notes maturing in August 2008. The refinancing replaced a \$1.25 billion bank credit facility, \$820 million of which was outstanding. A portion of the net proceeds was also used to repay the \$90 million of Equistar's medium-term notes that matured on August 30, 2001. The remaining net proceeds will be used for general business purposes. The amended and restated bank credit facility also made certain financial ratio requirements less restrictive. Equistar had previously amended its credit facility in March 2001, easing certain financial ratio requirements. In addition, during the third quarter 2001, Equistar terminated a \$130 million receivables securitization program originally entered into in December 1998.

Equistar's credit facility, the indenture governing Equistar's senior unsecured notes and certain of Equistar's railcar leases contain covenants that, subject to exceptions, restrict sale and leaseback transactions, investments, certain payments, lien incurrence, debt incurrence, sales of assets and mergers and consolidations. In addition, the credit facility and certain of Equistar's railcar leases require Equistar to maintain certain specified financial ratios, in all cases as provided in the credit facility. The breach of these covenants could permit the lenders under Equistar's credit facility and the indenture governing the senior notes to declare the loans immediately payable and could permit the lenders under Equistar's credit facility to terminate future lending commitments. In addition, the breach of these covenants would permit the early termination by the lessors of these railcar leases. Furthermore, a default under Equistar's debt instruments which results in, or permits, the acceleration of more than \$50 million of indebtedness would constitute a cross-default under Lyondell's credit facility. Equistar was in compliance with all covenants under its debt instruments and railcar leases as of December 31, 2001. However, as a result of the continued poor current business environment, Equistar is seeking an amendment to its credit facility and certain of its railcar leases to provide additional financial flexibility by easing certain financial ratio requirements. Such amendments will require the payment of additional fees. Management anticipates that the amendments will become effective prior to March 31, 2002.

Early in 2002, Equistar's credit rating was lowered by two major rating agencies, which could affect Equistar's borrowing costs in the future. The credit rating downgrade permits the early termination of one of Equistar's railcar leases by the lessor, which would accelerate the payment of \$126 million of minimum lease payments due under the lease. Equistar has reached agreement in principle with the lessor to renegotiate the lease.

LCR Liquidity and Capital Resources—In July 2001, LCR obtained new credit facilities, consisting of a \$450 million term loan and a \$70 million revolving credit facility, both of which mature in January 2003. These new facilities replaced similar facilities, which matured in September 2001, and will be used for general business purposes.

RECENT DEVELOPMENTS

Early in 2002, Lyondell and Occidental agreed in principle for Lyondell's acquisition of Occidental's 29.5% interest in Equistar and for Occidental's acquisition of an equity interest in Lyondell. Upon consummation of these transactions, Occidental would receive the following from Lyondell:

- 30 to 34 million shares of newly issued Lyondell Series B Common Stock, with the final number to be determined at closing of this transaction. These shares would have the same rights as Lyondell's regular common stock with the exception of the dividend. The Series B Common Stock would pay a dividend at the same rate as the regular common stock but, at Lyondell's option, the dividend may be paid in additional shares of Series B Common Stock or in cash. These new Series B shares also would include provisions for conversion to regular common stock three years after issuance or earlier in certain circumstances;
- five-year warrants to acquire five million shares of Lyondell regular common stock at \$25 per share, subject to adjustment upon the occurrence of certain events; and
- a contingent payment equivalent in value to 7.38% of Equistar's cash distributions for 2002 and 2003, up to a total of \$35 million, payable in cash, Series B Common Stock or regular common stock, as determined by Lyondell.

These transactions are subject to negotiation, completion and execution of definitive documentation, compliance with the applicable provisions of the partnership agreement and the parent agreement, approval by the boards of directors of Lyondell and Occidental, approval by Lyondell's stockholders, regulatory approvals and other customary conditions. There can be no assurance that the proposed transactions will be completed.

RELATED PARTY TRANSACTIONS

Lyondell makes significant purchases of raw materials from Equistar and provides significant administrative services to Equistar. In addition, Equistar, LCR and LMC, as well as other parties related to Equistar and LCR, engage in significant transactions among themselves. Lyondell believes that such related party transactions are effected on terms substantially no more or less favorable than those that would have been agreed upon by third parties on an arm's-length basis. See Notes 8 and 9 to the Consolidated Financial Statements for further discussion of transactions involving Lyondell, Equistar and LCR.

CRITICAL ACCOUNTING POLICIES

Lyondell applies those accounting policies that management believes best reflect the underlying business and economic events, consistent with generally accepted accounting principles. Lyondell's more significant accounting policies include those related to long-lived assets, major turnaround maintenance and repair costs, accruals for long-term employee benefit costs such as pension, postretirement and other postemployment costs, as well as accruals for taxes based on income. Inherent in such policies are certain key assumptions and estimates made by management. Lyondell's significant accounting policies are summarized in Note 2 to the Consolidated Financial Statements.

With respect to long-lived assets, key assumptions include the estimate of useful lives and the recoverability of carrying values of fixed assets, goodwill and other intangible 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 cost advantages, uncertainties associated with the United States and world economies, the cyclical nature of the chemical and refining industries, and uncertainties associated with governmental actions, whether regulatory or, in the case of LCR, with respect to the Crude Supply Agreement. See also "Forward-Looking Statements."

Lyondell defers the costs of turnaround maintenance and repair activities in excess of \$5 million, amortizing such costs over the period until the next expected major turnaround of the affected unit. During 2001, expenditures of \$34 million were deferred, and are being amortized over an average of 5 years.

Additional information on long-lived assets appears in Note 12 to the Consolidated Financial Statements.

With respect to long-term employee benefit costs, key assumptions include the long-term rate of return on pension assets, the annual rate of inflation of health care costs and the general interest rate environment. The key assumptions underlying these benefit costs are described in Note 17 to the Consolidated Financial Statements.

With respect to income taxes, uncertainties exist with respect to interpretation of complex tax regulations, both federal and foreign. Management generally expects that Lyondell's interpretations will prevail. Further details on Lyondell's income taxes appear in Note 18 to the Consolidated Financial Statements.

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.

CURRENT BUSINESS OUTLOOK

Weak business conditions in the chemical industry have continued through February 2002. There has been no evidence to date of solid demand growth in Equistar's markets that would cause Lyondell to expect a dramatic change. Similarly, Lyondell has not seen any significant improvement in the IC&D businesses through February 2002, although the MTBE business may improve due to seasonal factors. Lyondell expects that operating results for PO and derivatives will not change significantly from the fourth quarter 2001.

In the first quarter of 2002, LCR expects to process 217,000 barrels per day under the Crude Supply Agreement and 27,000 barrels per day of spot market volume. LCR received a declaration of force majeure from PDVSA Oil in January 2002 that may impact these volumes. According to the declaration, volume deliveries could be reduced up to 20.3%, beginning March 1, 2002. In February 2002, LCR was advised by PDVSA Oil that deliveries of crude oil to LCR in March 2002 would be reduced to approximately 198,000 barrels per day. Although additional reductions may be forthcoming, PDVSA Oil has not specified the level of reductions after March 2002. LCR has consistently contested the validity of reductions in deliveries under the Crude Supply Agreement based on force majeure declarations. On February 1, 2002, LCR filed a lawsuit against PDVSA and PDVSA Oil in connection with the January 2002 force majeure declaration, as well as the claimed force majeure from April 1998 to September 2000. See "Item 3. Legal Proceedings - Litigation Matters."

EUROPEAN MONETARY UNION

On January 1, 1999, the euro became the official currency for the member countries of the European Union participating in monetary union. Euro banknotes and coins were introduced on January 1, 2002 and the former national currency banknotes and coins will be withdrawn by July 1, 2002 at the latest. Lyondell converted its systems to invoice customers in euros beginning January 1, 1999. Full conversion of systems to the euro was completed in 2001. European monetary union has not had, and is not expected to have, a material impact on Lyondell's consolidated financial statements. Lyondell's European-based revenues are approximately \$1.0 billion on an annual basis.

ENVIRONMENTAL MATTERS

Various environmental laws and regulations impose substantial requirements upon the operations of Lyondell. Lyondell'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. Lyondell 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. Lyondell, Equistar and LCR also make capital expenditures to comply with environmental regulations. Such capital expenditures totaled approximately \$34 million, \$20 million and \$21 million for 2001, 2000 and 1999, respectively, on a 100% basis for Lyondell, Equistar and LCR. The increase in 2001 capital expenditures resulted from new emission reduction rules, discussed below, and Lyondell currently estimates that these rules will result in further increases in expenditures to approximately \$99 million in 2002 and \$240 million in 2003 for Lyondell, Equistar and LCR.

The eight-county Houston/Galveston region has been designated a severe non-attainment area for ozone by the EPA. Emission reduction controls for nitrogen oxides ("NOx") must be installed at LCR's refinery, each of Lyondell's two facilities and Equistar's six facilities in the Houston/Galveston region during the next several years. Compliance with the provisions of the plan will result in increased capital investment during the next several years and higher annual operating costs for Equistar, Lyondell, and LCR. Capital expenditures related to this matter alone could total between \$400 million and \$500 million for Lyondell, Equistar and LCR before the 2007 deadline. Lyondell's direct expenditures could total between \$65 million and \$80 million. Lyondell's proportionate share of Equistar's expenditures could total between \$85 million and \$105 million, and Lyondell's proportionate share of LCR's expenditures could total between \$75 million and \$95 million. The timing and amount of these expenditures are subject to regulatory and other uncertainties, as well as obtaining the necessary permits and approvals. In January 2001, Lyondell and an organization composed of industry participants filed a lawsuit to encourage adoption of their alternative plan to achieve the same air quality improvement with less negative economic impact on the region. Adoption of the alternative plan, as sought by the lawsuit, is expected to reduce the estimated capital investments for NOx reductions required by Lyondell, Equistar and LCR to comply with the plans for meeting the ozone standard. However, there can be no guarantee as to the ultimate capital cost of implementing any final plan developed to ensure ozone attainment by the 2007 deadline.

As of December 31, 2001, Lyondell's environmental liability for future assessment and remediation costs at its plant sites and a limited number of Superfund sites totaled \$26 million. The liabilities per site range from less than \$1 million to \$11 million and are expected to be incurred over the next two to seven years. Lyondell spent \$7 million to \$8 million annually for each of the last three years for environmental remediation matters. Lyondell estimates that expenditures will also be approximately \$8 million in 2002. In the opinion of management, there is currently no material range of loss in excess of the amount recorded for these sites. 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 Lyondell to reassess its potential exposure related to environmental matters.

In the United States, the Clean Air Act Amendments of 1990 set minimum levels for oxygenates, such as MTBE, in gasoline sold in areas not meeting specified air quality standards. In Europe, demand for MTBE has benefited from new legislation in the 15-nation European Union. The so-called "Auto/Oil Legislation" aimed at reducing air pollution from vehicle emissions was enacted in 1998, and refineries increased consumption of MTBE

to meet the new blending requirements. However, while studies by federal and state agencies and other world organizations have shown that MTBE is safe for use in gasoline, is not carcinogenic and is effective in reducing automotive emissions, 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 has led to public concern about the use of MTBE. Certain federal and state governmental initiatives have sought either to rescind the oxygenate requirement for reformulated gasoline or to restrict or ban the use of MTBE. The initiatives mentioned above or other governmental actions could result in a significant reduction in Lyondell's MTBE sales, which represented approximately 35% of its total 2001 revenues. Lyondell has developed technologies to convert TBA into alternate gasoline blending components should it be necessary to reduce MTBE production in the future. However, implementation of such technologies would require additional capital investment. See "Environmental Matters."

Additionally, the Clean Air Act specified certain emissions standards for vehicles beginning in the 1994 model year and required the EPA to study whether further emissions reductions from vehicles were necessary. In 1998, the EPA concluded that additional controls on gasoline and diesel were necessary to meet these emission standards. New standards for gasoline were finalized in 1999 and will require refiners to produce a low sulfur gasoline by 2004, with final compliance by 2006. A new "on-road" diesel standard was adopted in January 2001 and will require refiners to produce ultra low sulfur diesel by June 2006, with some allowance for a conditional phase-in period that could extend final compliance until 2009. Lyondell estimates that these standards will result in increased capital investment for LCR, totaling between \$175 million to \$225 million for the new gasoline standards and \$250 million to \$300 million for the new diesel standard, between now and the implementation dates. Lyondell's share of LCR's capital expenditures would be between \$250 million and \$300 million. In addition, these standards could result in higher operating costs for LCR. Equistar's business may also be impacted if these standards increase the cost for processing fuel components.

RECENT ACCOUNTING STANDARDS

In June 2001, the Financial Accounting Standards Board ("FASB") issued Statement of Financial Accounting Standards ("SFAS") No. 141, *Business Combinations*, and SFAS No. 142, *Goodwill and Other Intangible Assets*, effective January 1, 2002. SFAS No. 141 is effective for business combinations initiated after June 30, 2001 and is not expected to have a material effect on intangible assets acquired in business combinations effected prior to July 1, 2001. SFAS No. 142 prescribed discontinuance of the amortization of goodwill as well as annual review of goodwill for impairment. Lyondell does not expect the implementation of SFAS No. 142 to result in any impairment of its goodwill. Equistar expects the implementation of SFAS No. 142 to result in the impairment of the entire balance of its goodwill, resulting in a \$1.1 billion charge. Lyondell's 41% share of the Equistar charge, or \$432 million, will be reported as the cumulative effect of a change in accounting principle as of January 1, 2002. In addition, also as a cumulative effect of the implementation of SFAS No. 142, Lyondell's "negative" goodwill, representing a portion of the difference between Lyondell's investment in Equistar and Lyondell's 41% share of Equistar's equity, will be written off, offsetting the cumulative effect charge. Pretax earnings in 2002 and subsequent years will be favorably affected by \$30 million annually because of the elimination of goodwill amortization.

In June 2001, the FASB issued SFAS No. 143, *Accounting for Asset Retirement Obligations*. In October 2001, the FASB issued SFAS No. 144, *Accounting for the Impairment or Disposal of Long-Lived Assets*. Adoption of SFAS No. 143 and SFAS No. 144 in calendar years 2003 and 2002, respectively, is not expected to have a material effect on the consolidated financial statements of Lyondell.

As of January 1, 2001, Lyondell adopted SFAS No. 133, *Accounting for Derivative Instruments and Hedging Activities*, as amended by SFAS No. 138, *Accounting for Certain Derivative Instruments and Certain Hedging Activities*. Implementation of SFAS No. 133 and SFAS No. 138 did not have a material effect on the consolidated financial statements of Lyondell.

FORWARD-LOOKING STATEMENTS

Certain of the statements contained in this report are "forward-looking statements" within the meaning of the federal securities laws. Although Lyondell believes the expectations reflected in such forward-looking statements are reasonable, they do involve certain assumptions, risks and uncertainties, and Lyondell can give no assurance that such expectations will prove to have been correct. Lyondell's actual results could differ materially from those anticipated in these forward-looking statements as a result of certain factors, including:

- the cyclical nature of the chemical and refining industries,
- uncertainties associated with the United States and worldwide economies,
- substantial chemical and refinery capacity additions resulting in oversupply and declining prices and margins,
- the availability and cost of raw materials and utilities,
- access to capital markets,
- technological developments,
- current and potential governmental regulatory actions in the United States and in other countries,
- potential terrorist acts,
- operating interruptions (including leaks, explosions, fires, mechanical failure, unscheduled downtime, labor difficulties, transportation interruptions, spills and releases and other environmental risks), and
- Lyondell's ability to implement its business strategies, including cost reductions.

Many of such factors are beyond Lyondell's or its joint ventures' ability to control or predict. Any of these factors, or a combination of these factors, could materially affect Lyondell'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 Lyondell's or its joint ventures' future performance, and Lyondell'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.

Item 7a. Disclosure of Market and Regulatory Risk

COMMODITY PRICE RISK

A substantial portion of Lyondell's products and raw materials, as well as those of Equistar, LCR and LMC, are commodities whose prices fluctuate as market supply/demand fundamentals change. Accordingly, product margins and the level of Lyondell's profitability tend to fluctuate with changes in the business cycle. Lyondell tries to protect against such instability through various business strategies. These include increasing the olefins plants' raw material flexibility, entering into multi-year processing and sales agreements, moving downstream into olefins derivatives products whose pricing is more stable, and the use of the "deemed margin" contract at LCR. Lyondell has made limited use of derivative instruments for commodity price hedging purposes. No derivatives were outstanding at December 31, 2001.

Equistar has entered into over-the-counter derivatives, primarily price swap contracts related to crude oil to help manage its exposure to commodity price risk with respect to crude oil-related raw material purchases. As of December 31, 2001, there were no outstanding over-the-counter "derivatives." During 2001, while raw material market prices were at relatively high levels, Equistar entered into fixed price contracts for some of its natural gas and NGL requirements. The market prices of these commodities subsequently trended downwards with the result that the fixed prices were significantly in excess of market prices by the fourth quarter 2001. Using December 31, 2001 spot market prices for these products, the negative impact on first quarter 2002 operating results would be approximately \$30 million. Lyondell's after-tax share of said amount would be approximately \$8 million. Since December 31, 2001 natural gas prices generally have declined further. These fixed price contracts substantially terminate by the end of the first quarter 2002.

FOREIGN EXCHANGE RISK

Foreign exchange exposures result from cash flows between U.S. and foreign operations and transactions denominated in currencies other than the local currency of a foreign operating entity. Lyondell's foreign operations account for approximately 45% of consolidated revenues and consolidated assets. Lyondell is using foreign currency forward contracts to minimize the exposure related to euro-denominated capital commitments related to the construction of the PO-11 plant in The Netherlands. Although Lyondell uses these types of contracts to reduce foreign exchange exposures with respect to capital commitments denominated in euros, there can be no assurance that such hedging techniques will protect Lyondell's capital commitments from adverse exchange rate fluctuations or that Lyondell will not incur material losses on such contracts. Furthermore, these contracts are not designed to protect Lyondell's reported results against exchange rate fluctuations. At December 31, 2001, Lyondell had foreign currency forward contracts outstanding in the notional amount of 86 million euros (approximately \$76 million). Assuming a hypothetical 10% unfavorable change in the euro exchange rate from that in effect at year end, the foreign exchange loss on these contracts would be \$8 million. Sensitivity analysis was used for this purpose. The quantitative information about market risk is necessarily limited because it does not take into account the effects of the underlying operating transactions. Lyondell does not engage in any derivatives trading activities.

INTEREST RATE RISK

Lyondell is exposed to interest rate risk with respect to variable-rate debt. During 2001, Lyondell further reduced variable-rate debt from \$1.0 billion at December 31, 2000 to \$634 million at December 31, 2001, thereby reducing its exposure to interest rate risk. Assuming a hypothetical 10% increase in interest rates from those in effect at year end, the increase in annual interest expense on the variable-rate debt would be approximately \$4 million.

At December 31, 2001, Equistar and LCR had variable rate debt of \$299 million and \$535 million, respectively, excluding the note payable by LCR to Lyondell. Assuming a hypothetical 10% increase in interest rates from those in effect at year-end, Lyondell's share of the increase in annual interest expense on the combined variable-rate debt of Equistar and LCR would be approximately \$1 million. Sensitivity analysis was used for both of the above analyses.

REGULATORY RISK

Certain federal and state governmental initiatives in the U.S. have sought either to rescind the oxygenate requirement for reformulated gasoline or to restrict or ban the use of MTBE. Lyondell does not expect the proposals to have a significant impact on MTBE margins and volumes in the near term. In Europe, MTBE demand has benefited from new legislation in the European Union. Should it become necessary to reduce MTBE production over the longer term, Lyondell would need to make capital expenditures to convert its MTBE plants to production of alternate gasoline blending components. The profit margins on such alternate gasoline blending components could differ from those historically realized on MTBE. See "Items 1. and 2. Business and Properties – Intermediate Chemicals and Derivatives – Overview."

New air pollution standards promulgated by federal and state regulatory agencies in the U.S., including those specifically targeting the eight-county Houston/Galveston region, will affect a substantial portion of the operating facilities of Lyondell, Equistar and LCR. Compliance with these standards will result in increased capital investment during the next several years and higher annual operating costs for Lyondell, Equistar and LCR. See "Environmental Matters."

Item 8. Financial Statements and Supplementary Data

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REPORT OF INDEPENDENT ACCOUNTANTS

To the Board of Directors and Stockholders
of Lyondell Chemical Company

In our opinion, the accompanying consolidated balance sheets and the related consolidated statements of income, stockholders' equity and cash flows present fairly, in all material respects, the financial position of Lyondell Chemical Company and its subsidiaries at December 31, 2001 and 2000, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2001 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 auditing standards generally accepted in the United States of America, which require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit 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.

/s/ PricewaterhouseCoopers LLP

PRICEWATERHOUSECOOPERS LLP

Houston, Texas
March 8, 2002

LYONDELL CHEMICAL COMPANY

CONSOLIDATED STATEMENTS OF INCOME

<u>Millions of dollars, except per share data</u>	For the year ended December 31,		
	2001	2000	1999
Sales and other operating revenues	\$ 3,226	\$ 4,036	\$ 3,693
Operating costs and expenses:			
Cost of sales	2,771	3,371	2,891
Selling, general and administrative expenses	149	190	240
Research and development expense	32	35	58
Amortization of goodwill and other intangibles	99	101	100
Unusual charges	63	--	--
	<u>3,114</u>	<u>3,697</u>	<u>3,289</u>
Operating income	112	339	404
Interest expense	(386)	(514)	(616)
Interest income	17	52	27
Other income (expense), net	(4)	27	5
Gain on sale of assets	--	590	--
	<u>(261)</u>	<u>494</u>	<u>(180)</u>
Income (loss) before equity investments, income taxes and extraordinary items			
Income (loss) from equity investments:			
Equistar Chemicals, LP	(77)	101	52
LYONDELL-CITGO Refining LP	129	86	23
Other	(12)	12	1
	<u>40</u>	<u>199</u>	<u>76</u>
Income (loss) before income taxes and extraordinary items	(221)	693	(104)
Provision for (benefit from) income taxes	(76)	223	(24)
Income (loss) before extraordinary items	(145)	470	(80)
Extraordinary losses on extinguishment of debt, net of income taxes	(5)	(33)	(35)
Net income (loss)	<u>\$ (150)</u>	<u>\$ 437</u>	<u>\$ (115)</u>
Basic earnings per share:			
Income (loss) before extraordinary items	\$ (1.24)	\$ 4.00	\$ (.77)
Extraordinary losses	(.04)	(.28)	(.33)
Net income (loss)	<u>\$ (1.28)</u>	<u>\$ 3.72</u>	<u>\$ (1.10)</u>
Diluted earnings per share:			
Income (loss) before extraordinary items	\$ (1.24)	\$ 3.99	\$ (.77)
Extraordinary losses	(.04)	(.28)	(.33)
Net income (loss)	<u>\$ (1.28)</u>	<u>\$ 3.71</u>	<u>\$ (1.10)</u>

See Notes to Consolidated Financial Statements.

LYONDELL CHEMICAL COMPANY
CONSOLIDATED BALANCE SHEETS

<u>Millions, except shares and par value data</u>	<u>December 31,</u>	
	<u>2001</u>	<u>2000</u>
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 146	\$ 260
Accounts receivable:		
Trade, net	317	465
Related parties	35	43
Inventories	316	392
Prepaid expenses and other current assets	116	49
Deferred tax assets	277	136
Total current assets	1,207	1,345
Property, plant and equipment, net	2,293	2,429
Investments and long-term receivables:		
Investment in PO joint ventures	717	621
Investment in Equistar Chemicals, LP	522	599
Receivable from LYONDELL-CITGO Refining LP	229	229
Investment in LYONDELL-CITGO Refining LP	29	20
Other investments and long-term receivables	122	137
Goodwill, net	1,102	1,152
Other assets, net	482	515
Total assets	\$ 6,703	\$ 7,047
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable:		
Trade	\$ 261	\$ 315
Related parties	58	86
Current maturities of long-term debt	7	10
Accrued liabilities	233	323
Total current liabilities	559	734
Long-term debt	3,846	3,844
Other liabilities	583	441
Deferred income taxes	790	702
Commitments and contingencies		
Minority interest	176	181
Stockholders' equity:		
Common stock, \$1.00 par value, 250,000,000 shares authorized, 120,250,000 issued	120	120
Additional paid-in capital	854	854
Retained earnings	247	504
Accumulated other comprehensive loss	(397)	(258)
Treasury stock, at cost, 2,687,080 and 2,689,667 shares, respectively	(75)	(75)
Total stockholders' equity	749	1,145
Total liabilities and stockholders' equity	\$ 6,703	\$ 7,047

See Notes to Consolidated Financial Statements.

LYONDELL CHEMICAL COMPANY

CONSOLIDATED STATEMENTS OF CASH FLOWS

<u>Millions of dollars</u>	For the year ended December 31,		
	2001	2000	1999
Cash flows from operating activities:			
Net income (loss)	\$ (150)	\$ 437	\$ (115)
Adjustments to reconcile net income (loss) to cash provided by operating activities:			
Depreciation and amortization	269	279	330
Gain on sale of assets	--	(590)	--
Losses from equity investments	89	--	--
Unusual charges	63	--	--
Extraordinary items	5	33	35
Deferred income taxes	7	55	36
Changes in assets and liabilities that provided (used) cash:			
Accounts receivable	154	(160)	(124)
Inventories	48	3	15
Accounts payable	(74)	67	52
Prepaid expenses and other current assets	(85)	85	(51)
Other assets and liabilities	(127)	(148)	122
Cash provided by operating activities	199	61	300
Cash flows from investing activities:			
Expenditures for property, plant and equipment	(68)	(104)	(131)
Proceeds from sales of assets, net of cash sold	--	2,497	--
Contributions and advances to affiliates	(173)	(40)	(52)
Distributions from affiliates in excess of earnings	50	85	134
Other	--	--	4
Cash (used in) provided by investing activities	(191)	2,438	(45)
Cash flows from financing activities:			
Repayments of long-term debt	(394)	(2,417)	(4,122)
Proceeds from issuance of long-term debt	393	--	3,400
Payment of debt issuance costs	(15)	(20)	(107)
Issuance of common stock	--	--	736
Dividends paid	(106)	(106)	(97)
Other	--	--	8
Cash used in financing activities	(122)	(2,543)	(182)
Effect of exchange rate changes on cash	--	(3)	1
(Decrease) increase in cash and cash equivalents	(114)	(47)	74
Cash and cash equivalents at beginning of period	260	307	233
Cash and cash equivalents at end of period	\$ 146	\$ 260	\$ 307

See Notes to Consolidated Financial Statements.

LYONDELL CHEMICAL COMPANY

CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY

<u>Millions, except shares and per share data</u>	<u>Common Stock</u>		<u>Additional Paid-in Capital</u>	<u>Retained Earnings</u>	<u>Accumulated Other Comprehensive Income (Loss)</u>	<u>Comprehensive Income (Loss)</u>
	<u>Issued</u>	<u>Treasury</u>				
Balance, January 1, 1999 (80,000,000 shares issued; 2,978,203 treasury shares)	\$ 80	\$ (83)	\$ 158	\$ 387	\$ 32	\$ --
Net loss	--	--	--	(115)	--	(115)
Cash dividends (\$.90 per share)	--	--	--	(97)	--	--
Issuance of common stock	40	--	696	--	--	--
Reissuance of 299,227 treasury shares under restricted stock plan	--	8	--	(3)	--	--
Foreign currency translation, net of tax of \$31	--	--	--	--	(96)	(96)
Comprehensive loss						<u>\$ (211)</u>
Balance, December 31, 1999 (120,250,000 shares issued; 2,678,976 treasury shares)	\$ 120	\$ (75)	\$ 854	\$ 172	\$ (64)	\$ --
Net income	--	--	--	437	--	437
Cash dividends (\$.90 per share)	--	--	--	(106)	--	--
Reissuance of 60,436 treasury shares under restricted stock plan	--	2	--	--	--	--
Forfeiture of 71,127 shares under restricted stock plan	--	(2)	--	1	--	--
Foreign currency translation	--	--	--	--	(183)	(183)
Minimum pension liability, net of tax of \$5	--	--	--	--	(11)	(11)
Comprehensive income						<u>\$ 243</u>
Balance, December 31, 2000 (120,250,000 shares issued; 2,689,667 treasury shares)	\$ 120	\$ (75)	\$ 854	\$ 504	\$ (258)	\$ --
Net loss	--	--	--	(150)	--	(150)
Cash dividends (\$.90 per share)	--	--	--	(106)	--	--
Reissuance of 2,587 treasury shares under restricted stock plan	--	--	--	(1)	--	--
Unrealized loss on derivative instruments	--	--	--	--	(2)	(2)
Foreign currency translation	--	--	--	--	(53)	(53)
Minimum pension liability, net of tax of \$46	--	--	--	--	(84)	(84)
Comprehensive loss						<u>\$ (289)</u>
Balance, December 31, 2001 (120,250,000 shares issued; 2,687,080 treasury shares)	<u>\$ 120</u>	<u>\$ (75)</u>	<u>\$ 854</u>	<u>\$ 247</u>	<u>\$ (397)</u>	

See Notes to Consolidated Financial Statements.

