

GOLD FIELDS LTD  
Form 20-F  
April 23, 2012  
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As filed with the Securities and Exchange Commission on April 23, 2012

**UNITED STATES**  
**SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 20549

**Form 20-F**

(Mark One)

**REGISTRATION STATEMENT PURSUANT TO SECTION 12(b) OR 12(g) OF THE SECURITIES EXCHANGE ACT OF 1934**  
or

**ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**  
For the fiscal year ended December 31, 2011

or

**TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**  
For the transition period from \_\_\_\_\_ to \_\_\_\_\_

or

**SHELL COMPANY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**  
Date of event requiring this shell company report \_\_\_\_\_

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For the transition period from            to

Commission file number: 1-31318

## **Gold Fields Limited**

(Exact name of registrant as specified in its charter)

**Republic of South Africa**

(Jurisdiction of incorporation or organization)

**150 Helen Road**

**Sandown, Sandton, 2196**

**South Africa**

**011-27-11-562-9700**

(Address of principal executive offices)

*with a copy to:*

**Michael Fleischer**

**Executive Vice President    General Counsel**

**Tel: 011-27-11-562-9724**

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**michael.fleischer@goldfields.co.za**

**150 Helen Road**

**Sandown, Sandton, 2196**

**South Africa**

(Name, Telephone, E-mail and/or Facsimile number and Address of Company Contact Person)

Securities registered or to be registered pursuant to Section 12(b) of the Act

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<b>Title of Each Class</b>	<b>Name of Each Exchange on Which Registered</b>
<b>Ordinary shares of par value Rand 0.50 each</b>	<b>New York Stock Exchange*</b>
<b>American Depositary Shares, each representing one ordinary share</b>	<b>New York Stock Exchange</b>

\* Not for trading, but only in connection with the registration of the American Depositary Shares pursuant to the requirements of the Securities and Exchange Commission.

**Securities registered or to be registered pursuant to Section 12(g) of the Act**

**None**

**(Title of Class)**

**Securities for which there is a reporting obligation pursuant to Section 15(d) of the Act**

**None**

**(Title of Class)**

**Indicate the number of outstanding shares of each of the issuer's classes of capital or common stock as of the close of the period covered by the Annual Report**

**725,133,015 ordinary shares of par value Rand 0.50 each**

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act: Yes  No

If this report is an annual or transition report, indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934. Yes  No

Note: Checking the box above will not relieve any registrant required to file reports pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 from their obligations under those Sections.

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 whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes  No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, or a non-accelerated filer. See definition of accelerated filer and large accelerated filer in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer  Accelerated filer  Non-accelerated filer

Indicate by check mark which basis of accounting the registrant has used to prepare the financial statements included in this filing:

U.S. GAAP  International Financial Reporting Standards as issued by the International Accounting Standards Board  Other

If Other has been checked in response to the previous question, indicate by check mark which financial statement item the registrant has elected to follow: Item 17  Item 18

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If this is an annual report, indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes  No

(APPLICABLE ONLY TO ISSUERS INVOLVED IN BANKRUPTCY PROCEEDINGS DURING THE PAST FIVE YEARS)

Indicate by check mark whether the registrant has filed all documents and reports required to be filed by Sections 12, 13 or 15(d) of the Securities Exchange Act of 1934 subsequent to the distribution of securities under a plan confirmed by a court. Yes  No

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**The Worldwide Locations of Gold Fields Operations**

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In 2010, Gold Fields changed its fiscal year end from June 30 to December 31 to align with the Company's peers in the gold mining industry. This annual report contains audited consolidated financial statements of Gold Fields as at and for the fiscal year ended December 31, 2011. This annual report also contains the audited consolidated financial statements of Gold Fields as at and for the six month period ended December 31, 2010 and for fiscal years ended June 30, 2010 and 2009. It may not be possible to directly compare the audited consolidated financial statements as at and for the fiscal year ended December 31, 2011 with the audited consolidated financial statements as at and for the six month period ended December 31, 2010, as these relate to different financial periods, and it may not be possible to compare audited consolidated financial statements as at and for the six month period ended December 31, 2010 directly with the audited financial statements as at and for the fiscal years ended June 30, 2010 or 2009, insofar as such financial statements refer to a completed financial year. Investors are advised to use caution in drawing comparisons between these periods.

Gold Fields Limited, or Gold Fields or the Company, is a South African company and about one-half of its operations, based on gold production, are located there. Accordingly, its books of account are maintained in South African Rand and its annual and interim financial statements are prepared in accordance with International Financial Reporting Standards, or IFRS, as prescribed by law. Gold Fields also prepares annual financial statements in accordance with United States Generally Accepted Accounting Principles, or U.S. GAAP, which are translated into U.S. dollars. Except as otherwise noted, the financial information included in this annual report has been prepared in accordance with U.S. GAAP and is presented in U.S. dollars, and descriptions of critical accounting policies refer to accounting policies under U.S. GAAP.

For Gold Fields' financial statements, unless otherwise stated, balance sheet item amounts are translated from Rand to U.S. dollars at the exchange rate prevailing on the date that it closed its accounts for fiscal 2011 (Rand 8.13 per \$1.00 as of December 31, 2011), except for specific items included within shareholders' equity and the statements of cash flows that are translated at the rate prevailing on the date the relevant transaction was entered into, and statements of operations item amounts are translated from Rand to U.S. dollars at the weighted average exchange rate for each period (Rand 7.22 per \$1.00 for fiscal 2011).

In this annual report, Gold Fields presents the financial items total cash costs, total cash costs per ounce, total production costs and total production costs per ounce, which have been determined using industry standards promulgated by the Gold Institute and are not U.S. GAAP measures. The Gold Institute was a non-profit international industry association of miners, refiners, bullion suppliers and manufacturers of gold products that ceased operation in 2002, which developed a uniform format for reporting production costs on a per ounce basis. The Gold Institute has now been incorporated into the National Mining Association. The guidance was first adopted in 1996 and revised in November 1999. An investor should not consider these items in isolation or as alternatives to production costs, income before tax, net income, operating cash flows or any other measure of financial performance presented in accordance with U.S. GAAP. While the Gold Institute provided definitions for the calculation of total cash costs and total production costs, the calculation of total cash costs, total cash costs per ounce, total production costs and total production costs per ounce may vary significantly among gold mining companies, and by themselves do not necessarily provide a basis for comparison with other gold mining companies. See Key Information Selected Historical Consolidated Financial Data, Information on the Company Glossary of Mining Terms Total cash costs per ounce and Information on the Company Glossary of Mining Terms Total production costs per ounce.

In this annual report, Gold Fields also presents the financial items operating costs and notional cash expenditure, or NCE. Operating costs and NCE, including operating costs per ounce and NCE per ounce, have been determined by Gold Fields on the basis of internally developed definitions and are not U.S. GAAP measures. Gold Fields defines operating costs as production costs (exclusive of depreciation, amortization and movements in gold-in-process) plus corporate expenditure, employment termination costs and accretion expense on provision for environmental rehabilitation. Gold Fields defines NCE margin as revenue minus NCE, divided

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by revenue, expressed as a percentage. See Operating and Financial Review and Prospects Notional Cash Expenditure . An investor should not consider these items in isolation or as alternatives to production costs, cash flows from operating activities or any other measure of financial performance presented in accordance with U.S. GAAP. Operating costs, NCE and NCE margin as presented in this annual report may not be comparable to other similarly titled measures of performance of other companies.

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**Defined Terms and Conventions**

In this annual report, all references to the Group are to Gold Fields and its subsidiaries.

In this annual report, all references to fiscal 2009 are to the 12 month period ended June 30, 2009, fiscal 2010 are to the 12 month period ended June 30, 2010, all references to fiscal 2011 are to the 12 month period ended December 31, 2011 and all references to fiscal 2012 are to the 12 month period ending December 31, 2012. In this annual report, all references to South Africa are to the Republic of South Africa, all references to Ghana are to the Republic of Ghana, all references to Australia are to the Commonwealth of Australia, all references to Venezuela are to the Bolivarian Republic of Venezuela, all references to Finland are to the Republic of Finland, all references to Peru are to the Republic of Peru, all references to China are to the People's Republic of China, all references to Mali are to the Republic of Mali, all references to the Philippines are to the Republic of the Philippines and all references to the United States and U.S. mean the United States of America, its territories and possessions and any state of the United States and the District of Columbia.

In this annual report, all references to the DMR are references to the South African Department of Mineral Resources, the government body responsible for regulating the mining industry in South Africa, or to its predecessor entity, the Department of Minerals and Energy which was split into the Department of Mineral Resources and the Department of Energy in July 2009, as applicable.

This annual report contains descriptions of gold mining and the gold mining industry, including descriptions of geological formations and mining processes. In order to facilitate a better understanding of these descriptions, this annual report contains a glossary defining a number of technical and geological terms. See Information on the Company Glossary of Mining Terms .

In this annual report, gold production figures are provided in troy ounces, which are referred to as ounces or oz, or in kilograms, which are referred to as kg . Ore grades are provided in grams per metric ton, which are referred to as grams per ton or g/t. All references to tons , tonnes or metric tons in this annual report are to metric tons. All references to gold include gold and gold equivalent ounces, as applicable. See Information on the Company Glossary of Mining Terms for further information regarding units of measurement used in this annual report and a table providing rates of conversion between different units of measurement.

This annual report contains references to the lost time injury frequency rate at each Gold Fields operation. The lost time injury frequency rate at each operation includes any injury occurring in the workplace where, at any subsequent time, the injured employee is unable to attend a full shift due to the injury, or Lost Time Injuries.

In this annual report, R and Rand refer to the South African Rand and Rand cents refers to subunits of the South African Rand, \$, U.S.\$ and dollars refer to United States dollars, U.S. cents refers to subunits of the U.S. dollar, A\$ and Australian dollars refer to Australian dollars and CAD refers to Canadian dollars.

Certain information in this annual report presented in Rand and Australian dollars has been translated into U.S. dollars. Unless otherwise stated, the conversion rates for these translations are Rand 8.13 per \$1.00 and A\$1.00 per \$0.9854, which were the closing rates on December 31, 2011. By including the U.S. dollar equivalents, Gold Fields is not representing that the Rand or Australian dollar amounts actually represent the U.S. dollar amounts shown or that these amounts could be converted into U.S. dollars at the rates indicated.

