UNITED STATES SECURITIES AND EXCHANGE

COMMISSION

Washington, D.C. 20549 SCHEDULE 13D

Under the Securities Exchange Act of 1934

(Amendment No. 7)

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)

May 9, 2007

(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 that is the subject of this Schedule 13D, and is filing this schedule because of §§240.13d-1(e), 240.13d-1(f) or 240.13d-1(g), check the following box. o

CUSIP No. 552078

3.

4.

5.

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 Grou	ıp

(a)	0
(b)	0
SEC Use	Only
Source of WC, OO	
Check if Disclosure of Legal Proceedings Is Required Pursuant to Items 2(d) or 2(e) o	

	7.	Sole Voting Power 0
Number of Shares Beneficially	8.	Shared Voting Power 14,000,000
Owned by Each Reporting Person With	9.	Sole Dispositive Power 0
	10.	Shared Dispositive Power 14,000,000
11.	Aggregate A 14,000,000	Amount Beneficially Owned by Each Reporting Person
12.	Check if the	e Aggregate Amount in Row (11) Excludes Certain Shares o
13.	Percent of Class Represented by Amount in Row (11) 5.5% (1)	
14.	Type of Reporting Person CO	

(1) Calculated based on a total number of outstanding shares of Common Stock of 252,810,861 as of March 5, 2007, as reported by the Issuer in its Definitive Proxy Statement on Schedule 14A, filed with the Securities and Exchange Commission on March 8, 2007.

CUSIP No. 552078

1.	Names of Occidenta 95-25842	Reporting Persons. I.R.S. Identification Nos. of above persons (entities only) al Petroleum Investment Co. 67
2.	Check the	Appropriate Box if a Member of a Group
	(a)	0
	(b)	0
3.	SEC Use Only	
4.	Source of Funds WC, OO	

5. Check if Disclosure of Legal Proceedings Is Required Pursuant to Items 2(d) or 2(e) o

	7.	Sole Voting Power 0	
Number of Shares Beneficially Owned by Each Reporting Person With	8.	Shared Voting Power 14,000,000	
	9.	Sole Dispositive Power 0	
	10.	Shared Dispositive Power 14,000,000	
11.	Aggregate Amount Beneficially Owned by Each Reporting Person 14,000,000		
12.	Check if the Aggregate Amount in Row (11) Excludes Certain Shares o		
13.	Percent of Class Represented by Amount in Row (11) 5.5% (2)		
14.	Type of Reporting Person CO		
(2) Calculated Proxy Stateme	l based on a t ent on Sched	otal number of outstanding shares of Common Stock of 252,810,861 as of March 5, 2007, as reported by the Issuer in its Definitive ile 14A, filed with the Securities and Exchange Commission on March 8, 2007.	

CUSIP No. 552078

	f Reporting Persons. I.R.S. Identification Nos. of above persons (entities only) tal Chemical Holding Corporation 897
Check th	e Appropriate Box if a Member of a Group
(a)	0
(b)	0
(b)	0

4. Source of Funds WC, OO

6.	Citizenship or Place of Organization California		
	7.	Sole Voting Power 0	
Number of Shares Beneficially	8.	Shared Voting Power 14,000,000	
Owned by Each Reporting Person With	9.	Sole Dispositive Power 0	
	10.	Shared Dispositive Power 14,000,000	
11.	Aggregate Amount Beneficially Owned by Each Reporting Person 14,000,000		
12.	Check if the Aggregate Amount in Row (11) Excludes Certain Shares o		
13.	Percent of Class Represented by Amount in Row (11) 5.5% (3)		
14.	Type of Reporting Person CO		

(3) Calculated based on a total number of outstanding shares of Common Stock of 252,810,861 as of March 5, 2007, as reported by the Issuer in its Definitive Proxy Statement on Schedule 14A, filed with the Securities and Exchange Commission on March 8, 2007.