LYONDELL CHEMICAL COMPANY

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

1. Description of the Company and Operations

Lyondell Chemical Company ("Lyondell") is a leading worldwide producer and marketer of propylene oxide ("PO"), propylene glycol, propylene glycol ethers, butanediol ("BDO") toluene diisocyanate ("TDI"), styrene monomer ("SM") and methyl tertiary butyl ether ("MTBE"), the principal derivative of tertiary butyl alcohol ("TBA"). These operations are consolidated and reported as the intermediate chemicals and derivatives ("IC&D") segment.

Lyondell's operations in the petrochemicals and polymers segments are conducted through its joint venture ownership interest in Equistar Chemicals, LP ("Equistar") (see Note 8). Lyondell accounts for its investment in Equistar using the equity method of accounting. Equistar's petrochemicals segment produces olefins, including ethylene, propylene and butadiene; aromatics, including benzene and toluene; oxygenated products, including ethylene oxide and derivatives, ethylene glycol, ethanol and MTBE. Equistar's polymers segment produces polyolefins, including high density polyethylene ("HDPE"), low density polyethylene ("LDPE"), linear-low density polyethylene ("LLDPE") and polypropylene; and performance polymers products, including wire and cable insulating resins, and polymeric powders.

Lyondell's refining segment operations are conducted through its joint venture ownership interest in LYONDELL-CITGO Refining LP ("LCR") (see Note 9). Lyondell accounts for its investment in LCR using the equity method of accounting. LCR produces refined petroleum products, including gasoline, low sulfur diesel, jet fuel, aromatics, and lubricants.

Lyondell has additional operations conducted through its 75% joint venture ownership interest in Lyondell Methanol Company, LP ("LMC"), which produces methanol. Lyondell accounts for its investment in LMC using the equity method of accounting.

2. Summary of Significant Accounting Policies

Basis of Presentation—The consolidated financial statements include the accounts of Lyondell and its subsidiaries. Investments in joint ventures where Lyondell exerts a certain level of management control, but lacks full decision making ability over all major issues, are accounted for using the equity method of accounting. Under those circumstances, this accounting treatment is used even though Lyondell's ownership percentage may exceed 50%.

Revenue Recognition—Revenue from product sales is recognized as risk and title to the product transfer to the customer, which usually occurs when shipment is made.

Cash and Cash Equivalents—Cash equivalents consist of highly liquid debt instruments such as certificates of deposit, commercial paper and money market accounts purchased with an original maturity date of three months or less. Cash equivalents are stated at cost, which approximates fair value. Lyondell's policy is to invest cash in conservative, highly rated instruments and limit the amount of credit exposure to any one institution. Lyondell performs periodic evaluations of the relative credit standing of these financial institutions, which are considered in Lyondell's investment strategy.

Lyondell has no requirements for compensating balances in a specific amount at a specific point in time. Lyondell does maintain compensating balances for some of its banking services and products. Such balances are maintained on an average basis and are solely at Lyondell's discretion. As a result, none of Lyondell's cash is restricted.

Inventories—Inventories are stated at the lower of cost or market. Cost is determined on the last-in, first-out ("LIFO") basis for substantially all inventories, excluding materials and supplies. Materials and supplies are valued using the average cost method.

LYONDELL CHEMICAL COMPANY

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

Inventory exchange transactions, which involve homogeneous commodities in the same line of business 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.

Property, Plant and Equipment—Property, plant and equipment are recorded at cost. Depreciation of property, plant and equipment is computed using the straight-line method over the estimated useful lives of the related assets, generally 25 years for major manufacturing equipment, 30 years for buildings, 10 to 15 years for light equipment and instrumentation, 15 years for office furniture and 3 to 5 years for information system equipment. Upon retirement or sale, Lyondell 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. Lyondell's policy is to capitalize interest cost incurred on debt during the construction of major projects exceeding one year.

Long-Lived Asset Impairment—Lyondell 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 fair value. Long-lived assets to be disposed of are reported at the lower of carrying amount or fair value less cost to sell. Beginning in 2002, as discussed below, goodwill will be reviewed for impairment under SFAS No. 142 based on fair values.

Goodwill—Goodwill represents the excess of purchase price paid over the value assigned to the net tangible and identifiable intangible assets of a business acquired. Goodwill is being amortized using the straight-line method over 40 years, the estimated useful life. Amortization of goodwill will cease as of January 1, 2002 as described below under *Recent Accounting Standards*.

Turnaround Maintenance and Repair Costs—Cost of maintenance and repairs incurred in connection with turnarounds of major units at Lyondell's manufacturing facilities exceeding \$5 million are deferred and amortized using the straight-line method until the next planned turnaround, generally four to six years. These costs are maintenance, repair and replacement costs that are necessary to maintain, extend and improve the operating capacity and efficiency rates of the production units.

Deferred Software Costs—Costs to purchase and to develop software for internal use are deferred and amortized on a straight-line basis over a range of 3 to 7 years.

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

Environmental Remediation Costs—Anticipated expenditures related to investigation and remediation of contaminated sites, which include operating facilities and waste disposal sites, are accrued when it is probable a liability has been incurred and the amount of the liability can reasonably be estimated. Estimates have not been discounted to present value.

Minority Interest—Minority interest primarily represents the interest of third-party investors in a partnership that owns Lyondell's PO/SM II plant at the Channelview, Texas complex. The minority interest share of the partnership's income or loss is reported in "Other income (expense), net" in the Consolidated Statement of Income.

Income Taxes—Deferred income taxes result from temporary differences in the recognition of revenues and expenses for tax and financial reporting purposes. 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.

LYONDELL CHEMICAL COMPANY

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

Foreign Currency Translation—The functional currency of Lyondell's principal foreign operations is the local currency, except the Brazilian operation for which it is the U.S. dollar.

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 period. Actual results could differ from those estimates.

Accounting Changes Adopted in 2001—As of January 1, 2001, Lyondell adopted Statement of Financial Accounting Standards (“SFAS”) No. 133, *Accounting for Derivative Instruments and Hedging Activities*, as amended by SFAS No. 138, *Accounting for Certain Derivative Instruments and Certain Hedging Activities*. Under SFAS No. 133, all derivative instruments are recorded on the balance sheet at fair value. Gains or losses from changes in the fair value of derivatives used as cash flow hedges are deferred in accumulated other comprehensive income, to the extent the hedge is effective, and subsequently reclassified to earnings to offset the impact of the forecasted transaction. Implementation of SFAS No. 133 and SFAS No. 138 did not have a material effect on the consolidated financial statements of Lyondell.

Recent Accounting Standards—In June 2001, the Financial Accounting Standards Board (“FASB”) issued SFAS No. 141, *Business Combinations*, and SFAS No. 142, *Goodwill and Other Intangible Assets*, effective January 1, 2002. SFAS No. 141 is effective for business combinations initiated after June 30, 2001 and is not expected to have a material effect on intangible assets acquired in business combinations effected prior to July 1, 2001. SFAS No. 142 prescribes discontinuance of the amortization of goodwill as well as annual review of goodwill for impairment. Lyondell does not expect the implementation of SFAS No. 142 to result in any impairment of goodwill. Equistar expects the implementation of SFAS No. 142 to result in the impairment of the entire balance of its goodwill, resulting in a \$1.1 billion charge. Lyondell's 41% share of the Equistar charge, or \$432 million, will be reported as the cumulative effect of a change in accounting principle as of January 1, 2002. In addition, also as a cumulative effect of the implementation of SFAS No. 142, Lyondell's “negative” goodwill, representing a portion of the difference between Lyondell's investment in Equistar and Lyondell's 41% share of Equistar's partners' capital, will be written off, offsetting the cumulative effect charge. Pretax earnings in 2002 and subsequent years will be favorably affected by \$30 million annually because of the elimination of goodwill amortization.

In June 2001, the FASB issued SFAS No. 143, *Accounting for Asset Retirement Obligations*. In October 2001, the FASB issued SFAS No. 144, *Accounting for the Impairment or Disposal of Long-Lived Assets*. Adoption of SFAS No. 143 and SFAS No. 144 in calendar years 2003 and 2002, respectively, is not expected to have a material effect on the consolidated financial statements of Lyondell.

Reclassifications—Certain previously reported amounts have been reclassified to conform to classifications adopted in 2001.

3. Unusual Charges

During 2001, Lyondell recorded a pretax charge of \$63 million associated with its decision to exit the aliphatic diisocyanates (“ADI”) business. The decision reflected the limited ongoing strategic value to Lyondell of the ADI business and Lyondell's poor competitive position. The decision involves the shutdown of the ADI manufacturing unit at the Lake Charles, Louisiana facility. The action included a 20% reduction of the Lake Charles workforce, as well as ADI-related research and sales positions at other locations. The \$63 million charge included \$45 million to adjust the carrying values of the ADI assets to their net realizable value, and accrued liabilities of \$15 million for exit costs and \$3 million for severance and other employee-related costs for nearly 100 employee positions that were eliminated. Payments of \$2 million for exit costs and \$2 million for severance and other employee-related costs were made through December 31, 2001, resulting in a remaining accrued liability of \$14 million at year end.

LYONDELL CHEMICAL COMPANY

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

4. Extraordinary Items

As part of the fourth quarter 2001 refinancing (see Note 14), Lyondell wrote off unamortized debt issuance costs and amendment fees of \$7 million related to the early repayment of \$384 million of variable-rate debt outstanding under Lyondell's credit facility. The charge, less a tax benefit of \$2 million, was reported as an extraordinary loss on extinguishment of debt. During 2000, Lyondell retired debt in the principal amount of \$2.2 billion prior to maturity. Lyondell wrote off \$40 million of unamortized debt issuance costs and amendment fees and paid call premiums of \$10 million. The total charges of \$50 million, less a tax benefit of \$17 million, were reported as an extraordinary loss on extinguishment of debt. During 1999, Lyondell retired and partially refinanced debt in the principal amount of \$4.1 billion prior to maturity. Unamortized debt issuance costs and amendment fees of \$54 million, less a tax benefit of \$19 million, were written off and reported as an extraordinary loss on extinguishment of debt. Previously, these debt issuance costs and amendment fees had been deferred and were being amortized to interest expense.

5. Purchase of ARCO Chemical Company

Substantially all of Lyondell's consolidated operations were acquired with the July 28, 1998 acquisition of ARCO Chemical Company ("ARCO Chemical"). Concurrent with the acquisition, which was accounted for as a purchase, Lyondell accrued liabilities for costs associated with the delay of construction of the PO-11 plant, vesting of certain key manager benefits pursuant to a change of control provision, severance costs for the involuntary termination of certain headquarters employees and relocation costs for moving personnel to Lyondell's Houston headquarters. The total accrued liability for these items was approximately \$255 million at the date of acquisition. Lyondell subsequently revised the portion of the estimated liabilities for penalties and cancellation charges related to the PO-11 (see Note 7) lump-sum construction contract and related commitments. Based on the final negotiated terms, Lyondell reduced the accrued liability by \$13 million in 1999 and by \$8 million in 2000. In addition, during 2000 Lyondell finalized the portion of the accrued liability related to employee costs and reduced the liability by \$10 million. The benefit in 2000 from the accrual reversal was substantially offset by other acquisition-related costs. Through December 31, 2001, Lyondell had paid and charged approximately \$217 million against the accrued liability. The remaining \$7 million of the accrued liability relates to PO-11 commitments and will be paid periodically through the first quarter 2003.

6. Gain on Sale of Assets

On March 31, 2000, Lyondell completed the sale of the polyols business and ownership interests in its U.S. PO manufacturing operations to Bayer AG and Bayer Corporation (collectively "Bayer") for approximately \$2.45 billion. Lyondell recorded a pretax gain on the sale of \$544 million. In the third quarter 2000, the final settlement of working capital with Bayer and resolution of certain estimated liabilities resulted in the recording of an additional pretax gain on the sale of \$46 million. The businesses sold had been acquired in the purchase of ARCO Chemical (see Note 5). Lyondell used net proceeds of the asset sale to retire a significant portion of its outstanding debt that resulted from the ARCO Chemical purchase (see Note 14). The polyols business had sales of approximately \$830 million for the year ended December 31, 1999. The accompanying Consolidated Statements of Income included the operating results of the polyols business through March 31, 2000.

As part of the asset sale, Lyondell accrued liabilities of \$53 million for employee severance and other employee benefits, covering approximately 850 employees. The affected employees were generally terminated on or about April 1, 2000, with a limited number providing transition services through mid-2001. During the third quarter 2000, Lyondell reduced the accrued liability by \$25 million due to a reduction in the number of affected employees and significantly lower than expected payments of severance and other benefits. Payments of \$28 million for severance, relocation and other employee benefits were made through December 31, 2001, satisfying the remainder of the liability.

LYONDELL CHEMICAL COMPANY

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

7. Investment in PO Joint Ventures

As part of the sale of the polyols business and ownership interests in its U.S. PO manufacturing operations to Bayer (see Note 6), Lyondell entered into a U.S. PO manufacturing joint venture with Bayer (the "PO Joint Venture") and a separate joint venture with Bayer for certain related PO/SM technology (the "PO Technology Joint Venture"). Lyondell contributed approximately \$1.2 billion of assets at historical book value to the joint ventures, and allocated \$522 million of book value to Bayer to reflect Bayer's purchased partnership interest. Lyondell's residual interests are reported as "Investment in PO joint ventures" in the accompanying Consolidated Balance Sheets.

Bayer's ownership interest represents ownership of an in-kind portion of the PO production of the PO Joint Venture. Bayer's share of PO production from the PO Joint Venture will increase from approximately 1.5 billion pounds in 2001 to approximately 1.6 billion pounds annually in 2004 and thereafter. Lyondell takes in kind the remaining PO production and all co-product (SM and TBA) production from the PO Joint Venture.

Lyondell operates the PO Joint Venture plants and arranges and coordinates the logistics of PO delivery. The partners share in the cost of production based on their product offtake. Lyondell reports the cost of its product offtake as inventory and cost of sales in its Consolidated Financial Statements. Related cash flows are reported in the operating cash flow section of the Consolidated Statement of Cash Flows. Lyondell's investment in the PO Joint Venture and the PO Technology Joint Venture is reduced through recognition of its share of the depreciation and amortization of the assets of the joint ventures, which is included in cost of sales. Other changes in the investment balance are principally due to additional capital investments by Lyondell in the PO Joint Venture and the PO Technology Joint Venture.

In December 2000, Lyondell and Bayer formed a separate joint venture for the construction of a world-scale PO/SM plant, known as PO-11, located in The Netherlands. Lyondell sold a 50% interest in the construction project, based on project expenditures to date, to Bayer for approximately \$52 million. Lyondell and Bayer each contributed their 50% interest in PO-11 into the joint venture and each will bear 50% of the costs going forward to complete the project. The plant is expected to begin operations in the second half of 2003. Lyondell and Bayer do not share marketing or product sales under either the PO Joint Venture or PO-11. Lyondell's contributions to the PO-11 joint venture are reported as "Investment in PO joint ventures" in the accompanying Consolidated Balance Sheets and as "Contributions and advances to affiliates" in the Consolidated Statements of Cash Flows.

LYONDELL CHEMICAL COMPANY

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

8. Equity Interest in Equistar Chemicals, LP

Equistar was formed on December 1, 1997 as a joint venture between Lyondell and Millennium Chemicals Inc. ("Millennium"), to own and operate the businesses contributed by the partners. Lyondell contributed substantially all of the assets comprising its petrochemicals and polymers business segments, while Millennium contributed substantially all of the assets comprising its polyethylene and related products, performance polymers and ethanol businesses. On May 15, 1998, the ethylene, propylene and ethylene oxide and derivatives businesses of Occidental Petroleum Corporation ("Occidental") were contributed to Equistar ("Occidental Contributed Business"). Equistar is operated as a Delaware limited partnership owned by subsidiaries of Lyondell, Millennium and Occidental. Lyondell currently has a 41% joint venture ownership interest, while Millennium and Occidental each have 29.5% (see Note 24).

Summarized financial information for Equistar is as follows:

Millions of dollars	December 31,	
	2001	2000
BALANCE SHEETS		
Total current assets	\$ 1,226	\$ 1,332
Property, plant and equipment, net	3,705	3,819
Goodwill, net	1,053	1,086
Deferred charges and other assets	324	345
Total assets	<u>\$ 6,308</u>	<u>\$ 6,582</u>
Current maturities of long-term debt	\$ 104	\$ 90
Other current liabilities	557	653
Long-term debt	2,233	2,158
Other liabilities and deferred credits	177	141
Partners' capital	3,237	3,540
Total liabilities and partners' capital	<u>\$ 6,308</u>	<u>\$ 6,582</u>

	For the year ended December 31,		
	2001	2000	1999
STATEMENTS OF INCOME			
Sales and other operating revenues	\$ 5,909	\$ 7,495	\$ 5,594
Cost of sales	5,733	6,908	5,002
Other operating costs and expenses	253	253	334
Restructuring and other unusual charges	22	--	96
Operating income (loss)	(99)	334	162
Interest expense, net	189	181	176
Other income, net	8	--	46
Income (loss) before extraordinary loss	(280)	153	32
Extraordinary loss on extinguishment of debt	(3)	--	--
Net income (loss)	<u>\$ (283)</u>	<u>\$ 153</u>	<u>\$ 32</u>

SELECTED CASH FLOW INFORMATION			
Depreciation and amortization	\$ 321	\$ 310	\$ 300
Expenditures for property, plant and equipment	110	131	157

LYONDELL CHEMICAL COMPANY

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

Lyondell's "Income (loss) from equity investments" in Equistar as presented in the Consolidated Statements of Income consists of Lyondell's share of Equistar's net income (loss) and the accretion of the difference between Lyondell's investment and its underlying equity in Equistar's net assets. Upon formation, the difference between Lyondell's investment in Equistar and its underlying equity in Equistar's net assets was approximately \$900 million, of which approximately 50% was "negative" goodwill.

Lyondell purchases ethylene, propylene and benzene at market-related prices from Equistar under various agreements expiring in 2013 and 2014. Under the agreements, Lyondell is required to purchase 100% of its ethylene, propylene and benzene requirements for its Channelview and Bayport, Texas facilities, with the exception of quantities of one product that Lyondell is obligated to purchase under a supply agreement with a third party entered into prior to 1999 and expiring in 2015. In addition, a wholly owned subsidiary of Lyondell licenses MTBE technology to Equistar. Lyondell also purchases a significant portion of the MTBE produced by Equistar at one of its two Channelview units at market-related prices. Equistar's sales to Lyondell were \$405 million, \$572 million and \$246 million for the years ended December 31, 2001, 2000 and 1999, respectively. In addition, Equistar purchased \$4 million, \$2 million and \$6 million from Lyondell for the years ended December 31, 2001, 2000 and 1999, respectively, which are included in Equistar's "Cost of sales".

Sales by Equistar to LCR, primarily of products and processing services, were \$380 million, \$440 million and \$263 million for the years ended December 31, 2001, 2000 and 1999, respectively. Purchases by Equistar from LCR primarily of refinery products, during the years ended December 31, 2001, 2000 and 1999 totaled \$205 million, \$264 million and \$190 million, respectively.

During 1999, Lyondell provided certain administrative services to Equistar, including legal, risk management, treasury, tax and employee benefit plan administrative services, while Equistar provided services to Lyondell in the areas of health, safety and environment, human resources, information technology and legal. Effective January 1, 2000, Lyondell and Equistar implemented a revised agreement to utilize shared services more broadly. Lyondell now provides services to Equistar including information technology, human resources, raw 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 its share of the cost of such services. Direct third party costs, incurred exclusively for Equistar, are charged to Equistar. Billings by Lyondell to Equistar were approximately \$147 million, \$133 million and \$9 million for the years ended December 31, 2001, 2000 and 1999, respectively. The increased billings by Lyondell for 2000 and 2001 resulted from the increase in services provided by Lyondell under the Shared Services Agreement. Billings from Equistar to Lyondell were approximately \$8 million for the year ended December 31, 1999. There were no billings from Equistar to Lyondell for 2001 and 2000 as a result of implementing the Shared Services Agreement.

LYONDELL CHEMICAL COMPANY

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

9. Equity Interest in LYONDELL-CITGO Refining LP

In July 1993, LCR was formed to own and operate Lyondell's refining business. LCR is structured as a Delaware limited partnership owned by subsidiaries of Lyondell and CITGO. Lyondell owns 58.75% of the partnership. Lyondell's "Income from equity investments" in LCR presented in the Consolidated Statement of Income consists of Lyondell's share of LCR's net income and the accretion of the difference between Lyondell's investment and its underlying equity in LCR's net assets. Upon formation, the difference between Lyondell's investment in LCR and its underlying equity in LCR's net assets was approximately \$350 million.

Summarized financial information for LCR is as follows:

Millions of dollars	December 31,	
	2001	2000
BALANCE SHEETS		
Total current assets	\$ 230	\$ 310
Property, plant and equipment, net	1,343	1,319
Deferred charges and other assets	97	67
Total assets	<u>\$ 1,670</u>	<u>\$ 1,696</u>
Notes payable	\$ 50	\$ 470
Other current liabilities	335	397
Long-term debt	450	--
Loans payable to partners	264	264
Other liabilities and deferred credits	79	57
Partners' capital	492	508
Total liabilities and partners' capital	<u>\$ 1,670</u>	<u>\$ 1,696</u>

	For the year ended December 31,		
	2001	2000	1999
STATEMENTS OF INCOME			
Sales and other operating revenues	\$ 3,284	\$ 4,075	\$ 2,571
Cost of sales	2,967	3,826	2,432
Selling, general and administrative expenses	61	60	66
Unusual charges	--	--	6
Operating income	256	189	67
Interest expense, net	51	61	44
State income tax benefit	--	--	(1)
Income before extraordinary item	205	128	24
Extraordinary loss on extinguishment of debt, net of income taxes	(2)	--	--
Net income	<u>\$ 203</u>	<u>\$ 128</u>	<u>\$ 24</u>
SELECTED CASH FLOW INFORMATION			
Depreciation and amortization	\$ 108	\$ 112	\$ 103
Expenditures for property, plant and equipment	109	60	56

LYONDELL CHEMICAL COMPANY

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

Sales from LCR to Equistar, primarily of refinery products, were \$205 million, \$264 million and \$190 million for the years ended December 31, 2001, 2000 and 1999, respectively. Purchases by LCR from Equistar, primarily of certain olefins by-products and processing services, during the years ended December 31, 2001, 2000 and 1999 totaled \$380 million, \$440 million and \$263 million, respectively.

Lyondell has various service and cost sharing arrangements with LCR. Billings by Lyondell to LCR were approximately \$3 million for the year ended December 31, 2001 and \$4 million per year for the years ended December 31, 2000 and 1999. Billings from LCR to Lyondell were approximately \$3 million, \$2 million and \$3 million for the years ended December 31, 2001, 2000 and 1999, respectively. In addition, during 1999, LCR made interest payments to Lyondell of approximately \$9 million on loans and advances.

LCR has a long-term crude supply agreement ("Crude Supply Agreement") with Lagoven, S.A., now known as PDVSA Petróleo, S.A. ("PDVSA Oil"), an affiliate of CITGO (see Note 19). The Crude Supply Agreement incorporates formula prices to be paid by LCR for the crude oil supplied based on the market value of a slate of refined products deemed to be produced from each particular crude oil or feedstock, less: (i) certain deemed refining costs, adjustable for inflation and energy costs; (ii) certain actual costs; and (iii) a deemed margin, which varies according to the grade of crude oil or other feedstock delivered. The actual refining margin earned by LCR may vary from the formula amount depending on, among other things, the efficiency with which LCR conducts its operations from time to time. Although LCR believes that the Crude Supply Agreement reduces the volatility of LCR's earnings and cash flows, the Crude Supply Agreement also limits LCR's ability to enjoy higher margins during periods when the market price of crude oil is low relative to then-current market prices for refined products. In addition, if the actual yields, costs or volumes of the LCR refinery differ substantially from those contemplated by the Crude Supply Agreement, the benefits of this agreement to LCR could be substantially diminished, and could result in lower earnings and cash flow for LCR. Furthermore, there may be periods during which LCR's costs for crude oil under the Crude Supply Agreement may be higher than might otherwise be available to LCR from other sources. A disparate increase in the price of heavy crude oil relative to the market prices for its products, such as experienced in 1999, has the tendency to make continued performance of its obligations under the Crude Supply Agreement less attractive to PDVSA Oil.

In addition, under the terms of a long-term product sales agreement ("Products Agreement"), CITGO purchases substantially all of the refined products produced by LCR. Both PDVSA Oil and CITGO are direct or indirect, wholly owned subsidiaries of Petróleos de Venezuela, S.A., the national oil company of the Republic of Venezuela.

10. Accounts Receivable

Lyondell sells its products primarily to other industrial concerns in the petrochemicals and refining industries. Lyondell performs ongoing credit evaluations of its customers' financial condition, and, in certain circumstances, requires letters of credit from them. Lyondell's allowance for doubtful accounts receivable, which is reflected in the Consolidated Balance Sheets as a reduction of accounts receivable, totaled \$12 million at December 31, 2001 and 2000.

In December 2001, Lyondell amended its existing receivables purchase agreement, originally dated December 1998, with an independent issuer of receivables-backed commercial paper, extending the term until December 2004. Under the terms of the agreement, Lyondell agreed to sell, on an ongoing basis and without recourse, designated accounts receivable through December 2004. To maintain the balance of the accounts receivable sold, Lyondell is obligated to sell new receivables as existing receivables are collected. The agreement currently permits the sale of up to \$85 million of domestic accounts receivable. The amount of receivables permitted to be sold is determined

LYONDELL CHEMICAL COMPANY

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

by a formula, which takes into account, among other factors, Lyondell's credit rating. As of December 31, 2001 and 2000, Lyondell's gross accounts receivable that had been sold aggregated \$65 million and \$53 million, respectively. Increases and decreases in the amount sold have been reported as operating cash flows in the Consolidated Statement of Cash Flows. Costs related to the sales are included in "Other income (expense), net" in the Consolidated Statement of Income.

11. Inventories

Inventories were as follows at December 31:

<u>Millions of dollars</u>	<u>2001</u>	<u>2000</u>
Finished goods	\$ 262	\$ 301
Work-in-process	5	7
Raw materials	19	51
Materials and supplies	30	33
Total inventories	<u>\$ 316</u>	<u>\$ 392</u>

During 2001, inventories carried under the LIFO method of inventory accounting were reduced. Because the LIFO carrying costs are comparable to current costs, there was no significant benefit to income in 2001.

12. 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>2001</u>	<u>2000</u>
Land	\$ 10	\$ 10
Manufacturing facilities and equipment	2,529	2,580
Construction projects in progress	113	95
Total property, plant and equipment	2,652	2,685
Less accumulated depreciation	359	256
Property, plant and equipment, net	<u>\$ 2,293</u>	<u>\$ 2,429</u>

During 2001, Lyondell capitalized \$3 million of interest related to major construction projects. No interest was capitalized during 2000 and 1999.