In this annual report, except where otherwise noted, all production and operating statistics are based on Gold Fields' total operations, which include production from the Tarkwa and Damang mines in Ghana and from the Cerro Corona mine in Peru which is attributable to the noncontrolling shareholders in those mines. This annual report contains references to gold equivalent ounces which are quantities of metals (such as copper) expressed as amounts of gold using the prevailing prices of gold and the other metals. To calculate this, the accepted total value of the metal based on its weight and value is divided by the accepted value of one troy ounce of gold.



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**Forward-looking Statements**

This annual report contains forward-looking statements within the meaning of Section 27A of the U.S. Securities Act of 1933, as amended, or the Securities Act, and Section 21E of the U.S. Securities Exchange Act of 1934, as amended, or the Exchange Act, with respect to Gold Fields financial condition, results of operations, business strategies, operating efficiencies, competitive position, growth opportunities for existing services, plans and objectives of management, markets for stock and other matters. Statements in this annual report that are not historical facts are forward-looking statements.

These forward-looking statements, including, among others, those relating to the future business prospects, revenues and income of Gold Fields, wherever they may occur in this annual report and the exhibits to the annual report, are necessarily estimates reflecting the best judgment of the senior management of Gold Fields and involve a number of risks and uncertainties that could cause actual results to differ materially from those suggested by the forward-looking statements. As a consequence, these forward-looking statements should be considered in light of various important factors, including those set forth in this annual report. Important factors that could cause actual results to differ materially from estimates or projections contained in the forward-looking statements include, without limitation:

overall economic and business conditions in South Africa, Ghana, Australia, Peru and elsewhere;

the ability to achieve anticipated efficiencies and other cost savings in connection with past and future acquisitions;

the ability to achieve anticipated cost savings at existing operations;

the success of exploration and development activities;

decreases in the market price of gold or copper;

the occurrence of hazards associated with underground and surface gold mining;

the occurrence of work stoppages related to health and safety incidents;

the occurrence of labor disruptions and industrial actions;

the ability to manage and maintain access to current and future sources of liquidity, capital and credit, including the terms and conditions of Gold Fields facilities and Gold Fields overall cost of funding;

the manner, amount and timing of capital expenditures made by Gold Fields on both existing and new mines, mining projects, exploration projects or other initiatives;

changes in relevant government regulations, particularly environmental, tax, health and safety, regulations and potential new legislation affecting mining and mineral rights;

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fluctuations in exchange rates, currency devaluations and other macroeconomic monetary policies; and

political instability in South Africa, Ghana, Peru or regionally in Africa or South America.

Gold Fields undertakes no obligation to update publicly or release any revisions to these forward-looking statements to reflect events or circumstances after the date of this annual report or to reflect the occurrence of unanticipated events.

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Not applicable.

**ITEM 2: OFFER STATISTICS AND EXPECTED TIMETABLE**

Not applicable.

**ITEM 3: KEY INFORMATION****Selected Historical Consolidated Financial Data**

The selected historical consolidated financial data set out below for fiscal 2011, the six month period ended December 31, 2010, fiscal 2010 and 2009 and as of December 31, 2011, 2010 and as of June 30, 2010 have been derived from Gold Fields' audited consolidated financial statements for those years and as of those dates and the related notes. The selected historical consolidated financial data for each of the two years ended June 30, 2008 and 2007, and as of June 30, 2009, 2008 and 2007 have been derived from Gold Fields' audited consolidated financial statements as of that date, which are not included in this annual report, and adjusted where applicable as described below. The selected historical consolidated financial data presented below have been derived from financial statements which have been prepared in accordance with U.S. GAAP. The other Operating Data presented has been calculated as described in the footnotes to the table below:

	June 30, 2007	Fiscal Period Ended <sup>(1)(2)(3)</sup> June 30, 2008	June 30, 2009	June 30, 2010	Six-Month Period Ended <sup>(1)(2)(3)</sup> December 31, 2010	Fiscal Period Ended <sup>(1)(2)(3)</sup> December 31, 2011
	(\$ millions, unless otherwise stated)					
<b>Statement of Operations Data</b>						
Revenues	2,735.2	3,206.2	3,228.3	4,164.3	2,564.2	5,800.1
Production costs (exclusive of depreciation and amortization)	1,707.7	1,996.1	1,998.6	2,544.0	1,435.7	2,948.6
Depreciation and amortization	388.2	400.5	433.5	631.1	389.4	745.3
Corporate expenditure	38.4	41.0	35.5	47.5	20.7	25.9
Employee termination costs	4.9	16.2	21.0	10.3	35.3	32.8
Exploration expenditure	47.4	39.8	58.0	82.4	50.9	120.5
Feasibility and evaluation costs					9.3	95.2
Impairment of assets		11.4				9.5
Shaft closure costs		3.3	(0.2)			
Increase/(decrease) in provision for post-retirement health care costs	1.3	(0.7)	3.4	(9.4)	(0.1)	0.1
Accretion expense on provision for environmental rehabilitation	6.4	12.0	13.9	19.3	10.9	24.9
Share-based compensation	12.5	20.7	33.7	53.9	27.0	66.4
Interest and dividends	26.8	31.2	24.9	40.2	12.9	25.4
Finance expense	(95.2)	(100.4)	(73.9)	(65.2)	(31.7)	(54.3)
Unrealized gain on financial instruments	15.4					
Realized (loss)/gain on financial instruments	(10.7)	19.8	(1.3)	27.7	1.0	4.4
(Loss)/gain on foreign exchange	(15.1)	1.7	10.2	(8.5)	(1.4)	9.1

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	Fiscal Period Ended <sup>(1)(2)(3)</sup>				Six-Month Period Ended <sup>(1)(2)(3)</sup>	Fiscal Period Ended <sup>(1)(2)(3)</sup>
	June 30, 2007	June 30, 2008	June 30, 2009	June 30, 2010	December 31, 2010	December 31, 2011
	(\$ millions, unless otherwise stated)					
Profit/(loss) on sale of property, plant and equipment	7.4	4.6	0.5	0.3	0.7	(0.4)
Profit/(loss) on disposal of subsidiaries		208.4	(0.3)			
Profit/(loss) on disposal of listed investments	26.8	3.7	(16.1)	111.7	(0.4)	12.8
Impairment of listed investments			(16.0)	(8.1)		(0.5)
South African Equity Empowerment Transactions					(297.6)	
Other (expenses)/income	(2.2)	5.9	(7.7)	(31.9)	(30.5)	(69.9)
Royalties <sup>(4)</sup>					(43.3)	(149.7)
Income before tax, impairment of investment in equity investee and share of equity investees (losses)/income	481.6	840.8	551.2	851.4	194.8	1,507.8
Income and mining tax expense	(209.3)	(271.2)	(264.6)	(358.4)	(133.8)	(552.0)
Income before impairment of investment in equity investee and share of equity investees (losses)/income	272.3	569.6	286.6	493.0	61.0	955.8
Impairment of investment in equity investee		(61.3)	(87.4)			(6.8)
Share of equity investees (losses)/income	0.3	(16.0)	(3.5)	(22.7)	4.9	4.0
Net income	272.6	492.3	195.7	470.3	65.9	953.0
Less: Net income attributable to non controlling interests	(26.5)	(39.8)	(34.8)	(79.3)	(53.3)	(71.5)
Net income attributable to Gold Fields shareholders	246.1	452.5	160.9	391.0	12.6	881.5
Basic earnings per share attributable to Gold Fields shareholders(\$)	0.44	0.69	0.24	0.55	0.02	1.22
Diluted earnings per share attributable to Gold Fields shareholders(\$)	0.44	0.69	0.24	0.55	0.02	1.21
Dividend per share (Rand)	2.00	1.60	1.50	1.30	0.70	1.70
Dividend per share (\$)	0.28	0.22	0.17	0.17	0.10	0.24
<b>Other Operating Data</b>						
Total cash costs per equivalent ounce of gold produced (\$) <sup>(5)</sup>	394	505	538	670	753	835
Total production costs per equivalent ounce of gold produced (\$) <sup>(6)</sup>	482	610	659	837	953	1,039
Notional cash expenditure per equivalent ounce of gold produced (\$) <sup>(7)</sup>	596	822	763	928	1,060	1,153

## Notes:

- (1) On July 1, 2009, Gold Fields adopted updated guidance pertaining to ownership interests in subsidiaries held by parties other than the parent ( noncontrolling interests ), which requires noncontrolling interests to be classified as a separate component of equity for presentation and disclosure purposes. The data for the years ended June 30, 2007, 2008 and 2009 have been adjusted to conform to the updated guidance.
- (2) Under a revised accounting policy adopted in fiscal 2007, all costs associated with the development of a specific underground block or area are capitalized until saleable minerals are extracted from that specific block or area. At Gold Fields' underground mines, these costs include the cost of shaft sinking and access, the costs of building access ways, lateral development, drift development, ramps, box cuts and other