This Amendment No. 7 (this "<u>Amendment</u>") amends the Schedule 13D previously filed by Occidental Petroleum Corporation, a Delaware corporation ("<u>Occidental</u>"), Occidental Petroleum Investment Co., a California corporation ("<u>OPIC</u>"), and Occidental Chemical Holding Corporation, a California corporation ("<u>OCHC</u>" and, together with Occidental and OPIC, the "<u>Reporting Persons</u>"), with respect to the Reporting Persons' beneficial ownership in Lyondell Chemical Company ("<u>Lyondell</u>"). This Amendment is being filed to disclose a change in Items 4, 5 and 6 to the previously filed Schedule 13D.

Except as otherwise set forth herein, this Amendment No. 7 does not modify any of the information previously reported by the Reporting Persons in Schedule 13D.

Item 4. Purpose of Transaction

As described in Item 5(c), Occidental sold 6,990,070 shares of common stock, par value \$1.00 per share ("<u>Common Stock</u>"), of Lyondell on May 9, 2007.

Other than as set forth in 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. As discussed in Item 5 below with respect to the shares subject to the Swap Agreement (as defined below), OCHC has a current intention to sell its remaining 14,000,000 shares of Common Stock in open market sales over the next few months, although OCHC is not obligated to do so. Moreover, Occidental regularly reviews and analyzes its investments and other operations, including its investments in Lyondell, in order to determine whether value for Occidental's stockholders 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 investment, these reviews and analyses depend on a variety of factors, including, without limitation, the price of,

and other market conditions relating to, Lyondell's Common Stock, the investment return on the shares of Lyondell Common Stock owned by the Reporting Persons, 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

Item 5 is amended as follows:

(a)-(b) OCHC directly owns 14,000,000 shares of Common Stock representing approximately 5.5% of the issued and outstanding shares of Common Stock as of March 5, 2007.

As the sole stockholder of OCHC, OPIC may be deemed to be the beneficial owner of, and for purposes of Rule 13d-3 under the Act, to have the shared power to vote or direct the vote of and shared power to dispose or direct the disposition of, the 14,000,000 shares of Common Stock held by OCHC.

As the sole stockholder of OPIC, Occidental may be deemed to be the beneficial owner of, and for purposes of Rule 13d-3 under the Act, to have the shared power to vote or direct the vote of and shared power to dispose or direct the disposition of, the 14,000,000 shares of Common Stock held by OCHC.

(c) On May 4, 2007, Occidental and OCHC entered into a Purchase Agreement (the "<u>Purchase Agreement</u>") with Merrill Lynch, Pierce, Fenner & Smith Incorporated ("<u>Merrill</u>") pursuant to which OCHC agreed to sell to Merrill, and Merrill agreed to purchase, in a private placement (the "<u>Private Sale</u>") from OCHC, 6,990,070 shares of Common Stock at a price of more than \$32 per share. The Private Sale settled on May 9, 2007. Before the Private Sale, the Reporting Persons, directly or indirectly, held Common Stock representing approximately 8.3% of the issued and outstanding shares of Lyondell as of March 5, 2007. After the Private Sale, and as of the date of this report, the Reporting Persons, directly or indirectly, hold Common Stock representing approximately 5.5% of the issued and outstanding shares of Lyondell as of March 5, 2007.

OCHC is also a party to a total return swap agreement dated May 4, 2007, with Merrill (together, with OCHC, the "<u>Parties</u>", and individually, a "<u>Party</u>") with respect to 14,000,000 shares of Lyondell's Common Stock (the "<u>Swap Agreement</u>"). The Swap Agreement will enable Occidental to realize a similar market price with respect to future sales of such shares. OPC has guaranteed payment of OCHC's obligations under the Swap Agreement. OCHC has a current intention to sell its remaining 14,000,000 shares of Common Stock in open market sales over the next few months, although it is not obligated to do so. The precise timing and amount of such sales has not yet been determined, but OCHC expects to complete sales in daily transactions, subject to the volume limitations contained in Rule 144.