Goodwill, at cost, and the related accumulated amortization, were as follows at December 31:

<u>Millions of dollars</u>	<u>2001</u>	<u>2000</u>
Goodwill	\$ 1,212	\$ 1,232
Less accumulated amortization	110	80
Goodwill, net	<u>\$ 1,102</u>	<u>\$ 1,152</u>

LYONDELL CHEMICAL COMPANY

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

The unamortized balances of deferred debt issuance, software and turnaround costs were as follows at December 31:

<u>Millions of dollars</u>	<u>2001</u>	<u>2000</u>
Debt issuance costs	\$ 76	\$ 79
Software costs	48	28
Turnaround costs	43	20

Depreciation and amortization is summarized as follows for the periods presented:

<u>Millions of dollars</u>	<u>2001</u>	<u>2000</u>	<u>1999</u>
Property, plant and equipment	\$ 124	\$ 136	\$ 199
Investment in PO joint venture	31	24	--
Intangibles	47	56	60
Goodwill	30	32	34
Turnaround expense	16	10	7
Software costs	6	3	--
Debt issuance costs	15	18	30
	<u>\$ 269</u>	<u>\$ 279</u>	<u>\$ 330</u>

13. Accrued Liabilities

Accrued liabilities were as follows at December 31:

<u>Millions of dollars</u>	<u>2001</u>	<u>2000</u>
Interest	\$ 58	\$ 67
Contractual obligations	52	58
Taxes other than income	46	69
Payroll and benefits	46	69
Income taxes	21	20
Other	10	40
Total accrued liabilities	<u>\$ 233</u>	<u>\$ 323</u>

14. Long-Term Debt

In December 2001, Lyondell issued \$393 million of 9.5% senior secured notes due December 15, 2008. The proceeds were used to prepay \$384 million of variable-rate debt outstanding under Lyondell's credit facility. In September 2001, Lyondell amended its credit facility making certain financial ratio requirements less restrictive. As a result of the September 2001 amendment, the margin used to calculate the variable interest rate increased by 0.5% per annum. Lyondell had previously obtained an amendment to the credit facility and the financial ratio requirements in March 2001.

Lyondell used the net proceeds of the March 31, 2000 asset sale (see Note 6) to reduce its variable-rate debt by \$2.06 billion during 2000. During the fourth quarter 2000, Lyondell also repaid \$200 million of debentures, which matured in November 2000 and reduced variable rate debt by an additional \$150 million.

During May 1999, Lyondell amended a \$7 billion credit facility originally executed in connection with the ARCO Chemical acquisition in 1998. The amended credit facility retained a \$500 million revolving credit facility and also provided the lenders with additional collateral consisting of Lyondell's domestic assets (excluding the assets of its subsidiaries), re-priced the existing loans to reflect then market interest rates and revised certain financial covenants.

LYONDELL CHEMICAL COMPANY

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

Also in May 1999, Lyondell issued 40.25 million shares of common stock, receiving net proceeds of \$736 million. Lyondell also issued \$500 million of senior subordinated notes and \$1.9 billion of senior secured notes. Lyondell borrowed an additional \$1 billion under the amended credit facility. Lyondell used the proceeds to retire \$3.4 billion principal amount of variable rate debt.

The \$500 million credit facility, which matures in July 2003, was undrawn at December 31, 2001. Amounts available under the credit facility are reduced to the extent of certain outstanding letters of credit. Lyondell had outstanding letters of credit totaling \$10 million at December 31, 2001, of which \$4 million reduced the available credit facility.

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

<u>Millions of dollars</u>	<u>2001</u>	<u>2000</u>
Term Loan B	\$ --	\$ 193
Term Loan E due 2006	634	835
Senior Secured Notes, Series A due 2007, 9.625%	900	900
Senior Secured Notes, Series B due 2007, 9.875%	1,000	1,000
Senior Secured Notes due 2008, 9.5%	393	--
Senior Subordinated Notes due 2009, 10.875%	500	500
Debentures due 2005, 9.375%	100	100
Debentures due 2010, 10.25%	100	100
Debentures due 2020, 9.8%	224	224
Other	2	2
Total long-term debt	<u>3,853</u>	<u>3,854</u>
Less current maturities	7	10
Long-term debt, net	<u>\$ 3,846</u>	<u>\$ 3,844</u>

Term Loan E bears interest at LIBOR plus 4.375%.

The credit facility and the indentures under which Lyondell's senior secured notes and senior subordinated notes were issued contain covenants that, subject to exceptions, restrict sale and leaseback transactions, lien incurrence, debt incurrence, dividends and investments, sales of assets and mergers and consolidations. In addition, the credit facility requires Lyondell to maintain specified financial ratios and consolidated net worth, in all cases as provided in the credit facility. The breach of these covenants could permit the lenders to declare the loans immediately payable and could permit the lenders under Lyondell's credit facility to terminate future lending commitments.

Following amendments to the indentures for certain Equistar debt in November 2000, Lyondell is guarantor of \$400 million of the Equistar debt and a co-obligor with Equistar for \$31 million. Under certain limited circumstances the debt holders of the \$31 million on which Lyondell is a co-obligor have the right to require repurchase of the debt by Lyondell.

Aggregate maturities of all long-term debt during the next five years are \$7 million in 2002, \$7 million in 2003, \$7 million in 2004, \$107 million in 2005, \$608 million in 2006 and \$3.1 billion thereafter.

LYONDELL CHEMICAL COMPANY

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

15. Lease Commitments

Lyondell leases various facilities and equipment under noncancelable lease arrangements for varying periods. As of December 31, 2001, 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:

<u>Millions of dollars</u>	
2002	\$ 58
2003	48
2004	45
2005	42
2006	37
Thereafter	86
Less sublease rentals	<u>(6)</u>
Total minimum lease payments	<u>\$ 310</u>

Operating lease net rental expenses for 2001, 2000 and 1999 were \$70 million, \$74 million and \$106 million, respectively.

16. Financial Instruments and Derivatives

During 2001 and 2000, Lyondell entered into foreign currency forward contracts to hedge foreign exchange exposure related to euro-denominated capital commitments on the PO-11 construction project. At December 31, 2000, forward contracts in the notional amount of 134 million euros, or approximately \$125 million, were outstanding. Based on quoted market prices, the fair market value of these derivative instruments at December 31, 2000 was insignificant. Accordingly, on January 1, 2001, a transition adjustment in accumulated other comprehensive income, representing the cumulative effect of an accounting change in accordance with the transition provisions of SFAS No. 133, was not required.

The fair value of outstanding foreign currency forward contracts at December 31, 2001 reflected an unrealized pretax gain of \$3 million, all of which was deemed effective and, therefore, a \$2 million after-tax gain was recognized in accumulated other comprehensive income. The \$2 million unrealized gain net of \$4 million of realized losses during 2001 is recorded in accumulated other comprehensive income, and is expected to be reclassified to earnings over the useful life of the PO-11 project upon commencement of its depreciation.

Foreign currency forward contracts outstanding at December 31 were as follows:

	<u>2001</u>	<u>2000</u>
Notional amount:		
Euros	86	134
U.S. dollars	76	125
Fair value of asset	3	--

The fair value of the foreign currency forward contracts represents the amount to be exchanged if the existing contracts were settled at year-end and are based on market quotes.

LYONDELL CHEMICAL COMPANY

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

In addition, during 2001 Lyondell entered into price swap contracts with Occidental Energy Marketing, Inc. covering 42 million gallons of unleaded gasoline to hedge the cost of butane, a key raw material of MTBE. These contracts matured during 2001, resulting in a \$4 million pretax gain, \$3 million after-tax, that was reclassified to earnings. As of December 31, 2001, there were no outstanding price swap contracts covering unleaded gasoline.

The following table summarizes activity included in accumulated other comprehensive income ("AOCI") related to the after-tax impact of the effective portion of the fair value of derivative instruments for the year ended December 31:

<u>Millions of dollars</u>	<u>2001</u>
Gain (loss):	
Balance at beginning of period	\$ - -
Net gains on derivative instruments	1
Reclassification of gains on derivative instruments to earnings	(3)
Net change in AOCI for the period	(2)
Net loss on derivative instruments included in AOCI at December 31, 2001	<u>\$ (2)</u>

Foreign exchange transactions were insignificant in 2001, a net gain of \$13 million in 2000 and a net loss of \$2 million in 1999. The effects of foreign currency derivative instruments were not significant during 2000 and 1999.

The carrying value and the estimated fair value of Lyondell's non-current, non-derivative financial instruments as of December 31, 2001 and 2000 are shown in the table below:

<u>Millions of dollars</u>	<u>2001</u>		<u>2000</u>	
	<u>Carrying Value</u>	<u>Fair Value</u>	<u>Carrying Value</u>	<u>Fair Value</u>
Investments and long-term receivables	\$ 1,619	\$ 1,708	\$ 1,606	\$ 1,606
Long-term debt (including current maturities)	3,853	3,816	3,854	3,777

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 notes payable, approximated their carrying value due to their short maturity. Investments and long-term receivables, which consist primarily of equity investments in affiliated companies, were 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 Lyondell for debt with terms and average maturities similar to Lyondell's debt portfolio.

Lyondell is exposed to credit risk related to its financial instruments in the event of nonperformance by the counterparties. Lyondell does not generally require collateral or other security to support these financial instruments. The counterparties to these transactions are major institutions deemed creditworthy by Lyondell. Lyondell does not anticipate nonperformance by the counterparties.

LYONDELL CHEMICAL COMPANY

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

17. Pension and Other Postretirement Benefits

Lyondell has defined benefit pension plans which cover employees in the United States and a number of other countries. Retirement benefits are based on years of service and the employee's highest three consecutive years of compensation during the last ten years of service. Lyondell accrues pension costs based upon an actuarial valuation and funds the plans through periodic contributions to pension trust funds as required by applicable law. Lyondell also has unfunded supplemental nonqualified retirement plans, which provide pension benefits for certain employees in excess of the tax-qualified plans' limits. In addition, Lyondell sponsors unfunded postretirement benefit plans other than pensions for U.S. employees, which provide medical and life insurance benefits. The postretirement medical plans are contributory, while the life insurance plans are noncontributory.

The following table provides a reconciliation of benefit obligations, plan assets and the funded status of the plans:

Millions of dollars	Pension Benefits		Other Postretirement Benefits	
	2001	2000	2001	2000
Change in benefit obligation:				
Benefit obligation, January 1	\$ 431	\$ 399	\$ 69	\$ 72
Service cost	15	14	2	2
Interest cost	36	31	5	5
Plan amendments	--	--	19	--
Actuarial loss (gain)	108	64	--	(11)
Net effect of settlements, curtailments and special termination benefits	--	(19)	--	1
Benefits paid	(34)	(53)	(4)	(3)
Transfers	1	--	--	3
Foreign exchange effects	(3)	(5)	--	--
Benefit obligation, December 31	554	431	91	69
Change in plan assets:				
Fair value of plan assets, January 1	412	456	--	--
Actual return on plan assets	(26)	5	--	--
Company contributions	17	14	4	3
Benefits paid	(34)	(53)	(4)	(3)
Foreign exchange effects	(5)	(10)	--	--
Fair value of plan assets, December 31	364	412	--	--
Funded status	(190)	(19)	(91)	(69)
Unrecognized actuarial loss	224	73	7	9
Unrecognized prior service cost (benefit)	5	5	(4)	(26)
Unrecognized transition obligation	3	3	--	--
Net amount recognized	\$ 42	\$ 62	\$ (88)	\$ (86)
Amounts recognized in the Consolidated Balance Sheet consist of:				
Prepaid benefit cost	\$ 17	\$ 71	\$ --	\$ --
Accrued benefit liability	(124)	(28)	(88)	(86)
Intangible asset	3	3	--	--
Accumulated other comprehensive income – pretax	146	16	--	--
Net amount recognized	\$ 42	\$ 62	\$ (88)	\$ (86)

LYONDELL CHEMICAL COMPANY

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

The increase in other postretirement benefit obligations in 2001 resulted from a medical plan amendment that increased Lyondell's maximum contribution level per employee by 25%. The above table for pension benefits includes foreign pension plans of Lyondell. These plans constituted approximately 18% of the benefit obligation and 26% of the plan assets at December 31, 2001 and 20% of the benefit obligation and 25% of the plan assets at December 31, 2000. The assumptions used in determining the net periodic pension cost and pension obligation for foreign pension plans were based on the economic environment of each applicable country.

Pension plans with 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>2001</u>	<u>2000</u>
Benefit obligations	\$ 475	\$ 152
Accumulated benefit obligations	399	112
Fair value of assets	285	86

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>2001</u>	<u>2000</u>	<u>1999</u>	<u>2001</u>	<u>2000</u>	<u>1999</u>
Components of net periodic benefit cost:						
Service cost	\$ 15	\$ 14	\$ 18	\$ 2	\$ 2	\$ 2
Interest cost	36	31	32	5	5	5
Expected return on plan assets	(36)	(40)	(40)	--	--	--
Prior service cost amortization	--	1	1	(2)	(3)	(3)
Actuarial loss amortization	9	2	2	--	--	2
Net effect of curtailments, settlements and special termination benefits	9	(13)	--	1	(4)	--
Net periodic benefit cost	<u>\$ 33</u>	<u>\$ (5)</u>	<u>\$ 13</u>	<u>\$ 6</u>	<u>\$ --</u>	<u>\$ 6</u>

The 2001 net effect of curtailments, settlements and special termination benefits was primarily due to lump-sum settlements taken by retiring employees, which resulted in a net charge, while the 2000 net effect primarily related to employees terminated as part of the asset sale to Bayer, which resulted in a net credit. Foreign pension plans comprised \$1 million, \$2 million and \$2 million of net periodic pension cost for 2001, 2000 and 1999, respectively.

The assumptions used in determining the domestic net pension cost and net pension liability were as follows at December 31:

	<u>Pension Benefits</u>			<u>Other Postretirement Benefits</u>		
	<u>2001</u>	<u>2000</u>	<u>1999</u>	<u>2001</u>	<u>2000</u>	<u>1999</u>
Weighted-average assumptions as of December 31:						
Discount rate	7.00%	7.50%	8.00%	7.00%	7.50%	8.00%
Expected return on plan assets	9.50%	9.50%	9.50%	--	--	--
Rate of compensation increase	4.50%	4.50%	4.75%	4.50%	4.50%	4.75%

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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

The assumed annual rate of increase in the per capita cost of covered health care benefits as of December 31, 2001 was 7.0% for 2002 through 2004 and 5.0% thereafter. The health care cost trend rate assumption does not have a significant effect on the amounts reported due to limits on Lyondell'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 postretirement benefit liability as of December 31, 2001 by \$1 million and would not have a material effect on the aggregate service and interest cost components of the net periodic postretirement benefit cost for the year then ended.

Lyondell also maintains voluntary defined contribution savings plans for eligible employees. Contributions to the plans by Lyondell were \$12 million, \$11 million and \$10 million for the years ended December 31, 2001, 2000 and 1999, respectively.

18. 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>2001</u>	<u>2000</u>	<u>1999</u>
Current:			
Federal	\$ (92)	\$ 154	\$ (71)
Foreign	15	8	6
State	(2)	6	5
Total current	<u>(79)</u>	<u>168</u>	<u>(60)</u>
Deferred:			
Federal	(35)	71	38
Foreign	52	(31)	10
State	(14)	15	(12)
Total deferred	<u>3</u>	<u>55</u>	<u>36</u>
Income tax (benefit) provision before tax effects of extraordinary items and other comprehensive income	\$ (76)	\$ 223	\$ (24)
Tax effect of extraordinary items	(2)	(17)	(19)
Tax effects of elements of other comprehensive income:			
Minimum pension liability	(46)	(5)	--
Net unrealized losses on derivative instruments	(1)	--	--
Total income tax (benefit) provision on comprehensive income	<u>\$ (125)</u>	<u>\$ 201</u>	<u>\$ (43)</u>

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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(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. Significant components of Lyondell's deferred tax liabilities and assets were as follows as of December 31:

<u>Millions of dollars</u>	<u>2001</u>	<u>2000</u>
Deferred tax liabilities:		
Accelerated tax depreciation and amortization	\$ 561	\$ 717
Investments in joint venture partnerships	528	358
Other	6	47
Total deferred tax liabilities	<u>1,095</u>	<u>1,122</u>
Deferred tax assets:		
Net operating loss carryforwards	318	161
Provisions for employee benefit plans	92	70
Federal benefit attributable to deferred foreign taxes	35	72
Alternative minimum tax credit carryforwards	42	135
Other	111	138
Total deferred tax assets	<u>598</u>	<u>576</u>
Deferred tax asset valuation allowance	<u>(16)</u>	<u>(20)</u>
Net deferred tax assets	<u>582</u>	<u>556</u>
Net deferred tax liabilities	<u>513</u>	<u>566</u>
Less current portion of deferred tax assets	<u>(277)</u>	<u>(136)</u>
Long-term deferred income taxes	<u>\$ 790</u>	<u>\$ 702</u>

Lyondell has available alternative minimum tax ("AMT") credit carryforwards of approximately \$42 million after carryback of the current year AMT net operating loss. This credit is available to offset future U.S. federal income taxes and has no expiration date. Lyondell also has federal, state and foreign tax loss carryforwards, the tax benefit of which would be \$318 million at the current statutory rate. The federal loss carryforward benefits of \$254 million would begin expiring in 2014, and substantially all of the foreign tax loss carryforward benefit of \$63 million has no expiration date.

Management believes that it is more likely than not that the \$582 million of deferred tax assets in excess of the valuation reserve of \$16 million at December 31, 2001 will be realized. This conclusion is supported by the significant excess of deferred tax liabilities over deferred tax assets. These deferred tax liabilities, primarily related to depreciation, will reverse over the next 15 to 20 years. In addition, as discussed above, certain carryforwards have no expiration dates or long carryforward periods prior to their expiration.

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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

The domestic and foreign components of income (loss) before income taxes and extraordinary items 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:

<u>Millions of dollars</u>	<u>2001</u>	<u>2000</u>	<u>1999</u>
Income (loss) before income taxes and extraordinary items:			
Domestic	\$ (280)	\$ 759	\$ (137)
Foreign	59	(66)	33
Total	<u>\$ (221)</u>	<u>\$ 693</u>	<u>\$ (104)</u>
Theoretical income tax at U.S. statutory rate	\$ (77)	\$ 243	\$ (36)
Increase (reduction) resulting from:			
Reorganization of foreign operations	--	(37)	--
Other effects of foreign operations	17	(18)	8
Changes in estimates for prior year items	(23)	--	--
Goodwill and other permanent differences	3	11	5
State income taxes, net of federal	1	14	(3)
Other, net	3	10	2
Income tax (benefit) provision	<u>\$ (76)</u>	<u>\$ 223</u>	<u>\$ (24)</u>
Effective income tax rate	<u>(34.0)%</u>	<u>32.2%</u>	<u>(23.3)%</u>

The change in estimate for prior year items primarily represents certain tax effects related to the sale of assets to Bayer in 2000.

19. Commitments and Contingencies

Bayer Claim—In June 2001, Bayer AG delivered a notice of claim to Lyondell in relation to its March 2000 purchase of Lyondell's polyols business, asserting various claims relating to alleged breaches of representations and warranties related to condition of the business and assets. The notice of claim seeks damages in excess of \$100 million. Lyondell has vigorously contested the claims. The agreement governing the transaction with Bayer provides a formal dispute resolution process, the final step of which would be binding arbitration in Houston, Texas. Currently, as part of the process, the parties are engaged in negotiations to resolve the claims. Lyondell does not expect the resolution of the claims to result in any material adverse effect on its business, financial condition, liquidity or results of operations.

Capital Commitments—Lyondell has various commitments related to capital expenditures, all made in the normal course of business. At December 31, 2001, major capital commitments primarily consisted of Lyondell's 50% share of those related to the construction of a world-scale PO facility, known as PO-11, in The Netherlands. The outstanding commitments totaled \$117 million as of December 31, 2001.

Construction Lease—During the third quarter 2000, construction began on a new butanediol ("BDO") production facility in Europe known as BDO-2. Construction is being financed by an unaffiliated entity that was established for the purpose of serving as lessor with respect to this facility. Construction spending through December 31, 2001, including interest capitalized during construction, totaled 144 million euros, or approximately \$127 million using December 31, 2001 exchange rates. Upon completion in 2002, Lyondell will lease the facility under the operating lease for an initial term of five years. Minimum payments under the operating lease will approximate an amount equivalent to interest on the final construction costs at the interest rate implicit in the lease. Lyondell may, at its option, purchase the facility at any time during the lease term for the unrecovered construction costs of the lessor or may renew the lease for four successive five-year terms. If Lyondell does not exercise the purchase option before

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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

the end of the last renewal period, the facility will be sold. In the event the sales proceeds are less than their guaranteed residual value, Lyondell will pay the difference to the lessor. The residual value at the end of the lease term is estimated at approximately 206 million euros, or \$181 million using December 31, 2001 exchange rates. Under the transaction documents, Lyondell is subject to certain financial and other covenants that are substantially the same as those contained in the credit facility.

TDI Agreements—Lyondell is committed to purchase minimum annual quantities of TDI at plant cost from Rhodia through 2016. Such annual commitments are currently estimated at approximately 200 million pounds of TDI per year. Under a predecessor tolling agreement and resale agreement, both entered into in 1995, Lyondell's purchases, including amounts in excess of its previous minimum of 212 million pounds of TDI per year, were \$120 million, \$159 million and \$154 million in 2001, 2000 and 1999, respectively. The resale agreement expired December 31, 2001.

Crude Supply Agreement—Under the Crude Supply Agreement, PDVSA Oil is required to sell, and LCR is required to purchase, 230,000 barrels per day of extra heavy crude oil. This constitutes approximately 86% of the refinery's capacity of 268,000 barrels per day of crude oil. By letter dated April 16, 1998, PDVSA Oil informed LCR that the Venezuelan government, through the Ministry of Energy and Mines, had instructed that production of certain grades of crude oil be reduced. The letter stated that PDVSA Oil declared itself in a force majeure situation and would reduce deliveries of crude oil. Such reductions in deliveries were purportedly based on announced OPEC production cuts. LCR began receiving reduced deliveries of crude oil from PDVSA Oil in August 1998, of 195,000 barrels per day in that month. LCR was advised by PDVSA Oil in May 1999 of a further reduction in the deliveries of crude oil supplied under the Crude Supply Agreement to 184,000 barrels per day, effective May 1999.

On several occasions since then, PDVSA Oil further reduced crude oil deliveries, although it made payments under a different provision of the Crude Supply Agreement in partial compensation for such reductions. Subsequently, PDVSA Oil unilaterally increased deliveries of crude oil to LCR to 195,000 barrels per day effective April 2000, to 200,000 barrels per day effective July 2000 and to 230,000 barrels per day effective October 2000.

During 2001, PDVSA Oil informed LCR that the Venezuelan government, through the Ministry of Energy and Mines, had instructed that production of certain grades of crude oil be reduced effective February 1, 2001. PDVSA Oil declared itself in a force majeure situation, but did not reduce crude oil deliveries to LCR during 2001. In January 2002, PDVSA Oil again declared itself in a force majeure situation and stated that crude oil deliveries could be reduced by up to 20.3% beginning March 1, 2002. In February 2002, LCR was advised by PDVSA Oil that deliveries of crude oil to LCR in March 2002 would be reduced to approximately 198,000 barrels per day. Although additional reductions may be forthcoming, PDVSA Oil has not specified the level of reductions after March 2002.

LCR has consistently contested the validity of PDVSA Oil's and PDVSA's reductions in deliveries under the Crude Supply Agreement. The parties have different interpretations of the provisions of the contracts concerning the delivery of crude oil. The contracts do not contain dispute resolution procedures, and the parties have been unable to resolve their commercial dispute. As a result, on February 1, 2002, LCR filed a lawsuit against PDVSA and PDVSA Oil in connection with the January 2002 force majeure declaration, as well as the claimed force majeure from April 1998 to September 2000.

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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

In 1999, PDVSA announced its intention to renegotiate its crude supply agreements with all third parties, including LCR. In light of PDVSA's announced intent, there can be no assurance that PDVSA Oil will continue to perform its obligations under the Crude Supply Agreement. However, it has confirmed that it expects to honor its commitments if a mutually acceptable restructuring of the Crude Supply Agreement is not achieved. From time to time, the Company and PDVSA have had discussions covering both a restructuring of the Crude Supply Agreement and a broader restructuring of the LCR partnership. Lyondell is unable to predict whether changes in either arrangement will occur. The breach or termination of the Crude Supply Agreement would require LCR to purchase all or a portion of its crude oil feedstocks in the merchant market, could subject LCR to significant volatility and price fluctuations and could adversely affect LCR and, therefore, Lyondell.

Cross Indemnity Agreement—In connection with the 1988 transfer of assets and liabilities to Lyondell from Atlantic Richfield Company ("ARCO"), now wholly owned by BP p.l.c., Lyondell agreed to assume certain liabilities arising out of the operation of Lyondell's integrated petrochemicals and refining business prior to July 1, 1988. In connection with the transfer of such liabilities, Lyondell and ARCO entered into an agreement, updated in 1997 ("Revised Cross-Indemnity Agreement"), whereby Lyondell agreed to defend and indemnify ARCO against certain uninsured claims and liabilities which ARCO may incur relating to the operation of Lyondell prior to July 1, 1988, including certain liabilities which may arise out of pending and future lawsuits. For current and future cases related to Lyondell's products and operations, ARCO and Lyondell bear a proportionate share of judgment and settlement costs according to a formula that allocates responsibility based upon years of ownership during the relevant time period. Under the Revised Cross-Indemnity Agreement, Lyondell will assume responsibility for its proportionate share of future costs for waste site matters not covered by ARCO insurance.

In connection with the acquisition of ARCO Chemical, Lyondell succeeded, indirectly, to a cross indemnity agreement with ARCO whereby ARCO Chemical indemnified ARCO against certain claims or liabilities that ARCO may incur relating to ARCO's former ownership and operation of the businesses of ARCO Chemical, including liabilities under laws relating to the protection of the environment and the workplace, and liabilities arising out of certain litigation. As part of the agreement, ARCO indemnified ARCO Chemical with respect to claims or liabilities and other matters of litigation not related to the ARCO Chemical business.

Indemnification Arrangements Relating to Equistar—Lyondell, Millennium Petrochemicals and certain subsidiaries of Occidental have each agreed to provide certain indemnifications to Equistar with respect to the petrochemicals and polymers businesses contributed by the partners. In addition, Equistar agreed to assume third party claims that are related to certain pre-closing contingent liabilities that are asserted prior to December 1, 2004 as to Lyondell and Millennium Petrochemicals, and May 15, 2005 as to certain Occidental subsidiaries, to the extent the aggregate thereof does not exceed \$7 million to each partner, subject to certain terms of the respective asset contribution agreements. As of December 31, 2001, Equistar had incurred approximately \$5 million under the \$7 million indemnification basket with respect to the business contributed by Lyondell. Equistar also agreed to assume third party claims that are related to certain pre-closing contingent liabilities that are asserted for the first time after December 1, 2004 as to Lyondell and Millennium Petrochemicals, and for the first time after May 15, 2005 as to certain Occidental subsidiaries. As of September 30, 2001, Equistar, Lyondell, Millennium Petrochemicals and certain subsidiaries of Occidental amended the asset contribution agreements governing these indemnification obligations to clarify the treatment of, and procedures pertaining to the management of, certain claims arising under the asset contribution agreements. Lyondell believes that these amendments do not materially change the asset contribution agreements.

Environmental Remediation—As of December 31, 2001, Lyondell's environmental liability for future remediation costs at its plant sites and a limited number of Superfund sites totaled \$26 million. The liabilities per site range from less than \$1 million to \$11 million and are expected to be incurred over the next two to seven years. In the opinion of management, there is currently no material estimable range of loss in excess of the amount recorded for these sites. 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 Lyondell to reassess its potential exposure related to environmental matters.

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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

Clean Air Act—The eight-county Houston/Galveston region has been designated a severe non-attainment area for ozone by the U.S. Environmental Protection Agency (“EPA”). Emission reduction controls for nitrogen oxides (“NOx”) must be installed at LCR’s refinery and each of Lyondell’s two facilities and Equistar’s six facilities in the Houston/Galveston region. Lyondell estimates that aggregate related capital expenditures could total between \$400 million and \$500 million for Lyondell, Equistar and LCR before the 2007 deadline. Lyondell’s direct share of such expenditures could total between \$65 million and \$80 million. Lyondell’s proportionate share of Equistar’s expenditures could total between \$85 million and \$105 million, and Lyondell’s proportionate share of LCR’s expenditures could total between \$75 million and \$95 million. The timing and amount of these expenditures are subject to regulatory and other uncertainties, as well as obtaining the necessary permits and approvals. In January 2001, Lyondell and an organization composed of industry participants filed a lawsuit to encourage adoption of their alternative plan to achieve the same air quality improvement with less negative economic impact on the region. Adoption of the alternative plan, as sought by the lawsuit, is expected to reduce the estimated capital investments for NOx reductions required by Lyondell, Equistar and LCR to comply with the standards. However, there can be no guarantee as to the ultimate capital cost of implementing any final plan developed to ensure ozone attainment by the 2007 deadline.

