

SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

Schedule 13D

Under the Securities Exchange Act of 1934

Amendment No. 2

Lyondell Chemical Company

(Name of Issuer)

Common Stock

(Title of Class of Securities)

552078

(CUSIP Number)

Donald P. de Brier, Esq.
Occidental Petroleum Corporation
10889 Wilshire Boulevard
Los Angeles, California 90024
(310) 208-8800

(Name, Address and Telephone Number of Person Authorized
to Receive Notices and Communications)

October 7, 2003

(Date of Event Which Requires Filing of this Statement)

If the filing person has previously filed a statement on Schedule 13G to report the acquisition which is the subject of this Schedule 13D, and is filing this schedule because of Rule 13d-1(e), 13d-1(f) or 13d-1(g), check the following box
[]

Page 1 of 14 Pages

CUSIP No. 552078

- | | |
|---|---|
| (1) Names of reporting persons.
I.R.S. Identification Nos. of above persons (entities only). | Occidental Petroleum Corporation
95-4035997 |
| (2) Check the appropriate box if a member of a group

(see instructions) | (a)

(b) |
| (3) SEC use only. | |
| (4) Source of funds (see instructions). | OO, WC |
| (5) Check if disclosure of legal proceedings is required pursuant to Items 2(d) or 2(e). | |
| (6) Citizenship or place of organization. | Delaware |
| Number of shares beneficially owned by each reporting person with: | |
| (7) Sole voting power. | 0 |
| (8) Shared voting power. | 44,010,972 (including 2,700,000 shares of regular Common Stock, 36,310,972 shares |

of Series B Common Stock and 5,000,000 shares of Lyondell regular Common Stock issuable upon exercise of a warrant)

(9) Sole dispositive power.

0

(10) Shared dispositive power.

44,010,972 (including 2,700,000 shares of regular Common Stock, 36,310,972 shares of Series B Common Stock and 5,000,000 shares of Lyondell regular Common Stock issuable upon exercise of a warrant)

(11) Aggregate amount beneficially owned by each reporting person

44,010,972 (including 2,700,000 shares of regular Common Stock, 36,310,972 shares of Series B Common Stock and 5,000,000 shares of Lyondell regular Common Stock issuable upon exercise of a warrant)

(12) Check if the aggregate amount in Row (11) excludes certain shares (see instructions).

(13) Percent of class represented by amount in Row (11).

24.2%

(14) Type of reporting person (see instructions).

CO

(1) Names of reporting persons. I.R.S. Identification Nos. of above persons (entities only).	Occidental Petroleum Investment Co. 95-2584267
(2) Check the appropriate box if a member of a group (see instructions)	(a) (b)
(3) SEC use only.	
(4) Source of funds (see instructions).	OO, WC
(5) Check if disclosure of legal proceedings is required pursuant to Items 2(d) or 2(e).	
(6) Citizenship or place of organization.	California
Number of shares beneficially owned by each reporting person with:	
(7) Sole voting power.	0
(8) Shared voting power.	44,010,972 (including 2,700,000 shares of regular Common Stock, 36,310,972 shares of Series B Common Stock and 5,000,000 shares of Lyondell regular Common Stock issuable upon exercise of a warrant)
(9) Sole dispositive power.	0
(10) Shared dispositive power.	44,010,972 (including 2,700,000 shares of regular Common Stock, 36,310,972 shares of Series B Common Stock and 5,000,000 shares of Lyondell regular Common Stock issuable upon exercise of a warrant)
(11) Aggregate amount beneficially owned by each reporting person	44,010,972 (including 2,700,000 shares of regular Common Stock, 36,310,972 shares of Series B Common Stock and 5,000,000 shares of Lyondell regular Common Stock issuable upon exercise of a warrant)
(12) Check if the aggregate amount in Row (11) excludes certain shares (see instructions).	
(13) Percent of class represented by amount in Row (11).	24.2%
(14) Type of reporting person (see instructions).	CO