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- infrastructure development. Previously, at Gold Fields' underground mines, costs incurred to develop the property were capitalized only until the reef horizons were intersected. Subsequent mine development costs to access other specific ore blocks or areas of the mine were treated as variable production costs and expensed as incurred.
- (3) As a result of the acquisition of Western Areas, Western Areas was fully consolidated with Gold Fields as from December 1, 2006. During the period between December 1, 2006 and March 31, 2007, Gold Fields did not own 100% of Western Areas and therefore did not own 100% of South Deep. The percentages of the results of Western Areas and South Deep that did not accrue to Gold Fields have been accounted for as noncontrolling interests. U.S. GAAP requires that, where a company is acquired through a series of transactions, an investment in that company that was previously accounted for as available for sale be retrospectively accounted for on an equity basis. Since Gold Fields had previously held interests in Western Areas which were accounted for as available for sale, its results for the period July 1, 2006 to November 30, 2006 have been adjusted accordingly to account for the investment in Western Areas using the equity method.
- (4) The classification of royalty expense at Gold Fields' operations requires judgment, particularly at the Groups' South African and Ghanaian operations, where the percentages to be applied in calculating royalties are influenced by the expenses incurred in generating those product sales (and therefore the profitability of the operations). In light of the fact that the calculation of royalties in Ghana, representing the largest component of consolidated royalty expense, was changed as of April 1, 2011 to 5% of revenues earned from minerals obtained (regardless of the operating margin), Gold Fields changed the classification of royalty expense in its consolidated financial statements from a component of income and mining taxes to royalties in its consolidated statements of operations for the six month period ended December 31, 2010. Given the change in circumstances, Gold Fields considers it appropriate to change the presentation for all periods beginning with the six months ended December 31, 2010.
- (5) Gold Fields has calculated total cash costs per ounce by dividing total cash costs, as determined using guidance provided by the Gold Institute, by gold ounces sold for all periods presented. The guidance was first adopted in 1996 and revised in November 1999. Total cash costs, as defined in the Gold Institute industry guidance, are production costs as recorded in the statement of operations, less offsite (i.e. central) general and administrative expenses (including head office costs performance, as well as changes in the currency exchange rate between the Rand, Australian dollar and the Bolivar, compared with the U.S. dollar). Total cash costs and total cash costs per ounce are not U.S. GAAP measures. Management, however, believes that total cash costs per ounce provides a measure for comparing Gold Fields' operational performance against that of its peer group, both for Gold Fields as a whole, and for its individual operations. An investor should not consider total cash costs and total cash costs per ounce in isolation or as an alternative to total production costs or net income/(loss), income before tax, operating cash flows or any other measure of financial performance presented in accordance with U.S. GAAP. In particular, depreciation and amortization is included in a measure of production costs under U.S. GAAP, but is not included in total cash costs under the guidance provided by the Gold Institute. See Presentation of Financial Information and Information on the Company Glossary of Mining Terms Total cash costs per ounce. For a reconciliation of Gold Fields' production costs to its total cash costs for fiscal 2011, the six month period ended December 31, 2010 and fiscal 2010 and 2009, see Operating and Financial Review and Prospects Results of Operations Years Ended December 31, 2011 and June 30, 2010 Costs and Expenses, Operating and Financial Review and Prospects-Results of Operations Six Months ended December 31, 2010 Costs and Expenses and Operating and Financial Review and Prospects Results of Operations Years Ended June 30, 2010 and 2009 Costs and Expenses.
- (6) Gold Fields has calculated total production costs per ounce by dividing total production costs, as determined using the guidance provided by the Gold Institute, by gold ounces sold for all periods presented. Total production costs, as defined by the Gold Institute industry guidance, are total cash costs, as calculated using the Gold Institute guidance, plus amortization, depreciation and rehabilitation costs. Changes in total production costs per ounce are affected by operational performance, as well as changes in the currency exchange rate between the Rand, and the Australian dollar compared with the U.S. dollar. Changes in the currency exchange rate between the Bolivar and the U.S. dollar affected changes in total production costs

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per ounce until the sale of the Choco 10 mine on November 30, 2007. Total production costs per ounce is not a U.S. GAAP measure. Management, however, believes that total production costs per ounce provides a measure for comparing Gold Fields' operational performance against that of its peer group, both for Gold Fields as a whole, and for its individual operations. An investor should not consider total production costs per ounce in isolation or as an alternative to total production costs or net income/(loss), income before tax, operating cash flows or any other measure of financial performance presented in accordance with U.S. GAAP. See Presentation of Financial Information and Information on the Company Glossary of Mining Terms Total production costs per ounce. For a reconciliation of Gold Fields' production costs to its total production costs for fiscal 2011, the six month period ended December 31, 2010 and fiscal 2010 and 2009, see Operating and Financial Review and Prospects Results of Operations Years Ended December 31, 2011 and June 30, 2010 Costs and Expenses, Operating and Financial Review and Prospects Results of Operations Six Months Ended December 31, 2010 Costs and Expenses and Operating and Financial Review and Prospects Results of Operations Years Ended June 30, 2010 and 2009 Costs and Expenses.

- (7) Gold Fields defines notional cash expenditure, or NCE, as operating costs plus additions to property, plant and equipment, and defines operating costs as production costs (exclusive of depreciation and amortization) plus corporate expenditure, employment termination costs and accretion expense on provision for environmental rehabilitation. Gold Fields reports NCE on a per equivalent ounce basis. For a description of NCE and a reconciliation of Gold Fields' NCE to its production costs for fiscal 2011, the six month period ended December 31, 2010 and fiscal 2010 and 2009, see Operating and Financial Review and Prospects Notional Cash Expenditure.

	June 30, 2007	June 30, 2008	June 30, 2009	As at <sup>(1)(2)(3)</sup> June 30, 2010	December 31, 2010	December 31, 2011
	(\$ million, unless otherwise stated)					
<b>Balance Sheet Data</b>						
Cash and cash equivalents	326.4	253.7	357.5	500.7	809.5	744.0
Current portion of financial instruments		6.9				
Receivables	297.7	280.1	383.5	305.4	411.4	483.4
Inventories	144.9	152.8	196.0	234.9	256.3	297.7
Material contained on heap leach pads	58.1	74.5	81.3	91.5	111.3	187.9
<b>Total current assets</b>	<b>827.1</b>	<b>768.0</b>	<b>1,018.3</b>	<b>1,132.5</b>	<b>1,588.5</b>	<b>1,713.0</b>
Property, plant and equipment, net	5,576.8	5,423.7	5,756.9	6,639.7	7,482.0	7,016.8
Goodwill	1,222.7	1,092.8	1,084.7	1,154.9	1,295.2	1,075.4
Non-current investments	401.8	737.4	475.2	254.3	344.3	272.2
<b>Total assets</b>	<b>8,028.4</b>	<b>8,021.9</b>	<b>8,335.1</b>	<b>9,181.4</b>	<b>10,710.0</b>	<b>10,077.4</b>
Accounts payable and provisions	463.6	610.3	533.5	551.9	670.6	669.9
Current portion of financial instruments	10.8		1.7			
Interest payable	34.7	29.2	14.4	4.5	4.1	11.2
Income and mining taxes payable	72.2	123.1	98.2	104.3	156.1	264.4
Current portion of long-term loans	227.5	772.9	317.8	691.1	261.7	547.0
Bank overdraft	3.3	2.7	9.7			
<b>Total current liabilities</b>	<b>812.1</b>	<b>1,538.2</b>	<b>975.3</b>	<b>1,351.8</b>	<b>1,092.5</b>	<b>1,492.5</b>
Long-term loans	1,211.8	564.2	785.9	430.0	1,136.6	1,360.7
Deferred income and mining taxes	879.5	719.9	817.7	982.5	1,051.8	1,019.4
Provision for environmental rehabilitation	197.2	216.2	236.9	275.7	324.4	336.9
Provision for post-retirement health care costs	9.5	7.9	11.4	2.8	2.7	2.1
Other non-current liabilities			3.9		19.7	13.5
<b>Total liabilities</b>	<b>3,110.1</b>	<b>3,046.4</b>	<b>2,831.1</b>	<b>3,042.8</b>	<b>3,627.7</b>	<b>4,225.1</b>

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	As at <sup>(1)(2)(3)</sup>					
	June 30, 2007	June 30, 2008	June 30, 2009	June 30, 2010	December 31, 2010	December 31, 2011
	(\$ million, unless otherwise stated)					
Share capital	54.8	54.9	57.7	57.8	58.8	59.0
Additional paid-in capital	4,459.8	4,490.4	4,944.2	5,005.4	5,313.2	5,374.6
Retained earnings	211.8	521.8	561.5	834.4	779.6	772.5
Accumulated other comprehensive (loss)/income	64.8	(243.0)	(338.9)	(96.5)	562.4	(423.3)
<b>Total equity attributable to Gold Fields shareholders</b>	<b>4,791.2</b>	<b>4,824.1</b>	<b>5,224.5</b>	<b>5,801.1</b>	<b>6,714.0</b>	<b>5,782.8</b>
Noncontrolling interests	127.1	151.4	279.5	337.5	368.3	69.5
<b>Total equity</b>	<b>4,918.3</b>	<b>4,975.5</b>	<b>5,504.0</b>	<b>6,138.6</b>	<b>7,082.3</b>	<b>5,852.3</b>
<b>Total liabilities and equity</b>	<b>8,028.4</b>	<b>8,021.9</b>	<b>8,335.1</b>	<b>9,181.4</b>	<b>10,710.0</b>	<b>10,077.4</b>

	As at <sup>(1)(2)(3)</sup>					
	June 30, 2007	June 30, 2008	June 30, 2009	June 30, 2010	December 31, 2010	December 31, 2011
	(\$ million, unless otherwise stated)					
<b>Other Financial Data</b>						
Number of ordinary shares as adjusted to reflect changes in capital structure	652,158,066	653,200,682	704,749,849	705,903,511	720,796,887	724,591,516
Net Assets	4,791.2	4,824.1	5,224.5	5,801.1	6,714.0	5,782.8

## Notes:

- (1) On July 1, 2009, Gold Fields adopted updated guidance pertaining to ownership interests in subsidiaries held by parties other than the parent ( noncontrolling interests ), which requires noncontrolling interests to be classified as a separate component of equity for presentation and disclosure purposes. The data as at June 30, 2007, 2008 and 2009 have been adjusted to conform to the updated guidance.
- (2) Under a revised accounting principle adopted in fiscal 2007, all costs associated with the development of a specific underground block or area are capitalized until saleable minerals are extracted from that specific block or area. At Gold Fields' underground mines, these costs include the cost of shaft sinking and access, the costs of building access ways, lateral development, drift development, ramps, box cuts and other infrastructure development. Previously, at Gold Fields' underground mines, costs incurred to develop the property were capitalized only until the reef horizons were intersected. Subsequent mine development costs to access other specific ore blocks or areas of the mine were treated as variable production costs and expensed as incurred.
- (3) As a result of the acquisition of Western Areas, Western Areas was fully consolidated with Gold Fields as from December 1, 2006. During the period between December 1, 2006 and March 31, 2007, Gold Fields did not own 100% of Western Areas and therefore did not own 100% of South Deep. The percentages of the results of Western Areas and South Deep that did not accrue to Gold Fields have been accounted for as noncontrolling interests. U.S. GAAP requires that, where a company is acquired through a series of transactions, an investment in that company that was previously accounted for as available for sale be retrospectively accounted for on an equity basis. Since Gold Fields had previously held interests in Western Areas which were accounted for as available for sale, its results for prior years and the period July 1, 2006 to November 30, 2006 have been adjusted accordingly to account for the investment in Western Areas using the equity method.



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The following tables set forth, for the periods indicated, the average, high and low exchange rates of Rand for U.S. Dollars, expressed in Rand per \$1.00. For periods prior to December 31, 2008, the following tables express the exchange rates in terms of the noon buying rate in New York City for cable transfers in Rand as certified for customs purposes by the Federal Reserve Bank of New York. As of December 31, 2008, the Federal Reserve Bank ceased publication of the noon buying rate and, as such, the exchange rates for fiscal 2009 are sourced from I-Net Bridge, being the closing rate at period end.