In the United States, the Clean Air Act Amendments of 1990 set minimum levels for oxygenates, such as MTBE, in gasoline sold in areas not meeting specified air quality standards. 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 has led to public concern about the use of MTBE. Certain federal and state governmental initiatives have sought either to rescind the oxygenate requirement for reformulated gasoline or to restrict or ban the use of MTBE. These initiatives or other governmental actions could result in a significant reduction in Lyondell’s MTBE sales, which represented approximately 35% of Lyondell’s 2001 revenues. Lyondell has developed technologies to convert TBA into alternate gasoline blending components should it be necessary to reduce MTBE production in the future. However, implementation of such technologies would require additional capital investment.

The Clean Air Act specified certain emissions standards for vehicles beginning in the 1994 model year and required the EPA to study whether further emissions reductions from vehicles were necessary. In 1998, the EPA concluded that additional controls on gasoline and diesel fuel were necessary to meet these emission standards. New standards for gasoline were finalized in 1999 and will require refiners to produce a low sulfur gasoline by 2004, with final compliance by 2006. A new “on-road” diesel standard was adopted in January 2001 and will require refiners to produce ultra low sulfur diesel by June 2006, with some allowance for a conditional phase-in period that could extend final compliance until 2009. Lyondell estimates that these standards will result in increased capital investment for LCR, totaling between \$175 million to \$225 million for the new gasoline standards and \$250 million to \$300 million for the new diesel standard, between now and the implementation dates. Lyondell’s share of LCR’s capital expenditures would be between \$250 million and \$300 million. In addition, these standards could result in higher operating costs for LCR. Equistar’s business may also be impacted if these standards increase the cost for processing fuel components.

General—Lyondell is involved in various lawsuits and proceedings. Subject to the uncertainty inherent in all litigation, management believes the resolution of these proceedings will not have a material adverse effect on the financial position, liquidity or results of operations of Lyondell.

In the opinion of management, any liability arising from the matters discussed in this note is not expected to have a material adverse effect on the financial position or liquidity of Lyondell. However, the adverse resolution in any reporting period of one or more of these matters discussed in this note could have a material impact on Lyondell’s results of operations for that period without giving effect to contribution or indemnification obligations of co-defendants or others, or to the effect of any insurance coverage that may be available to offset the effects of any such award.

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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

20. Stockholders' Equity

Preferred Stock—Lyondell has authorized 80 million shares of \$.01 par value preferred stock. As of December 31, 2001, none was outstanding.

Common Stock—In May 1999, Lyondell issued 40.25 million shares of common stock at \$19 per share. The net proceeds of \$736 million were credited to "Common stock" and "Additional paid in capital" in the Consolidated Balance Sheet.

Basic and Diluted Earnings per Share—Basic earnings per share for income (loss) before extraordinary items for the periods presented are computed based upon the weighted average number of shares outstanding for the periods. Diluted earnings per share for income (loss) before extraordinary items include the effect of outstanding stock options issued under the Executive Long-Term Incentive Plan and the Incentive Stock Option Plan. These stock options were antidilutive in 2001 and 1999. Earnings (loss) per share ("EPS") data is as follows for the years ended December 31:

<u>Thousands of shares</u>	<u>2001</u>		<u>2000</u>		<u>1999</u>	
	<u>Shares</u>	<u>EPS</u>	<u>Shares</u>	<u>EPS</u>	<u>Shares</u>	<u>EPS</u>
Basic	117,563	\$(1.24)	117,557	\$ 4.00	103,115	\$(.77)
Dilutive effect of options	--	--	221	(.01)	--	--
Diluted	<u>117,563</u>	<u>\$(1.24)</u>	<u>117,778</u>	<u>\$ 3.99</u>	<u>103,115</u>	<u>\$(.77)</u>

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

<u>Millions of dollars</u>	<u>2001</u>	<u>2000</u>
Foreign currency translation	\$ (300)	\$ (247)
Minimum pension liability	(95)	(11)
Unrealized loss on derivative instruments	(2)	--
Total accumulated other comprehensive loss	<u>\$ (397)</u>	<u>\$ (258)</u>

Treasury Stock—From time to time Lyondell purchases its shares in the open market to issue under its employee compensation and benefits plans, including stock option and restricted stock plans. For the years ended December 31, 2001, 2000 and 1999, respectively, Lyondell reissued, under the Restricted Stock Plan, 2,587 shares, 60,436 shares and 299,227 shares previously purchased.

1999 Incentive Plan—The 1999 Long-Term Incentive Plan ("1999 LTIP") provides for the grant of awards to employees of Lyondell and its subsidiaries. Awards to employees may be in the form of (i) stock options, (ii) stock appreciation rights, payable in cash or common stock, (iii) restricted grants of common stock or units denominated in common stock, (iv) performance grants denominated in common stock or units denominated in common stock that are subject to the attainment of one or more goals, (v) grants of rights to receive the value of a specified number of shares of common stock (phantom stock), and (vi) a cash payment. Awards of common stock under the 1999 LTIP are generally limited to the lesser of ten million shares or 10% of the number of shares of common stock outstanding at the time of granting of the award. During 2001, Lyondell awarded stock option grants for 3,143,231 shares and grants for 797,949 performance shares under this plan. The weighted-average grant-date fair value of the performance share grants was \$16.25 per share. During 2000, Lyondell awarded stock option grants for 2,228,241 shares and grants for 706,345 performance shares under this plan. The weighted-average grant-date fair value of the performance share grants was \$12.91 per share.

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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

Restricted Stock Plan—Under the 1995 Restricted Stock Plan, one million shares of common stock are available for grants and awards to officers and other key management employees. Lyondell grants fixed awards of common stock that are forfeitable and subject to restrictions on transfer. Vesting is contingent on the participant's continuing employment at Lyondell for a period specified in the award. During 2001, 2000 and 1999 Lyondell granted and issued restricted stock of 2,587 shares, 60,436 shares and 299,277 shares respectively, to officers and employees. The shares vest on various dates through May 4, 2003, depending upon the terms of the individual grants. Employees are entitled to receive dividends on the restricted shares.

Rights to Purchase Common Stock—On December 8, 1995, the Board of Directors of Lyondell declared a dividend of one right ("Right") for each outstanding share of Lyondell's common stock to stockholders of record on December 20, 1995. The Rights become exercisable upon the earlier of: (i) ten days following a public announcement by another entity that it has acquired beneficial ownership of 15% or more of the outstanding shares of common stock; or (ii) ten business days following the commencement of a tender offer or exchange offer to acquire beneficial ownership of 15% or more of the outstanding shares of common stock, except under certain circumstances. The Rights expire at the close of business on December 8, 2005 unless earlier redeemed at a price of \$.0005 per Right or exchanged by Lyondell as described in the Rights Agreement dated as of December 8, 1995.

Stock Options—The following table summarizes activity relating to stock options under the 1999 LTIP. As of December 31, 2001, options covering 6,636,163 shares were outstanding at prices ranging from \$11.25 to \$20.00 per share. Of these, 5,223,998 shares with a weighted average remaining life of 9 years were outstanding at a weighted average price of \$14.89 per share, of which 910,630 shares were exercisable at a weighted average price of \$13.09 per share. In addition, 1,412,165 shares with a weighted average remaining life of 7 years were outstanding at a weighted average price of \$18.17 per share, of which 995,031 shares were exercisable at a weighted average price of \$18.17 per share.

	Number of Shares	Average Option Price Per Share
Balance, January 1, 1999	--	\$ --
Granted	1,756,098	17.82
Cancelled	(132,664)	18.13
Balance, December 31, 1999	1,623,434	17.79
Granted	2,228,241	13.07
Cancelled	(185,908)	16.64
Balance, December 31, 2000	3,665,767	14.98
Granted	3,143,231	16.25
Exercised	(49,618)	12.91
Cancelled	(123,217)	15.06
Balance, December 31, 2001	<u>6,636,163</u>	15.59

LYONDELL CHEMICAL COMPANY

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

Lyondell's Executive Long-Term Incentive Plan ("LTI Plan") became effective in November 1988. The last stock options granted under the LTI Plan were granted in March 1994. No additional stock option grants will be made under this plan. As of December 31, 2001, options covering 529,839 shares were outstanding under the LTI Plan with a weighted average remaining life of 1 year, all of which were exercisable at prices ranging from \$23.00 to \$26.00 per share.

The following summarizes stock option activity for the LTI Plan:

	Number of Shares	Average Option Price Per Share
Balance, January 1, 1999	616,481	\$ 23.61
Cancelled	(7,884)	23.62
Balance, December 31, 1999	608,597	23.61
Exercised	(6,850)	20.25
Cancelled	(5,483)	21.30
Balance, December 31, 2000	596,264	23.67
Cancelled	(66,425)	20.25
Balance, December 31, 2001	529,839	24.09

Lyondell's Incentive Stock Option Plan ("ISO Plan"), a tax qualified plan, became effective in January 1989. The last stock options granted under the ISO Plan were granted in March 1993. No additional grants will be made under the ISO Plan. At December 31, 1999, no stock options were outstanding. The following summarizes stock option activity for the ISO Plan:

	Number of Shares	Average Option Price Per Share
Balance January 1, 1999	145,191	\$ 30.00
Cancelled	(145,191)	30.00
Balance, December 31, 1999	-	

LYONDELL CHEMICAL COMPANY

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

Employee stock options are accounted for under the intrinsic value based method prescribed by Accounting Principles Board Opinion No. 25, *Accounting for Stock Issued to Employees*. Accordingly, no compensation cost has been recognized in connection with stock option grants under the plans. The pro forma impact on net income and earnings per share from calculating compensation expense in the manner described in SFAS No. 123, *Accounting for Stock-Based Compensation*, in 2001, 2000 and 1999 was approximately \$8 million, \$6 million and \$6 million, or \$.07 per share, \$.05 per share and \$.06 per share, respectively. The fair value per share of options granted was estimated as of the date of grant using the Black-Scholes option-pricing model and the following assumptions.

	2001	2000	1999
Fair value per share of options granted	\$ 4.08	\$ 4.04	\$ 4.67
Fair value assumptions:			
Dividend yield	5.88%	5%	5%
Expected volatility	42%	46%	35%
Risk-free interest rate	5.28%	6.5%	5%
Maturity, in years	10	10	10

21. Supplemental Cash Flow Information

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

<u>Millions of dollars</u>	<u>2001</u>	<u>2000</u>	<u>1999</u>
Interest paid	<u>\$ 372</u>	<u>\$ 521</u>	<u>\$ 570</u>
Net income taxes (received) paid	<u>\$ (12)</u>	<u>\$ 57</u>	<u>\$ (91)</u>

Effective December 31, 1999, Lyondell made a noncash capital contribution to LCR by converting \$47 million of its note receivable from LCR to a capital investment in LCR.

22. Segment and Related Information

Lyondell operates in four reportable segments: (i) intermediate chemicals and derivatives; (ii) petrochemicals; (iii) polymers; and (iv) refining. The accounting policies of the segments are the same as those described in "Summary of Significant Accounting Policies" (see Note 2). The methanol operations are not a reportable segment.

No customer accounted for 10% or more of consolidated sales during the three years ended December 31, 2001. However, under the terms of LCR's Products Agreement (see Note 9), CITGO purchases substantially all of the refined products of the refining segment.

LYONDELL CHEMICAL COMPANY

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

Summarized financial information for Lyondell's reportable segments is shown in the following table.

<u>Millions of dollars</u>	<u>Intermediate Chemicals and Derivatives</u>	<u>Petrochemicals</u>	<u>Polymers</u>	<u>Refining</u>	<u>Other</u>	<u>Total</u>
2001						
Sales and other						
operating revenues	\$ 3,226	\$ --	\$ --	\$ --	\$ --	\$ 3,226
Operating income	112	--	--	--	--	112
Income (loss) from equity						
investments	--	113	(77)	129	(125)	40
Total assets	5,887	286	113	258	159	6,703
Capital expenditures	68	--	--	--	--	68
Depreciation and amortization expense	269	--	--	--	--	269
2000						
Sales and other						
operating revenues	\$ 4,036	\$ --	\$ --	\$ --	\$ --	\$ 4,036
Operating income	339	--	--	--	--	339
Income (loss) from equity						
investments	--	285	(76)	86	(96)	199
Total assets	6,150	336	140	249	172	7,047
Capital expenditures	104	--	--	--	--	104
Depreciation and amortization expense	279	--	--	--	--	279
1999						
Sales and other						
operating revenues	\$ 3,693	\$ --	\$ --	\$ --	\$ --	\$ 3,693
Operating income	404	--	--	--	--	404
Income (loss) from equity						
investments	--	183	21	23	(151)	76
Total assets	8,557	314	140	271	216	9,498
Capital expenditures	131	--	--	--	--	131
Depreciation and amortization expense	330	--	--	--	--	330

The following table presents the details of "Income (loss) from equity investments" as presented above in the "Other" column for the years ended December 31:

<u>Millions of dollars</u>	<u>2001</u>	<u>2000</u>	<u>1999</u>
Equistar items not allocated to segments:			
Principally general and administrative expenses and interest expense, net	\$ (116)	\$ (108)	\$ (171)
Other income, net	3	--	19
Income (loss) from equity investment in LMC	(12)	12	1
Total—Other	<u>\$ (125)</u>	<u>\$ (96)</u>	<u>\$ (151)</u>

LYONDELL CHEMICAL COMPANY

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

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

Millions of dollars	2001	2000	1999
Equistar items not allocated to segments:			
Goodwill	\$ 87	\$ 99	\$ 113
Other assets	36	24	40
Equity investment in LMC	36	49	63
Total—Other	<u>\$ 159</u>	<u>\$ 172</u>	<u>\$ 216</u>

The following "Revenues" by country data are based upon the location of the use of the product. The "Long-lived assets" by country data is based upon the location of the assets.

Millions of dollars	Revenues			Long-Lived Assets		
	2001	2000	1999	2001	2000	1999
United States	\$ 1,765	\$ 2,101	\$ 1,826	\$ 1,382	\$ 1,482	\$ 2,944
Foreign	1,461	1,935	1,867	911	947	1,347
Total	<u>\$ 3,226</u>	<u>\$ 4,036</u>	<u>\$ 3,693</u>	<u>\$ 2,293</u>	<u>\$ 2,429</u>	<u>\$ 4,291</u>

Foreign long-lived assets primarily consist of the net property, plant and equipment of two plants, located near Rotterdam, The Netherlands, and Fos-sur-Mer, France, both of which are part of the IC&D segment.

23. Unaudited Quarterly Results

Millions of dollars, except per share data	For the quarter ended			
	March 31	June 30	September 30	December 31
<u>2001</u>				
Sales and other operating revenues	\$ 857	\$ 902	\$ 750	\$ 717
Operating income (loss)	31	66	(26)	41
Income (loss) from equity investments	2	42	17	(21)
Net income (loss) (a)	(34)	4	(67)	(53)
Basic and diluted earnings (loss) per share before extraordinary item (b)	(.29)	.04	(.57)	(.42)
<u>2000</u>				
Sales and other operating revenues	\$ 1,136	\$ 976	\$ 975	\$ 949
Operating income	87	142	97	13
Income from equity investments	50	66	83	--
Net income (loss) (c)	306	46	133	(48)
Basic and diluted earnings (loss) per share before extraordinary item (a) (b)	2.69	.39	1.13	(.38)

(a) The fourth quarter of 2001 included an extraordinary loss on early extinguishment of debt of \$5 million, or \$.04 per share.

(b) Earnings per common share calculations for each of the quarters are based upon the weighted average number of shares outstanding for each period (basic earnings per share). The sum of the quarters may not necessarily be equal to the full year earnings per share amount.

(c) The first and third quarters of 2000 included after-tax gains on asset sales of \$369 million, or \$3.14 per share, and \$31 million, or \$.26 per share, respectively. The first, second and fourth quarters of 2000 included an extraordinary loss on early extinguishment of debt of \$11 million, or \$.09 per share, \$19 million, or \$.16 per share, and \$3 million, or \$.03 per share, respectively.

LYONDELL CHEMICAL COMPANY

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

24. Subsequent Event

Early in 2002, Lyondell and Occidental agreed in principle for Lyondell's acquisition of Occidental's 29.5% interest in Equistar and for Occidental's acquisition of an equity interest in Lyondell. Upon consummation of these transactions, Occidental would receive the following from Lyondell:

- 30 to 34 million shares of newly issued Lyondell Series B Common Stock, with the final number to be determined at closing of this transaction. These shares would have the same rights as Lyondell's regular common stock with the exception of the dividend. The Series B Common Stock would pay a dividend at the same rate as the regular common stock but, at Lyondell's option, the dividend may be paid in additional shares of Series B Common Stock or in cash. These new Series B shares also would include provisions for conversion to regular common stock three years after issuance or earlier in certain circumstances;
- five-year warrants to acquire five million shares of Lyondell regular common stock at \$25 per share, subject to adjustment upon the occurrence of certain events; and
- a contingent payment equivalent in value to 7.38% of Equistar's cash distributions for 2002 and 2003, up to a total of \$35 million, payable in cash, Series B Common Stock or regular common stock, as determined by Lyondell.

These transactions are subject to negotiation, completion and execution of definitive documentation, compliance with the applicable provisions of the partnership agreement and the parent agreement, approval by the boards of directors of Lyondell and Occidental, approval by Lyondell's stockholders, regulatory approvals and other customary conditions. There can be no assurance that the proposed transactions will be completed.

25. Supplemental Guarantor Information

ARCO Chemical Technology Inc. ("ACTI"), ARCO Chemical Technology L.P. ("ACTLP") and Lyondell Chemical Nederland, Ltd. ("LCNL") are guarantors, jointly and severally, (collectively "Guarantors") of the \$393 million senior secured notes issued in December 2001 and the \$500 million senior subordinated notes and \$1.9 billion senior secured notes issued in May 1999. LCNL, a Delaware corporation, is a wholly owned subsidiary of Lyondell that owns a Dutch subsidiary that operates a chemical production facility near Rotterdam, The Netherlands. ACTI is a Delaware corporation, which holds the investment in ACTLP. ACTLP is a Delaware limited partnership, which holds and licenses technology to other Lyondell affiliates and to third parties. Separate financial statements of the Guarantors are not considered to be material to the holders of the senior subordinated notes and senior secured notes. The following condensed consolidating financial information present supplemental information for the Guarantors as of December 31, 2001 and 2000 and for the three years ended December 31, 2001.

LYONDELL CHEMICAL COMPANY

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

CONDENSED CONSOLIDATING FINANCIAL INFORMATION

As of and for the year ended December 31, 2001

Millions of dollars	Lyondell	Guarantors	Non-Guarantors	Eliminations	Consolidated Lyondell
BALANCE SHEET					
Total current assets	\$ 781	\$ 132	\$ 294	\$ --	\$ 1,207
Property, plant and equipment, net	915	516	862	--	2,293
Other investments and long-term receivables	7,007	461	1,537	(7,386)	1,619
Goodwill, net	453	389	260	--	1,102
Other assets	344	88	50	--	482
Total assets	<u>\$ 9,500</u>	<u>\$ 1,586</u>	<u>\$ 3,003</u>	<u>\$ (7,386)</u>	<u>\$ 6,703</u>
Current maturities of long-term debt	\$ 7	\$ --	\$ --	\$ --	\$ 7
Other current liabilities	391	73	88	--	552
Long-term debt	3,844	--	2	--	3,846
Other liabilities	515	55	13	--	583
Deferred income taxes	611	133	46	--	790
Intercompany liabilities (assets)	3,383	(1,101)	(2,282)	--	--
Minority interest	--	--	176	--	176
Stockholders' equity	749	2,426	4,960	(7,386)	749
Total liabilities and stockholders' equity	<u>\$ 9,500</u>	<u>\$ 1,586</u>	<u>\$ 3,003</u>	<u>\$ (7,386)</u>	<u>\$ 6,703</u>
STATEMENT OF INCOME					
Sales and other operating revenues	\$ 2,211	\$ 786	\$ 1,605	\$ (1,376)	\$ 3,226
Cost of sales	2,156	559	1,432	(1,376)	2,771
Selling, general and administrative expenses	79	16	54	--	149
Research and development expense	32	--	--	--	32
Amortization of goodwill and other intangibles	70	18	11	--	99
Unusual charges	63	--	--	--	63
Operating income (loss)	(189)	193	108	--	112
Interest (expense) income, net	(384)	3	12	--	(369)
Other (expense) income, net	(127)	(83)	206	--	(4)
Income from equity investments	616	--	60	(636)	40
Intercompany income	267	335	128	(730)	--
(Benefit from) provision for income taxes	62	152	174	(464)	(76)
Income (loss) before extraordinary items	121	296	340	(902)	(145)
Extraordinary items, net of taxes	(5)	--	--	--	(5)
Net income (loss)	<u>\$ 116</u>	<u>\$ 296</u>	<u>\$ 340</u>	<u>\$ (902)</u>	<u>\$ (150)</u>

LYONDELL CHEMICAL COMPANY

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

For the year ended December 31, 2001

<u>Millions of dollars</u>	<u>Lyondell</u>	<u>Guarantors</u>	<u>Non-Guarantors</u>	<u>Eliminations</u>	<u>Consolidated Lyondell</u>
STATEMENT OF CASH FLOWS					
Net income (loss)	\$ 116	\$ 296	\$ 340	\$ (902)	\$ (150)
Adjustments to reconcile net income (loss) to net cash (used in) provided by operating activities:					
Depreciation and amortization	138	47	84	--	269
Extraordinary items	5	--	--	--	5
Net changes in working capital and other	(662)	119	(284)	902	75
Net cash (used in) provided by operating activities	(403)	462	140	--	199
Expenditures for property, plant and equipment	(17)	(8)	(43)	--	(68)
Contributions and advances to affiliates	61	(115)	(119)	--	(173)
Distributions from affiliates in excess of earnings	(10)	--	60	--	50
Other	470	--	--	(470)	--
Net cash provided by (used in) investing activities	504	(123)	(102)	(470)	(191)
Payment of debt issuance costs	(15)	--	--	--	(15)
Proceeds from issuance of long-term debt	393	--	--	--	393
Repayment of long-term debt	(394)	--	--	--	(394)
Dividends paid	(106)	(426)	(44)	470	(106)
Net cash used in financing activities	(122)	(426)	(44)	470	(122)
Effect of exchange rate changes on cash	--	67	(67)	--	--
Decrease in cash and cash equivalents	(21)	(20)	(73)	--	(114)
Cash and cash equivalents:					
Beginning of year	142	20	98	--	260
End of year	\$ 121	\$ --	\$ 25	\$ --	\$ 146

LYONDELL CHEMICAL COMPANY

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

CONDENSED CONSOLIDATING FINANCIAL INFORMATION
As of and for the year ended December 31, 2000

<u>Millions of dollars</u>	<u>Lyondell</u>	<u>Guarantors</u>	<u>Non-Guarantors</u>	<u>Eliminations</u>	<u>Consolidated Lyondell</u>
BALANCE SHEET					
Total current assets	\$ 695	\$ 242	\$ 408	\$ --	\$ 1,345
Property, plant and equipment, net	980	566	883	--	2,429
Other investments and long-term receivables	6,914	413	1,638	(7,359)	1,606
Goodwill, net	476	414	262	--	1,152
Other assets	398	61	48	8	515
Total assets	<u>\$ 9,463</u>	<u>\$ 1,696</u>	<u>\$ 3,239</u>	<u>\$ (7,351)</u>	<u>\$ 7,047</u>
Current maturities of long-term debt	\$ 10	\$ --	\$ --	\$ --	\$ 10
Other current liabilities	556	73	95	--	724
Long-term debt	3,842	--	2	--	3,844
Other liabilities	378	59	4	--	441
Deferred income taxes	556	140	6	--	702
Intercompany liabilities (assets)	2,976	(1,095)	(1,889)	8	--
Minority interest	--	--	181	--	181
Stockholders' equity	1,145	2,519	4,840	(7,359)	1,145
Total liabilities and stockholders' equity	<u>\$ 9,463</u>	<u>\$ 1,696</u>	<u>\$ 3,239</u>	<u>\$ (7,351)</u>	<u>\$ 7,047</u>
STATEMENT OF INCOME					
Sales and other operating revenues	\$ 2,794	\$ 936	\$ 1,585	\$ (1,279)	\$ 4,036
Cost of sales	2,441	673	1,536	(1,279)	3,371
Selling, general and administrative expenses	141	5	44	--	190
Research and development expense	32	--	3	--	35
Amortization of goodwill and other intangibles	67	22	12	--	101
Operating income	113	236	(10)	--	339
Interest income (expense), net	(481)	1	18	--	(462)
Other income (expense), net	(155)	(128)	310	--	27
Gain on sale of assets	--	(9)	599	--	590
Income from equity investments	1,048	--	215	(1,064)	199
Intercompany income (expense)	(88)	156	181	(249)	--
Provision for income taxes	140	82	423	(422)	223
Income before extraordinary items	297	174	890	(891)	470
Extraordinary items, net of taxes	(33)	--	--	--	(33)
Net income	<u>\$ 264</u>	<u>\$ 174</u>	<u>\$ 890</u>	<u>\$ (891)</u>	<u>\$ 437</u>

LYONDELL CHEMICAL COMPANY

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

For the year ended December 31, 2000

<u>Millions of dollars</u>	<u>Lyondell</u>	<u>Guarantors</u>	<u>Non-Guarantors</u>	<u>Eliminations</u>	<u>Consolidated Lyondell</u>
STATEMENT OF CASH FLOWS					
Net income	\$ 264	\$ 174	\$ 890	\$ (891)	\$ 437
Adjustments to reconcile net income (loss) to net cash provided by (used in) operating activities:					
Gain on sale of assets	--	9	(599)	--	(590)
Depreciation and amortization	148	57	74	--	279
Extraordinary items	33	--	--	--	33
Net changes in working capital and other	(101)	(292)	(596)	891	(98)
Net cash provided by (used in) operating activities	344	(52)	(231)	--	61
Proceeds from sales of assets, net of cash sold	1,903	216	378	--	2,497
Expenditures for property, plant and equipment	(27)	(36)	(41)	--	(104)
Contributions and advances to affiliates	12	--	(52)	--	(40)
Distributions from affiliates in excess of earnings	(19)	--	104	--	85
Other	249	--	--	(249)	--
Net cash provided by investing activities	2,118	180	389	(249)	2,438
Payment of debt issuance costs	(20)	--	--	--	(20)
Proceeds from issuance of long-term debt	--	--	--	--	--
Repayment of long-term debt	(2,416)	--	(1)	--	(2,417)
Dividends paid	(106)	(91)	(158)	249	(106)
Net cash used in financing activities	(2,542)	(91)	(159)	249	(2,543)
Effect of exchange rate changes on cash	--	(49)	46	--	(3)
(Decrease) increase in cash and cash equivalents	(80)	(12)	45	--	(47)
Cash and cash equivalents:					
Beginning of year	222	32	53	--	307
End of year	\$ 142	\$ 20	\$ 98	\$ --	\$ 260

LYONDELL CHEMICAL COMPANY

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

CONDENSED CONSOLIDATING FINANCIAL INFORMATION

For the year ended December 31, 1999

<u>Millions of dollars</u>	<u>Lyondell</u>	<u>Guarantors</u>	<u>Non- Guarantors</u>	<u>Eliminations</u>	<u>Consolidated Lyondell</u>
STATEMENT OF INCOME					
Sales and other operating revenues	\$ 2,602	\$ 796	\$ 882	\$ (587)	\$ 3,693
Cost of sales	1,976	556	946	(587)	2,891
Selling, general and administrative expenses	167	--	73	--	240
Research and development expense	44	--	14	--	58
Amortization of goodwill and other intangibles	56	35	9	--	100
Operating income (loss)	359	205	(160)	--	404
Interest (expense) income, net	(606)	3	14	--	(589)
Other income (expense), net	24	(146)	127	--	5
Income from equity investments	395	--	94	(413)	76
Intercompany income	13	225	176	(414)	--
Provision for income taxes	43	67	58	(192)	(24)
Income (loss) before extraordinary items	142	220	193	(635)	(80)
Extraordinary items, net of taxes	(35)	--	--	--	(35)
Net income (loss)	<u>\$ 107</u>	<u>\$ 220</u>	<u>\$ 193</u>	<u>\$ (635)</u>	<u>\$ (115)</u>

LYONDELL CHEMICAL COMPANY

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

For the year ended December 31, 1999

<u>Millions of dollars</u>	<u>Lyondell</u>	<u>Guarantors</u>	<u>Non- Guarantors</u>	<u>Eliminations</u>	<u>Consolidated Lyondell</u>
STATEMENT OF CASH FLOWS					
Net income (loss)	\$ 107	\$ 220	\$ 193	\$ (635)	\$ (115)
Adjustments to reconcile net income to net cash (used in) provided by operating activities:					
Depreciation and amortization	194	61	75	--	330
Extraordinary items	35	--	--	--	35
Net changes in working capital and other	(398)	(71)	(116)	635	50
Net cash (used in) provided by operating activities	(62)	210	152	--	300
Expenditures for property, plant and equipment	(97)	(15)	(19)	--	(131)
Contributions and advances to affiliates	(18)	--	(34)	--	(52)
Distributions from affiliates in excess of earnings	--	--	134	--	134
Other	425	1	4	(426)	4
Net cash provided by (used in) investing activities	310	(14)	85	(426)	(45)
Repayment of long-term debt	(4,122)	--	--	--	(4,122)
Proceeds from issuance of long-term debt	3,400	--	--	--	3,400
Payment of debt issuance costs	(107)	--	--	--	(107)
Issuance of common stock	736	--	--	--	736
Dividends paid	(97)	(167)	(259)	426	(97)
Other	8	--	--	--	8
Net cash used in financing activities	(182)	(167)	(259)	426	(182)
Effect of exchange rate changes on cash	--	(28)	29	--	1
Increase in cash and cash equivalents	66	1	7	--	74
Cash and cash equivalents:					
Beginning of year	156	31	46	--	233
End of year	\$ 222	\$ 32	\$ 53	\$ --	\$ 307

REPORT OF INDEPENDENT ACCOUNTANTS

To the Partnership Governance Committee
of Equistar Chemicals, LP

In our opinion, the accompanying consolidated balance sheets and the related consolidated statements of income, of partners' 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, 2001 and 2000, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2001 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 auditing standards generally accepted in the United States of America, which require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit 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.