(d) Not applicable.

(e) Not applicable

Item 6. Contracts, Arrangements, Understandings or Relationships with Respect to Securities of the Issuer

Item 6 is hereby amended and restated in its entirety as follows:

The information set forth in Item 5 hereof is incorporated herein by reference. The foregoing description of the Purchase Agreement is a summary and all statements made herein related to the Purchase Agreement are qualified in their entirety by reference to the full text of the agreement, which is filed as Exhibit 6, and is incorporated herein by reference.

- Item 7. Material to Be Filed as Exhibits
 - Exhibit 6 Purchase Agreement dated as of May 4, 2007, by and among Merrill Lynch, Pierce, Fenner & Smith Incorporated, Occidental Petroleum Corporation and Occidental Chemical Holding Corporation.

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.

Date: May 11, 2007

OCCIDENTAL PETROLEUM CORPORATION

By: /s/ JIM A. LEONARD

Name: Jim A. Leonard Title: Vice President, Controller and Principal Accounting Officer

OCCIDENTAL PETROLEUM INVESTMENT CO.

By: /s/ JIM A. LEONARD

Name: Jim A. Leonard Title: President

OCCIDENTAL CHEMICAL HOLDING CORPORATION

By: /s/ JIM A. LEONARD Name: Jim A. Leonard Title: Vice President

PURCHASE AGREEMENT

PURCHASE AGREEMENT, dated as of May 4, 2007 (this "<u>Agreement</u>"), by and between Merrill Lynch, Pierce, Fenner & Smith Incorporated (the "<u>Purchaser</u>"), Occidental Petroleum Corporation, a corporation organized under the laws of Delaware (the "<u>Parent</u>"), and Occidental Chemical Holding Corporation, a corporation organized under the laws of California (the "<u>Seller</u>").

WHEREAS, the Seller owns shares of common stock, par value \$1.00 per share (the "<u>Common Stock</u>"), of Lyondell Chemical Company, a corporation organized under the laws of Delaware (the "<u>Issuer</u>"); and

WHEREAS, the Seller desires to sell the Shares (as defined hereunder) of Common Stock to the Purchaser, and the Purchaser desires to purchase the Shares from the Seller in accordance with the terms hereof.

NOW, THEREFORE, in consideration of the foregoing and the covenants, agreements and warranties contained herein, the sufficiency of which consideration is hereby acknowledged, the parties agree as follows:

1. **Definitions**. When used herein, the following terms shall have the following meanings:

"Encumbrance" means any pledge, hypothecation, assignment, lien, restriction (other than a Transfer Restriction), charge, claim, security interest, option, preference, priority or other preferential arrangement of any kind or nature whatsoever.

"Exchange Act" means the Securities Exchange Act of 1934, as amended.

"Rule 144" means Rule 144 promulgated under the Securities Act.

"Securities Act" means the Securities Act of 1933, as amended.

"Settlement Date" means the third Trading Day following the Trade Date.

"Trading Day" means any day that is a trading day on the primary securities exchange or market for the Common Stock.

"Transfer Restriction" means, with respect to any security, any condition to or restriction on the ability of the holder thereof to sell, assign or otherwise transfer such security or to enforce the provisions thereof or of any document related thereto, whether set forth in such security itself or in any document related thereto, including, without limitation, the Stockholders Agreement among the Issuer and the stockholders identified therein, dated as of August 22, 2002, as amended by a first amendment among the Issuer, the Seller and the Parent dated as of October 7, 2003 (the "Stockholders Agreement"), or arising by operation of law, including, without limitation, such conditions or restrictions arising under federal, state or foreign securities laws.

2. *Sale and Purchase.* Subject to the terms of this Agreement, the Seller and the Purchaser agree that the Seller will sell to the Purchaser, and the Purchaser will purchase from the Seller, on the date hereof (the "<u>Trade Date</u>"), 6,990,070 shares of Common Stock (the "<u>Shares</u>") for a purchase price of \$32.0780 per share (the "<u>Purchase Price</u>").