<b>Year ended</b>	<b>Average<sup>(1)</sup></b>
June 30, 2007	7.20 <sup>(1)</sup>
June 30, 2008	7.30 <sup>(1)</sup>
June 30, 2009	9.01 <sup>(2)</sup>
June 30, 2010	7.58 <sup>(2)</sup>
December 31, 2010	7.32 <sup>(2)</sup>
December 31, 2011	7.22 <sup>(2)</sup>
through March 23, 2012	7.75

## Notes:

- (1) The average of the noon buying rates on the last day of each full month during the relevant period as certified for customs purposes by the Federal Reserve Bank of New York.
- (2) The daily average of the closing rate during the relevant period as reported by I-Net Bridge.

<b>Month ended</b>	<b>High</b>	<b>Low</b>
September 30, 2011	8.40	7.00
October 31, 2011	8.28	7.71
November 30, 2011	8.56	7.85
December 31, 2011	8.42	8.01
January 31, 2012	8.18	7.74
February 28, 2012	7.77	7.47

The closing rate for the Rand on March 23, 2012 as reported by I-Net Bridge was Rand 7.67 per \$1.00. Fluctuations in the exchange rate between the Rand and the U.S. dollar will affect the dollar equivalent of the price of the ordinary shares on the JSE, which may affect the market price of the American Depositary Shares, or ADSs, on the New York Stock Exchange. These fluctuations will also affect the U.S. dollar amounts received by owners of ADSs on the conversion of any dividends paid in Rand on the ordinary shares.

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**RISK FACTORS**

*In addition to the other information included in this annual report, the considerations listed below could have a material adverse effect on Gold Fields' business, financial condition or results of operations, resulting in a decline in the trading price of Gold Fields' ordinary shares or ADSs. The risks set forth below comprise all material risks currently known to Gold Fields. However, there may be additional risks that Gold Fields does not currently know of or that Gold Fields currently deems immaterial based on the information available to it. These factors should be considered carefully, together with the information and financial data set forth in this document.*

***Changes in the market price for gold, and to a lesser extent copper, which in the past have fluctuated widely, affect the profitability of Gold Fields' operations and the cash flows generated by those operations.***

Most of Gold Fields' revenues are derived from the sale of gold. Historically, the market price for gold has fluctuated widely and has been affected by numerous factors over which Gold Fields has no control, including:

the demand for gold for industrial uses and for use in jewelry;

demand for gold from relatively new emerging markets, particularly Brazil, Russia, India and China, and the emerging middle class in these markets;

actual, expected or rumored purchases and sales of gold bullion holdings by central banks or other large gold bullion holders or dealers;

demand for exchange traded funds which replicate the exact performance of gold;

demand for gold for investment purposes;

speculative trading activities in gold;

the overall level of forward sales by other gold producers;

the overall level and cost of production by other gold producers;

international or regional political and economic events or trends;

the strength or weakness of the U.S. dollar (the currency in which gold prices generally are quoted) and of other currencies;

financial market expectations regarding the rate of inflation; and

interest rates.

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In addition, the current demand for and supply of gold affects the price of gold, but not necessarily in the same manner as current demand and supply affect the prices of other commodities. Since the potential supply of gold is large relative to mine production in any given year, normal variations in current production will not necessarily have a significant effect on the supply of gold or the gold price. Central banks, financial institutions and individuals historically have held large amounts of gold as a store of value, and production in any given year historically has constituted a small portion of the total potential supply of gold. Historically, gold has tended to retain its value in relative terms against basic goods in times of inflation and monetary crisis. Pursuant to a gold sales agreement entered into by 15 European central banks, individual banks may sell up to 400 tons of gold per year. However, the effect on the market of these or any other gold sales is unclear.

Due to the credit crisis in the Euro zone countries and other factors, the market price of gold has experienced significant volatility. In fiscal 2011, the average London afternoon fixing price for gold was U.S.\$1,571 per ounce. For the same period, the high was U.S.\$1,895 per ounce and the low was U.S.\$1,319 per ounce. On March 23, 2012, the London afternoon fixing price for gold was U.S.\$1,664 per ounce. A sustained period of significant gold price volatility may adversely affect Gold Fields' ability to evaluate the feasibility of undertaking new capital projects or continuing existing operations or to make other long-term strategic decisions.

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While the aggregate effect of these factors is impossible for Gold Fields to predict, if gold prices fall below the amount it costs Gold Fields to produce gold and remain at such levels for any sustained period, Gold Fields may experience losses and may be forced to curtail or suspend some or all of its exploration projects, growth projects, operations and/or reduce operational capital expenditures. In addition, Gold Fields might not be able to recover any losses it may incur during that period.

Copper accounts for a significant proportion of the revenues at Gold Fields Cerro Corona mine, although copper is not a major element of Gold Fields overall revenues. A variety of factors may depress global copper prices, including slowing growth rates in Brazil, Russia, China and India. A decline in copper prices, which have also fluctuated widely, could adversely affect the revenues and cash flows from the Cerro Corona mine.

***Because Gold Fields does not use commodity or derivative instruments to protect against low gold prices with respect to its production, Gold Fields may be impacted by any significant decline in the price of gold.***

As a general rule, Gold Fields sells its gold production at market prices. Gold Fields generally does not enter into forward sales, derivatives or other hedging arrangements to establish a price in advance for the sale of its future gold production. In general, hedging reduces the risk of exposure to volatility in the gold price. Hedging also enables a gold producer to fix the price that it receives for gold which generally is higher than the then current spot price. To the extent that Gold Fields does not generally use commodity or derivative instruments, it will not be protected against declines in the gold price, which could lead to reduced revenue in respect of gold production that is not hedged. See Quantitative and Qualitative Disclosures About Market Risk .

***Gold Fields mineral reserves are estimates based on a number of assumptions, any changes to which may require Gold Fields to lower its estimated mineral reserves.***

The mineral reserves stated in this annual report represent the amount of gold and copper that Gold Fields estimated, as of December 31, 2011, could be mined, processed and sold at prices sufficient to recover Gold Fields estimated future total costs of production, remaining investment and anticipated additional capital expenditures. Ore reserves are estimates based on assumptions regarding, among other things, Gold Fields costs, expenditures, prices and exchange rates, which may prove inaccurate due to a number of factors, many of which are beyond Gold Fields control.

In 2010, Gold Fields changed its fiscal year-end from June 30 to December 31 to align with the company s peers in the gold mining industry. The mineral reserves as at December 31, 2011 have been prepared in accordance with the SAMREC Code. Therefore, the information regarding the Group s mineral reserves as at December 31, 2011 and December 31, 2010 has been prepared at a different point in the year than the reserves information as at June 30, 2009. As a result, the mineral reserve information prepared as at December 31, 2011 and December 31, 2010 may not be directly comparable to that reported by the Group in prior years.

In the event that Gold Fields revises any of its assumptions that underlie its mineral reserves reporting in an adverse manner, Gold Fields may need to revise its mineral reserves downwards. In particular, if Gold Fields production costs or capital expenditures increase, if gold or copper prices decrease or if the Rand or Australian dollar strengthens against the U.S. dollar, a portion of Gold Fields mineral reserves may become uneconomical to recover, forcing Gold Fields to lower its estimated reserves. See Information on the Company Reserves of Gold Fields as of December 31, 2011 .

***To the extent that Gold Fields seeks to expand through acquisitions, it may experience problems in executing acquisitions or managing and integrating the acquisitions with its existing operations.***

In order to expand its operations and reserve base, Gold Fields may seek to make acquisitions of selected precious metal producing and/or exploration companies or assets. Gold Fields success at making any acquisitions will depend on a number of factors, including, but not limited to:

negotiating acceptable terms with the seller of the business or equities to be acquired;

obtaining approval from regulatory authorities;



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assimilating the operations of an acquired business in a timely and efficient manner;

maintaining Gold Fields' financial and strategic focus while integrating the acquired business;

implementing Gold Fields' standards, controls, procedures and policies at the acquired business;

operating in a new environment to the extent that Gold Fields makes an acquisition outside of markets in which it has previously operated; and

legal, regulatory or other changes in any jurisdiction that may affect the success of an acquisition.

There can be no assurance that any acquisition will achieve the results intended. Any problems experienced by Gold Fields in connection with an acquisition as a result of one or more of these factors could have a material adverse effect on Gold Fields' business, operating results and financial condition.

***To the extent that Gold Fields seeks to expand through its exploration program, it may experience problems associated with mineral exploration or developing mining projects.***

In order to expand its operations and reserve base, Gold Fields may rely on its exploration program for gold and other metals associated with gold as well as its ability to develop mining projects. Exploration for gold and other metals associated with gold is speculative in nature, involves many risks and is frequently unsuccessful. Any exploration program entails risks relating to the location of economic ore bodies, the development of appropriate extractive processes, the receipt of necessary governmental permits and regulatory approvals and the construction of mining and processing facilities at the mining site. Gold Fields' exploration efforts may not result in the discovery of gold or other metals associated with gold and any mineralization discovered may not result in an increase of Gold Fields' reserves. If ore bodies are developed, it can take a number of years and substantial expenditures from the initial phases of drilling until production commences, during which time the economic feasibility of production may change. Gold Fields' exploration program may not result in the replacement of current production with new reserves or result in any new commercial mining operations. In addition, to the extent Gold Fields participates in the development of a project through a joint venture or any other multi-party commercial structure, there could be disagreements, legal or otherwise, or divergent interests or goals amongst the parties, which could jeopardize the success of the project.

Furthermore, significant capital investment is required to achieve commercial production from exploration efforts. There is no assurance that Gold Fields will have, or be able to raise, the required funds to engage in these activities or to meet its obligations with respect to the exploration properties in which it has or may acquire an interest.

***Due to the nature of mining and the type of gold mines it operates, Gold Fields faces a material risk of liability, delays, mine stoppages and increased production costs from environmental and industrial accidents and pollution.***

The business of gold mining by its nature involves significant risks and hazards, including environmental hazards and industrial and mining accidents. In particular, hazards associated with Gold Fields' underground mining operations include:

rock bursts;

seismic events, particularly at the KDC and South Deep operations;

extreme ambient operating temperature

underground fires and explosions, including those caused by flammable gas or in connection with blasting;

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cave-ins or gravity falls of ground;

discharges of gases and toxic substances;

releases of radioactivity;

flooding;

electrocution;

falling from height;

accidents related to the presence of mobile machinery, including locomotives, shaft conveyances and elevators;

ground and surface water pollution, including as a result of potential spillage or seepage from tailings dams;

sinkhole formation and ground subsidence;

human error; and

other accidents and conditions resulting from drilling, blasting and removing and processing material from an underground mine. Gold Fields' South African operations may be more susceptible to certain of these risks due to mining at deep levels.