(1) Names of reporting persons. I.R.S. Identification Nos. of above persons (entities only).	Occidental Chemical Holding Corporation 95-2865897
(2) Check the appropriate box if a member of a group (see instructions)	(a) (b)
(3) SEC use only.	
(4) Source of funds (see instructions).	OO, WC
(5) Check if disclosure of legal proceedings is required pursuant to Items 2(d) or 2(e).	
(6) Citizenship or place of organization.	California
Number of shares beneficially owned by each reporting person with:	
(7) Sole voting power.	0
(8) Shared voting power.	44,010,972 (including 2,700,000 shares of regular Common Stock, 36,310,972 shares of Series B Common Stock and 5,000,000 shares of Lyondell regular Common Stock issuable upon exercise of a warrant)
(9) Sole dispositive power.	0
(10) Shared dispositive power.	44,010,972 (including 2,700,000 shares of regular Common Stock, 36,310,972 shares of Series B Common Stock and 5,000,000 shares of Lyondell regular Common Stock issuable upon exercise of a warrant)
(11) Aggregate amount beneficially owned by each reporting person	44,010,972 (including 2,700,000 shares of regular Common Stock, 36,310,972 shares of Series B Common Stock and 5,000,000 shares of Lyondell regular Common Stock issuable upon exercise of a warrant)
(12) Check if the aggregate amount in Row (11) excludes certain shares (see instructions).	
(13) Percent of class represented by amount in Row (11).	24.2%
(14) Type of reporting person (see instructions).	CO

ITEM 1. SECURITY AND ISSUER.

Title of class of equity security: Series B Common Stock
Common Stock

Issuer: Lyondell Chemical Company

Address of principal executive offices: 1221 McKinney Street, Suite 700
Houston, Texas 77010

This Schedule relates to the regular Common Stock of Lyondell, the Series B Common Stock of Lyondell, and a warrant to acquire shares of the regular Common Stock of Lyondell. For reporting purposes, the Reporting Person has treated the Series B Common Stock of Lyondell as being part of the same class under Section 12 of the 1934 Act as the regular Common Stock of Lyondell.

ITEM 2. IDENTITY AND BACKGROUND.

Occidental Petroleum Corporation ("Occidental"):

state of organization: Delaware

principal business: engaged, through its subsidiaries and
affiliates, in the production, development
and marketing of natural resources and
chemicals

principal business address: 10889 Wilshire Boulevard
Los Angeles, California 90024

Occidental Petroleum Investment Co. ("OPIC"):

state of organization: California

principal business: holding company

principal business address: 10889 Wilshire Boulevard
Los Angeles, California 90024

Occidental Chemical Holding Corporation ("OCHC"):

state of organization: California

principal business: holding company

principal business address: 10889 Wilshire Boulevard
Los Angeles, California 90024

The name, business address, and current principal occupation or employment of each of the executive officers and directors of Occidental, OPIC and OCHC (collectively, the "Companies") are set forth below. Unless otherwise indicated, the business address of each such person is 10889 Wilshire Boulevard, Los Angeles, California 90024. All such persons listed below are citizens of the United States except Mr. Syriani, who is a citizen of Lebanon; Dr. Segovia, who is a citizen of Colombia; and Mr. Feick, who is a citizen of Canada. Directors of Occidental are identified by an asterisk (*).

Name and Business Address - - - - -	Present Principal Occupation or Employment - - - - -
Ray R. Irani*	Chairman of the Board and Chief Executive Officer of Occidental
Ronald W. Burkle* 9130 West Sunset Boulevard Los Angeles, California 90069	Managing Partner and majority owner of The Yucaipa Companies
John S. Chalsty* 10 Rockefeller Center, 8th Floor New York, New York 10020	Chairman, Muirfield Capital Management, LLC
Stephen I. Chazen	Chief Financial Officer and Executive Vice President - Corporate Development of Occidental
Donald P. de Brier	Executive Vice President, Secretary and General Counsel of Occidental
Edward P. Djerejian* Rice University, MS-40 6100 Main Street Houston, Texas 77005-1892	Director, James A. Baker III Institute for Public Policy
S. P. Dominick, Jr. (1) (2)	Vice President and Controller of Occidental; President of OPIC
R. Chad Dreier* 24025 Park Sorrento, Suite 400 Calabasas, California 91302	President and Chief Executive Officer, The Ryland Group
John E. Feick* 230, 319-2nd Avenue, SW Calgary, Alberta, Canada T2P OC5	President and Chief Executive Officer of Matrix Solutions, Inc.
Richard W. Hallock	Executive Vice President - Human Resources of Occidental
J. R. Havert (1) (2)	Vice President and Treasurer of Occidental; Vice President and Treasurer of OPIC; Vice President and Treasurer of OCHC