3. *Seller's and Parent's Representations, Warranties and Agreements.* The Parent and Seller hereby jointly and severally represent, warrant and agree on the date hereof, the Trade Date and the Settlement Date that:

(a) (1) The Parent and Seller are duly organized, validly existing and in good standing under their respective jurisdictions of incorporation. Each of the Parent and the Seller has the power to execute and deliver this Agreement and to perform its respective obligations under this Agreement and has taken all necessary action to authorize such execution, delivery and performance;

(2) Such execution, delivery and performance do not violate or conflict with any law applicable to the Parent or the Seller, any provision of their respective certificates of incorporation or bylaws, any order or judgment of any court or other agency of government applicable to the Parent or the Seller or any of their respective assets or any contractual restriction binding on or affecting the Parent or the Seller or any of their respective assets; provided, however, that no representation or warranty is made in respect of the Stockholders Agreement;

(3) No consent, approval, authorization or other order of, or filing with, any governmental authority or other person, is required for the execution, delivery and performance by the Parent or the Seller of this Agreement or the consummation by the Parent or the Seller of the transactions contemplated hereunder, except as may be required under applicable securities laws; provided, however, that no representation or warranty is made in respect of the Stockholders Agreement; and

(4) This Agreement has been duly executed and delivered by the Parent and the Seller. The Parent's and the Seller's respective obligations under this Agreement constitute the legal, valid and binding obligations of the Parent and the Seller, enforceable in accordance with their respective terms (subject to applicable bankruptcy, reorganization, insolvency, moratorium or similar laws affecting creditors' rights generally and subject, as to enforceability, to equitable principles of general application (regardless of whether enforcement is sought in a proceeding in equity or at law)).

(b) There is not pending or, to the Parent's or the Seller's knowledge, threatened against the Parent or the Seller any action, suit or proceeding at law or in equity or before any court, tribunal, governmental body, agency or official or any arbitrator that is likely to affect the legality, validity or enforceability against the Parent or the Seller of this Agreement or the Parent's or the Seller's ability to perform their respective obligations under this Agreement.

(c) Neither the Parent, the Seller nor any person acting on behalf of either of them has retained any broker in connection with the transactions contemplated by this Agreement. The Parent and the Seller agree that neither the Purchaser nor any affiliate, employee, agent or representative of the

Purchaser shall have any liability to the Parent, the Seller or any other person with respect to any brokerage or finder's fee or other commission in connection with the transactions contemplated by this Agreement, except as agreed in writing by the Purchaser, the Parent and the Seller.

- (d) The Seller is the record and beneficial owner of the Shares, free and clear of any Encumbrances.
- (e) The Seller acquired the Shares or warrants that were exercised on a cashless basis for certain of the Shares on July 8, 2002.

(f) Neither the Parent nor the Seller is in possession of any material nonpublic information concerning the Issuer. "Material" information for these purposes is any information to which an investor would reasonably attach importance in reaching a decision to buy, sell or hold securities of the Issuer; it being understood that any information included in the presentation to the Parent dated April 20, 2007 by representatives of the Purchaser (the "Presentation"), including any transactions contemplated therein, shall not be considered material for purposes of this representation.

(g) The Parent and Seller confirm there are no other agreements or understandings governing the ownership and disposition of the Shares other than those filed (or incorporated by reference) as material agreements in the Parent's Annual Report on Form 10-K for the year ended December 31, 2006, or as contemplated by the Presentation.

(h) The Parent and the Seller shall cause all opinions of counsel required to be delivered to the Issuer pursuant to any Transfer Restriction or otherwise in connection with the transfer of the Shares hereunder to be provided at the Parent's and the Seller's own expense and shall provide the Purchaser a reasonable opportunity to review and comment upon each such opinion prior to its delivery to the Issuer.