/s/ PricewaterhouseCoopers LLP

PRICEWATERHOUSECOOPERS LLP

Houston, Texas
March 8, 2002

EQUISTAR CHEMICALS, LP
CONSOLIDATED STATEMENTS OF INCOME

<u>Millions of dollars</u>	<u>For the year ended December 31,</u>		
	<u>2001</u>	<u>2000</u>	<u>1999</u>
Sales and other operating revenues:			
Unrelated parties	\$ 4,583	\$ 5,770	\$ 4,506
Related parties	1,326	1,725	1,088
	<u>5,909</u>	<u>7,495</u>	<u>5,594</u>
Operating costs and expenses:			
Cost of sales	5,733	6,908	5,002
Selling, general and administrative expenses	181	182	259
Research and development expense	39	38	42
Amortization of goodwill	33	33	33
Unusual charges	22	--	96
	<u>6,008</u>	<u>7,161</u>	<u>5,432</u>
Operating income (loss)	(99)	334	162
Interest expense	(192)	(185)	(182)
Interest income	3	4	6
Other income, net	8	--	46
Income (loss) before extraordinary item	(280)	153	32
Extraordinary loss on extinguishment of debt	(3)	--	--
Net income (loss)	<u>\$ (283)</u>	<u>\$ 153</u>	<u>\$ 32</u>

See Notes to Consolidated Financial Statements.

EQUISTAR CHEMICALS, LP
CONSOLIDATED BALANCE SHEETS

<u>Millions of dollars</u>	December 31,	
	2001	2000
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 202	\$ 18
Accounts receivable:		
Trade, net	440	568
Related parties	100	190
Inventories	448	506
Prepaid expenses and other current assets	36	50
Total current assets	1,226	1,332
Property, plant and equipment, net	3,705	3,819
Investment in PD Glycol	47	53
Goodwill, net	1,053	1,086
Other assets, net	277	292
Total assets	\$ 6,308	\$ 6,582
LIABILITIES AND PARTNERS' CAPITAL		
Current liabilities:		
Accounts payable:		
Trade	\$ 331	\$ 426
Related parties	29	61
Current maturities of long-term debt	104	90
Accrued liabilities	197	166
Total current liabilities	661	743
Long-term debt	2,233	2,158
Other liabilities	177	141
Commitments and contingencies	--	--
Partners' capital:		
Partners' accounts	3,257	3,540
Accumulated other comprehensive income (loss)	(20)	--
Total partners' capital	3,237	3,540
Total liabilities and partners' capital	\$ 6,308	\$ 6,582

See Notes to Consolidated Financial Statements.

EQUISTAR CHEMICALS, LP

CONSOLIDATED STATEMENTS OF CASH FLOWS

<u>Millions of dollars</u>	<u>For the year ended December 31,</u>		
	<u>2001</u>	<u>2000</u>	<u>1999</u>
Cash flows from operating activities:			
Net income (loss)	\$ (283)	\$ 153	\$ 32
Adjustments to reconcile net income (loss) to cash provided by operating activities:			
Depreciation and amortization	321	310	300
Net (gain) loss on disposition of assets	(3)	5	35
Extraordinary loss on extinguishment of debt	3	--	--
Changes in assets and liabilities that provided (used) cash:			
Accounts receivable	220	(58)	(213)
Inventories	61	14	17
Accounts payable	(129)	28	119
Accrued liabilities	30	(65)	82
Other assets and liabilities	10	(48)	(28)
Cash provided by operating activities	<u>230</u>	<u>339</u>	<u>344</u>
Cash flows from investing activities:			
Expenditures for property, plant and equipment	(110)	(131)	(157)
Proceeds from sales of assets	10	4	75
Purchase of business from AT Plastics, Inc.	(7)	--	--
Cash used in investing activities	<u>(107)</u>	<u>(127)</u>	<u>(82)</u>
Cash flows from financing activities:			
Net borrowing (payments) under lines of credit	(820)	20	(502)
Proceeds from issuance of long-term debt	1,000	--	898
Repayment of other long-term debt	(91)	(42)	(150)
Repayment of obligations under capital leases	--	--	(205)
Distributions to partners	--	(280)	(255)
Other	(28)	--	(6)
Cash provided by (used in) financing activities	<u>61</u>	<u>(302)</u>	<u>(220)</u>
Increase (decrease) in cash and cash equivalents	184	(90)	42
Cash and cash equivalents at beginning of period	18	108	66
Cash and cash equivalents at end of period	<u>\$ 202</u>	<u>\$ 18</u>	<u>\$ 108</u>

See Notes to Consolidated Financial Statements.

EQUISTAR CHEMICALS, LP

CONSOLIDATED STATEMENTS OF PARTNERS' CAPITAL

<u>Millions of dollars</u>	Partners' Accounts				Accumulated Other Comprehensive Income (loss)	Comprehensive Income (loss)
	Lyondell	Millennium	Occidental	Total		
Balance at January 1, 1999	\$ 613	\$ 1,621	\$ 1,651	\$ 3,885	\$ --	\$ --
Net income	14	9	9	32	--	32
Distributions to partners	(105)	(75)	(75)	(255)	--	--
Comprehensive income						\$ 32
Balance at December 31, 1999	522	1,555	1,585	3,662	--	--
Net income	63	45	45	153	--	153
Distributions to partners	(114)	(83)	(83)	(280)	--	--
Other	5	--	--	5	--	--
Comprehensive income						\$ 153
Balance at December 31, 2000	476	1,517	1,547	3,540	--	--
Net loss	(115)	(84)	(84)	(283)	--	(283)
Other comprehensive income:						
Unrealized loss on securities	--	--	--	--	(1)	(1)
Minimum pension liability	--	--	--	--	(19)	(19)
Comprehensive loss						\$ (303)
Balance at December 31, 2001	\$ 361	\$ 1,433	\$ 1,463	\$ 3,257	\$ (20)	

See Notes to Consolidated Financial Statements.

EQUISTAR CHEMICALS, LP

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

1. Formation of the Partnership and Operations

Lyondell Chemical Company ("Lyondell") and Millennium Chemicals Inc. ("Millennium") formed Equistar Chemicals, LP ("Equistar" or "the Partnership"), a Delaware limited partnership, which commenced operations on December 1, 1997. On May 15, 1998, Equistar was expanded with the contribution of certain assets from Occidental Petroleum Corporation ("Occidental"). Equistar is currently owned 41% by Lyondell, 29.5% by Millennium and 29.5% by Occidental, all through wholly owned subsidiaries (see also Note 18).

Equistar owns and operates the petrochemicals and polymers businesses contributed by Lyondell, Millennium and Occidental, which consist of 18 manufacturing facilities primarily on the U.S. Gulf Coast and in the U.S. Midwest. The petrochemicals segment manufactures and markets olefins, oxygenated products, aromatics and specialty products. Olefins include ethylene, propylene and butadiene, and oxygenated products include ethylene oxide, ethylene glycol, ethanol and methyl tertiary butyl ether ("MTBE"). The petrochemicals segment also includes the production and sale of aromatics, including benzene and toluene. The polymers segment manufactures and markets polyolefins, including high-density polyethylene ("HDPE"), low-density polyethylene ("LDPE"), linear low-density polyethylene ("LLDPE"), polypropylene, and performance polymers, all of which are used in the production of a wide variety of consumer and industrial products. The performance polymers include enhanced grades of polyethylene, including wire and cable insulating resins, and polymeric powders.

Equistar is governed by a Partnership Governance Committee consisting of nine representatives, three appointed by each general partner. Most of the significant decisions of the Partnership Governance Committee require unanimous consent, including approval of the Partnership's strategic plan and annual updates thereof. Distributions are made to the partners based upon their percentage ownership of Equistar. Additional cash contributions required by the Partnership are also based upon the partners' percentage ownership of Equistar.

2. Summary of Significant Accounting Policies

Basis of Presentation—The consolidated financial statements include the accounts of Equistar and its wholly owned subsidiaries.

Revenue Recognition—Revenue from product sales is recognized as risk and title to the product transfer to the customer, which usually occurs when shipment is made.

Cash and Cash Equivalents—Cash equivalents consist of highly liquid debt instruments such as certificates of deposit, commercial paper and money market accounts purchased with an original maturity date of three months or less. Cash equivalents are stated at cost, which approximates fair value. Equistar's policy is to invest cash in conservative, highly rated instruments and limit the amount of credit exposure to any one institution. Equistar performs periodic evaluations of the relative credit standing of these financial institutions which are considered in Equistar's investment strategy.

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. As a result, none of Equistar's cash is restricted.

EQUISTAR CHEMICALS, LP

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

Inventories—Inventories are stated at the lower of cost or market. Cost is determined on the last-in, first-out (“LIFO”) basis, except for materials and supplies, which are valued at average cost. Inventory exchange transactions, which involve homogeneous commodities in the same line of business 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.

Property, Plant and Equipment—Property, plant and equipment are recorded at cost. Depreciation of property, plant and equipment is computed using the straight-line method over the estimated useful lives of the related assets, generally 25 years for major manufacturing equipment, 30 years for buildings, 10 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 assets and the related accumulated depreciation from the accounts and reflects any resulting gains or losses in the Consolidated Statement 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 fair value. Long-lived assets to be disposed of are reported at the lower of carrying amount or fair value less cost to sell. Beginning in 2002, as discussed below, goodwill will be reviewed for impairment under SFAS No. 142 based on fair values.

Investment in PD Glycol—Equistar holds a 50% interest in a joint venture with E.I. DuPont de Nemours and Company that owns an ethylene glycol facility in Beaumont, Texas. This investment was contributed by Occidental in 1998. The investment in PD Glycol is accounted for using the equity method of accounting. At December 31, 2001 and 2000, Equistar’s underlying equity in the net assets of PD Glycol exceeded the cost of the investment by \$7 million. The excess is being accreted into income on a straight-line basis over a period of 25 years.

Goodwill—Goodwill includes goodwill contributed by Millennium and goodwill recorded in connection with the contribution of Occidental’s assets. Goodwill is being amortized using the straight-line method over 40 years, the estimated useful life. Amortization of goodwill will cease as of January 1, 2002 as described below under *Recent Accounting Standards*.

Turnaround Maintenance and Repairs Costs—Cost of maintenance and repairs incurred in connection with turnarounds of major units at Equistar’s manufacturing facilities exceeding \$5 million are deferred and amortized using the straight-line method until the next planned turnaround, generally four to six years. These costs are maintenance, repair and replacement costs that are necessary to maintain, extend and improve the operating capacity and efficiency rates of the production units.

Deferred Software Costs—Costs to purchase and to develop software for internal use are deferred and amortized on a straight-line basis over a range of 3 to 10 years.

Environmental Remediation Costs—Anticipated expenditures related to investigation and remediation of contaminated sites, which include operating facilities and waste disposal sites, are accrued when it is probable a liability has been incurred and the amount of the liability can be reasonably estimated. The estimated liabilities have not been discounted to present value.

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 and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amount of revenues and expenses during the reporting period. Actual results could differ from those estimates.

EQUISTAR CHEMICALS, LP

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

Accounting Changes Adopted in 2001—As of January 1, 2001, Equistar adopted Statement of Financial Accounting Standards (“SFAS”) No. 133, *Accounting for Derivative Instruments and Hedging Activities*, as amended by SFAS No. 138, *Accounting for Certain Derivative Instruments and Certain Hedging Activities*. Under SFAS No. 133, all derivative instruments are recorded on the balance sheet at fair value. Gains or losses from changes in the fair value of derivatives used as cash flow hedges are deferred in accumulated other comprehensive income, to the extent the hedge is effective, and subsequently reclassified to earnings to offset the impact of the related forecasted transaction. Implementation of SFAS No. 133 and SFAS No. 138 did not have a material effect on the consolidated financial statements of Equistar.

Recent Accounting Standards—In June 2001, the Financial Accounting Standards Board (“FASB”) issued SFAS No. 141, *Business Combinations*, and SFAS No. 142, *Goodwill and Other Intangible Assets*, effective January 1, 2002. SFAS No. 141 is effective for business combinations initiated after June 30, 2001 and is not expected to have a material effect on intangible assets acquired in business combinations effected prior to July 1, 2001. SFAS No. 142 prescribed the discontinuance of amortization of goodwill as well as annual review of goodwill for impairment. Equistar expects the implementation of SFAS No. 142 to result in the impairment of the entire balance of goodwill, resulting in a \$1.1 billion charge that will be reported as the cumulative effect of a change in accounting principle as of January 1, 2002. Earnings in 2002 and subsequent years will be favorably affected by \$33 million annually because of the elimination of goodwill amortization.

In June 2001, the FASB issued SFAS No. 143, *Accounting for Asset Retirement Obligations*. In October 2001, the FASB issued SFAS No. 144, *Accounting for the Impairment or Disposal of Long-Lived Assets*. Adoption of SFAS No. 143 and SFAS No. 144 in calendar years 2003 and 2002, respectively, is not expected to have a material effect on the consolidated financial statements of Equistar.

Reclassifications—Certain previously reported amounts have been reclassified to conform to classifications adopted in 2001.

3. Unusual Charges

Equistar shut down its Port Arthur, Texas polyethylene facility in February 2001. The asset values of the Port Arthur production units were previously adjusted as part of a \$96 million restructuring charge recognized in 1999, as discussed below. During the first quarter 2001, Equistar recorded an additional \$22 million charge, which included environmental remediation liabilities of \$7 million (see Note 15), severance benefits of \$5 million, pension benefits of \$2 million, and other exit costs of \$3 million. The severance and pension benefits covered approximately 125 people employed at the Port Arthur facility. The remaining \$5 million of the charge related primarily to the write down of certain assets. Payments of \$4 million for severance, \$3 million for exit costs and \$1 million for environmental remediation were made through December 31, 2001. The pension benefits of \$2 million will be paid from the assets of the pension plans. As of December 31, 2001, the remaining liability included \$6 million for environmental remediation costs and \$1 million for severance benefits.

During 1999, Equistar recorded a charge of \$96 million associated with decisions to shut down certain polymer reactors and to consolidate certain administrative functions between Lyondell and Equistar. Accordingly, Equistar recorded a charge of \$72 million to adjust the asset carrying values. The remaining \$24 million of the total charge represented severance and other employee-related costs for approximately 500 employee positions that were eliminated. The eliminated positions, primarily administrative functions, resulted from opportunities to share such services between Lyondell and Equistar. Through December 31, 2001, approximately \$19 million of severance and other employee-related costs had been paid and charged against the accrued liability. As of December 31, 2001, all of the employee terminations had been completed and the remaining liability of \$5 million was eliminated.

EQUISTAR CHEMICALS, LP

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

4. Extraordinary Item

As part of the third quarter 2001 refinancing (see Note 11), Equistar wrote off unamortized debt issuance costs and amendment fees of \$3 million related to the early repayment of the \$1.25 billion bank credit facility and reported the charge as an extraordinary loss on extinguishment of debt.

5. Related Party Transactions

Product Transactions with Lyondell—Lyondell purchases ethylene, propylene and benzene at market-related prices from Equistar under various agreements expiring in 2013 and 2014. Under the agreements, Lyondell is required to purchase 100% of its ethylene, propylene and benzene requirements for its Channelview and Bayport, Texas facilities, with the exception of quantities of one product that Lyondell is obligated to purchase under a supply agreement with an unrelated third party entered into prior to 1999 and expiring in 2015. In addition, a wholly owned subsidiary of Lyondell licenses MTBE technology to Equistar. Lyondell also purchases a significant portion of the MTBE produced by Equistar at one of its two Channelview units at market-related prices.

Product Transactions with Occidental Chemical—In connection with the contribution of Occidental Chemical assets to Equistar, Equistar and Occidental Chemical entered into a long-term agreement for Equistar to supply 100% of the ethylene requirements for Occidental Chemical's U.S. manufacturing plants. The pricing terms under the agreement between Equistar and Occidental Chemical are similar to the pricing terms under the ethylene sales agreement between Equistar and Lyondell. The ethylene raw material is exclusively for internal use in production at these plants, less any quantities up to 250 million pounds per year tolled in accordance with the provisions of the agreement. Upon three years notice from either party to the other, sales may be "phased down" over a period not less than five years. No phase down may commence before January 1, 2009. Therefore, the annual required minimum cannot decline to zero prior to December 31, 2013, unless certain specified force majeure events occur. In addition to ethylene, Equistar sells methanol, ethers, and glycols to Occidental Chemical. Equistar also enters into over-the-counter derivatives, primarily price swap contracts, for crude oil with Occidental Energy Marketing, Inc., a subsidiary of Occidental Chemical, to help manage its exposure to commodity price risk with respect to crude oil-related raw material purchases (see Note 13). Equistar also purchases various products from Occidental Chemical at market-related prices.

Product Transactions with Millennium Petrochemicals—Equistar sells ethylene to Millennium Petrochemicals at market-related prices pursuant to an agreement entered into in connection with the formation of Equistar. Under this agreement, Millennium Petrochemicals is required to purchase 100% of its ethylene requirements for its LaPorte, Texas facility from Equistar. The contract expires December 1, 2002 and, thereafter, renews annually. Either party may terminate on one year's notice. The pricing terms of this agreement are similar to the pricing terms of the ethylene sales agreements with Lyondell and Occidental Chemical.

Under an agreement entered into in connection with the formation of Equistar, Equistar is required to purchase 100% of its vinyl acetate monomer ("VAM") raw material requirements at market-related prices from Millennium Petrochemicals for its LaPorte, Texas, Clinton, Iowa and Morris, Illinois plants for the production of ethylene vinyl acetate products at those locations. The contract expires December 31, 2002 and, thereafter, renews annually.

Product Transactions with Oxy Vinyls, LP—Occidental Chemical owns 76% of Oxy Vinyls, LP ("Oxy Vinyls"), a joint venture partnership. Equistar sells ethylene to Oxy Vinyls for Oxy Vinyls' LaPorte, Texas facility at market-related prices pursuant to an agreement which expires on December 31, 2003.

EQUISTAR CHEMICALS, LP

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

Transactions with LYONDELL-CITGO Refining LP—Lyondell's rights and obligations under the terms of its product sales and raw material purchase agreements with LYONDELL-CITGO Refining LP ("LCR"), a joint venture investment of Lyondell, have been assigned to Equistar. Accordingly, certain olefins by-products are sold by Equistar to LCR for processing into gasoline and certain refinery products are sold by LCR to Equistar as raw materials. Equistar also has assumed certain processing arrangements as well as storage obligations between Lyondell and 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.

Transactions with LMC—Lyondell Methanol Company, L.P. ("LMC") sells all of its products to Equistar at market-related prices. The natural gas for LMC's plant is purchased by Equistar as agent for LMC under Equistar master agreements with various third party suppliers. Equistar provides operating and other services for LMC under the terms of existing agreements that were assumed by Equistar from Lyondell, including the lease to LMC by Equistar of the real property on which LMC's methanol plant is located. Pursuant to the terms of those agreements, LMC pays Equistar a management fee and reimburses certain expenses of Equistar at cost.

Shared Services Agreement with Lyondell—During 1999, Lyondell provided certain administrative services to Equistar, including legal, risk management, treasury, tax and employee benefit plan administrative services, while Equistar provided services to Lyondell in the areas of health, safety and environment, human resources, information technology and legal. Effective January 1, 2000, Lyondell and Equistar implemented a revised agreement to utilize shared services more broadly. Lyondell now provides services to Equistar including information technology, human resources, raw 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 its share of the cost of such services. Direct third party costs, if incurred exclusively for Equistar, are charged directly to Equistar.

Shared Services and Shared-Site Agreements with Millennium Petrochemicals—Equistar and Millennium Petrochemicals have agreements under which Equistar provides utilities, fuel streams and office space to Millennium Petrochemicals. In addition, Millennium Petrochemicals provides Equistar certain operational services, including utilities as well as barge dock access and related services.

Transition Services Agreement with Occidental Chemical—On June 1, 1998, Occidental Chemical and Equistar entered into a transition services agreement. Under the terms of the agreement, Occidental Chemical provided Equistar certain services in connection with the businesses contributed by Occidental Chemical, including services related to accounting, payroll, office administration, marketing, transportation, purchasing and procurement, management, human resources, customer service, technical services and others. Most of these services ceased in June 1999. Health, safety, and environmental services were extended until December 31, 1999.

EQUISTAR CHEMICALS, LP

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

Related party transactions are summarized as follows:

<u>Millions of dollars</u>	<u>For the year ended December 31,</u>		
	<u>2001</u>	<u>2000</u>	<u>1999</u>
<u>Equistar billed related parties for:</u>			
Sales of products and processing services:			
Lyondell	\$ 405	\$ 572	\$ 246
Occidental Chemical	441	558	435
LCR	377	438	260
Millennium Petrochemicals	55	90	54
Oxy Vinyls	48	67	93
Shared services and shared site agreements:			
LCR	3	2	3
LMC	6	6	6
Millennium Petrochemicals	17	24	21
Lyondell	--	--	8
Gas purchased for LMC	86	85	46
<u>Related parties billed Equistar for:</u>			
Purchases of products:			
LCR	\$ 203	\$ 264	\$ 190
LMC	151	165	95
Millennium Petrochemicals	15	16	12
Lyondell	4	2	6
Occidental Chemical	1	2	2
Shared services and transition agreements:			
Lyondell	147	133	9
Millennium Petrochemicals	19	22	24
LCR	2	--	--
Occidental Chemical	--	--	2

6. Purchase and Sale of Businesses

Effective June 1, 2001, Equistar expanded its wire and cable business through the acquisition of the low- and medium-voltage power cable materials business of AT Plastics, Inc. Equistar accounted for the acquisition as a purchase, allocating the \$7 million purchase price to property, plant and equipment and inventory.

Effective April 30, 1999, Equistar completed the sale of its concentrates and compounds business. The transaction included two manufacturing facilities, located in Heath, Ohio and Crockett, Texas, and related inventories. Equistar's proceeds from the sale were approximately \$75 million.

7. Accounts Receivable

Equistar sells its products primarily to other chemical manufacturers in the petrochemicals and polymers industries. 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, which is reflected in the accompanying Consolidated Balance Sheets as a reduction of accounts receivable, totaled \$14 million and \$9 million at December 31, 2001 and 2000, respectively.

EQUISTAR CHEMICALS, LP

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

During 2001, Equistar terminated an agreement with an independent issuer of receivables-backed commercial paper. Previously, Equistar sold, on an ongoing basis and without recourse, designated accounts receivable, maintaining the balance of the accounts receivable sold by selling new receivables as existing receivables were collected. At December 31, 2000 and 1999, the balance of Equistar's accounts receivable sold was \$130 million. Increases and decreases in the amount sold were reported as operating cash flows in the Consolidated Statement of Cash Flows. Costs related to the sales were included in "Selling, general and administrative expenses" in the Consolidated Statement of Income.

8. Inventories

Inventories were as follows at December 31:

<u>Millions of dollars</u>	<u>2001</u>	<u>2000</u>
Finished goods	\$ 243	\$ 273
Work-in-process	12	16
Raw materials	104	123
Materials and supplies	89	94
Total inventories	<u>\$ 448</u>	<u>\$ 506</u>

Income in 2001 benefited from a reduction in the levels of raw material and product inventories, which are carried under the LIFO method of accounting. The charges to cost of sales associated with the inventory reductions were valued based on relatively low LIFO inventory values. If these charges had been valued based on average 2001 costs, cost of sales for 2001 would have been higher by approximately \$10 million. The excess of the current cost of inventories over book value was approximately \$28 million at December 31, 2001.

9. 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>2001</u>	<u>2000</u>
Land	\$ 79	\$ 78
Manufacturing facilities and equipment	5,929	5,769
Construction in progress	92	134
Total property, plant and equipment	6,100	5,981
Less accumulated depreciation	2,395	2,162
Property, plant and equipment, net	<u>\$ 3,705</u>	<u>\$ 3,819</u>

Equistar did not capitalize any interest during 2001, 2000 and 1999 with respect to construction projects.

Goodwill, at cost, and the related accumulated amortization were as follows at December 31:

<u>Millions of dollars</u>	<u>2001</u>	<u>2000</u>
Goodwill	\$ 1,318	\$ 1,318
Less accumulated amortization	265	232
Goodwill, net	<u>\$ 1,053</u>	<u>\$ 1,086</u>

EQUISTAR CHEMICALS, LP

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

The unamortized balances of deferred turnaround, software and debt issuance costs included in "Other assets, net" were as follows at December 31:

<u>Millions of dollars</u>	<u>2001</u>	<u>2000</u>
Turnaround costs	\$ 70	\$ 75
Software costs	97	104
Debt issuance costs	34	9

Depreciation and amortization is summarized as follows for the periods presented:

<u>Millions of dollars</u>	<u>For the year ended December 31,</u>		
	<u>2001</u>	<u>2000</u>	<u>1999</u>
Property, plant and equipment	\$ 237	\$ 229	\$ 221
Goodwill	33	33	33
Turnaround expense	20	24	25
Software costs	12	13	12
Other	17	11	9
Debt issuance costs	2	--	--
	<u>\$ 321</u>	<u>\$ 310</u>	<u>\$ 300</u>

10. Accrued Liabilities

Accrued liabilities were as follows at December 31:

<u>Millions of dollars</u>	<u>2001</u>	<u>2000</u>
Property taxes	\$ 68	\$ 73
Interest	68	52
Payroll and benefits	49	38
Other	12	3
Total accrued liabilities	<u>\$ 197</u>	<u>\$ 166</u>

11. Long-Term Debt

In August 2001, Equistar completed a \$1.5 billion debt refinancing. The refinancing included a bank credit facility consisting of a \$500 million secured revolving credit facility maturing in August 2006 and a \$300 million secured term loan, maturing in August 2007, with scheduled quarterly amortization payments, beginning December 31, 2001. The revolving credit facility was undrawn at December 31, 2001. Borrowing under the revolving credit facility generally bears interest based on a margin over, at Equistar's option, LIBOR or a base rate. The sum of the applicable margin plus a facility fee varies between 1.5% and 2.5%, in the case of LIBOR loans, and 0.5% and 1.5%, in the case of base rate loans, depending on Equistar's ratio of debt to EBITDA. The term loan generally bears interest at a rate equal to LIBOR plus 3% or the base rate plus 2%, at Equistar's option. Borrowing under the

EQUISTAR CHEMICALS, LP

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

term loan had a weighted average interest rate of 6.26% during 2001. Certain financial ratio requirements were modified in the refinancing to make them less restrictive. The bank credit facility is secured by a lien on Equistar's accounts receivable, inventory, other personal property and certain fixed assets. The refinancing also included the issuance of \$700 million of new unsecured 10.125% senior notes maturing in August 2008. The 10.125% senior notes rank *pari passu* with existing Equistar notes.