Name and Business Address -----	Present Principal Occupation or Employment -----
Kenneth J. Huffman	Vice President - Investor Relations of Occidental
Scott A. King (2) 5005 LBJ Freeway Dallas, Texas 75244	Vice President and General Counsel of OCHC
Dale R. Laurance*	President of Occidental
Anthony R. Leach	Vice President - Finance of Occidental; Executive Vice President of OCHC
Irvin W. Maloney*	Retired Chairman and Chief Executive Officer, Dataproducts Corporation
Robert M. McGee	Vice President of Occidental
Lawrence P. Meriage	Vice President - Communications and Public Affairs of Occidental
Donald L. Moore 5 East Greenway Plaza Houston, Texas 77046-0504	Vice President and Chief Information Officer of Occidental
John W. Morgan	Executive Vice President - Operations of Occidental; Vice President of OPIC
R. Casey Olson 5 East Greenway Plaza Houston, Texas 77046-0504	Vice President of Occidental
Linda S. Peterson (1)	Assistant Secretary of Occidental; Vice President and Secretary of OPIC; Vice President and Assistant Secretary of OCHC
Rodolfo Segovia* Carrera 9A No. 99-02 OF. 1001 Santafe de Bogota, D.C. Colombia	Member of Executive Committee of Inversiones Sanford
Richard A. Swan	Vice President - Health, Environment and Safety of Occidental
Aziz D. Syriani* 505 Park Avenue - 11th Floor New York, New York 10022	President and Chief Operating Officer of The Olayan Group

Name and Business Address

Present Principal Occupation or Employment

Rosemary Tomich*

Owner of the Hope Cattle Company and the A.S. Tomich Construction Company; Chairman of the Board of Directors and Chief Executive Officer, Livestock Clearing, Inc.

Aurmond A. Watkins, Jr.

Vice President - Tax of Occidental; Vice President of OCHC

Walter L. Weisman*

P.O. Box 18017
Beverly Hills, California 90209

Past Chairman and Chief Executive Officer of American Medical International, Inc.

- (1) Director of OPIC
(2) Director of OCHC

During the last five years, none of the Companies or the natural persons named above (a) has been convicted in a criminal proceeding (excluding traffic violations or similar misdemeanors) or (b) was a party to a civil proceeding of a judicial or administrative body of competent jurisdiction and as a result of such proceeding was or is subject to a judgment, decree or final order enjoining future violations of, or prohibiting or mandating activities subject to, federal or state securities laws or finding any violation with respect to such laws.

ITEM 3. SOURCE AND AMOUNT OF FUNDS OR OTHER CONSIDERATION.

Occidental will pay Credit Suisse First Boston ("CSFB") \$33,480,000 in cash to consummate its purchase of 2,700,000 shares of Lyondell's regular Common Stock. The transaction's expected closing date is October 14, 2003. The source of these funds is the working capital of Occidental and its subsidiaries.

Occidental did not transfer any funds in exchange for the 594,180 shares of Series B Common Stock of Lyondell described in Item 5(c), below. The securities constituted stock dividends.

On August 22, 2002, Occidental paid Lyondell \$440 million pursuant to a Securities Purchase Agreement, dated as of July 8, 2002, between Lyondell and OCHC (the "Securities Purchase Agreement") and received 34 million shares of Series B Common Stock and 5,000,000 shares of regular common stock issuable upon exercise of the Warrant for the Purchase of Shares of Common Stock (the "Warrant"). 1

1 The \$440 million came from general corporate funds received when Occidental sold to Lyondell three of its affiliates, which owned a 29.5% interest in Equistar Chemicals, LP.

ITEM 4. PURPOSE OF TRANSACTION.

As described in Item 5(c), (i) Occidental agreed to purchase 2,700,000 million shares of Lyondell's regular Common Stock from CSFB as part of a public offering of those shares and (ii) Occidental received 594,180 shares of Series B Common Stock of Lyondell as a dividend in place of a cash dividend. Pursuant to Lyondell's Certificate of Incorporation, Lyondell has the right to elect to pay dividends on its Series B Common Stock with additional shares of Series B Common Stock rather than cash.

Directly and through OPIC and OCHC, Occidental currently holds its Lyondell shares for investment purposes only with a view toward maximizing long-term shareholder value for Occidental's shareholders and not for the purpose of controlling Lyondell.

Other than as set forth above or in Item 6 of this Schedule 13D, Occidental currently has no plans that relate to, or would result in, any of the actions listed in clauses (a) through (j) of Item 4 of Schedule 13D. However, Occidental continuously reviews and analyzes its investments in each of its subsidiaries and other operations, including the Lyondell shares, in order to determine whether value for Occidental's shareholders is best served by holding those investments, increasing, disposing of, or monetizing those investments, or recapitalizing or otherwise restructuring those investments. With respect to the Lyondell shares, these reviews and analyses depend on a variety of factors, including without limitation, the price of, and other market conditions relating to, the Lyondell shares, the investment return on the Lyondell shares, Lyondell's business and prospects, other investment and business opportunities available to Occidental, general stock market and economic conditions, tax considerations, and other factors deemed relevant.