Hazards associated with Gold Fields' open pit mining operations include:

flooding of the open pit;

extreme ambient operating temperatures;

collapses of the open pit walls;

electrocution;

accidents associated with the operation of large open pit mining and rock transportation equipment;



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accidents related to the presence of other mobile machinery;

accidents associated with the preparation and ignition of large-scale open pit blasting operations;

ground and surface water pollution, including as a result of potential spillage or seepage from tailings dams;

production disruptions due to weather; and

hazards associated with heap leach processing, such as groundwater and waterway contamination.

Hazards associated with Gold Fields' rock dump and production stockpile mining and tailings disposal include:

accidents associated with operating a rock dump and production stockpile and rock transportation equipment;

production disruptions due to weather;

sinkhole formation and ground subsidence;

collapses of rock dumps or tailings dams; and

ground and surface water pollution, on and off site.

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Gold Fields is at risk of experiencing any and all of these environmental or other industrial hazards. The occurrence of any of these hazards could delay or halt production, increase production costs and result in liability for Gold Fields.

Gold Fields may also be subject to actions by labor groups or other interested parties who object to perceived or actual conditions and policies at the mines or to the perceived or actual environmental impact of the mines. These actions may delay or halt production, increase production costs, result in liability for the Group or may create negative publicity related to Gold Fields.

***Ageing infrastructure may cause breakdowns and unplanned stoppages, which may result in production delays, increased costs and industrial accidents.***

Deep level gold mining shafts and processing plants are usually designed with a lifespan of 25 to 30 years. Vertical shafts consist of large quantities of infrastructure steelwork for guiding conveyances and services such as high and low tension electric cables, air and water pipe columns. Maintaining this infrastructure requires skilled human resources, capital allocation, management and planned maintenance.

Once a shaft or a processing plant has reached the end of its intended lifespan, more than normal maintenance and care is required to maintain it. Some of Gold Fields' South African operating shafts and Gold Fields' processing plants are more than 30 years old. Although Gold Fields has a comprehensive maintenance strategy in place, incidents resulting in production delays, increased costs or industrial accidents may occur. Such incidents may have a material adverse effect on the company's results of operations and financial position.

***If Gold Fields experiences losses of senior management or is unable to hire and retain sufficient technically skilled employees, its business may be materially adversely affected.***

Gold Fields' ability to operate or expand effectively depends largely on the experience, skills and performance of its senior management team and technically skilled employees. There can be no certainty that the services of its senior management will continue to be available to Gold Fields. Any senior management departures could adversely affect Gold Fields' efficiency, control over operations and results of operations.

During fiscal 2009, Gold Fields restructured its operations into four regions: South Africa, West Africa, South America and Australasia. See Information on the Company Strategy Regional Delivery Model. An important element of this restructuring was bolstering the technical skills base of each of the four regional management teams to provide additional resources and to provide for succession planning. The mining industry, including Gold Fields, continues to experience a global shortage of technically skilled employees. Gold Fields may be unable to hire or retain appropriate technically skilled employees or other management personnel, or may have to pay higher levels of remuneration than it currently intends in order to do so. If Gold Fields is not able to hire and retain appropriate management and technically skilled personnel, or if there are not sufficient succession plans in place, Gold Fields may not achieve the intended benefits of its regional restructuring, which could have a material adverse effect on its business, results of operations and financial position.

***Because gold is generally sold in U.S. dollars, while most of Gold Fields' production costs are in Rand, Australian dollars and other non-U.S. dollar currencies, Gold Fields' operating results and financial condition could be materially harmed by an appreciation in the value of these non-U.S. dollar currencies.***

Gold is sold throughout the world principally in U.S. dollars, but Gold Fields' costs of production are incurred principally in Rand, Australian dollars and other non-U.S. dollar currencies. As a result, any significant and sustained appreciation of any of these non-U.S. dollar currencies against the U.S. dollar may materially increase Gold Fields' costs in U.S. dollar terms, which could materially adversely affect Gold Fields' operating results and financial condition.

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***Economic, political or social instability in the countries or regions where Gold Fields operates may have a material adverse effect on Gold Fields operations and profits.***

Approximately half of Gold Fields' production is in South Africa. Gold Fields also has significant operations in Ghana, Australia and Peru. As a result, changes or instability to the economic, political or social environment in South Africa or in any of these other countries or in neighboring countries could affect an investment in Gold Fields.

In particular, continued or increased inflation in any of the countries where it operates could increase the prices Gold Fields pays for products and services, including wages for its employees and power costs, which if not offset by increased gold prices or currency devaluations could have a material adverse effect on Gold Fields' financial condition and results of operations.

In recent years, governments (local and national), communities, non-governmental organizations and trade unions in several jurisdictions have sought and, in some cases, have implemented greater cost imposts on the mining industry, including through the imposition of additional taxes and royalties. These trends are evident in the cost of electricity and other levies imposed by governments in many of the countries in which Gold Fields operates. In South Africa, the African National Congress, or the ANC, is considering a report which, among other things, proposes greater state intervention in the mining industry, including the imposition of new taxes and increasing the state's holdings in mining companies. Moreover, the Ghanaian parliament passed a bill that, effective March 9, 2012, increases taxes on mining companies in order to benefit from the movement in gold prices. These changes included introducing a separate tax category for companies engaged in mining which would raise the applicable corporate tax rate from 25% to 35% as well as introducing a much less favorable capital allowance regime, which may affect Gold Fields' future capital expenditure decisions. Further, a draft bill is being prepared proposing a windfall tax on mining activities but it has not yet been released for consent. The impositions of additional operational costs, taxes or royalty payments could have a material adverse effect on Gold Fields' business, operating results and financial condition.

Further, the South African government has implemented laws aimed at alleviating and redressing the disadvantages suffered by citizens under previous governments. In the future, the South African government may implement new laws and policies, which in turn may have a material adverse impact on Gold Fields' operations and financial results.

In recent years, South Africa has continued to experience high levels of crime and unemployment. These problems may have impacted fixed inward investment into South Africa and have prompted emigration of skilled workers. As a result, Gold Fields may have difficulties attracting and retaining qualified employees.

Numerous public statements have been made about the nationalization of South African mines. While the official policy of the South African government is not to nationalize mines, these comments and any other potential threats of nationalization may negatively affect investors' perceptions of South Africa. The ANC set up a committee to investigate greater intervention in the minerals sector. A research report from this committee was recently reviewed at the National Executive Committee of the ANC. The report recommends against full scale nationalization in favor of, among other things, the revision of the existing royalty and tax regimes and will be discussed at the next national policy conference of the ANC to be held in June 2012.

There has been regional political and economic instability in certain of the countries surrounding South Africa. Any similar political or economic instability in South Africa could have a negative impact on Gold Fields' ability to manage and operate its South African operations.

In addition, there has also been local opposition to mine development projects in Peru. The Group's operations and other mining operations in Peru have been the subject of local protests in the past, including the illegal blockades of access roads. Such blockades are normally accompanied by demands for increased employment from local communities and increased use of local contractors. In addition, Gold Fields Cerro

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Corona mine is near the planned Newmont-Buenaventura Conga Project which was the subject of local protests. While production at Cerro Corona has not been affected by this opposition, Cerro Corona, along with other mining operations, may be affected by protests or heightened restrictions on mining activities in the future. Cerro Corona shares the same public road as the Conga Project. There have also been protests against the Gold Fields Chucapaca project in Peru. If Gold Fields experiences further opposition in connection with its operations in Peru, or if protests aimed at other mining operations affect operations at Cerro Corona, it could have a material adverse effect on Gold Fields' financial condition and results of operations.

Regional and national elections took place in Peru in late 2010 and early 2011 respectively. President Humala took office in late July 2011. Based on the appointments made in key governmental positions and public declarations, management does not expect major changes to Peruvian government policy, other than increased attention given to social inclusion programs. However, as announced during President Humala's campaign, a new special tax regime for mining companies was established in 2011, increasing the tax burden on mining companies. In addition, a new consultation law has been enacted, requiring the government to consult with indigenous or native populations on legislative or administrative proposals that may have an impact on their collective rights. It is not yet certain what, if any, other political or economic impact the policies of the new administration will have on Peru generally, or on Gold Fields specifically.

***Power cost increases may adversely affect Gold Fields' results of operations.***

In South Africa, Gold Fields' mining operations depend upon electrical power generated by the State utility, Eskom. Eskom holds a monopoly on power supply in the South African market. Eskom applied to the National Energy Regulator of South Africa, or NERSA, for a 35% average tariff increase on each of April 1, 2010, 2011 and 2012, and NERSA granted average increases of 24.8%, 25.8% and 25.9%, respectively. However, in March 2012, Eskom announced that as of April 1, 2012, the tariff increase will be 16%. Gold Fields expects further significant additional increases during the next several years as Eskom embarks on an electricity generation capacity expansion program. Should Gold Fields experience further power tariff increases, its results of operations may be adversely impacted. In fiscal 2011, power costs made up 14% of the cost of production at the South African operations. See Information on the Company Gold Fields Mining Operations KDC Operation Mining .

Both Gold Fields Ghana Limited, or Gold Fields Ghana, and Abooso Goldfields Limited, or Abooso, have agreed on new tariffs with their respective power suppliers (the state electricity supplier, the Volta River Authority, or VRA, supplies power to Gold Fields Ghana and the Electricity Company of Ghana, or ECG, provides power to Abooso), representing approximately a 54% increase over the previous year. In fiscal 2011, Gold Fields paid \$0.157 per kilowatt hour. In the first half of calendar 2010, Gold Fields paid \$0.099 per kilowatt hour, while in the second half of calendar 2010, it paid \$0.131 per kilowatt hour. Until gas supply to the generating units in Ghana is assured, energy prices will correlate with the crude oil price. In this regard, it is expected that the next tariff review will result in an increase in the tariff. The VRA has provided a revised Power Sales and Purchase Agreement between VRA and Gold Fields Ghana which is expected to be concluded in April 2012. VRA tariffs for the period from January 2011 to December 2011 have been concluded. A tariff has been agreed with the ECG covering the period June 1, 2010 to May 31, 2011. Tariff rates for June 2011 to May 2012 are being negotiated. Any increase in the electricity price could have a material adverse effect on the Group's business and operating results.

