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

Form 6-K

REPORT OF FOREIGN PRIVATE ISSUER PURSUANT TO RULE 13a-16 OR 15d-16 UNDER THE SECURITIES EXCHANGE ACT OF 1934

September 1

5,2006

BHP Billiton

Limited

...... (Translation of registrant's name into English) 180 Lonsdale Street Melbourne VIC 3000 Australia

(Address of principal executive office)

Indicate by check mark whether the registrant files or will file annual reports under cover of Form 20-F or Form 40-F: [x] Form 20-F [] Form 40-F

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(1): []

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(7): []

Indicate by check mark whether the registrant by furnishing the information contained in this Form is also thereby furnishing the information to the Commission pursuant to Rule 12g3-2(b) under the Securities Exchange Act of 1934: [] Yes [x] No

If "Yes" is marked, indicate below the file number assigned to the registrant in connection with Rule 12g3-2(b): _n/a_

15 September 2006

To: Australian Stock Exchange London Stock Exchange

CC: New York Stock Exchange Swiss Stock Exchange JSE Limited Deutsche Bank UBS Zurich

BHP Billiton Group Share Buy-back Programme

Attached, for the information of your markets, is a notice in the form (Appendix 3D) required by the Listing Rules of the Australian Stock Exchange ('ASX') advising of an extension to the BHP Billiton Limited on-market share buy-back programme previously advised to the market on 29 August 2005. The Group wishes to extend the current on-market buy-back programme of BHP Billiton Limited for a further 12 months to 30 September 2007. BHP Billiton Limited may buy back up to 349 million shares on ASX. This number represents less than 10 percent of BHP Billiton Limited's issued share capital at 30 June 2006.

A similar authority will be sought by BHP Billiton Plc at the Annual General Meeting.

These approvals form part of the programme announced on 23 August 2006 whereby BHP Billiton announced its intention to return US\$3 billion to shareholders over the next 18 months through a series of share buy-backs. This programme commenced on 7 September 2006 with an on-market buy-back of shares in BHP Billiton Plc. We expect it to continue with on-market purchases of shares in BHP Billiton Plc which could be made by BHP Billiton Plc and/or BHP Billiton Limited or one of its subsidiaries.

Karen Wood Group Company Secretary

Rule 3.8A

Appendix 3D

Changes relating to buy-back (*except* minimum holding buy-back)

Information and documents given to ASX become ASX's property and may be made public.

Introduced 1/9/99. Origin: Appendix 7B. Amended 13/3/2000, 30/9/2001.

Name of entity	ABN
BHP Billiton Limited	49 004 028 077

We (the entity) give ASX the following information.

1	Date that an Appendix 3C or the last Appendix 3D was given to ASX	29 August 2005
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Information about the change

Complete each item for which there has been a change and items 9 and 10.

		Column 1 (Details announced to market in Appendix 3C or last Appendix 3D)	Column 2 (Details of change to buy-back proposals)
	On-market buy-back		
2	Name of broker who will act on the company's behalf		
3	Deleted 30/9/2001.		
4	If the company intends to buy back a maximum number of shares - that number Note: This requires a figure to be included, not a percentage. The reference to a maximum number is to the total number including shares already bought back and shares remaining to be bought back. If the total has not changed, the item does not need to be completed.	358 million	349 million (being less than 10 percent of the Company's issued share capital at 30 June 2006 or at any time during the previous 12 months)

		Column 1	Column 2
		(Details announced to market in Appendix 3C or last Appendix 3D)	(Details of change to buy-back proposals)
5	If the company intends to buy back a maximum number of shares - the		

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	number remaining to be bought back		
6	If the company intends to buy-back shares within a period of time - that period of time; if the company intends that the buy-back be of unlimited duration - that intention	Up to and including 30 September 2006	Up to and including 30 September 2007
7	If the company intends to buy back shares if conditions are met - those conditions		

All buy-backs

8	Any other change		
9	Reason for change	Extension of the period of the buy-back programme for capital management purposes and reduction in th maximum number of shares that may be bought back following the cancellation of 95,950,979 shares on 3 April 2006.	

y other information material t reholder's decision whether to acc offer (eg, details of any propo eover bid)	ept		
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Compliance statement

1. The company is in compliance with all Corporations Act requirements relevant to this buy-back.

2. There is no information that the listing rules require to be disclosed that has not already been disclosed, or is not contained in, or attached to, this form.

Sign here: Date: 15 September 2006

Print name: K.J. Wood Group Company Secretary

BHP Billiton Limited ABN 49 004 028 077 Registered in Australia Registered Office: Level 27, 180 Lonsdale Street Melbourne Victoria 3000 Telephone +61 1300 554 757 Facsimile +61 3 9609 3015

BHP Billiton Plc Registration number 3196209 Registered in England and Wales Registered Office: Neathouse Place London SW1V 1BH United Kingdom Telephone +44 20 7802 4000 Facsimile +44 20 7802 4111

The BHP Billiton Group is headquartered in Australia

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SIGNATURES

Pursuant to the requirements 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.

BHP Billiton Limited

Date: 15 September 2006

By: Karen Wood

Name: Karen Wood Title: Group Company Secretary