ITEM 5. INTEREST IN SECURITIES OF THE ISSUER.

(a) Occidental:	aggregate number of shares held:	44,010,972*
-----	percentage of class:	24.2%
OPIC:	aggregate number of shares held:	44,010,972*
-----	percentage of class:	24.2%
OCHC:	aggregate number of shares held:	44,010,972*
-----	percentage of class:	24.2%

None of the directors or executive officers listed in Item 2 above is the beneficial owner of Lyondell common stock, except Ray R. Irani and Stephen I. Chazen, each of whom holds 1,780 shares of restricted common stock, 1,780 shares of phantom stock (to be settled for cash upon vesting of the restricted common stock), and 1,044.6028 deferred stock units (to be settled

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* This number includes 2,700,000 shares of regular Common Stock, 36,310,972 shares of Series B Common Stock and 5,000,000 shares of regular Common Stock issuable upon exercise of the Warrant.

for cash upon retirement). Each of Dr. Irani's and Mr. Chazen's holdings constitute less than one percent of Lyondell's common stock.

(b) Occidental:	sole power to vote or direct the vote:	0
-----	shared power to vote or direct the vote:	44,010,972*
	sole power to dispose or direct the disposition:	0
	shared power to dispose or direct the disposition:	44,010,972*
OPIC:	sole power to vote or direct the vote:	0
-----	shared power to vote or direct the vote:	44,010,972*
	sole power to dispose or direct the disposition:	0
	shared power to dispose or direct the disposition:	44,010,972*
OCHC:	sole power to vote or direct the vote:	0
-----	shared power to vote or direct the vote:	44,010,972*
	sole power to dispose or direct the disposition:	0
	shared power to dispose or direct the disposition:	44,010,972*

None of the directors or executive officers listed in Item 2 above is the beneficial owner of Lyondell common stock, except Ray R. Irani and Stephen I. Chazen, each of whom holds 1,780 shares of restricted common stock, 1,780 shares of phantom stock (to be settled for cash upon vesting of the restricted common stock), and 1,044.6028 deferred stock units (to be settled for cash upon retirement). Each of Dr. Irani's and Mr. Chazen's holdings constitute less than one percent of Lyondell's common stock.

(c) On October 7, 2003, Occidental entered into a letter agreement with CSFB (the "Letter Agreement") that obligates Occidental or one of its affiliates to purchase 2,700,000 shares of Lyondell regular Common Stock at \$12.40 per share. Occidental will pay CSFB \$33,480,000 in cash to consummate this transaction, which is expected to close on October 14, 2003. On September 30, 2003, Occidental received a stock dividend of 594,180 shares of Series B Common Stock of Lyondell.

(d) Not applicable.

(e) Not applicable.

ITEM 6. CONTRACTS, ARRANGEMENTS, UNDERSTANDINGS OR RELATIONSHIPS WITH RESPECT TO SECURITIES OF THE ISSUER.

Pursuant to the Letter Agreement, in addition to agreeing to purchase the 2,700,000 shares of Lyondell regular Common Stock, Occidental agreed not to dispose of, or request registration of, any of its Lyondell shares for ninety days from the public offering date stated in

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* This number includes 2,700,000 shares of regular Common Stock, 36,310,972 shares of Series B Common Stock and 5,000,000 shares of regular Common Stock issuable upon exercise of the Warrant.

the prospectus for Lyondell's public offering (the "Lock-Up Period"). The two Occidental officers who serve on Lyondell's board of directors (as described in more detail below) entered into separate agreements with CSFB that provided that they would not dispose of any of their Lyondell shares during the Lock-Up Period. Also in connection with the Letter Agreement, Occidental and Lyondell entered into a First Amendment to Stockholder's Agreement, dated as of October 7, 2003 (the "Amendment"). The Amendment provided a specific waiver of Occidental's obligations (stated in the Stockholder's Agreement) that it would not acquire, or agree to acquire, any Lyondell securities.

Pursuant to the Securities Purchase Agreement, OCHC purchased from Lyondell a total of 34,000,000 shares of Lyondell's newly created Series B common stock. Pursuant to the Warrant, OCHC also received warrants to purchase an additional 5 million shares (the "Warrant Shares") of Lyondell's regular common stock for \$25 per share. In exchange for the Lyondell securities, Occidental paid \$440,000,000 in cash.