Further, Gold Fields' contract for the supply of electricity to its Australian operations is due to expire in 2014. Any replacement of this supply may entail a significant increase in costs due to the volatile Western Australian gas market. Any such increase in costs could have a material adverse impact on the Group's business and operating results.

***Power stoppages, fluctuations and usage constraints may force Gold Fields to halt or curtail operations.***

In 2008, South Africa experienced disruptions in electrical power supply and these disruptions impacted Gold Fields' operations. The Department of Energy is in the process of developing a power conservation

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program, including rules regarding baseline adjustments and load growth. However, there can be no assurance that this conservation program will ensure that there is sufficient electricity available for Gold Fields to run its South African operations at full capacity or at all.

Although the VRA has not imposed any power cuts in Ghana since August 2006, frequent power interruptions have occurred. The national utility remains reliant on hydropower for approximately 50% of its generation and there can be no assurance that there will not be new disruptions to the electricity supply in the future. Should Gold Fields experience power outages, fluctuations or usage constraints at any of its operations, then its business and results of operations may be materially adversely impacted.

***Actual and potential supply chain shortages and increases in the prices of production inputs may have a material adverse effect on Gold Fields operations and profits.***

Gold Fields' results of operations may be affected by the availability and pricing of raw materials and other essential production inputs, including fuel, steel and cyanide and other reagents. The price of raw materials may be substantially affected by changes in global supply and demand, along with weather conditions, governmental controls and other factors. A sustained interruption in the supply of any of these materials would require Gold Fields to find acceptable substitute suppliers and could require it to pay higher prices for such materials. Any significant increase in the prices of these materials will increase the Company's operating costs and affect production considerations.

Giant tires, of the type used by Gold Fields for its large earthmoving equipment and trucks, are in short supply, and prices have risen recently and may continue to rise in the future. This shortage of tires for earthmoving vehicles is causing mining companies to review operating practices, to seek additional methods of preserving tire life and to examine alternative sources of tire supply. To the extent that Gold Fields is unable to procure an adequate supply of these tires, it may have to alter its mining plans, especially at its open pit operations, which could reduce its gold production and have a material adverse effect on Gold Fields' business, operating results and financial condition.

***Gold Fields' insurance coverage may prove inadequate to satisfy potential claims.***

Gold Fields has an insurance program, however it may become subject to liability for pollution, occupational illnesses or other hazards against which it has not insured, cannot insure or has insufficiently insured, including those in respect of past mining activities. Gold Fields' existing property and liability insurance contains exclusions and limitations on coverage. Should Gold Fields suffer a major loss, future earnings could be affected. In addition, insurance may not continue to be available at economically acceptable premiums. As a result, in the future, Gold Fields' insurance coverage may not cover the extent of claims against Gold Fields, including, but not limited to, claims for environmental or industrial accidents, occupational illnesses or pollution.

***Gold Fields' financial flexibility could be materially constrained by South African exchange control regulations.***

South Africa's exchange control regulations restrict the export of capital from South Africa, the Republic of Namibia, and the Kingdoms of Lesotho and Swaziland, known collectively as the Common Monetary Area, or the CMA. Transactions between South African residents (including companies) and non-residents of the CMA are subject to exchange controls enforced by the South African Reserve Bank, or SARB. As a result, Gold Fields' ability to raise and deploy capital outside the CMA is restricted.

Under South African exchange control regulations, Gold Fields must obtain approval from the SARB regarding any capital raising involving a currency other than the Rand. In connection with its approval, it is possible that the SARB may impose conditions on Gold Fields' use of the proceeds of any such capital raising, such as limits on Gold Fields' ability to retain the proceeds of the capital raising outside South Africa or requirements that Gold Fields seek further SARB approval prior to applying any such funds to a specific use.

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These restrictions could hinder Gold Fields' financial and strategic flexibility, particularly its ability to fund acquisitions, capital expenditures and exploration projects outside South Africa. See Information on the Company Environmental and Regulatory Matters South Africa Exchange Controls .

***An acquisition of shares in or assets of a South African company by a non-South African purchaser that is subject to exchange control regulations may not be granted regulatory approval.***

In some circumstances, potential acquisitions of shares in or assets of South African companies by non-South African resident purchasers are subject to review by the SARB pursuant to South African exchange control regulations. As a result, the Treasury may refuse to approve any proposed acquisitions of Gold Fields or its South African assets in the future. As a result, Gold Fields' management may be limited in its ability to consider strategic options and Gold Fields' shareholders may not be able to realize the premium over the current trading price of Gold Fields ordinary shares which they might otherwise receive upon such an acquisition. See Information on the Company Environmental and Regulatory Matters South Africa Exchange Controls .

***Gold Fields' operations and profits may be adversely affected by union activity and new and existing labor laws.***

There has been an increase in union activity in many of the countries in which Gold Fields operates, including South Africa and, in recent years, there have been new labor laws introduced or amendments to existing labor laws that impose additional obligations on Gold Fields or grant additional rights to workers.

Greater union activity has resulted in more frequent industrial action and has impacted labor negotiations. A number of unions in various industries have threatened to or have recently gone on strike in South Africa, causing work stoppages and production losses. Negotiations with the South African mining unions in 2011 resulted in above-inflation wage increases between 8.0% to 10.0%, depending upon the category of employee. This is a two year wage agreement. Other South African mining industry participants are undergoing negotiations with labor unions and the results of these negotiations may have an effect on future negotiations by Gold Fields. Wages and related labor costs accounted for 43% of Gold Fields' total cost of sales in South Africa in fiscal 2011. The unions representing Gold Fields employees have indicated that they may continue to take industrial action to protest a variety of issues, including the issues raised during the strike at South Deep in fiscal 2010 relating to the relationship between the unions and management, greater union involvement in human resource and other management decision-making processes at the mine (which issues, amongst others, remain unresolved). For example, the unions representing gold mining workers in South Africa went on strike starting from July 28, 2011 until August 2, 2011 over wage negotiations. Gold Fields is currently in discussions with its unions at South Deep regarding a number of operational and employee matters and is endeavouring to seek agreement on the unresolved issues.

Gold Fields' operations in Peru and Ghana have recently been and may in the future be impacted by increased union activities. For example, the operational employees at Cerro Corona formed a labor union and negotiated a five-year collective bargaining agreement with Gold Fields. In Ghana, Gold Fields entered into a three year wage agreement with the labor unions in October 2010, but there can be no guarantee that the labor unions will not undertake strikes and go slow actions against the Group's operations or other mining companies.

In the event that Gold Fields experiences work stoppages, delays, sabotage, go-slow actions, lower productivity levels than envisaged or any other industrial relations related interruptions at any of its operations or increased employment-related costs due to union or employee activity, these may have a material adverse effect on its business, production levels, production targets, results of operations, financial condition and reputation.

Gold Fields may also be affected by certain labor laws that impose obligations regarding worker rights. For example, laws in South Africa impose monetary penalties for non-compliance with the administrative and the reporting requirements in respect of affirmative action policies, while Ghanaian law contains broad provisions requiring mining companies to recruit and train Ghanaian personnel and to use the services of Ghanaian companies. In addition, the Australian federal government has recently introduced a new industrial relations system that includes good faith bargaining obligations for employers, fewer restrictions on the content of collective agreements and an enhanced role for union officials as bargaining representatives, parties to agreements and participants in dispute resolution. Existing labor laws and any new or amended labor laws may increase Gold Fields' labor costs and have a material adverse effect on Gold Fields' business, operating results and financial condition.

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If Gold Fields is unable to implement cost cutting measures or increase production levels to offset any increases in labor costs or production losses, these costs and losses could have a material adverse effect on Gold Fields' business, operating results and financial condition.

*Gold Fields may suffer adverse consequences as a result of its reliance on outside contractors to conduct some of its operations.*

A portion of Gold Fields' operations in Australia and Peru are currently conducted by outside contractors. As a result, Gold Fields' operations at those sites are subject to a number of risks, some of which are outside Gold Fields' control, including:

negotiating agreements with contractors on acceptable terms;

the inability to replace a contractor and its operating equipment in the event that either party terminates the agreement;

reduced control over those aspects of operations which are the responsibility of the contractor;

failure of a contractor to perform under its agreement with Gold Fields;

interruption of operations or increased costs in the event that a contractor ceases its business due to insolvency or other unforeseen events;

failure of a contractor to comply with applicable legal and regulatory requirements, to the extent it is responsible for such compliance; and

problems of a contractor with managing its workforce, labor unrest or other employment issues.

In addition, Gold Fields may incur liability to third parties as a result of the actions of its contractors. The occurrence of one or more of these risks could have a material adverse effect on Gold Fields' business, results of operations and financial condition. See [Directors, Senior Management and Employees' Employees' Labor Relations - Ghana](#), [Directors, Senior Management and Employees' Employees' Labor Relations - Australia](#) and [Directors, Senior Management and Employees' Employees' Labor Relations - Peru](#).

*Regulation of greenhouse gas emissions and climate change issues may adversely affect Gold Fields' operations.*

Energy is a significant input to Gold Fields' mining and processing operations, with its principal energy sources being electricity, purchased petroleum products, natural gas and coal. There is a substantial weight of scientific evidence concluding that carbon emissions from fossil fuel-based energy consumption contribute to global warming, greenhouse effects and climate change.

A number of governments or governmental bodies have introduced or are contemplating regulatory changes in response to the potential impacts of climate change that may restrict emissions of greenhouse gases in areas in which Gold Fields operates.

In Australia, the Australian Clean Energy Act 2011 (Cth) and associated legislation establishing a national carbon pricing scheme, or Scheme, passed into law in November 2011. Under the Scheme, entities that have operational control over facilities (i.e. activities) that emit more than 25,000 tons CO<sub>2</sub>-e per annum in greenhouse gas emissions covered by the Scheme, will be directly regulated and will be required to acquire and surrender carbon units to cover those emissions.

The Scheme will operate in two phases: a fixed price phase commencing July 1, 2012, followed by a floating price phase commencing on July 1, 2015. Members of Gold Fields' Australian group are likely to be indirectly affected by the Scheme. While emissions from the Australian operations are unlikely to be directly regulated, the price of diesel fuel paid by Gold Fields' operations is likely to rise due to changes in fuel subsidy.