The August 2001 refinancing replaced a five-year, \$1.25 billion credit facility with a group of banks that would have expired November 2002. Borrowing under the facility at December 31, 2000 was \$820 million and had a weighted average interest rate of 7.13% at December 31, 2000. Millennium America Inc., a subsidiary of Millennium, provided limited guarantees with respect to the payment of principal and interest on a total of \$750 million principal amount of indebtedness under the \$1.25 billion revolving credit facility. As a result of the refinancing, the related guarantees have been terminated.

In March 2001, Equistar amended the previous \$1.25 billion credit facility making certain financial ratio requirements less restrictive. As a result of the amendment, the interest rate on the previous credit facility was increased from LIBOR plus 5/8 of 1% to LIBOR plus 8/10 of 1%.

In February 1999, Equistar issued \$900 million of debt securities. The debt securities included \$300 million of 8.50% Notes, which mature on February 15, 2004, and \$600 million of 8.75% Notes, which mature on February 15, 2009. Equistar used the net proceeds from this offering (i) to repay \$205 million outstanding under a capitalized lease obligation relating to Equistar's Corpus Christi facility, (ii) to repay the outstanding balance under a \$500 million credit agreement, after which the \$500 million credit agreement was terminated, (iii) to repay \$150 million of 10.00% Notes due in June 1999, and (iv) to the extent of the remaining net proceeds, to reduce outstanding borrowing under the revolving credit facility and for Partnership working capital purposes.

The bank credit facility and the indenture governing Equistar's 10.125% senior notes contain covenants that, subject to certain exceptions, restrict sale and leaseback transactions, lien incurrence, debt incurrence, sales of assets and mergers and consolidations. In addition, the bank credit facility requires Equistar to maintain specified financial ratios. The breach of these covenants could permit the lenders to declare the loans immediately payable and could permit the lenders under Equistar's credit facility to terminate future lending commitments.

As a result of the continued poor current business environment, Equistar is seeking an amendment to its credit facility that would increase its financial flexibility by easing certain financial ratio requirements. Such an amendment will require the payment of additional fees. Equistar anticipates that the amendment will become effective prior to March 31, 2002.

EQUISTAR CHEMICALS, LP

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

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

<u>Millions of dollars</u>	<u>2001</u>	<u>2000</u>
Bank credit facilities:		
Revolving credit facility due 2006	\$ --	\$ 820
Term loan due 2007	299	--
Other debt obligations:		
Medium-term notes due 2002-2005	31	121
9.125% Notes due 2002	100	100
8.50% Notes due 2004	300	300
6.50% Notes due 2006	150	150
10.125% Senior Notes due 2008	700	--
8.75% Notes due 2009	598	598
7.55% Debentures due 2026	150	150
Other	9	9
Total long-term debt	<u>2,337</u>	<u>2,248</u>
Less current maturities	104	90
Total long-term debt, net	<u>\$ 2,233</u>	<u>\$ 2,158</u>

The 8.75% notes have a face amount of \$600 million and are shown net of unamortized discount. The medium-term notes had a weighted average interest rate of 9.8% and 9.6% at December 31, 2001 and 2000, respectively.

The medium-term notes, the 9.125% notes, the 6.5% notes and the 7.55% debentures were assumed by Equistar from Lyondell when Equistar was formed in 1997. As between Equistar and Lyondell, Equistar is primarily liable for this debt. Lyondell remains a co-obligor for the medium-term notes and certain events involving only Lyondell could give rise to events of default under those notes, permitting the obligations to be accelerated. Under certain limited circumstances, the holders of the medium-term notes have the right to require repurchase of the notes. Following amendments to the indentures for the 9.125% notes and 6.5% notes and the 7.55% debentures in November 2000, Lyondell remains a guarantor of that debt but not a co-obligor. 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, 2001.

Aggregate maturities of long-term debt during the next five years are \$104 million in 2002, \$32 million in 2003; \$303 million in 2004; \$8 million in 2005; \$153 million in 2006 and \$1.8 billion thereafter.

12. Lease Commitments

Equistar leases various facilities and equipment under noncancelable lease arrangements for various periods.

Operating leases include leases of railcars used in the distribution of products in Equistar's business. Equistar leases the railcars from unaffiliated entities established for the purpose of serving as lessors with respect to these leases. The leases include options for Equistar to purchase the railcars during a lease term. If Equistar does not exercise a purchase option, the affected railcars will be sold upon termination of the lease. In the event the sales proceeds are less than the related guaranteed residual value, Equistar will pay the difference to the lessor. The total guaranteed residual value under these leases was approximately \$225 million at December 31, 2001.

EQUISTAR CHEMICALS, LP

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

Certain of Equistar's railcar operating leases contain financial and other covenants that are substantially the same as those contained in the credit facility discussed in Note 11 above. A breach of these covenants would permit the early termination of those leases. As a result of the continued poor current business environment, Equistar is seeking an amendment to these railcar leases. Such amendments will require the payment of additional fees. Equistar anticipates that the amendments will become effective prior to March 31, 2002.

In addition, the credit rating downgrade in 2002 permits the early termination of one of Equistar's railcar leases by the lessor, which would accelerate the payment of \$126 million of minimum lease payments. Equistar has reached an agreement in principal with the lessor to renegotiate the lease.

At December 31, 2001, future minimum lease payments and residual value guarantees relating to noncancelable operating leases with lease terms in excess of one year were as follows:

<u>Millions of dollars</u>	<u>Minimum Lease Payments</u>	<u>Residual Value Guarantees</u>
2002	\$ 95	\$ 39
2003	78	--
2004	67	186
2005	43	--
2006	35	--
Thereafter	287	--
Total minimum lease payments	<u>\$ 605</u>	<u>\$ 225</u>

Operating lease net rental expense was \$110 million, \$115 million and \$112 million for the years ending December 31, 2001, 2000 and 1999, respectively.

13. Financial Instruments and Derivatives

Equistar enters into over-the-counter derivatives, primarily price swap contracts, related to crude oil with Occidental Energy Marketing, Inc., a subsidiary of Occidental Chemical, to help manage its exposure to commodity price risk with respect to crude oil-related raw material purchases. At December 31, 2000, price swap contracts covering 5.1 million barrels of crude oil were outstanding. The carrying value and fair market value of these derivative instruments at December 31, 2000 represented a liability of \$13 million, which was based on quoted market prices. The resulting loss from these hedges of anticipated raw material purchases was deferred on the consolidated balance sheet. On January 1, 2001, in accordance with the transition provisions of SFAS No. 133, Equistar reclassified the deferred loss of \$13 million to accumulated other comprehensive income as a transition adjustment, representing the cumulative effect of a change in accounting principle. The transition adjustment was reclassified to the Consolidated Statement of Income during the period January through July 2001 as the related raw material purchases occurred.

During 2001, Equistar entered into additional price swap contracts covering 7.2 million barrels of crude oil and primarily maturing from July 2001 through December 2001. In the third quarter 2001, outstanding price swap contracts, covering 4.1 million barrels of crude oil and primarily maturing from October 2001 through December 2001, were effectively terminated. The termination resulted in realization of a gain of nearly \$9 million, which was recognized in the fourth quarter 2001 as the related forecasted transactions occurred. There were no outstanding price swap contracts at December 31, 2001.

The following table summarizes activity included in accumulated other comprehensive income ("AOCI") related to the fair value of derivative instruments for the year ended December 31, 2001:

EQUISTAR CHEMICALS, LP

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

<u>Millions of dollars</u>	<u>2001</u>
Gain (loss):	
Balance at beginning of period	\$ --
January 1, 2001 transition adjustment – reclassification of December 31, 2000 deferred loss	(13)
Net gains on derivative instruments	35
Reclassification of gains on derivative instruments to earnings	(22)
Net change included in AOCI for the period	--
Net gain on derivative instruments included in AOCI at December 31, 2001	\$ --

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 \$2.3 billion and \$2.1 billion at December 31, 2001 and 2000, respectively.

Equistar is exposed to credit risk related to its financial instruments in the event of nonperformance by the counterparties. Equistar does not generally require collateral or other security to support these financial instruments. The counterparties to these transactions are major institutions deemed creditworthy by Equistar. Equistar does not anticipate nonperformance by the counterparties.

Equistar accounts for certain investments as "available-for-sale" securities in accordance with the provisions of SFAS No. 115, *Accounting for Certain Investments in Debt and Equity Securities*. Accordingly, changes in the fair value of the investments are recognized in the balance sheet and the unrealized holding gains and losses are recognized in other comprehensive income.

14. Pension and Other Postretirement Benefits

All full-time regular employees of the Partnership are covered by defined benefit pension plans sponsored by Equistar. In connection with the formation of Equistar, no pension assets or obligations were contributed to Equistar, with the exception of union represented plans contributed by Occidental.

Retirement benefits are based upon years of service and the employee's highest three consecutive years of compensation during the last ten years of service. Equistar accrues pension costs based upon an actuarial valuation and funds the plans through periodic contributions to pension trust funds. Equistar also has unfunded supplemental nonqualified retirement plans, which provide pension benefits for certain employees in excess of the 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 noncontributory.

EQUISTAR CHEMICALS, LP

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(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	
	2001	2000	2001	2000
Change in benefit obligation:				
Benefit obligation, January 1	\$ 120	\$ 99	\$ 92	\$ 77
Service cost	16	17	2	2
Interest cost	10	9	6	6
Plan amendments	--	--	29	--
Actuarial loss (gain)	12	8	(14)	11
Benefits paid	(11)	(12)	(3)	(2)
Net effect of curtailments, settlements and special termination benefits	--	(1)	--	1
Transfer to Lyondell	--	--	--	(3)
Benefit obligation, December 31	<u>147</u>	<u>120</u>	<u>112</u>	<u>92</u>
Change in plan assets:				
Fair value of plan assets, January 1	117	101	--	--
Actual return on plan assets	(6)	(3)	--	--
Partnership contributions	7	31	3	2
Benefits paid	(11)	(12)	(3)	(2)
Fair value of plan assets, December 31	<u>107</u>	<u>117</u>	<u>--</u>	<u>--</u>
Funded status	(40)	(3)	(112)	(91)
Unrecognized actuarial loss	48	24	5	20
Unrecognized prior service cost	--	--	29	--
Net amount recognized	<u>\$ 8</u>	<u>\$ 21</u>	<u>\$ (78)</u>	<u>\$ (71)</u>
Amounts recognized in the Consolidated Balance Sheet consist of:				
Prepaid benefit cost	\$ 22	\$ 35	\$ --	\$ --
Accrued benefit liability	(33)	(14)	(78)	(71)
Accumulated other comprehensive income	19	--	--	--
Net amount recognized	<u>\$ 8</u>	<u>\$ 21</u>	<u>\$ (78)</u>	<u>\$ (71)</u>

The increase in other postretirement benefit obligations in 2001 resulted from a medical plan amendment that increased Equistar's maximum contribution level per employee by 25%.

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

	2001	2000
Benefit obligation	\$ 129	\$ 63
Fair value of assets	81	40

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

	2001	2000
Accumulated benefit obligation	\$ 106	\$ 9
Fair value of assets	81	6

EQUISTAR CHEMICALS, LP

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

Net periodic pension and other postretirement benefit costs included the following components:

Millions of dollars	Pension Benefits			Other Postretirement Benefits		
	2001	2000	1999	2001	2000	1999
Components of net periodic benefit cost:						
Service cost	\$ 16	\$ 17	\$ 22	\$ 2	\$ 2	\$ 4
Interest cost	10	9	7	6	6	6
Amortization of actuarial loss	2	--	1	--	1	1
Expected return on plan assets	(11)	(8)	(8)	--	--	--
Net effect of curtailments, settlements and special termination benefits	3	(1)	--	2	1	--
Net periodic benefit cost	<u>\$ 20</u>	<u>\$ 17</u>	<u>\$ 22</u>	<u>\$ 10</u>	<u>\$ 10</u>	<u>\$ 11</u>

The assumptions used in determining the net pension cost and the net pension liability were as follows at December 31:

Weighted-average assumptions as of December 31:	Pension Benefits			Other Postretirement Benefits		
	2001	2000	1999	2001	2000	1999
Discount rate	7.00%	7.50%	8.00%	7.00%	7.50%	8.00%
Expected return on plan assets	9.50%	9.50%	9.50%	--	--	--
Rate of compensation increase	4.50%	4.50%	4.75%	4.50%	4.50%	4.75%

The assumed annual rate of increase in the per capita cost of covered health care benefits as of December 31, 2001 was 7.0% for 2002 through 2004 and 5.0% 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 under 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 postretirement benefit liability as of December 31, 2001 by less than \$1 million and would not have a material effect on the aggregate service and interest cost components of the net periodic postretirement benefit cost for the year then ended.

Equistar also maintains voluntary defined contribution savings plans for eligible employees. Contributions to the plans by Equistar were \$16 million, \$17 million and \$20 million for the years ended December 31, 2001, 2000 and 1999, respectively.

15. Commitments and Contingencies

Commitments—Equistar has various purchase commitments for materials, supplies and services incident to the ordinary conduct of business. At December 31, 2001, Equistar had commitments for natural gas and natural gas liquids at prices in excess of current market. Using December 31, 2001 spot market prices for these products the estimated negative impact on first quarter 2002 operating results would be approximately \$30 million. Since December 31, 2001, natural gas prices have further declined. These fixed-price contracts substantially terminate by the end of the first quarter 2002. See also Note 5, describing related party commitments.

EQUISTAR CHEMICALS, LP

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

Equistar is party to various unconditional purchase obligation contracts as a purchaser for products and services, principally for steam and power. At December 31, 2001, future minimum payments under these contracts with noncancelable contract terms in excess of one year were as follows:

<u>Millions of dollars</u>	
2002	\$ 109
2003	132
2004	135
2005	137
2006	138
Thereafter	<u>1,688</u>
Total minimum contract payments	<u>\$ 2,339</u>

Equistar's total purchases under these agreements were \$77 million, \$51 million and \$56 million for the years ending December 31, 2001, 2000 and 1999, respectively. The increases in 2001, 2002 and 2003 are due to commitments for steam and power from a new co-generation facility, which is expected to reach full capacity in mid-2002.

Indemnification Arrangements—Lyondell, Millennium Petrochemicals and certain subsidiaries of Occidental have each agreed to provide certain indemnifications to Equistar with respect to the petrochemicals and polymers businesses contributed by the partners. In addition, Equistar agreed to assume third party claims that are related to certain pre-closing contingent liabilities that are asserted prior to December 1, 2004 as to Lyondell and Millennium Petrochemicals, and May 15, 2005 as to certain Occidental subsidiaries, to the extent the aggregate thereof does not exceed \$7 million to each partner, subject to certain terms of the respective asset contribution agreements. As of December 31, 2001, Equistar had incurred a total of \$17 million for these uninsured claims and liabilities. Equistar also agreed to assume third party claims that are related to certain pre-closing contingent liabilities that are asserted for the first time after December 1, 2004 as to Lyondell and Millennium Petrochemicals, and for the first time after May 15, 2005 as to certain Occidental subsidiaries. As of September 30, 2001, Equistar, Lyondell, Millennium Petrochemicals and certain subsidiaries of Occidental amended the asset contribution agreements governing these indemnification obligations to clarify the treatment of, and procedures pertaining to the management of, certain claims arising under the asset contribution agreements. Equistar management believes that these amendments do not materially change the asset contribution agreements.

Environmental Remediation—Equistar's accrued liability for environmental matters as of December 31, 2001 was \$6 million and related to the Port Arthur facility, which was permanently shut down on February 28, 2001. In the opinion of management, there is currently no material estimable range of loss in excess of the amounts recorded for environmental remediation.

Clean Air Act—The eight-county Houston/Galveston region has been designated a severe non-attainment area for ozone by the U.S. Environmental Protection Agency ("EPA"). Emission reduction controls for nitrogen oxides ("NOx") must be installed at each of Equistar's six plants located in the Houston/Galveston region during the next several years. Compliance with the plan will result in increased capital investment, which could be between \$200 million and \$260 million, before the 2007 deadline, as well as higher annual operating costs for Equistar. The timing and amount of these expenditures are subject to regulatory and other uncertainties, as well as obtaining the necessary permits and approvals. In January 2001, Equistar and an organization composed of industry participants filed a lawsuit against the Texas Natural Resource Conservation Commission ("TNRCC") to encourage adoption of their alternative plan to achieve the same air quality improvement with less negative economic impact on the region. Adoption of the alternative plan, as sought by the lawsuit, is expected to reduce Equistar's estimated capital investments for NOx reductions required to comply with the standards. However, there can be no guarantee as to the ultimate capital cost of implementing any final plan developed to ensure ozone attainment by the 2007 deadline.

EQUISTAR CHEMICALS, LP

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

The Clean Air Act Amendments of 1990 set minimum levels for oxygenates, such as MTBE, in gasoline sold in areas not meeting specified air quality standards. 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 has led to public concern about the use of MTBE. Certain federal and state governmental initiatives have sought either to rescind the oxygenate requirement for reformulated gasoline or to restrict or ban the use of MTBE. These initiatives or other governmental actions could result in a significant reduction in Equistar's MTBE sales, which represented approximately 4% of its total 2001 revenues. Equistar has developed technologies to convert its process to produce alternate gasoline blending components should it be necessary to reduce MTBE production in the future. However, implementation of such technologies would require additional capital investment.

General—The Partnership is also subject to various lawsuits and proceedings. Subject to the uncertainty inherent in all litigation, management believes the resolution of these proceedings will not have a material adverse effect on the financial position or liquidity of Equistar.

16. Supplemental Cash Flow Information

Supplemental cash flow information is summarized as follows for the periods presented:

<u>Millions of dollars</u>	<u>For the year ended December 31,</u>		
	<u>2001</u>	<u>2000</u>	<u>1999</u>
Cash paid for interest	<u>\$ 171</u>	<u>\$ 180</u>	<u>\$ 146</u>

EQUISTAR CHEMICALS, LP

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

17. Segment Information and Related Information

Equistar operates in two reportable segments, petrochemicals and polymers. The accounting policies of the segments are the same as those described in "Summary of Significant Accounting Policies" (see Note 2). No third-party customer accounted for 10% or more of sales during the three-year period ended December 31, 2001.

Summarized financial information concerning Equistar's reportable segments is shown in the following table. Intersegment sales between the petrochemicals and polymers segments were based on current market prices.

<u>Millions of dollars</u>	<u>Petrochemicals</u>	<u>Polymers</u>	<u>Unallocated</u>	<u>Eliminations</u>	<u>Consolidated</u>
For the year ended December 31, 2001:					
Sales and other					
operating revenues:					
Customers	\$ 3,929	\$ 1,980	\$ --	\$ --	\$ 5,909
Intersegment	1,455	--	--	(1,455)	--
	<u>5,384</u>	<u>1,980</u>	<u>--</u>	<u>(1,455)</u>	<u>5,909</u>
Unusual charges	--	--	22	--	22
Operating income (loss)	275	(186)	(188)	--	(99)
Total assets	3,458	1,365	1,485	--	6,308
Capital expenditures	84	24	2	--	110
Depreciation and amortization expense	204	58	59	--	321
For the year ended December 31, 2000:					
Sales and other					
operating revenues:					
Customers	\$ 5,144	\$ 2,351	\$ --	\$ --	\$ 7,495
Intersegment	1,887	--	--	(1,887)	--
	<u>7,031</u>	<u>2,351</u>	<u>--</u>	<u>(1,887)</u>	<u>7,495</u>
Operating income (loss)	694	(185)	(175)	--	334
Total assets	3,693	1,534	1,355	--	6,582
Capital expenditures	79	46	6	--	131
Depreciation and amortization expense	199	55	56	--	310
For the year ended December 31, 1999:					
Sales and other					
operating revenues:					
Customers	\$ 3,435	\$ 2,159	\$ --	\$ --	\$ 5,594
Intersegment	1,324	--	--	(1,324)	--
	<u>4,759</u>	<u>2,159</u>	<u>--</u>	<u>(1,324)</u>	<u>5,594</u>
Unusual charges	--	--	96	--	96
Operating income (loss)	447	51	(336)	--	162
Total assets	3,671	1,551	1,514	--	6,736
Capital expenditures	61	83	13	--	157
Depreciation and amortization expense	194	53	53	--	300

EQUISTAR CHEMICALS, LP

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

The following table presents the details of “Operating income (loss)” as presented above in the “Unallocated” column for the years ended December 31, 2001, 2000 and 1999.

<u>Millions of dollars</u>	<u>2001</u>	<u>2000</u>	<u>1999</u>
Expenses not allocated to petrochemicals and polymers:			
Principally general and administrative expenses	\$ (166)	\$ (175)	\$ (240)
Unusual charges	(22)	--	(96)
Total—Unallocated	<u>\$ (188)</u>	<u>\$ (175)</u>	<u>\$ (336)</u>

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

<u>Millions of dollars</u>	<u>2001</u>	<u>2000</u>	<u>1999</u>
Cash	\$ 202	\$ 18	\$ 108
Accounts receivable—trade and related parties	17	16	18
Prepays and other current assets	20	17	22
Property, plant and equipment, net	44	56	58
Goodwill, net	1,053	1,086	1,119
Other assets	149	162	189
	<u>\$ 1,485</u>	<u>\$ 1,355</u>	<u>\$ 1,514</u>

18. Subsequent Event

Early in 2002, Lyondell and Occidental agreed in principle for Lyondell’s acquisition of Occidental’s 29.5% share of Equistar and Occidental’s purchase of an equity interest in Lyondell. Upon completion of these transactions, Lyondell’s ownership interest in Equistar would increase to 70.5%. Millennium holds the remaining 29.5% interest in Equistar. There can be no assurance that the proposed transactions will be completed.

Report of Independent Accountants

To the Partnership Governance Committee
of LYONDELL-CITGO Refining LP

In our opinion, the accompanying balance sheets and related statements of income, Partners' capital and cash flows, present fairly, in all material respects, the financial position of LYONDELL-CITGO Refining LP (the Partnership) at December 31, 2001 and December 31, 2000, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2001 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 auditing standards generally accepted in the United States of America, which require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit 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.

/s/ PricewaterhouseCoopers LLP

PRICEWATERHOUSECOOPERS LLP

Houston, Texas
February 4, 2002

LYONDELL-CITGO REFINING LP

STATEMENTS OF INCOME

Millions of dollars	For the year ended December 31,		
	2001	2000	1999
Sales and other operating revenues	\$ 3,284	\$ 4,075	\$ 2,571
Operating costs and expenses:			
Cost of sales:			
Crude oil and feedstock	2,379	3,246	1,959
Operating and other expenses	588	580	473
Selling, general and administrative expenses	61	60	66
Unusual charge	--	--	6
	<u>3,028</u>	<u>3,886</u>	<u>2,504</u>
Operating income	256	189	67
Interest expense	(52)	(63)	(45)
Interest income	<u>1</u>	<u>2</u>	<u>1</u>
Income before benefit from income taxes and Extraordinary item	205	128	23
Benefit from state income taxes	<u>--</u>	<u>--</u>	<u>(1)</u>
Income before extraordinary item	205	128	24
Extraordinary loss on extinguishment of debt	<u>(2)</u>	<u>--</u>	<u>--</u>
Net Income	<u>\$ 203</u>	<u>\$ 128</u>	<u>\$ 24</u>

See Notes to Financial Statements.

LYONDELL-CITGO REFINING LP

BALANCE SHEETS

<u>Millions of dollars</u>	<u>December 31,</u>	
	<u>2001</u>	<u>2000</u>
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 3	\$ 1
Accounts receivable:		
Trade, net	31	75
Related parties and affiliates	62	131
Inventories	130	90
Prepaid expenses and other current assets	4	13
Total current assets	<u>230</u>	<u>310</u>
Property, plant and equipment	2,322	2,292
Construction projects in progress	177	127
Accumulated depreciation and amortization	<u>(1,156)</u>	<u>(1,100)</u>
	1,343	1,319
Deferred charges and other assets	<u>97</u>	<u>67</u>
Total assets	<u>\$ 1,670</u>	<u>\$ 1,696</u>
LIABILITIES AND PARTNERS' CAPITAL		
Current liabilities:		
Accounts payable:		
Trade	\$ 117	\$ 108
Related parties and affiliates	98	187
Distribution payable to Lyondell Partners	17	18
Distribution payable to CITGO Partners	12	13
Loan payable to bank	50	20
Note payable	--	450
Taxes, payroll and other liabilities	<u>91</u>	<u>71</u>
Total current liabilities	<u>385</u>	<u>867</u>
Long-term debt	450	--
Loans payable to Lyondell Partners	229	229
Loans payable to CITGO Partners	35	35
Pension, postretirement benefit and other liabilities	<u>79</u>	<u>57</u>
Total long-term liabilities	<u>793</u>	<u>321</u>
Commitments and contingencies		
Partners' capital:		
Partners' accounts	507	508
Accumulated other comprehensive loss	<u>(15)</u>	<u>--</u>
Total partners' capital	<u>492</u>	<u>508</u>
Total liabilities and partners' capital	<u>\$ 1,670</u>	<u>\$ 1,696</u>

See Notes to Financial Statements.

LYONDELL-CITGO REFINING LP

STATEMENTS OF CASH FLOWS

Millions of dollars	For the year ended December 31,		
	2001	2000	1999
Cash flows from operating activities:			
Net income	\$ 203	\$ 128	\$ 24
Adjustments to reconcile net income to cash provided by operating activities:			
Depreciation and amortization	108	112	103
Net (gain) loss on disposition of assets	(3)	1	--
Extraordinary item	2	--	--
Changes in assets and liabilities that provided (used) cash:			
Accounts receivable	113	(62)	(79)
Inventories	(40)	(43)	59
Accounts payable	(88)	97	91
Prepaid expenses and other current assets	7	10	(10)
Other assets and liabilities	(22)	(21)	(7)
Cash provided by operating activities	<u>280</u>	<u>222</u>	<u>181</u>
Cash flows from investing activities:			
Expenditures for property, plant and equipment	(109)	(60)	(56)
Proceeds from sale of property, plant and equipment	8	--	--
Proceeds from sales tax refund related to capital expenditures	5	--	--
Other	--	(1)	(1)
Cash used in investing activities	<u>(96)</u>	<u>(61)</u>	<u>(57)</u>
Cash flows from financing activities:			
Proceeds from (repayments of) bank loan	30	20	(20)
Repayment of current maturities of long-term debt	--	(450)	--
Proceeds from PDVSA loan	--	439	--
Contributions from Lyondell Partners	45	25	--
Contributions from CITGO Partners	32	18	--
Proceeds from Lyondell Partners' loans	--	4	35
Proceeds from CITGO Partners' loans	--	13	25
Distributions to Lyondell Partners	(165)	(144)	(101)
Distributions to CITGO Partners	(116)	(101)	(71)
Payment of debt issuance costs	(8)	--	--
Cash used in financing activities	<u>(182)</u>	<u>(176)</u>	<u>(132)</u>
Increase (decrease) in cash and cash equivalents	2	(15)	(8)
Cash and cash equivalents at beginning of period	1	16	24
Cash and cash equivalents at end of period	<u>\$ 3</u>	<u>\$ 1</u>	<u>\$ 16</u>

See Notes to Financial Statements.