As additional consideration for the transaction, Occidental will receive from Lyondell a contingent payment equal to 7.38% of cash distributions from Equistar for 2002 and 2003 up to a total of \$35 million, to be paid either in cash or in Lyondell regular Common Stock or Series B Common Stock.

Pursuant to a Stockholders Agreement, dated as of August 22, 2002 (the "Stockholders Agreement"), Lyondell has appointed to its board of directors two of Occidental's executive officers, Dr. Ray R. Irani (who also is an Occidental director) and Mr. Stephen I. Chazen. Unless Occidental obtains Lyondell's consent, the Stockholders Agreement prevents Occidental (a) from selling its Series B common stock or the Warrant Shares and (b) from converting its Series B common stock into regular Lyondell common stock for at least two years. In addition, the Stockholders Agreement generally requires Occidental to vote its Lyondell common stock in favor of the slate of directors proposed by Lyondell's management. The Stockholders Agreement will be effective as long as Occidental owns 17 million or more shares of Lyondell common stock.

ITEM 7. MATERIAL TO BE FILED AS EXHIBITS.

Exhibit 1	Agreement Pursuant to Rule 13d-1(k)
Exhibit 2	Securities Purchase Agreement, dated as of July 8, 2002, by and between Lyondell Chemical Company and Occidental Chemical Holding Corporation*
Exhibit 3	Warrant for the Purchase of Shares of Common Stock, issued August 22, 2002*
Exhibit 4	Stockholders Agreement, dated as of August 22, 2002, by and among Lyondell Chemical Company and the Stockholders as defined therein*

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* Previously filed.

Exhibit 5 Letter Agreement dated as of October 7, 2003

Exhibit 6 First Amendment to Stockholders Agreement, dated as of
October 7, 2003

SIGNATURE

After reasonable inquiry and to the best of my knowledge and belief, I certify that the information set forth in this statement is true, complete and correct.

October 10, 2003

OCCIDENTAL PETROLEUM CORPORATION

By: /s/ J. R. HAVERT

Name: J. R. Havert

Title: Vice President and Treasurer

OCCIDENTAL PETROLEUM INVESTMENT CO.

By: /s/ J. R. HAVERT

Name: J. R. Havert

Title: Vice President and Treasurer

OCCIDENTAL CHEMICAL HOLDING CORPORATION

By: /s/ J. R. HAVERT

Name: J. R. Havert

Title: Vice President and Treasurer

AGREEMENT

Pursuant to Rule 13d-1(k) promulgated under the Securities Exchange Act of 1934, as amended, the undersigned agree that the Schedule 13D to which this Agreement is attached as Exhibit 1 is filed on behalf of each of us. This Agreement may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same agreement.

Dated: October 10, 2003 OCCIDENTAL PETROLEUM CORPORATION

By: /s/ J. R. HAVERT

Name: J. R. Havert
Title: Vice President and Treasurer

OCCIDENTAL PETROLEUM INVESTMENT CO.

By: /s/ J. R. HAVERT

Name: J. R. Havert
Title: Vice President and Treasurer

OCCIDENTAL CHEMICAL HOLDING CORPORATION

By: /s/ J. R. HAVERT

Name: J. R. Havert
Title: Vice President and Treasurer

October 7, 2003

Credit Suisse First Boston LLC
Eleven Madison Avenue
New York, New York 10010-3629

Ladies and Gentlemen:

This letter agreement (the "AGREEMENT") is being executed in order to document our understanding regarding the purchase by us or one of our affiliates from you in a public offering (the "PUBLIC OFFERING") of registered shares of common stock, par value \$1.00 per share (the "ORIGINAL COMMON STOCK"), of Lyondell Chemical Company, a Delaware corporation (the "COMPANY").

The Company proposes to issue and sell to you, and you propose to offer, an aggregate of 12,000,000 shares (the "UNDERWRITTEN SHARES") and, at your election, up to 1,800,000 additional shares (the "OPTION SHARES" and together with the Underwritten Shares, the "SHARES") of Original Common Stock, pursuant to an underwriting agreement, between the Company and you entered into concurrently with this Agreement (the "UNDERWRITING Agreement"). As of the date of this Agreement, excluding 5,000,000 shares of Original Common Stock issuable upon exercise of a warrant, we beneficially own 36,310,792 shares of the Company's Series B common stock (the "SERIES B COMMON STOCK", and together with the Original Common Stock, the "COMMON STOCK"), which represents approximately 22% of the Company's common equity. Unless otherwise provided herein, capitalized terms used and not defined herein shall have the meanings ascribed to them in the Underwriting Agreement.