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levels. Gold Fields expects this to introduce additional costs of between A\$6 and A\$8 million (U.S.\$6 and U.S.\$8 million) a year at current levels of fuel consumption. See [Information on the Company Environmental and Regulatory Matters Australia Environmental](#) .

The South African government is considering the introduction of a carbon tax in 2013 to reduce greenhouse gas emissions. The proposed carbon tax is Rand 120 per ton CO<sub>2</sub>-e, however, 60% of emissions would initially be tax exempt. The 60% discount will continue to apply until 2020. The net carbon tax will therefore only be R48 per ton. The R48 per ton will be escalated by 10% per annum until 2020. The 60% discount will be scaled back gradually from 2020 until 2025 and may be replaced by absolute emissions thresholds thereafter. If the proposed carbon tax had been in effect in fiscal 2011, management estimates this would have introduced an additional cost of R223 million (after taking the 60% discount into consideration). A revised policy paper which discusses the proposed carbon tax and the possibility of introducing a trading scheme for greenhouse gases is expected to be released by the South African government for public comment later this year. See [Information on the Company Environmental and Regulatory Matters South Africa Environmental](#).

From a medium- and long-term perspective, Gold Fields is likely to see an increase in costs relating to its energy-intensive assets and assets that emit significant amounts of greenhouse gases as a result of regulatory initiatives in countries in which it operates. These regulatory initiatives will be either voluntary or mandatory and may impact Gold Fields' operations directly or by affecting its suppliers or customers. These costs may include, among other things, emission measurement and reduction, audit processes and human resource costs. Non-compliance with statutory initiatives may result in monetary liabilities. Insurance premiums may increase and the Company's position relative to industry competitors may change. Inconsistency of regulations particularly between developed and developing countries may affect Gold Fields' decision to pursue opportunities in certain countries and also may affect its costs of operations. Assessments of the potential impact of future climate change regulation are uncertain, given the wide scope of potential regulatory change in countries in which Gold Fields operates.

Furthermore, the potential physical impacts of climate change on Gold Fields' operations are highly uncertain and may differ across geographies. They may include changes in rainfall patterns and intensities, water shortages, extreme weather conditions and changing temperatures. Flooding could disrupt mining, processing and transportation, and result in increased health and safety risks. Reduced rainfall could result in electricity supply shortages in certain countries where Gold Fields operates and extreme weather conditions may negatively impact Gold Fields' workforce. These effects may adversely impact the cost, production and financial performance of Gold Fields' operations.

***Theft of gold and copper as well as illegal mining occur on Gold Fields' properties, are difficult to control, can disrupt Gold Fields' business and can expose Gold Fields to liability.***

A number of Gold Fields' properties have experienced illegal mining activities and theft of gold bearing materials and copper (which may be by employees or third parties). The activities of the illegal miners could cause pollution or other damage to Gold Fields' properties, including underground fires, or personal injury or death, for which Gold Fields could potentially be held responsible. An increase in illegal mining activities could result in depletion of mineral deposits, potentially making the future mining of such deposits uneconomic. The presence of illegal miners could lead to project delays and disputes regarding the development or operation of commercial gold deposits, particularly in Ghana. An increase in the theft of gold and copper may reduce the amount of these metals that Gold Fields is able to recover from its operations. Rising gold and copper prices may increase the likelihood of such thefts occurring. Illegal mining and theft could also result in lost gold reserves, mine stoppages, and have a material adverse effect on Gold Fields' financial condition or results of operations.

***HIV/AIDS and tuberculosis pose risks to Gold Fields in terms of lost productivity and increased costs.***

The prevalence of HIV/AIDS in South Africa poses risks to Gold Fields in terms of potentially reduced productivity and increased medical and other costs. Management has recently estimated that approximately 18%

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of Gold Fields' workforce in South Africa is infected with HIV. Increasingly, Gold Fields is seeing an adverse impact of HIV/AIDS on its affected employees similar to that experienced by other companies in the South African mining sector, evidenced by increased absenteeism and reduced productivity. Compounding this is the concomitant infections with tuberculosis that can accompany HIV illness, particularly the end stages, and causes additional healthcare-related costs. In South Africa, the incidence of tuberculosis in mine workers is aggravated by exposure to crystalline silica dust and by compromised immunity due to HIV infection. Exposure of HIV-positive individuals to silica dust can significantly increase the risk of contracting tuberculosis, HIV/AIDS remains an important focus for Gold Fields and Gold Fields will continue its extensive intervention campaigns. However, the potential impact of HIV/AIDS on Gold Fields' South African operations and financial condition is large. Factors influencing the impact of HIV/AIDS include the incidence of HIV infection among Gold Fields' employees and the surrounding community, the impact on employees' productivity, treatment costs and other costs. Most of these factors are beyond Gold Fields control. See [Directors, Senior Management and Employees' Employees' Health and Safety' Health' HIV/AIDS Program](#) .

***Gold Fields' operations in South Africa are subject to environmental and health and safety regulations, which could impose significant costs and burdens and Gold Fields may face claims and liability for breaches, or alleged breaches, of such regulations and other applicable laws.***

Gold Fields' South African operations are subject to various environmental laws and regulations including, for example, those relating to waste treatment and disposal, emissions and water management, and must comply with permits or standards governing, among other things, tailings dams and waste disposal areas, water consumption, air emissions, water discharges, and naturally occurring radioactive material. Gold Fields may in the future incur significant costs to comply with the South African environmental requirements imposed under existing or new legislation, regulations or permit requirements or to comply with changes in existing laws and regulations or the manner in which they are applied. Gold Fields may also be subject to litigation and other costs as a result of environmental rights granted to individuals under South Africa's Constitution or other sources of environmental rights. These costs could have a material adverse effect on Gold Fields' business, operating results and financial condition. See [Information on the Company' Environmental and Regulatory Matters' South Africa' Environmental](#) . Additionally, the proliferation of social media and other internet technologies may contribute to negative publicity relating to any actual or perceived environmental, labor or other issues at Gold Fields' operations.

Gold Fields' South African operations are also subject to various health and safety laws and regulations that impose various duties on Gold Fields' mines while granting the authorities broad powers to, among other things, close or suspend operations at unsafe mines and order corrective action relating to health and safety matters. Under these health and safety laws and regulations, the Group may also be subject to prosecution for industrial accidents as well as significant penalties and fines for non-compliance. Further, certain targets were set by the Mine Health and Safety Council, a body consisting of representatives from the government, mining companies and unions, for the reduction of accidents, noise and silicosis to be achieved by 2013. If a mine fails to achieve these targets, the Mine Health and Safety Inspectorate, or the MHSI, could potentially order that operations be halted due to overexposure of employees to unsafe or unhealthy working conditions.

The principal health risks associated with Gold Fields' mining operations in South Africa arise from occupational exposure to silica dust, noise, heat and certain hazardous chemicals. The most significant occupational diseases affecting Gold Fields' workforce include lung diseases (such as silicosis, tuberculosis, a combination of the two and chronic obstructive airways disease, or COAD) as well as noise-induced hearing loss, or NIHL. The Occupational Diseases in Mines and Works Act 78 of 1973, or ODMWA, governs the payment of compensation and medical costs for certain illnesses, such as silicosis, contracted by those employed in mines or at sites where activities ancillary to mining are conducted. Recently, the South African Constitutional Court ruled that a claim for compensation under ODMWA does not prevent the employee from seeking to recover compensation from the employer concerned in a civil action under common law (either as individuals or as a class). While issues, such as negligence and causation, need to be proved on a case by case basis, it is nevertheless possible that such ruling could expose Gold Fields to claims related to occupational hazards and

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diseases (including silicosis), which may be in the form of a class action or similar group action. If Gold Fields were threatened with or faced a significant number of such claims and the claims were suitably established against it, the payment of compensation for the claims could have a material adverse effect on Gold Fields' business, reputation, results of operations and financial condition. In addition, Gold Fields may incur significant additional costs arising out of these issues, including costs relating to the payment of fees, increased levies or other contributions in respect of compensatory or other funds established (if any) and expenditures arising out of its efforts to resolve any outstanding claims or other potential action.

A number of accidents, many of which resulted in fatalities, have recently occurred at various mining operations in South Africa, including at some of Gold Fields' operations. There can be no assurance that the unions will not take industrial action in response to such accidents which could lead to losses in Gold Fields' production. The DMR can and does issue instructions following safety incidents or accidents to partially or completely halt operations at affected mines. Moreover, it is Gold Fields' policy to halt production at its operations when serious accidents occur in order to rectify dangerous situations and, if necessary, retrain workers. Any additional stoppages in production, or increased costs, could have a material adverse effect on Gold Fields' business, operating results and financial condition. In April 2009, the Mine Health and Safety Amendment Bill became law. As a result, Gold Fields is now subject to more stringent regulations regarding mine health and safety and may be subject to an increased risk of prosecution for industrial accidents as well as greater penalties and fines for non-compliance. Further, any changes to the health and safety laws which increase the burden of compliance or the penalties for non-compliance may cause Gold Fields to incur further significant costs. See Information on the Company Environmental and Regulatory Matters South Africa Health and Safety .

***Gold Fields' operations in South Africa are subject to water use licenses, which could impose significant costs and burdens.***

Under South African law, Gold Fields' South African operations are subject to water use licenses that govern each operation's water usage and that require, among other things, mining operations to achieve and maintain certain water quality limits regarding all water discharges. The Kloof operation (now part of the KDC mine) was issued a water use license in December 2008 that expired in December 2011. The Group applied for renewal of, and amendments to, this license. Pending approval of the Kloof water use license, Gold Fields has obtained a regulatory directive from the Department of Water Affairs, or the DWA, that permits the continuation of water uses at its Kloof operations while its application is being processed. Historically, Gold Fields has been in compliance with the license granted to the Kloof operation in 2008. However, since February 2011, the water discharged from one of the shafts of the KDC mine covered by the Kloof license has exceeded the discharge parameters specified by the license. Gold Fields has informed the DWA and has investigated the cause of the increased discharge. One of the findings of the investigation was that the increased discharge was most likely due to external variables beyond the control of Gold Fields. Based on this information, the directive described above included an increase to the discharge limit. However, there can be no assurance that the Kloof operation will be granted a license or that it will be granted a license that includes this increased discharge limit. The Driefontein operation (now part of the KDC mine) was issued a water use license in October 2010. However, due to certain discrepancies in the information in the water use license, Gold Fields is in discussions with the DWA to rectify and revise the license. In addition, once this process is complete, Gold Fields intends to apply for an amendment to the Driefontein water use license to add certain water uses not previously required. Gold Fields believes that it is discharging water within the parameters of the Driefontein license but there can be no assurance that a revised license will be issued or that the DWA will not determine that Gold Fields is not in compliance with its requirements. While there was a delay in processing the water license application at South Deep, Gold Fields was issued a new water use license for South Deep in December 2011. The DWA advised Beatrix, which had pre-existing water permits of indefinite length, that its current water usage remains authorized and it need not apply for a new license. However, Beatrix has nevertheless submitted a water use license application, which is currently being processed.