LYONDELL-CITGO REFINING LP

STATEMENTS OF PARTNERS' CAPITAL

Millions of dollars	Partners' Accounts			Accumulated Other Comprehensive Income (Loss)	Comprehensive Income (Loss)
	Lyondell Partners	CITGO Partners	Total		
Balance at January 1, 1999	\$ 65	\$ 584	\$ 649	\$ --	\$ --
Net income	23	1	24	--	24
Other contributions	47	32	79	--	--
Distributions to Partners	(115)	(81)	(196)	--	--
Comprehensive income					<u>\$ 24</u>
Balance at December 31, 1999	20	536	556	--	\$ --
Net income	86	42	128	--	128
Cash contributions	25	18	43	--	--
Distributions to Partners	(128)	(91)	(219)	--	--
Comprehensive income					<u>\$ 128</u>
Balance at December 31, 2000	3	505	508	--	\$ --
Net income	129	74	203	--	203
Cash contributions	45	32	77	--	--
Distributions to Partners	(165)	(116)	(281)	--	--
Other comprehensive income:					
Minimum pension liability				(15)	(15)
Comprehensive income					<u>\$ 188</u>
Balance at December 31, 2001	<u>\$ 12</u>	<u>\$ 495</u>	<u>\$ 507</u>	<u>\$ (15)</u>	

See Notes to Financial Statements.

LYONDELL-CITGO REFINING LP

NOTES TO FINANCIAL STATEMENTS

1. The Partnership

LYONDELL-CITGO Refining LP ("LCR" or the "Partnership") was formed on July 1, 1993, by subsidiaries of Lyondell Chemical Company ("Lyondell") and CITGO Petroleum Corporation ("CITGO") in order to own and operate a refinery ("Refinery") located adjacent to the Houston Ship Channel in Houston, Texas and a lube oil blending and packaging plant in Birmingham, Alabama.

Lyondell owns its interest in the Partnership through wholly owned subsidiaries, Lyondell Refining LP, LLC ("Lyondell LP") and Lyondell Refining Company ("Lyondell GP"). Lyondell LP and Lyondell GP together are known as Lyondell Partners. CITGO holds its interest through CITGO Refining Investment Company ("CITGO LP") and CITGO Gulf Coast Refining, Inc. ("CITGO GP"), both wholly owned subsidiaries of CITGO. CITGO LP and CITGO GP together are known as CITGO Partners. Lyondell Partners and CITGO Partners together are known as the Partners. LCR will continue in existence until it is dissolved under the terms of the Limited Partnership Agreement (the "Agreement").

The Partners have agreed to allocate net income and cash provided by operating activities based on certain contributions and other factors instead of allocating such amounts based on their capital account balances. Based upon these contributions and other factors, Lyondell Partners and CITGO Partners had ownership interests of approximately 59% and 41%, respectively, as of December 31, 2001.

At December 31, 2001, the Partnership employed approximately 1,000 full-time employees. Of these, approximately 600 were covered by a collective bargaining agreement between LCR and the Paper, Allied-Industrial, Chemical and Energy Workers International Union ("PACE"). The agreement, which expired in January 2002, has been renewed and will expire in January 2006 (see Note 15). LCR also uses the services of independent contractors in the routine conduct of its business.

2. Summary of Significant Accounting Policies

Revenue Recognition—Revenue from product sales is recognized as risk and title to the product transfers to the customer, which usually occurs when shipment is made.

Cash and Cash Equivalents—Cash equivalents consist of highly liquid debt instruments such as certificates of deposit, commercial paper and money market accounts purchased with an original maturity date of three months or less. Cash equivalents are stated at cost, which approximates fair value. The Partnership's policy is to invest cash in conservative, highly rated instruments and limit the amount of credit exposure to any one institution.

Accounts Receivable—The Partnership sells its products primarily to companies in the petrochemical and refining industries. The Partnership 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 Balance Sheets as a reduction of accounts receivable-trade, totaled approximately \$25,000 at both December 31, 2001 and 2000.

Inventories—Inventories are stated at the lower of cost or market. Cost is determined on the last-in, first-out ("LIFO") basis for inventories, excluding materials and supplies. Materials and supplies are valued using the average cost method.

Inventory exchange transactions, which involve homogeneous commodities in the same line of business 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.

LYONDELL-CITGO REFINING LP

NOTES TO FINANCIAL STATEMENTS—(Continued)

Property, Plant and Equipment—Property, plant and equipment are recorded at cost. The primary components of property, plant and equipment are manufacturing facilities and equipment. Depreciation of property, plant and equipment is computed using the straight-line method over the estimated useful lives of the related assets which range from five to thirty years. Upon retirement or sale, the Partnership removes the cost of the assets and the related accumulated depreciation from the accounts and reflects any resulting gains or losses in income. LCR's policy is to capitalize interest cost incurred on debt during the construction of major projects exceeding one year.

Long-Lived Asset Impairment—LCR evaluates long-lived assets for impairment whenever events or changes in circumstances indicate that a 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 fair value. Long-lived assets to be disposed of are reported at the lower of carrying amount or fair value less cost to sell.

Turnaround Maintenance and Repair Costs—Cost of maintenance and repairs incurred in connection with turnarounds of major units at the Refinery exceeding \$5 million are deferred and amortized using the straight-line method, until the next planned turnaround, generally four to six years. These costs consist of maintenance, repair and replacement costs that are necessary to maintain, extend and improve the operating capacity and efficiency rates of the production units. Amortization of deferred turnaround costs for 2001, 2000 and 1999 was \$11 million, \$11 million and \$13 million, respectively. Other turnaround costs and ordinary repair and maintenance costs are expensed as incurred.

Environmental Remediation Costs—Anticipated expenditures related to investigation and remediation of contaminated sites, which include operating facilities and waste disposal sites, are accrued when it is probable a liability has been incurred and the amount of the liability can reasonably be estimated. Estimates have not been discounted to present value.

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 federal income taxes in the accompanying financial statements. The Partnership is subject to certain state income taxes.

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 liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

Accounting Changes Adopted in 2001—As of January 1, 2001, LCR adopted Statement of Financial Accounting Standards ("SFAS") No. 133, *Accounting for Derivative Instruments and Hedging Activities*, as amended by SFAS No. 138, *Accounting for Certain Derivative Instruments and Certain Hedging Activities*. Under SFAS No. 133, all derivative instruments are recorded on the balance sheet at fair value. The adoption of SFAS No. 133 did not have a significant impact on the financial statements of LCR.

Recent Accounting Standards—In June 2001, the Financial Accounting Standards Board ("FASB") issued SFAS No. 141, *Business Combinations*, SFAS No. 142, *Goodwill and Other Intangible Assets* and SFAS No. 143, *Accounting for Asset Retirement Obligations*. In October 2001, the FASB issued SFAS No. 144, *Accounting for the Impairment or Disposal of Long-Lived Asset*. Adoption of SFAS No. 141, SFAS No. 142, SFAS No. 143 and SFAS No. 144, is not expected to have a material effect on the financial statements of LCR.

Reclassifications—Certain previously reported amounts have been reclassified to conform to classifications adopted in 2001.

LYONDELL-CITGO REFINING LP

NOTES TO FINANCIAL STATEMENTS—(Continued)

3. Unusual Charge

During 1998, LCR and PACE ratified a new, three-year labor contract. That contract called for a Reduction In Force ("RIF") program, which resulted in certain personnel reductions. LCR expensed \$6 million, relating to the RIF, in 1999. The \$6 million charge was reported as an unusual charge.

4. Extraordinary Item

In July 2001, LCR retired debt in the principal amount of \$450 million prior to maturity (see Note 8). LCR wrote off \$2 million of unamortized debt issuance costs. The \$2 million charge was reported as an extraordinary loss on extinguishment of debt. Previously, these debt issuance costs had been deferred and were being amortized to interest expense.

5. Related Party Transactions

LCR is party to agreements with the following related parties:

- CITGO
- CITGO Partners
- Equistar Chemicals, LP ("Equistar") – Lyondell holds a 41% interest
- Lyondell
- Lyondell Partners
- PDVSA
- PDV Holding, Inc.
- PDVSA Oil
- PDVSA Services

LCR buys a substantial majority of its crude oil supply at deemed product-based prices, adjusted for certain indexed items (see Note 14 and 15), from PDVSA Oil under the terms of a long-term crude oil supply agreement ("Crude Supply Agreement").

Under the terms of a long-term product sales agreement, CITGO buys all of the finished gasoline, jet fuel, low sulfur diesel, heating oils, coke and sulfur produced at the Refinery at market-based prices.

LCR is party to a number of raw materials, product sales and administrative service agreements with Lyondell, CITGO and Equistar. This includes a hydrogen take-or-pay contract with Equistar (see Note 14). In addition, a tolling agreement provides for the production of alkylate and methyl tertiary butyl ether for the Partnership at Equistar's Channelview, Texas petrochemical complex.

In January 1999, the Partnership entered into a lubricant facility operating agreement and lubricant sales agreements with CITGO. The lubricant facility operating agreement allows CITGO to operate the lubricant facility in Birminghamport, Alabama while the Partnership retains ownership. Under the terms of the lubricant sales agreements, CITGO buys paraffinic lubricants base oil, naphthenic lubricants, white mineral oils and specialty oils from the Partnership.

During 1999, LCR paid Lyondell Partners and CITGO Partners \$9 million and \$1 million, respectively, for interest on loans related to funding a portion of the upgrade project at the Refinery and other capital expenditures. In accordance with the terms of LCR's credit facility (see Note 8) no interest was paid to Lyondell Partners or CITGO Partners on these loans during 2001 or 2000.

LYONDELL-CITGO REFINING LP

NOTES TO FINANCIAL STATEMENTS—(Continued)

During 2000, LCR paid PDVSA \$15 million for interest on the \$450 million interim financing from May 2000 through September 2000. During 2000, LCR paid PDV Holding, Inc. \$1 million for interest on the interim \$70 million revolver loan from May 2000 through September 2000 (see Note 8).

Related party transactions are summarized as follows:

<u>Millions of dollars</u>	<u>For the year ended December 31,</u>		
	<u>2001</u>	<u>2000</u>	<u>1999</u>
<u>LCR billed related parties for the following:</u>			
Sales of products:			
CITGO	\$ 2,309	\$ 2,879	\$ 1,755
Equistar	203	264	190
PDVSA Services	--	14	--
Services and cost sharing arrangements:			
CITGO	--	--	2
Equistar	2	--	--
Lyondell	3	2	3
Delivery shortfalls under Crude Supply Agreement: PDVSA Oil			
	--	--	12
<u>Related parties billed LCR for the following:</u>			
Purchase of products:			
CITGO	80	52	46
Equistar	359	425	250
PDVSA	1,474	1,796	764
Transportation charges:			
CITGO	1	1	1
Equistar	2	--	--
PDVSA	3	1	4
Services and cost sharing arrangements:			
CITGO	3	2	1
Equistar	19	15	13
Lyondell	3	4	4

6. Supplemental Cash Flow Information

At December 31, 2001, 2000 and 1999, construction in process included approximately \$11 million, \$3 million and \$7 million, respectively, of non-cash additions which related to accounts payable accruals.

During 2001, 2000 and 1999, LCR paid interest of \$38 million, \$41 million and \$37 million, respectively. No interest costs were capitalized in 2001, 2000 or 1999. During each of the years ended December 31, 2001, 2000 and 1999 LCR paid less than \$1 million in state income tax.

During the third quarter 2000, LCR recorded certain non-cash financing transactions. Proceeds from the \$450 million one-year credit facility completed in September 2000, net of approximately \$11 million of loan costs, were paid directly to the holder of the interim financing note. Also, approximately \$6 million was paid by Lyondell directly to CITGO for Lyondell's share of previous capital funding loans made by CITGO to LCR.

In December 1999, the Partners agreed to reclassify part of the outstanding balance of their respective loans to their respective partners' capital accounts in relation to their ownership interests of approximately 59% for Lyondell Partners and 41% for CITGO Partners. Accordingly \$47 million and \$32 million of Lyondell Partners' and CITGO Partners' loans, respectively, were reclassified to the respective partners' capital accounts.

LYONDELL-CITGO REFINING LP

NOTES TO FINANCIAL STATEMENTS—(Continued)

7. Inventories

Inventories were as follows at December 31:

<u>Millions of dollars</u>	<u>2001</u>	<u>2000</u>
Finished goods	\$ 42	\$ 26
Raw materials	75	49
Materials and supplies	13	15
Total inventories	<u>\$ 130</u>	<u>\$ 90</u>

In 2001 and 2000, all inventory, excluding materials and supplies, were determined by the LIFO method. The excess of replacement cost of inventories over the carrying value was approximately \$53 million and \$137 million at December 31, 2001 and 2000, respectively.

8. Financing Arrangements

In May 1995, LCR entered into two credit facilities totaling \$520 million with a group of banks. The first facility, a \$70 million, 364-day revolving working capital facility, was utilized for general business purposes and for letters of credit. At December 31, 1999, no amounts were outstanding under this credit facility. Interest for this credit facility was based on either prime, eurodollar rates or based on a competitive auction feature wherein the interest rate can be established by competitive bids submitted by the participating banks, all at LCR's option. The second facility was a \$450 million, five-year term credit facility that was used to partially fund an upgrade project at the Refinery which was completed in February 1997. At December 31, 1999, \$450 million was outstanding under this credit facility with a weighted-average interest rate of 5.8%. Interest for this facility was based on prime or eurodollar rates at the Partnership's option. Both facilities expired in May of 2000 and accordingly, on the December 31, 1999 balance sheet the \$450 million was classified as a current liability.

In August 1999, both facilities were amended to change the covenant calculations of certain financial ratios. In consideration for these changes the Partners agreed that LCR would defer payment of interest accrued on loans payable to the Partners from July 1, 1999 through the termination date of the two facilities.

In May 2000, LCR entered into a credit facility with PDVSA for interim financing to repay the \$450 million outstanding under its May 1995 credit facility that expired in May 2000.

In September 2000, LCR entered into two one-year credit facilities with a syndication of banks, consisting of a \$450 million term loan to replace the \$450 million interim financing and a \$70 million revolving credit facility to be used for working capital and general business purposes. At December 31, 2000, \$450 million was outstanding under the \$450 million term loan with a weighted-average interest rate of 8.2%. At December 31, 2000, \$20 million was outstanding under the \$70 million revolving credit facility with a weighted-average interest rate of 8.6%.

In July 2001, LCR obtained new credit facilities consisting of a \$450 million term loan (see Note 4) and a \$70 million revolving credit facility, both of which mature in January 2003. These new facilities replaced similar facilities, which matured in September 2001.

At December 31, 2001, \$450 million was outstanding under the \$450 million term loan with a weighted-average interest rate of 5.4%. At December 31, 2001, \$50 million was outstanding under the \$70 million revolving credit facility with a weighted-average interest rate of 4.8%.

LYONDELL-CITGO REFINING LP

NOTES TO FINANCIAL STATEMENTS—(Continued)

Both facilities contain covenants that require LCR to maintain a minimum net worth and maintain certain financial ratios defined in the agreements. The facilities also contain other customary covenants which limit the Partnership's ability to modify certain significant contracts, incur additional debt or liens, dispose of assets, make restricted payments as defined in the agreements or merge or consolidate with other entities. Additionally, the covenants continue to defer the payment of interest accrued on loans payable to the Partners through the termination date of the two facilities. LCR was in compliance with all such covenants at December 31, 2001.

At December 31, 2001, LCR had outstanding letters of credit totaling \$9 million.

In October 1995 and January 1997, LCR began borrowing funds from Lyondell Partners and CITGO Partners, respectively, in connection with the upgrade project at the Refinery and other capital expenditures. These loans are due on July 1, 2003 and are subordinate to the two bank credit facilities. At December 31, 2001, Lyondell Partners and CITGO Partners loans totaled \$229 million and \$35 million, respectively, and both loans had weighted-average interest rates of 4.4% which are based on eurodollar rates. At December 31, 2000, Lyondell Partners and CITGO Partners loans totaled \$229 million and \$35 million, respectively, and both loans had weighted-average interest rates of 6.7% which are based on eurodollar rates. Interest to both Partners was payable at the end of each calendar quarter through June 30, 1999, but is now deferred in accordance with the \$450 million credit facility.

During 2001, 2000 and 1999, LCR incurred \$52 million, \$63 million and \$45 million of interest cost, respectively. Included in the interest cost for 2001 is approximately \$9 million of amortization of deferred loan costs incurred to obtain the \$450 million eighteen-month term financing in July 2001. Included in the interest cost for 2000 is approximately \$3 million of amortization of deferred loan costs incurred to obtain the \$450 million one-year term financing in September 2000.

9. Financial Instruments

The fair value of all financial instruments included in current assets and current liabilities, including cash and cash equivalents, accounts receivable, accounts payable, loan payable to bank and note payable, approximated their carrying value due to their short maturity. The fair value of long-term loans payable approximated their carrying value because they bear interest at variable rates.

10. Lease Commitments

LCR leases crude oil storage facilities, computers, office equipment and other items. At December 31, 2001, future minimum lease payments for operating leases with noncancelable lease terms in excess of one year were as follows:

<u>Millions of dollars</u>	
2002	\$ 29
2003	11
2004	6
2005	6
2006	4
Thereafter	15
Total minimum lease payments	<u>\$ 71</u>

Operating lease net rental expenses for the years ended December 31, 2001, 2000 and 1999 were approximately \$32 million, \$31 million and \$27 million, respectively.

LYONDELL-CITGO REFINING LP

NOTES TO FINANCIAL STATEMENTS—(Continued)

11. Employee Benefit Plans

Employee Savings—LCR sponsors qualified defined contribution retirement and savings plans covering substantially all eligible salaried and hourly employees. Participants make voluntary contributions to the plans and the Partnership makes contributions, including matching employee contributions, based on plan provisions. LCR expensed \$5 million related to its contributions to these plans in each of the three years ended December 31, 2001.

Pension Benefits—LCR sponsors one qualified noncontributory defined benefit pension plan covering eligible hourly employees and one covering eligible salaried employees. The Partnership also sponsors one nonqualified defined benefit plan for certain eligible employees. The qualified plans' assets include primarily stocks and bonds. The nonqualified plan is not funded.

LCR's policy is to fund the qualified pension plans in accordance with applicable laws and regulations and not to exceed the tax deductible limits. The nonqualified plans are funded as necessary to pay retiree benefits. The plan benefits for each of the qualified pension plans are primarily based on an employee's years of plan service and compensation as defined by each plan.

Postretirement Benefits Other Than Pensions—In addition to pension benefits, the Partnership also provides certain health care and life insurance benefits for eligible salaried and hourly employees at retirement. These benefits are subject to deductibles, co-payment provisions and other limitations and are primarily funded on a pay as you go basis. The Partnership reserves the right to change or to terminate the benefits at any time.

LYONDELL-CITGO REFINING LP

NOTES TO FINANCIAL STATEMENTS—(Continued)

The following table provides a reconciliation of benefit obligations, plan assets and the funded status of these plans:

<u>Millions of dollars</u>	Pension Benefits		Other Postretirement Benefits	
	2001	2000	2001	2000
Change in benefit obligation:				
Benefit obligation, January 1	\$ 70	\$ 66	\$ 32	\$ 31
Service cost	5	4	1	1
Interest cost	6	5	2	2
Actuarial loss (gain)	21	8	(2)	(1)
Special termination benefits	--	1	--	--
Benefits paid	(5)	(14)	(2)	(1)
Benefit obligation, December 31	<u>97</u>	<u>70</u>	<u>31</u>	<u>32</u>
Change in plan assets:				
Fair value of plan assets, January 1	42	39	--	--
Actual return on plan assets	(3)	(2)	--	--
Partnership contributions	5	19	2	1
Benefits paid	(5)	(14)	(2)	(1)
Fair value of plan assets, December 31	<u>39</u>	<u>42</u>	<u>--</u>	<u>--</u>
Funded status	(58)	(28)	(31)	(32)
Unrecognized actuarial loss	39	13	8	14
Unrecognized prior service cost (benefit)	1	2	(22)	(25)
Net amount recognized	<u>\$ (18)</u>	<u>\$ (13)</u>	<u>\$ (45)</u>	<u>\$ (43)</u>
Amounts Recognized in Balance Sheets:				
Accrued benefit liability	\$ (18)	\$ (13)	\$ (45)	\$ (43)
Additional minimum liability	(17)	--	--	--
Intangible asset	2	--	--	--
Accumulated other comprehensive income	15	--	--	--
Net amount recognized	<u>\$ (18)</u>	<u>\$ (13)</u>	<u>\$ (45)</u>	<u>\$ (43)</u>

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

<u>Millions of dollars</u>	2001	2000
Benefit obligation	\$ 97	\$ 70
Fair value of assets	39	42

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

<u>Millions of dollars</u>	2001	2000
Accumulated benefit obligation	\$ 74	\$ 35
Fair value of assets	39	28

LYONDELL-CITGO REFINING LP

NOTES TO FINANCIAL STATEMENTS—(Continued)

Net periodic pension and other postretirement benefit costs include the following components:

	Pension Benefits			Other Postretirement Benefits		
	2001	2000	1999	2001	2000	1999
<i>Millions of dollars</i>						
Components of net periodic benefit cost:						
Service cost	\$ 5	\$ 4	\$ 5	\$ 1	\$ 1	\$ 1
Interest cost	6	6	6	2	2	2
Expected return on plan assets	(4)	(3)	(4)	--	--	--
Amortization of prior service costs	--	--	--	(3)	(3)	(3)
Amortization of actuarial loss	2	--	1	--	1	1
Effect of curtailments, settlements, special termination benefits and other	--	2	5	1	--	1
Net periodic benefit cost	<u>\$ 9</u>	<u>\$ 9</u>	<u>\$ 13</u>	<u>\$ 1</u>	<u>\$ 1</u>	<u>\$ 2</u>
Special termination benefit charge	<u>\$ --</u>	<u>\$ 1</u>	<u>\$ 3</u>	<u>\$ --</u>	<u>\$ --</u>	<u>\$ 1</u>

The assumptions used as of December 31, 2001, 2000 and 1999 in determining net pension cost and net pension liability were as follows:

	Pension Benefits			Other Postretirement Benefits		
	2001	2000	1999	2001	2000	1999
Weighted-average assumptions as of December 31:						
Discount rate	7.00%	7.50%	8.00%	7.00%	7.50%	8.00%
Expected return on plan assets	9.50%	9.50%	9.50%	N/A	N/A	N/A
Rate of compensation increase	4.50%	4.50%	4.75%	4.50%	4.50%	4.75%

For measurement purposes, the assumed annual rate of increase in the per capita costs of health care benefits as of December 31, 2001 was 7% for 2002 and 5% thereafter. A one-percentage-point increase or decrease in assumed health care cost trend rates would have a less than \$1 million change on both the postretirement benefit obligation and the total of the service and interest cost components.

12. Income Taxes

Deferred taxes result from temporary differences in the recognition of revenues and expenses for tax and financial reporting purposes and are calculated based upon cumulative book and tax differences in the Balance Sheets in accordance with SFAS No. 109, *Accounting for Income Taxes*. LCR is treated as a partnership for federal income tax purposes; consequently, no provision for federal income taxes is required. LCR is however, subject to state income taxes, and therefore a provision for or benefit from state income taxes has been recorded. Pretax income was taxed by domestic jurisdictions only. There was no provision for or benefit from state income taxes reflected for 2001 or 2000. The benefit from state income tax was \$1 million in 1999. In addition, there was no deferred provision for state income tax in 2001, 2000 and 1999.

LYONDELL-CITGO REFINING LP

NOTES TO FINANCIAL STATEMENTS—(Continued)

13. Production Units

In May 1999, LCR shut down a fluid catalytic cracking unit as a result of a malfunction that damaged the main air blower. Repairs were completed and the unit was placed back in service in May 1999. Also in May 1999, LCR shut down one of two coker units following a fire. Repairs were completed and this unit was placed back in service in July 1999. As a result of these two incidents, crude oil processing rates were reduced. Both of these incidents were covered by business interruption insurance, subject to deductibles of \$10 million per incident. LCR recorded approximately \$12 million of business interruption insurance recoveries related to these incidents for the year ended December 31, 1999. Additionally, \$5 million of business interruption insurance recoveries were recorded in 2000. Both the \$12 million from 1999 and \$5 million from 2000 had been collected at December 31, 2000.

14. Commitments and Contingencies

LCR has various purchase commitments for materials, supplies and services incident to the ordinary conduct of business. In the aggregate, such commitments are not at prices in excess of current market. LCR is party to take-or-pay contracts for hydrogen, electricity and steam. At December 31, 2001, future minimum payments under these contracts with noncancelable contract terms in excess of one year were as follows:

<u>Millions of dollars</u>	<u>Amount</u>
2002	\$ 31
2003	39
2004	42
2005	43
2006	44
Thereafter	465
Total minimum payments	<u>\$ 664</u>

Total LCR purchases under these agreements were \$94 million, \$78 million and \$87 million during 2001, 2000 and 1999, respectively. A substantial portion of the purchases related to these agreements, for the three years ended December 31, 2001, were related to a hydrogen take-or-pay agreement with Equistar. Also, a substantial portion of the future minimum payments is related to the hydrogen take-or-pay agreement with Equistar (see Note 5).

LCR is subject to various lawsuits and proceedings.

With respect to liabilities associated with the Refinery, Lyondell generally has retained liability for events that occurred prior to July 1, 1993 and certain ongoing environmental projects at the Refinery under the Contribution Agreement, retained liability section. LCR generally is responsible for liabilities associated with events occurring after June 30, 1993 and ongoing environmental compliance inherent to the operation of the Refinery.

LCR's policy is to be in compliance with all applicable environmental laws. LCR is subject to extensive environmental laws and regulations concerning emissions to the air, discharges to surface and subsurface waters and the generation, handling, storage, transportation, treatment and disposal of waste materials. Some of these laws and regulations are subject to varying and conflicting interpretations. In addition, the Partnership cannot accurately predict future developments, such as increasingly strict environmental laws, inspection and enforcement policies and compliance costs therefrom, which might affect the handling, manufacture, use, emission or disposal of products, other materials or hazardous and non-hazardous waste.

LCR estimates that it has a liability of approximately \$3 million at December 31, 2001 related to future Comprehensive Environmental Response, Compensation and Liability Act of 1980 ("CERCLA"), Resource Conservation and Recovery Act ("RCRA"), and the Texas Natural Resource Conservation Commission ("TNRCC") assessment and remediation costs. Lyondell has a contractual obligation to reimburse LCR for a portion of this

LYONDELL-CITGO REFINING LP

NOTES TO FINANCIAL STATEMENTS—(Continued)

liability, which is currently estimated to be approximately \$2 million. Accordingly, LCR has reflected a current liability of approximately \$1 million for the portion of this liability that will not be reimbursed by Lyondell. In the opinion of management, there is currently no material range of probable loss in excess of the amount recorded. However, it is possible that new information about the sites associated with this liability, new technology or future developments such as involvement in other CERCLA, RCRA, TNRCC or other comparable state law investigations, could require LCR to reassess its potential exposure related to environmental matters.

Clean Air Act—The eight-county Houston/Galveston region has been designated a severe non-attainment area for ozone by the Environmental Protection Agency (“EPA”). Emission reduction controls for nitrogen oxides (“NOx”) must be installed at the Refinery located in the Houston/Galveston region. LCR estimates that aggregate related capital expenditures could total between \$130 million and \$150 million before the 2007 deadline. The timing and amount of these expenditures are subject to regulatory and other uncertainties, as well as obtaining the necessary permits and approvals. In January 2001, LCR, Lyondell, and an organization composed of industry participants filed a lawsuit to encourage adoption of their alternative plan to achieve the same air quality improvement with less negative economic impact on the region. Adoption of the alternative plan, as sought by the lawsuit, is expected to reduce the estimated capital investments for NOx reductions required by LCR to comply with the standards. However, there can be no guarantee as to the ultimate capital cost of implementing any final plan developed to ensure ozone attainment by the 2007 deadline.