(i) Upon payment of the aggregate Purchase Price by Purchaser to the Seller and delivery of the Shares by Seller to Purchaser pursuant to the terms hereof, Purchaser will not be a "Stockholder" (as defined in the Stockholders Agreement), to which the Stockholders Agreement applies.

4. *Purchaser's Representations, Warranties and Agreements.* The Purchaser hereby represents, warrants and agrees on the date hereof, the Trade Date and the Settlement Date that:

(a) (1) The Purchaser is duly organized and validly existing under the laws of the jurisdiction of the Purchaser's organization or incorporation and, if relevant under such laws, in good standing. The Purchaser has the power to execute and deliver this Agreement and to perform the Purchaser's obligations under this Agreement and has taken all necessary action to authorize such execution, delivery and performance;

(2) Such execution, delivery and performance do not violate or conflict with any law applicable to the Purchaser, any provision of the Purchaser's constitutional documents, any order or judgment of any court or other agency of government applicable to the Purchaser or any of the Purchaser's assets or any contractual restriction binding on or affecting the Purchaser or any of the Purchaser's assets;

(3) No consent, approval, authorization or other order of, or filing with, any governmental authority or other person, is required for the execution, delivery and performance by the Purchaser of this Agreement or the consummation by the Purchaser of the transactions contemplated hereunder; and

2

(4) This Agreement has been duly executed and delivered by the Purchaser. The Purchaser's obligations under this Agreement constitute the legal, valid and binding obligations of the Purchaser, enforceable in accordance with their respective terms (subject to applicable bankruptcy, reorganization, insolvency, moratorium or similar laws affecting creditors' rights generally and subject, as to enforceability, to equitable principles of general application (regardless of whether enforcement is sought in a proceeding in equity or at law)).

(b) The Purchaser is a "qualified institutional buyer" within the meaning of Rule 144A under the Securities Act. The Purchaser is acquiring the Shares for its own account and not with a view to the distribution thereof within the meaning of the Securities Act. The Purchaser intends to treat the Shares as "restricted securities" for purposes of Rule 144.

(c) The Purchaser has the requisite knowledge and experience in financial and business matters so that it is capable of evaluating the merits and risks of the purchase of the Shares contemplated hereby and that in evaluating and making its decision to purchase the Shares pursuant to this Agreement, the Purchaser has not relied upon the Parent, the Seller or any of their representatives for any information concerning the Issuer or relating to legal, tax or investment advice. The Purchaser acknowledges that other than as specifically included in this Agreement, none of the Parent, the Seller or any of their representatives is making or has made any representations or warranties with respect to the Shares or the Issuer or the transactions contemplated hereby.

5. *Conditions Precedent to Obligations of the Purchaser.* The obligations of the Purchaser hereunder are subject to the satisfaction or waiver of the following conditions precedent:

(a) The representations and warranties of the Parent and the Seller contained herein shall be true and correct as of the date hereof, the Trade Date and the Settlement Date.

(b) The Parent and the Seller shall have complied with all of their covenants and agreements contained herein to be performed by them on or prior to the Settlement Date.

(c) The Purchaser's account, as has been previously provided to the Seller, shall have been credited with the Shares, and other than as contemplated by the Stockholders Agreement and as may be required by applicable securities laws, the Shares will not be subject to any restriction on sale, assignment or transfer.

(d) The transfer of the Shares to the Purchaser shall have been registered on the books of the Issuer and/or any applicable transfer agent.

(e) If requested by the Purchaser or Issuer, the Seller shall have delivered to the Purchaser an opinion of counsel reasonably satisfactory to the Purchaser covering such matters as the Purchaser shall reasonably request.

6. *Conditions Precedent to Obligations of the Seller*. The obligations of the Seller hereunder are subject to the satisfaction or waiver of the following conditions precedent:

(a) The representations and warranties of the Purchaser contained herein shall be true and correct as of the date hereof, the Trade Date and the Settlement Date.

(b) The Purchaser shall have complied with all of its covenants and agreements contained herein to be performed by it on or prior to the Settlement Date.

