

GOLD FIELDS LTD

Form 6-K

January 24, 2012

FORM 6-K

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

Report of Foreign Private Issuer

Pursuant to Rule 13a-16 or 15d-16

of the Securities Exchange Act of 1934

For the month of January 2012

Commission File Number 1-31318

Gold Fields Limited

(Translation of registrant's name into English)

150 Helen Rd.

Sandown, Sandton 2196

South Africa

(Address of principal executive offices)

Indicate by check mark whether the registrant files or will file annual reports under cover Form 20-F or Form 40-F.

Form 20-F...x... 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 by furnishing the information contained in this Form, the registrant is also thereby furnishing the information to the Commission pursuant to Rule 12g3-2(b) under the Securities Exchange Act of 1934.

Yes No ..x...

If "Yes" is marked, indicate below the file number assigned to the registrant in connection with Rule 12g3-2(b): 82- _____

Directors: M A Ramphele (Chair), N J Holland † ** (Chief Executive Officer), P A Schmidt** (Chief Financial Officer), K Ansah # , C A Carolus, R Dañino*, A R Hill ≠ ,

D L Lazaro^, R P Menell, M S Moloko, D N Murray, D M J Ncube, R L Pennant-Rea † , G M Wilson

† British, ≠ Canadian, # Ghanaian, *Peruvian, ^Filipino, ** Executive Director

Corporate Secretary: C Farrel

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MEDIA RELEASE

Gold Fields Limited and Gold One International

Limited to Investigate a Joint Venture for

Retreatment of West Rand Surface Tailings

Deposits

JOHANNESBURG – 24 January, 2012. **Gold Fields Limited (JSE, NYSE, NASDAQ Dubai: GFI)** (“Gold Fields”) and **Gold One International Limited (ASX and JSE: GDO)** are pleased to announce that they have entered into a Memorandum of

Understanding (“MOU”) to investigate the viability of concurrently reprocessing their combined surface tailings deposits, located on the West Rand region of South Africa’s Witwatersrand Basin. Gold One and Gold Fields currently operate mines on the West Rand, a region with a long history of gold and uranium mining.

In terms of the MOU, Gold Fields and Gold One (collectively, the “parties”) will jointly investigate the feasibility of establishing a Joint Venture into which both parties will contribute surface assets for retreatment. These assets are expected to comprise in excess of 700 million tonnes and represent over 60% of the total tailings material in the region. The parties aim to complete a detailed scoping study by the middle of this year, following which a decision will be taken on whether to progress the study to a feasibility level.

Should the Joint Venture proceed, the intention is to reclaim and retreat the historical tailings material and current tailings to recover residual gold, uranium and sulphur. A key objective of the project will be to address the re-deposition of the residues in accordance with modern sustainable deposition practices, ultimately supporting mine closure in an environmentally sustainable manner.

In 2010, Gold Fields completed extensive economic studies on its Tailings Treatment Project (“TTP”), which is a low-grade gold and uranium recovery project focusing on the existing tailings storage facilities and the current underground mining horizons of Gold Fields' West Rand operations, Kloof Driefontein Complex (“KDC”) and South Deep. As at December 2010, Gold Fields declared a mineral resource of 475.6 million tonnes at its tailings storage facilities, which includes gold mineral resources of 4.5 million ounces and uranium mineral resources of 53.6 million pounds.

Gold One advised Gold Fields that on 9 January, 2012, it completed the acquisition of Rand Uranium (Pty) Limited (“Rand Uranium”).

Furthermore, as part of the Rand Uranium transaction, Gold One established the Randfontein Surface Operations, which are currently processing approximately 300,000 tonnes of tailings material per month through the Cooke Gold Plant. Gold One also advised that it had commenced with a review of its Cooke Uranium Project.

Rand Uranium had earlier completed a comprehensive definitive feasibility study on the processing of the Cooke Tailings Deposit for the extraction of both gold and uranium (including 70% of detailed and already completed engineering design). The primary focus of the feasibility study is the construction of a uranium metallurgical plant to treat the Cooke Tailings Deposit. In addition, during the December 2011 quarter, Gold One stated that it commenced assessing the potential treatment of several other surface tailings deposits that exist on the mining and prospecting licenses acquired from Rand Uranium.

The combined consideration of the Gold One, Rand Uranium and Gold Fields studies, as well as the possibility of utilising existing and planned metallurgical plant infrastructure, will allow the companies to significantly fast-track a joint economic assessment of the reprocessing of the combined tailings deposits.

Gold One President and Chief Executive Officer Neal Froneman comments: "I am excited about the opportunity of forging a strategic relationship with Gold Fields. Economic recovery of gold and uranium from historical tailings deposits has been successfully demonstrated in other districts of the Witwatersrand Goldfields. The combination of our extensive technical studies and the quality of assets that would be pooled into the partnership presents an exciting prospect for the Joint Venture and growth of Gold One's surface business. Importantly, the economically sustainable retreatment of the existing tailings deposits will also have a positive environmental impact, benefiting all stakeholders in the district in which we operate."

Gold Fields Chief Executive Officer Nick Holland comments: "This is an exciting opportunity to investigate the feasibility of extracting value from our substantial surface resources on the West Rand. Gold Fields already has projects in place to retreat our tailings and the MOU with Gold One allows us to further explore a relatively low risk opportunity to extract value from Gold Fields' surface resources that is not inherent in our share price."

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Notes to editors

About Gold Fields

Gold Fields is one of the world's largest unhedged producers of gold with attributable annualised production of 3.5 million gold equivalent ounces from eight operating mines in Australia, Ghana, Peru and South Africa. Gold Fields also has an extensive and diverse global growth pipeline with four major projects in resource development and feasibility, with construction decisions expected in the next 18 to 24 months.

Gold Fields has total attributable gold equivalent Mineral Reserves of 76.7 million ounces and Mineral Resources of 225.4 million ounces.

Gold Fields is listed on the JSE Limited (primary listing), the New York Stock Exchange (NYSE), NASDAQ Dubai Limited, Euronext in

Brussels (NYX) and the Swiss Exchange (SWX).

Sponsor: J.P. Morgan Equities Limited

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.

Date: 24 January 2012

GOLD FIELDS LIMITED

By:

Name: Mr W J Jacobsz

Title: Senior Vice President: Investor
Relations and Corporate Affairs