The Clean Air Act specified certain emissions for vehicles beginning in the 1994 model year and required the EPA to study whether further emissions reductions from vehicles were necessary. In 1998, the EPA concluded that additional controls on gasoline fuel were necessary to meet these emission standards. New standards for gasoline were finalized in 1999 and will require refiners to produce a low sulfur gasoline by 2004, with final compliance by 2006. A new “on-road” diesel standard was adopted in January 2001 and will require refiners to produce ultra low sulfur diesel by June 2006, with some allowance for a conditional phase-in period that could extend final compliance until 2009. LCR estimates that these standards will result in increased capital investment totaling between \$175 million and \$225 million for the new gasoline standards and \$250 million to \$300 million for the new diesel standard, between now and the implementation dates. In addition, these standards could result in higher operating costs.

Under the Crude Supply Agreement, which will expire on December 31, 2017, PDVSA Oil is required to sell, and LCR is required to purchase 230,000 barrels per day of extra heavy Venezuelan crude oil. This constitutes approximately 86% of the Refinery’s refining capacity of 268,000 barrels per day of crude oil. By letter dated April 16, 1998, PDVSA Oil informed LCR that the Venezuelan government, through the Ministry of Energy and Mines, had instructed that production of certain grades of crude oil be reduced. The letter stated that PDVSA Oil declared itself in a force majeure situation and that PDVSA Oil would reduce deliveries of crude oil. Such reductions in deliveries were purportedly based on the grounds of announced OPEC production cuts. LCR began receiving reduced deliveries of crude oil from PDVSA Oil in August 1998, of 195,000 barrels per day in that month. LCR was advised by PDVSA Oil, in May 1999 of a further reduction in the deliveries of crude oil supplied under the Crude Supply Agreement to 184,000 barrels per day, effective May 1999.

On several occasions since then, PDVSA Oil has further reduced certain crude oil deliveries, although it made payments under a different provision of the Crude Supply Agreement. Subsequently, PDVSA Oil unilaterally increased deliveries of crude oil to LCR to 195,000 barrels per day effective April 2000, to 200,000 barrels per day effective July 2000 and to 230,000 barrels per day effective October 2000.

During 2001, PDVSA Oil informed LCR that the Venezuelan government, through the Ministry of Energy and Mines, had instructed that production of certain grades of crude oil be reduced effective February 1, 2001. PDVSA Oil declared itself in a force majeure situation, but did not reduce crude oil deliveries to LCR during 2001.

LCR has consistently contested the validity of PDVSA Oil’s and PDVSA’s reduction in deliveries under the Crude Supply Agreement. The parties have different interpretations of the provisions of the contracts concerning the delivery of crude oil. The contracts do not contain dispute resolution procedures and the parties have been unable to resolve their commercial dispute (see Note 15).

LYONDELL-CITGO REFINING LP

NOTES TO FINANCIAL STATEMENTS—(Continued)

PDVSA has previously announced that it intends to renegotiate the crude supply agreements it has with all third parties, including LCR. However, PDVSA has confirmed they expect to honor their commitments if a mutually acceptable restructuring of the Crude Supply Agreement is not achieved. The breach or termination of the Crude Supply Agreement would require LCR to purchase all or a portion of its crude oil feedstocks in the merchant market, could subject LCR to significant volatility and price fluctuations and could adversely affect the Partnership.

In the opinion of management, any liability arising from the matters discussed in this note will not have a material adverse effect on the financial position or liquidity of LCR. However, the adverse resolution in any reporting period of one or more of the matters discussed in this note could have a material impact on LCR's results of operations for that period without giving effect to contribution or indemnification obligations of codefendants or others, or to the effect of any insurance coverage that may be available to offset the effects of any such award.

15. Subsequent Events

In November 2001, LCR and PACE signed a Memorandum of Agreement which provided that LCR would implement all terms and conditions of a national oil settlement (to be negotiated), as adopted by a major oil company and ratified by at least two other major oil companies. In return for this commitment, LCR's labor agreement, which was set to expire with the rest of the industry on January 31, 2002, would be extended through the date of the new national oil agreement. On January 31, 2002, a national oil agreement between major oil companies was reached with PACE. The terms include a four-year agreement that will expire on January 31, 2006. Accordingly, LCR's agreement with PACE will expire on January 31, 2006 (see Note 1).

In January 2002, PDVSA Oil declared itself in a force majeure situation and stated that crude oil deliveries could be reduced by up to 20.3% beginning in March 2002. On February 1, 2002, LCR filed a lawsuit against PDVSA and PDVSA Oil in connection with the January 2002 force majeure declaration, as well as the claimed force majeure from April 1998 and September 2000 (see Note 14). In February 2002, LCR was advised by PDVSA Oil that deliveries of crude oil to LCR in March 2002 would be reduced to approximately 198,000 barrels per day. Although additional reductions may be forthcoming, PDVSA Oil has not specified the level of reductions after March 2002.

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

None.

PART III

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

Item 11. *Executive Compensation*

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

Item 13. *Certain Relationships and Related Transactions*

Information regarding executive officers of the Company is included in Part I. For the other information called for by Items 10, 11, 12 and 13, reference is made to the Company's definitive proxy statement for its 2002 Annual Meeting of Stockholders, which will be filed with the Securities and Exchange Commission within 120 days after December 31, 2001, and which is incorporated herein by reference.

PART IV

Item 14. *Exhibits, Financial Statement Schedules and Reports on Form 8-K*

(a) The following exhibits are filed as a part of this report:

- 3.1 Amended and Restated Certificate of Incorporation of the Registrant(10)
- 3.1(a) Certificate of Ownership and Merger dated July 31, 1998(17)
- 3.2 Amended and Restated By-Laws of the Registrant
- 4.1 Indenture dated as of March 10, 1992, as supplemented by a First Supplemental Indenture dated as of March 10, 1992, between the Registrant and Continental Bank, National Association, Trustee(3)
- 4.1(a) Second Supplemental Indenture dated as of December 1, 1997 among the Registrant, Equistar Chemicals, LP and First Trust National Association(12)
- 4.1(b) Third Supplemental Indenture dated as of November 3, 2000 among the Registrant, Equistar Chemicals, LP and U.S. Bank Trust, National Association (19)
- 4.1(c) Fourth Supplemental Indenture dated as of November 17, 2000 among the Registrant, Equistar Chemicals, LP and U.S. Bank Trust, National Association (19)
- 4.2 Indenture dated as of January 29, 1996, as supplemented by a First Supplemental Indenture dated as of February 15, 1996, between the Registrant and Texas Commerce Bank, as Trustee(9)
- 4.2(a) Second Supplemental Indenture dated as of December 1, 1997 among the Registrant, Equistar Chemicals, LP and Texas Commerce Bank National Association(12)
- 4.2(b) Third Supplemental Indenture dated as of November 3, 2000 among the Registrant, Equistar Chemicals, LP and The Chase Manhattan Bank (19)
- 4.2(c) Fourth Supplemental Indenture dated as of November 17, 2000 among the Registrant, Equistar Chemicals, LP and The Chase Manhattan Bank (19)
- 4.3 Specimen common stock certificate(1)
- 4.4 \$70,000,000 revolving Credit Agreement dated as of July 20, 2001 among LCR, the lenders from time to time parties thereto, and Credit Suisse First Boston, as Issuer and Agent(21)

- 4.5 \$450,000,000 Credit Agreement dated as of July 20, 2001 among LCR, the lenders from time to time parties thereto, and Credit Suisse First Boston, as Agent(21)
- 4.6 Rights Agreement dated as of December 8, 1995 between the Registrant and the Bank of New York, as Rights Agent(8)
- 4.7 Amendment and Restated Credit Facility dated as of August 24, 2001 among Equistar Chemicals, LP, the lenders from time to time party thereto and Citicorp USA, Inc. and Credit Suisse First Boston, as co-syndication agents, Bank of America, N.A., as serving agent and as administrative agent and The Chase Manhattan Bank, as collateral agent and as administrative agent(22)
- 4.8 \$7,000,000,000 Credit Agreement dated as of July 23, 1998 as amended by Amendment No. 1 thereto, as amended and restated as of April 16, 1999(15)
- 4.8(a) Amendment No. 3 dated as of February 3, 2000 to the \$7,000,000,000 Credit Agreement dated as of July 23, 1998(17)
- 4.8(b) Amendment No. 4 dated as of September 22, 2000 to the \$7,000,000,000 Credit Agreement dated as of July 23, 1998
- 4.8(c) Amendment No. 5 dated as of March 27, 2001 to the \$7,000,000,000 Credit Agreement dated as of July 23, 1998(20)
- 4.8(d) Amendment No. 6 dated as of September 26, 2001 to the \$7,000,000,000 Credit Agreement dated as of July 23, 1998(22)
- 4.9 Indenture dated as of January 15, 1999, as supplemented by a First Supplemental Indenture between Equistar Chemicals, LP and The Bank of New York(14)
- 4.9(a) Second Supplemental Indenture dated October 4, 1999 among Equistar Chemicals, LP, Equistar Funding Corporation and The Bank of New York(17)
- 4.10 Indenture dated as of June 15, 1988 between ARCO Chemical Company and Bank of New York, as Trustee(14)
- 4.10(a) First Supplemental Indenture dated as of January 5, 2000 between the Registrant and Bank of New York, as Trustee(17)
- 4.10(b) Form of 9 3/8% Debenture Due 2005 issuable under the Indenture referred to in Exhibit 4.10(14)
- 4.10(c) Form of 9.80% Debenture Due 2020 issuable under the Indenture referred to in Exhibit 4.10(14)
- 4.10(d) Form of 10.25% Debenture Due 2010 issuable under the Indenture referred to in Exhibit 4.10(14)
- 4.11 Indenture among the Registrant, the Subsidiary Guarantors party thereto and The Bank of New York, as Trustee, dated as of May 17, 1999, for 9 5/8% Senior Secured Notes, Series A, due 2007(16)
- 4.12 Indenture dated as of May 17, 1999 among the Registrant, the Subsidiary Guarantors party thereto and The Bank of New York, as Trustee, for 9 7/8% Senior Secured Notes, Series B, due 2007(16)
- 4.13 Indenture dated as of May 17, 1999 among the Registrant, the Subsidiary Guarantors party thereto and The Bank of New York, as Trustee, for 10 7/8% Senior Subordinated Notes due 2009(16)
- 4.14 Indenture dated as of August 24, 2001 among Equistar Chemicals, LP, Equistar Funding Corporation and The Bank of New York, as Trustee(22)
- 4.14(a) Form of Note dated as of August 24, 2001 (attached as Exhibit A to the Indenture dated as of August 24, 2001 among Equistar Chemicals, LP, Equistar Funding Corporation and The Bank of New York, as Trustee, filed herewith as Exhibit 4.14)(22)
- 4.15 Registration Rights Agreement dated as of December 4, 2001 by and among the Registrant, ARCO Chemical Technology, Inc., ARCO Chemical Technology, LP, Lyondell Chemical Nederland, Ltd. and Salomon Smith Barney Inc., J.P. Morgan Securities Inc., Bank of America Securities LLC, Credit Suisse First Boston Corporation, Bank One Capital Markets, Inc., Credit Lyonnais Securities (USA) Inc., Mizuho International plc, Scotia Capital (USA) Inc., and SG Cowan Securities Corporation(23)
- 4.16 Indenture among the Registrant, the Subsidiary Guarantors party thereto and The Bank of New York, as Trustee, dated as of December 4, 2001(23)
- 4.16(a) Form of Note dated as of December 4, 2001 (attached as Exhibit A to the Indenture dated as of December 4, 2001 among the Registrant, the Subsidiary Guarantors party thereto and The Bank of New York, as Trustee, filed herewith as Exhibit 4.16)(23)

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

EXECUTIVE OFFICER AND DIRECTOR COMPENSATION:

- 10.1 Amended and Restated Executive Supplementary Savings Plan
- 10.2 Amended and Restated Executive Long-Term Incentive Plan(2)
- 10.3 Amended and Restated Supplementary Executive Retirement Plan
- 10.4 Executive Medical Plan(10)
- 10.4(a) Amendment No. 1 to the Executive Medical Plan(10)
- 10.4(b) Amendment No. 2 to the Executive Medical Plan(10)
- 10.5 Amended and Restated Executive Deferral Plan
- 10.6 Executive Long-Term Disability Plan(3)
- 10.6(a) Amendment No. 1 to the Executive Long-Term Disability Plan(10)
- 10.7 Amended and Restated Executive Life Insurance Plan
- 10.8 Amended and Restated Supplemental Executive Benefit Plans Trust Agreement
- 10.9 Restricted Stock Plan(5)
- 10.9(a) Amendment No. 1 to the Restricted Stock Plan(7)
- 10.9(b) Amendment No. 2 to the Restricted Stock Plan(12)
- 10.10 Form of Registrant's Indemnity Agreement with Officers and Directors(17)
- 10.11 Amended and Restated Elective Deferral Plan for Non-Employee Directors
- 10.12 Amended and Restated Retirement Plan for Non-Employee Directors
- 10.13 Amended and Restated Restricted Stock Plan for Non-Employee Directors
- 10.14 Amended and Restated Non-Employee Directors Benefit Plans Trust Agreement
- 10.15 Stock Option Plan for Non-Employee Directors
- 10.16 Amended and Restated 1999 Long-Term Incentive Plan
- 10.17 Amended and Restated Lyondell Chemical Company Executive Severance Pay Plan
- 10.18 ARCO Chemical Company Change of Control Plan(14)

OTHER MATERIAL CONTRACTS:

- 10.19 Limited Partnership Agreement of LCR, dated December 31, 1998(14)
- 10.20 Contribution Agreement between the Registrant and LYONDELL-CITGO Refining Company Ltd.(4)
- 10.21 Crude Oil Supply Agreement between LYONDELL-CITGO Refining Company Ltd. and Lagoven, S.A.(4)
- 10.22 Asset Purchase Agreement dated April 13, 1995 between the Registrant and Occidental Chemical Company(6)
- 10.23 Amended and Restated Limited Partnership Agreement of Equistar Chemicals, LP, dated August 24, 2001(22)
- 10.24 Asset Contribution Agreement among the Registrant, Lyondell Petrochemical L.P. Inc. and Equistar Chemicals, LP (11)
- 10.24(a) First Amendment to Asset Contribution Agreement, dated as of May 15, 1998, among the Registrant, Lyondell Petrochemical L.P. Inc. and Equistar Chemicals, LP(14)
- 10.24(b) Second Amendment to Lyondell Asset Contribution Agreement, dated as of September 30, 2001, among the Registrant, Lyondell Petrochemical LP Inc. and Equistar(22)
- 10.25 Asset Contribution Agreement among Millennium Petrochemicals Inc., Millennium LP and Equistar Chemicals, LP(11)

- 10.25(a) First Amendment to Asset Contribution Agreement, dated as of May 15, 1998, among Millennium Petrochemicals Inc., Millennium LP and Equistar Chemicals, LP(14)
- 10.25(b) Second Amendment to Millennium Asset Contribution Agreement, dated as of September 30, 2001, among Millennium Petrochemicals Inc., Millennium Petrochemicals LP LLC and Equistar Chemicals, LP(22)
- 10.26 Amended and Restated Parent Agreement dated as of May 15, 1998 among Occidental Chemical, Oxy CH Corporation, Occidental, the Registrant, Millennium and Equistar Chemicals, LP(13)
- 10.26(a) First Amendment to the Amended and Restated Parent Agreement, dated as of June 30, 1998(14)
- 10.26(b) Assignment and Assumption Agreement, executed as of June 19, 1998, with Respect to the Amended and Restated Parent Agreement(14)
- 10.27 Agreement and Plan of Merger and Asset Contribution dated May 15, 1998 among Occidental Petrochem Partner 1, Inc., Occidental Petrochem Partner 2, Inc., Oxy Petrochemicals, PDG Chemical and Equistar Chemicals, LP(13)
- 10.27(a) First Amendment to Occidental Asset Contribution Agreement, dated as of September 30, 2001, among Occidental Petrochem Partner 1, Inc., Occidental Petrochem Partner 2, Inc., PDG Chemical Inc., Occidental Petrochem Partner GP, Inc. and Equistar Chemicals, LP(22)
- 10.28 Amended and Restated Master Transaction Agreement dated as of March 31, 2000 among the Registrant, Bayer AG and Bayer Corporation(18)
- 10.28(a) First Amendment to Amended and Restated Master Transaction Agreement, dated as of December 18, 2000(19)
- 10.29 Amended and Restated Master Asset and Stock Purchase Agreement dated as of March 31, 2000 among the Registrant, the entities set forth on Schedule 1 thereto, Bayer AG and Bayer Corporation(18)
- 10.30 Amended and Restated Limited Partnership Agreement of PO JV, LP dated as of March 31, 2000(18)
- 10.31 Limited Partnership Interest Purchase and Sale Agreement dated as of March 31, 2000 among Lyondell SAT, INC., Lyondell POTechLP, Inc., BAYPO I LLC, BAYPO II LLC and BIPPO Corporation(18)
- 10.32 General Partnership Agreement dated December 18, 2000 between Bayer Polyurethanes B.V. and Lyondell PO-11 C.V.(19)
- 10.33 Parent Agreement dated December 18, 2000 between the Registrant and Bayer AG(19)
- 12 Statement Setting Forth Detail for Computation of Ratio of Earnings to Fixed Charges
- 21 Subsidiaries of the Registrant
- 23 Consent of PricewaterhouseCoopers LLP
- 24 Powers of Attorney

- (1) Filed as an exhibit to the Registrant's Registration Statement on Form S-1 (No. 33-25407) and incorporated herein by reference.
- (2) Filed as an exhibit to the Registrant's Annual Report on Form 10-K Report for the year ended December 31, 1990 and incorporated herein by reference.
- (3) Filed as an exhibit to the Registrant's Annual Report on Form 10-K Report for the year ended December 31, 1992 and incorporated herein by reference.
- (4) Filed as an exhibit to the Registrant's Current Report on Form 8-K dated as of July 1, 1993 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, 1994 and incorporated herein by reference.
- (6) Filed as an exhibit to the Registrant's Current Report on Form 8-K dated as of May 1, 1995 and incorporated herein by reference.
- (7) Filed as an exhibit to the Registrant's Quarterly Report on Form 10-Q for the quarter ended September 30, 1995 and incorporated herein by reference.
- (8) Filed as an exhibit to the Registrant's Current Report on Form 8-K dated December 8, 1995 and incorporated herein by reference.
- (9) Filed as an exhibit to the Registrant's Registration Statement on Form S-3 dated as of January 31, 1996 and incorporated herein by reference.

- (10) 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.
- (11) Filed as an exhibit to the Registrant's Current Report on Form 8-K dated as of October 17, 1997 and incorporated herein by reference.
- (12) 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.
- (13) Filed as an exhibit to the Registrant's Current Report on Form 8-K dated as of May 15, 1998 and incorporated herein by reference.
- (14) Filed as an exhibit to the Registrant's Annual Report on Form 10-K for the year ended December 31, 1998 and incorporated herein by reference.
- (15) Filed as an exhibit to the Registrant's Current Report on Form 8-K dated April 19, 1999 and incorporated herein by reference.
- (16) Filed as an exhibit to the Registrant's Registration Statement on Form S-4 (No. 333-81831) incorporated herein by reference.
- (17) 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.
- (18) Filed as an exhibit to the Registrant's Current Report on Form 8-K dated as of April 14, 2000 and incorporated herein by reference.
- (19) Filed as an exhibit to the Registrant's Annual Report on Form 10-K for the year ended December 31, 2000 and incorporated herein by reference.
- (20) Filed as an exhibit to the Registrant's Quarterly Report on Form 10-Q for the quarter ended March 31, 2001 and incorporated herein by reference.
- (21) Filed as an exhibit to the Registrant's Quarterly Report on Form 10-Q for the quarter ended June 30, 2001 and incorporated herein by reference.
- (22) 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.
- (23) Filed as an exhibit to the Registrant's Registration Statement on form S-4 (No. 333-76536-01).

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 61.

(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.

(c) Reports on Form 8-K

The following Current Report on Form 8-K was furnished during the quarter ended December 31, 2001:

<u>Date of Report</u>	<u>Item Nos.</u>	<u>Financial Statements</u>
November 29, 2001	7, 9	No

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.

LYONDELL CHEMICAL COMPANY

Date: March 15, 2002

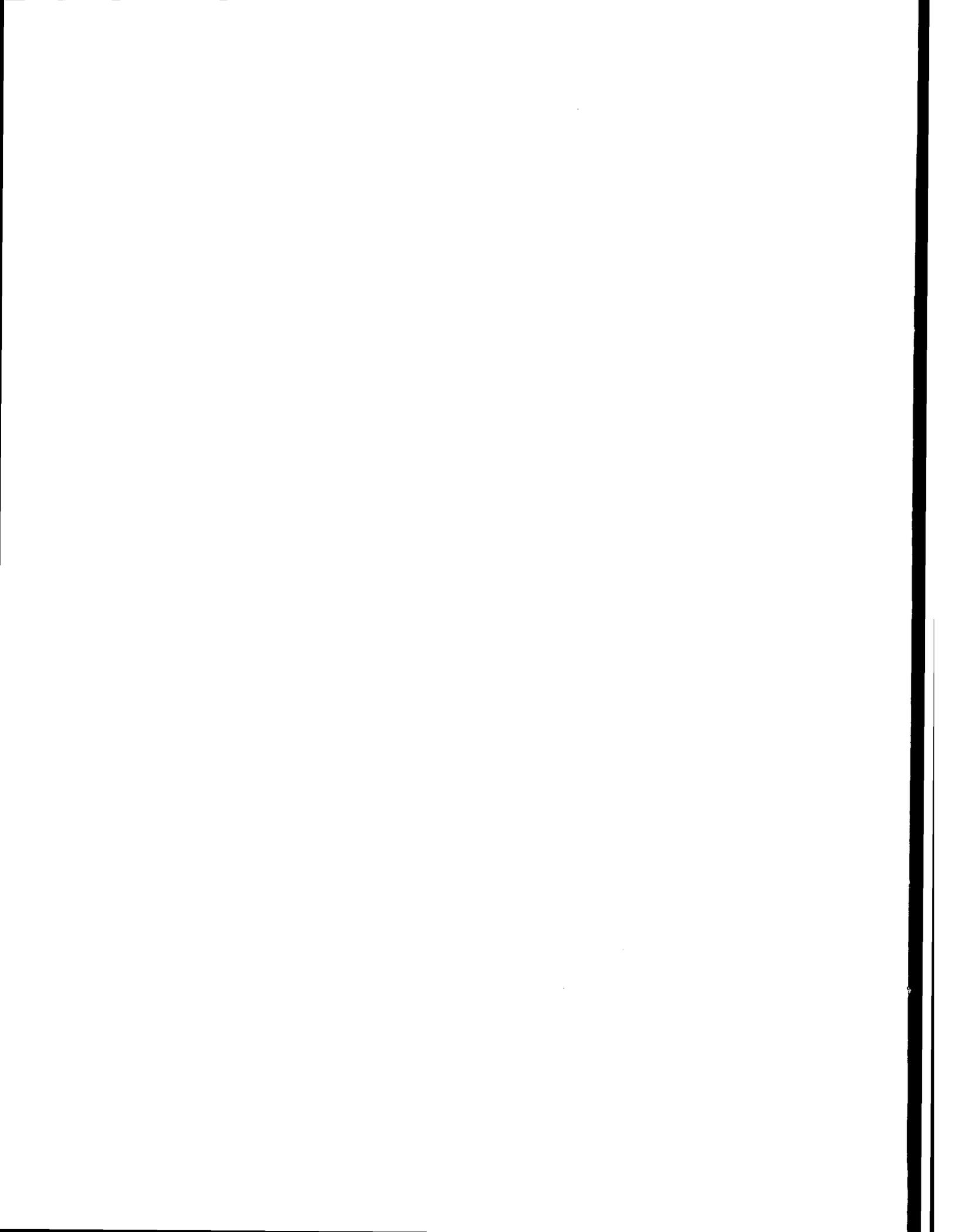
By: /s/ DAN F. SMITH

Dan F. Smith

President and Chief Executive Officer

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

<u>Signature</u>	<u>Title</u>	<u>Date</u>
/s/ <u>WILLIAM T. BUTLER*</u> (William T. Butler)	Chairman of the Board	March 15, 2002
/s/ <u>DAN F. SMITH</u> (Dan F. Smith, Principal Executive Officer)	President, Chief Executive Officer and Director	March 15, 2002
/s/ <u>CAROL A. ANDERSON*</u> (Carol A. Anderson)	Director	March 15, 2002
/s/ <u>TRAVIS ENGEN*</u> (Travis Engen)	Director	March 15, 2002
/s/ <u>STEPHEN F. HINCHLIFFE, JR.*</u> (Stephen F. Hinchliffe, Jr.)	Director	March 15, 2002
/s/ <u>DAVID J. LESAR*</u> (David J. Lesar)	Director	March 15, 2002
/s/ <u>DUDLEY C. MECUM II*</u> (Dudley C. Mecum II)	Director	March 15, 2002
/s/ <u>WILLIAM R. SPIVEY*</u> (William R. Spivey)	Director	March 15, 2002
/s/ <u>PAUL R. STALEY*</u> (Paul R. Staley)	Director	March 15, 2002
/s/ <u>ROBERT T. BLAKELY</u> (Robert T. Blakely, Principal Financial Officer)	Executive Vice President and Chief Financial Officer	March 15, 2002
/s/ <u>CHARLES L. HALL</u> (Charles L. Hall, Principal Accounting Officer)	Vice President and Controller	March 15, 2002
*By: /s/ <u>KERRY A. GALVIN</u> (Kerry A. Galvin, as Attorney-in-fact)		March 15, 2002



Shareholder Information

STOCK EXCHANGE

Lyondell Chemical Company is listed on the New York Stock Exchange under the symbol LYO. As of December 31, 2001, there were 1,819 shareholders of record.

ANNUAL MEETING

The Annual Meeting of Shareholders will be held on Thursday, May 2, 2002, beginning at 9 A.M. in Lyondell Chemical Company's General Assembly Room, 42nd Floor, One Houston Center, 1221 McKinney, Houston, Texas. Notice of the meeting, proxy statement and proxy card will be mailed to shareholders in advance of the meeting.

SHAREHOLDER INFORMATION SERVICES

Shareholders and other interested parties can learn more about Lyondell's earnings, dividends, stock price, news releases, SEC filings and other information through the following information services:

- Visit Lyondell at www.lyondell.com.
- Call Lyondell Investor Relations at 713-652-4590.
- Mail your questions or request to us at:
Lyondell – Investor Relations Department
PO Box 3646
Houston, Texas 77253-3646

OUR INVESTOR RELATIONS CONTACT IS

Patrick D. Quarles 713-309-7141

PUBLIC REPORT

Lyondell has issued a Public Report on Our Business, the Environment and Sustainable Development. You can access a copy via our web site or request a copy by writing to:

Lyondell – Public Affairs Department
PO Box 3646
Houston, Texas 77253-3646

ONLINE ANNUAL REPORT

Lyondell's Annual Report is available online at www.lyondell.com

EASY WAYS TO ACCUMULATE ADDITIONAL SHARES OF LYONDELL STOCK

Lyondell provides a convenient way to add to your stock ownership through an automatic dividend reinvestment plan. Shareholders can acquire additional shares of Lyondell stock by reinvesting cash dividends or making optional cash payments.

REGISTRAR AND TRANSFER AGENT

To enroll in the dividend reinvestment plan, or to get answers to questions about your stock account or dividends, contact:

American Stock Transfer & Trust Company
PO Box 922
Wall Street Station
New York, NY 10269-0260
1-877-749-4981

Website: www.investpower.com

Address shareholder inquiries, send certificates for transfer and address changes to:

American Stock Transfer & Trust Company
59 Maiden Lane
New York, NY 10038
1-800-937-5449
Email: info@amstock.com
Website: www.amstock.com

MARKET PRICE AND DIVIDENDS PAID BY QUARTER

Dollars	First	Second	Third	Fourth
2001				
Market Price Per Share				
High	17.95	17.65	15.40	15.93
Low	12.625	13.94	9.45	10.90
Cash Dividends per Share	.225	.225	.225	.225
2000				
Market Price Per Share				
High	14.875	19.50	17.75	16.75
Low	8.4375	13.5	11.0	11.3125
Cash Dividends per Share	.225	.225	.225	.225