Subject to the terms and conditions of this Agreement and the closing of the sale of the Underwritten Shares on the Closing Date, we agree to purchase from you, in the Public Offering, 2,700,000 shares of Original Common Stock (the "OXY SHARES") on the Closing Date at the Purchase Price per share specified in the Underwriting Agreement. Notwithstanding the foregoing, you shall have no obligation to sell to us any Oxy Shares in the event the Underwriting Agreement is terminated (for any reason) or in the event the Company fails to deliver such shares to you, it being understood that the Company shall not be deemed to have delivered any Oxy Shares on the Closing Date until the Company shall have first delivered 9,300,000 Underwritten Shares on the Closing Date.

This Agreement is made in reliance upon our representations and warranties to you contained in this Agreement. We hereby represent and warrant to you that the Oxy Shares to be acquired by us will be acquired for investment for our own account, not as a nominee or agent, and not with a view to the resale or distribution of any part thereof, and that in connection with the Public Offering, we will comply with the provisions of Regulation M under the Securities Exchange Act of 1934, as amended. By executing this Agreement, we further represent and warrant to you that we do not presently have any contract, undertaking, agreement or arrangement with any person to sell, transfer or grant participations to such person or to any third person with respect to, any of the Oxy Shares.

We hereby agree on behalf of ourselves and our direct and indirect subsidiaries (collectively, the "RESTRICTED PARTIES"), that from the date hereof and until 90 days after the public offering date set forth in the final prospectus used to sell the Shares (the "PUBLIC OFFERING DATE") pursuant to the Underwriting Agreement, the Restricted Parties will not offer, sell, contract to sell, pledge or otherwise dispose of, directly or indirectly, any shares of Common Stock or securities convertible into or exchangeable or exercisable for any shares of Common Stock, enter into a transaction which would have the same effect, or enter into any swap, hedge or other arrangement that disposes of, in whole or in part, any of the economic consequences of ownership of shares of Common Stock, whether any such aforementioned transaction is to be settled by delivery of shares of Common Stock or such other securities, in cash or otherwise, or publicly disclose the intention to make any such offer, sale, pledge or disposition, or to enter into any such transaction, swap, hedge or other arrangement, without, in each case, your prior written consent; provided, however, that the foregoing restrictions shall not prevent Occidental from making public statements concerning its long term expectations for its investment in the Company so long as Occidental does not state any specific plan or proposal to sell. In addition, we agree that, without your prior written consent, the Restricted Parties will not, during the period commencing on the

date hereof and ending 90 days after the Public Offering Date, make any demand for or exercise any right with respect to, the registration of any shares of

Common Stock or any security convertible into or exercisable or exchangeable for shares of Common Stock. Any shares of Common Stock received upon exercise of warrants or the payment of in-kind dividends will also be subject to the foregoing restrictions of this paragraph. The foregoing restrictions of this paragraph shall not apply to our purchase of shares of Original Common Stock in open market transactions after the Closing Date pursuant to Section 2.2(b) of the Stockholders Agreement among the Company and the Stockholders named therein, dated August 22, 2002.

In furtherance of the foregoing, the Company and its transfer agent and registrar are hereby authorized to decline to make any transfer of shares of Common Stock if such transfer would constitute a violation or breach of this Agreement.

If the Underwriting Agreement is terminated for any reason, this Agreement (including, without limitation, our obligations in the second immediately preceding paragraph) shall also terminate at the time of such termination. You shall have no liability to the undersigned arising out of any termination of the Underwriting Agreement or the failure to consummate the transaction contemplated therein and the undersigned acknowledges that you have the right to terminate the Underwriting Agreement and/or to decline to consummate the transaction contemplated therein under certain circumstances. This Agreement shall be binding on us and our successors and assigns.

THIS AGREEMENT SHALL BE GOVERNED BY AND CONSTRUED IN ACCORDANCE WITH THE LAWS OF THE STATE OF NEW YORK (WITHOUT REFERENCE TO THE CHOICE OF LAW RULES THEREOF).

Very truly yours,

OCCIDENTAL PETROLEUM CORPORATION

/s/ STEPHEN I. CHAZEN

Name: Stephen I. Chazen
Title: Chief Financial Officer and
Executive Vice President -
Corporate Development

Accepted as of the date hereof:

CREDIT SUISSE FIRST BOSTON LLC

/s/ DAVID P. FARIS

Name: David P. Faris
Title: Director

FIRST AMENDMENT
TO
STOCKHOLDERS AGREEMENT

This First Amendment to Stockholders Agreement (this "Amendment") is made as of October 7, 2003 by and among Lyondell Chemical Company, a Delaware corporation (the "Company"), Occidental Chemical Holding Corporation, a California corporation ("OCHC"), and Occidental Petroleum Corporation, a Delaware corporation ("Occidental"). The Company, OCHC and Occidental are sometimes collectively referred to herein as the "Parties" and each individually referred to as a "Party."