(c) The Seller shall have received the wire transfer referred to in Section 7.

7. *Settlement.* (a) On the Settlement Date, subject to Sections 5 and 6 of this Agreement, the Seller shall deliver to the Purchaser the Shares against payment by the Purchaser of the Purchase Price.

The Purchase Price shall be paid by wire transfer of immediately available funds to the account of the Seller designated in writing to the Purchaser which writing shall be delivered prior to the Settlement Date.

(b) Each of the Purchaser, the Parent and the Seller will, upon the reasonable request of the other, execute and deliver all other documents and instruments reasonably deemed necessary or desirable by the other party to fully effect the purchases and sales contemplated by this Agreement.

3

(c) In the event the transactions contemplated herein are not consummated on the Settlement Date solely as a result of a failure to satisfy Section 3(i), each party hereto will bear such party's own expenses in connection with this Agreement, and no party hereto or any third party beneficiary will have any claim for damages of any kind against any of the other parties hereto as a result of such failure.

8. [Reserved]

9. *Notices.* Any notice, request, instruction or other document to be given hereunder by a party hereto shall be in writing and shall be deemed to have been given upon receipt at the address provided on the signature page or to such other address as a party may designate by notice given as herein provided.

10. *Expenses.* Each party hereto will bear such party's own expenses in connection with the purchase and sale of the Shares contemplated hereby, except that the Purchaser shall bear all transfer and issuance taxes, if any, imposed on such purchase and sale.

11. *Miscellaneous.* (a) This Agreement may be executed in any number of counterparts (including by facsimile transmission), each of which shall be deemed an original, but all of which together shall constitute one and the same agreement. This Agreement constitutes the entire agreement between the parties hereto with respect to the subject matter hereof and supersedes all oral communication and prior writings with respect thereto. If any provision of this Agreement shall be held invalid, illegal or unenforceable, the validity, legality and enforceability of the other provisions hereof shall not be affected thereby. The headings used in this Agreement are for convenience of reference only and are not to affect the construction of or be taken into consideration in interpreting this Agreement. No amendment, modification or waiver in respect of this Agreement will be effective unless in writing (including a writing evidenced by a facsimile transmission) and executed by each of the parties. The parties acknowledge that money damages will not be a sufficient remedy for breach of this Agreement and that the parties hereto may obtain specific performance or other injunctive relief, without the necessity of posting a bond or security therefor.

(b) <u>APPLICABLE LAW; WAIVER OF JURY TRIAL</u>. THIS AGREEMENT SHALL BE GOVERNED BY AND CONSTRUED IN ACCORDANCE WITH THE LAWS OF THE STATE OF NEW YORK (WITHOUT REFERENCE TO CHOICE OF LAW DOCTRINE). THE PARTIES HEREBY KNOWINGLY AND VOLUNTARILY WAIVE ANY RIGHT THEY MAY HAVE TO A TRIAL BY JURY IN RESPECT OF ANY LITIGATION BASED HEREON.

4

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed and delivered as of the date first above written.

OCCIDENTAL CHEMICAL HOLDING CORPORATION

MERRILL LYNCH, PIERCE, FENNER & SMITH INCORPORATED

By:	/s/ James R. Havert
	Name: James R. Havert
	Title: Vice President and Treasurer

By:

/s/ William Morley Name: William Morley Title: Authorized Signatory 10889 Wilshire Boulevard Los Angeles, California 90024 Attention: Mr. James R. Havert Facsimile: (310) 443-6661

OCCIDENTAL PETROLEUM CORPORATION

By: /s/ James R. Havert Name: James R. Havert Title: Vice President and Treasurer

10889 Wilshire Boulevard Los Angeles, California 90024 Attention: Mr. James R. Havert Facsimile: (310) 443-6661 4 World Financial Center New York, New York 10080 Attention: Mr. Gary Rosenblum Facsimile: (212) 449-2615

5