RECITALS

WHEREAS, the Company and the Stockholders entered into a Stockholders Agreement, dated as of August 22, 2002, by and among the Company and the Stockholders (the "Stockholders Agreement"), which restricts Occidental and its Wholly Owned Affiliates from, among other things, acquiring, agreeing to acquire or making any proposal to acquire, directly or indirectly, any securities of the Company;

WHEREAS, the Company desires to sell to Occidental or one or more of its Wholly Owned Affiliates, and Occidental or one or more of its Wholly Owned Affiliates desires to purchase, shares of Original Common Stock in the Company's equity offering pursuant to the Underwriting Agreement dated as of October 7, 2003 between the Company and Credit Suisse First Boston LLC (the "Offering") in an amount that will be sufficient to maintain Occidental's approximate pro rata share ownership of the Company's outstanding equity as of the date of commencement of the Offering (which is approximately 22%);

WHEREAS, the Parties desire to document the correction of a typographical error in the text of Section 3.3(b) to the Stockholders Agreement;

WHEREAS, pursuant to Section 7.11 of the Stockholders Agreement, Occidental and the Company now desire to amend the Stockholders Agreement as set forth below;

NOW, THEREFORE, in consideration of the premises and mutual covenants of the Parties, the Parties hereby agree as follows:

Section 1. Defined Terms. The definitions of capitalized terms used and not otherwise defined herein shall have the meanings given such terms in the Stockholders Agreement.

Section 2. Amendment to Section 2.2 of the Stockholders Agreement. The Parties hereby agree that Section 2.2 of the Stockholders Agreement shall be amended by inserting the following text as new subsection (d) to Section 2.2:

"(d) Section 2.1 shall not be applicable to the purchase, directly or indirectly, by Occidental or one or more of its Wholly Owned Affiliates of up to 2.7 million shares of Original Common Stock (such amount is intended to be sufficient to permit Occidental to maintain its approximate pro rata share of ownership of the Company's outstanding equity as of

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the date of the commencement of the Company's equity offering pursuant to the Underwriting Agreement dated as of October 7, 2003 between the Company and Credit Suisse First Boston LLC, which is approximately 22%) in the Offering, so long as after giving effect to such purchase, Occidental and its Wholly Owned Affiliates will beneficially own in the aggregate, directly or indirectly, a lower ownership percentage in the Company than the Occidental Rights Trigger Amount (as defined in the Securities Purchase Agreement). Occidental hereby agrees, and shall cause its Wholly Owned Affiliates, to promptly notify the Company of any purchase of such Original Common Stock."

Section 3. Amendment to Section 3.3(b) of the Stockholders Agreement. The Parties hereby agree that Section 3.3(b) of the Stockholders Agreement shall be amended and restated in its entirety to read as follows:

"The Company shall exercise all authority under applicable law to cause any slate of directors presented to the stockholders of the Company for election to the Board of Directors to include both Dr. Ray Irani and Stephen I. Chazen, so long as they are qualified to serve, until Occidental and its Subsidiaries beneficially own in the aggregate, directly or indirectly, less than 34 million shares of Common Stock (excluding for purposes of this Section 3.3(b), shares to be issued to OCHC or its Wholly Owned Affiliates upon

exercise of a Warrant), from which time until the Termination Date for Occidental and its Wholly Owned Affiliates only one of such individuals (to be determined in the sole discretion of the Company) shall be entitled to a seat on the Board of Directors."

Section 4. Effectiveness of Stockholders Agreement. Except as amended by this Amendment, all terms and conditions of the Stockholders Agreement shall remain in full force and effect among the Parties thereto.

Section 5. Counterparts. This Amendment may be executed in one or more counterparts, each of which shall constitute an original. All signatures need not be on the same counterpart.

Section 6. Governing Law. The laws of the State of Delaware shall govern the construction, interpretation and effect of this Amendment without giving effect to any conflicts of law principles.

Section 7. Specific Performance. Each Party agrees that the other Parties would be irreparably damaged if for any reason such Party fails to perform any of such Party's obligations under this Amendment, and that the other Parties would not have an adequate remedy at law for money damages in such event. Accordingly, the other Parties shall be entitled to seek specific performance and injunctive and other equitable relief to enforce the performance of this Amendment by such Party. This provision is without prejudice to any other rights that the Parties may have against any other Party for any failure to perform its obligations under this Amendment.

Section 8. Jurisdiction; Consent to Service of Process; Waiver. ANY JUDICIAL PROCEEDING BROUGHT AGAINST ANY PARTY OR ANY DISPUTE UNDER, ARISING OUT OF OR IN CONNECTION WITH THIS AMENDMENT SHALL BE

BROUGHT IN THE FEDERAL OR STATE COURTS OF THE STATE OF DELAWARE, AND, BY EXECUTION AND DELIVERY OF THIS AMENDMENT, EACH OF THE PARTIES ACCEPTS THE EXCLUSIVE JURISDICTION OF SUCH COURTS AND IRREVOCABLY AGREES TO BE BOUND BY ANY JUDGMENT (AS FINALLY ADJUDICATED) RENDERED THEREBY IN CONNECTION WITH THIS AMENDMENT. EACH OF THE PARTIES SHALL APPOINT THE CORPORATION TRUST COMPANY, THE PRENTICE-HALL CORPORATION SYSTEM, INC. OR A SIMILAR ENTITY (THE "AGENT") AS AGENT TO RECEIVE ON ITS BEHALF SERVICE OF PROCESS IN ANY PROCEEDING IN ANY SUCH COURT IN THE STATE OF DELAWARE, AND EACH OF THE PARTIES SHALL MAINTAIN THE APPOINTMENT OF SUCH AGENT (OR A SUBSTITUTE AGENT) FROM THE DATE HEREOF UNTIL THE TERMINATION OF THE STOCKHOLDERS AGREEMENT AND SATISFACTION OF ALL OBLIGATIONS HEREUNDER AND THEREUNDER. THE FOREGOING CONSENTS TO JURISDICTION AND APPOINTMENTS OF AGENT TO RECEIVE SERVICE OF PROCESS SHALL NOT CONSTITUTE GENERAL CONSENTS TO SERVICE OF PROCESS IN THE STATE OF DELAWARE FOR ANY PURPOSE EXCEPT AS PROVIDED ABOVE AND SHALL NOT BE DEEMED TO CONFER RIGHTS ON ANY PERSON OTHER THAN THE PARTIES. EACH PARTY HEREBY WAIVES ANY OBJECTION IT MAY HAVE BASED ON LACK OF PERSONAL JURISDICTION, IMPROPER VENUE OR FORUM NON-CONVENIENS.

Section 9. Waiver of Jury Trial. EACH PARTY HEREBY KNOWINGLY AND INTENTIONALLY, IRREVOCABLY AND UNCONDITIONALLY WAIVES TRIAL BY JURY IN ANY LEGAL ACTION OR PROCEEDING UNDER, ARISING OUT OF OR IN CONNECTION WITH THIS AMENDMENT AND FOR ANY COUNTERCLAIM THEREIN.

Section 10. Cooperation for Rule 144 Resales. The Company hereby agrees that it will file the reports required to be filed by it under the Securities Act of 1933, as amended (the "Securities Act"), and the Securities Exchange Act of 1934, as amended, and the rules and regulations adopted by the Securities Exchange Commission ("SEC") thereunder (or, if the Company is not required to file such reports, it will, upon the request of Occidental, make publicly available other non-confidential information so long as necessary to permit sales under Rule 144 under the Securities Act of shares of Original Common Stock Occidental purchases in the Offering), and it will take such other action as Occidental may reasonably request, all to the extent required from time to time to enable Occidental to sell shares it purchases in the Offering without registration under the Securities Act within the limitation of the exemptions provided by (a) Rule 144 under the Securities Act or (b) any similar rule or regulation hereafter adopted by the SEC.

IN WITNESS WHEREOF, this Amendment has been executed on behalf of each of the Parties by their respective officers thereunto duly authorized, effective as of the date first written above.

LYONDELL CHEMICAL COMPANY

By: /s/ DAN F. SMITH

Name: Dan F. Smith

Title: President and Chief Executive Officer

OCCIDENTAL PETROLEUM CORPORATION

By: /s/ STEPHEN I. CHAZEN

Name: Stephen I. Chazen

Title: Chief Financial Officer and Executive
Vice President - Corporate Development

OCCIDENTAL CHEMICAL HOLDING CORPORATION

By: /s/ J. R. HAVERT

Name: J. R. Havert

Title: Vice President and Treasurer