Gold Fields has identified a risk of potential long-term acid mine drainage, or AMD, issues which are currently experienced by peer mining groups. AMD relates to the acidification and contamination of naturally

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occurring water resources by pyrite-bearing ore contained in underground mines and in rock dumps, tailings dams and pits on the surface. Gold Fields has commissioned several technical studies to identify the steps required to prevent AMD at its facilities but none of these studies have allowed Gold Fields to generate a reliable estimate of the potential impact of AMD on the Company. If Gold Fields were to experience any AMD issues, it could cause Gold Fields to not be in compliance with its water use license requirements and could expose Gold Fields to potential liabilities.

Gold Fields is reviewing and investigating a water treatment strategy that will, if successfully implemented, position Gold Fields favorably to satisfy conditions of new water use licenses across its South African operations, while also preventing potential AMD issues. However, there can be no assurance that Gold Fields will be in compliance with its licensing agreements within the required timeframe due primarily to the associated regulatory approval processes and commercial agreements that are required for the water treatment strategy. Gold Fields expects to incur significant expenditure to achieve and maintain compliance with the license requirements at each of its South African operations. Any failure on Gold Fields' part to achieve or maintain compliance with the requirements of these licenses with respect to any of its operations could result in Gold Fields being subject to substantial claims, penalties, fees and expenses; significant delays in operations; or the loss of the relevant water use license, which could curtail or halt production at the affected operation. Any of the above could have a material adverse effect on Gold Fields' business, operating results and financial condition.

***Gold Fields' mineral rights in South Africa are subject to legislation, which could impose significant costs and burdens.***

The Mineral and Petroleum Resources Development Act No. 28 of 2002, or the MPRDA, came into effect on May 1, 2004, together with the implementation of a broad-based socio-economic empowerment charter, or the Mining Charter, for effecting entry of historically disadvantaged South Africans, or HDSAs, into the mining industry. Among other things, the Mining Charter required (i) each mining company to achieve a 15% HDSA ownership of mining assets within five years of the Mining Charter coming into effect and a 26% HDSA ownership of mining assets within 10 years of the Mining Charter coming into effect, (ii) the mining industry as a whole to agree to assist HDSA companies in securing finance to fund participation in an amount of Rand 100 billion over the first five years and (iii) mining companies to spell out plans for achieving employment equity at management level with a view to achieving a baseline of 40% HDSA participation in management and achieving a baseline of 10% participation by women in the mining industry, in each case within five years.

Following a review and as anticipated, the DMR released the Amended Mining Charter on September 13, 2010. The requirement under the Mining Charter for mining entities to achieve a 26% HDSA ownership of mining assets by the year 2014 was retained. Amendments to the Mining Charter in the Amended Mining Charter include, *inter alia*, the requirement by mining companies to (i) facilitate local beneficiation of mineral commodities; (ii) procure a minimum of 40% of capital goods, 70% of services and 50% of consumer goods from HDSA suppliers (i.e. suppliers of which a minimum of 25% + 1 vote of their share capital must be owned by HDSAs) by 2014 (exclusive of non-discretionary procurement expenditure); (iii) ensure that multinational suppliers of capital goods contribute a minimum of 0.5% of their annual income generated from South African mining companies towards the socio-economic development of South African communities into a social development fund from 2010; (iv) achieve a minimum of 40% HDSA demographic representation by 2014 at executive management (board) level, senior management (EXCO) level, core and critical skills, middle management level and junior management level; (v) invest up to 5% of annual payroll in essential skills development activities; and (vi) implement measures to improve the standards of housing and living conditions for mineworkers by converting or upgrading mineworkers' hostels into family units, attaining an occupancy rate of one person per room and facilitating home ownership options for all mineworkers in consultation with organized labor. (i) to (vi) must be achieved by 2014. In addition, mining companies are required to monitor and evaluate their compliance to the Amended Mining Charter, and must submit annual compliance reports to the DMR. The Scorecard for the Broad-Based Socio-Economic Empowerment Charter for the South African Mining Industry attached to the Amended Mining Charter, or the Scorecard, makes provision for a phased-in approach for compliance with the above targets over the five year period ending in 2014. For measurement purposes, the

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Scorecard allocates various weightings to the different elements of the Amended Mining Charter. Failure to comply with the provisions of the Amended Mining Charter will amount to a breach of the MPRDA and may result in the cancellation or suspension of a mining company's existing mining rights.

In accordance with the MPRDA, the DMR on April 29, 2009 published a Code of Good Practice for the Minerals Industry and the Housing and Living Condition Standard for the Mining Industry, or the Code, relating to the socio-economic transformation of the mining industry. However, certain provisions of the Code appeared to be inconsistent with the Mining Charter, or to go beyond the scope envisaged in the MPRDA. Various industry participants have been in discussions with the DMR regarding the scope and applicability of the Code. It is anticipated that the contents of the Code will ultimately be amended to be made consistent with the Amended Mining Charter. Details of when this will happen and the contents of the final Code are currently uncertain. See [Information on the Company Environmental and Regulatory Matters South Africa Mineral Rights The MPRDA](#).

The acquisition by Mvelaphanda Resources Limited, or Mvela Resources, of a 15% beneficial interest in GFI Mining South Africa (Proprietary) Limited, or GFIMSA, for a cash consideration of Rand 4,139 million was effected in March 2009 to meet the requirement for a 15% HDSA ownership within five years of the Mining Charter coming into effect. See [Operating and Financial Review and Prospects Overview General Mvelaphanda Transaction](#). During the six month period ended December 31, 2010, Gold Fields completed three further empowerment transactions which ensured Gold Fields' compliance with the 2014 Black Economic Empowerment, or BEE, equity ownership targets. These transactions included an Employee Share Option Plan, or ESOP, housed through the Thusano Share Trust for 10.75% of GFIMSA (represented by 13.5 million unencumbered Gold Fields Limited shares with full voting rights); a broad-based BEE transaction for 10% of South Deep with a phased in participation over 20 years; and a broad-based BEE transaction for a further 1% of GFIMSA, excluding South Deep. The three transactions had a combined value of approximately R2.4 billion. See [Additional Information Material Contracts Black Economic Empowerment Transactions](#).

Moreover, there is no guarantee that any steps Gold Fields has already taken or might take in the future will ensure the successful renewal of its existing mining rights, the retaining of new mining rights, the granting of further new mining rights or that the terms of renewals of its rights would not be significantly less favorable to Gold Fields than the terms of its current rights. Any further adjustment to the ownership structure of Gold Fields' South African mining assets in order to meet the Amended Mining Charter's requirements could have a material adverse effect on the value of Gold Fields' ordinary shares or debt and failing to comply with the Amended Mining Charter's requirements could subject Gold Fields to negative consequences, the scope of which have not yet been fully determined. As noted, the ANC is considering a report which, among other things, proposes greater state intervention in the mining industry, including the imposition of new taxes and increasing the state's holdings in mining companies.

Failure by the Group's South African operations to comply with the 26% HDSA ownership requirements as set out in the MPRDA and the Amended Mining Charter amounts to breach of the MPRDA and may result in the cancellation or suspension of the company's existing mining rights and may prevent the Group's South African operations from obtaining any new mining rights.

The Broad-Based Black Economic Empowerment Act, 2003, or the BBBEE Act, established a national policy on broad-based black economic empowerment with the objective of increasing the participation of black South Africans in the economy. The BBBEE Act provides for various measures to promote black economic empowerment, including empowering the Minister of Trade and Industry to issue Codes of Good Practice, or Codes, with which organs of state and public entities and parties interacting with them or obtaining rights and licenses from them would be required to comply. There has been some debate as to whether or to what extent the mining industry was subject to the BBBEE Act and the policies and Codes provided for thereunder. In December 2011, the Minister of Trade and Industry, published for public comment by the 9th of February 2012 a draft BBBEE Amendment bill, which has the effect of expanding and strengthening the black economic empowerment provisions of the BBBEE Act. It was expected that the draft bill would have clarified the extent, if any, of the

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application of the BBBEE Act to the mining industry, but such clarification has not been provided for in the draft bill. While it is anticipated that the draft bill will undergo various amendments before it becomes law, it should be appreciated that a risk exists that the companies in the mining industry may become subject to another layer of black economic empowerment regulation.

Gold Fields may, in the future, incur significant costs as a result of changes in the interpretation of existing laws, or the imposition of new laws, which may have a material adverse effect on Gold Fields' business, operating results and financial condition.

***Gold Fields' operations in Ghana are subject to environmental and health and safety laws and regulations, which could impose significant costs and burdens.***

Gold Fields' Ghana operations are subject to various environmental laws and regulations. The Ghanaian environmental protection laws require, among other things, that Gold Fields register with the Ghanaian environmental authorities, and obtain environmental permits and certificates for the Ghana operations, as well as to rehabilitate land disturbed by mining operations. Gold Fields is required to secure estimated environmental rehabilitation costs in part by posting a reclamation bond. Gold Fields Ghana is required to post a reclamation bond and deposit a cash amount sufficient to cover 50% of the estimated rehabilitation costs. While there are indications that the regulator may demand the posting of a bond covering a greater percentage of the estimated rehabilitation costs during future negotiations and is also trying to establish a standard for calculating rehabilitation cost across all mines, there have been no changes requested. Changes in the required method of calculation for these bonds or an unforeseen circumstance that produces unexpected costs may materially and adversely affect Gold Fields' future environmental expenditures. See [Information on the Company Environmental and Regulatory Matters Ghana Environmental](#).

Ghanaian health and safety regulations impose statutory duties on an owner of a mine to, among other things, take steps to ensure that the mine is managed and worked in a manner which provides for the safety and proper discipline of the mine workers. Additionally, Gold Fields is required, under the terms of its mining leases, to comply with the reasonable instructions of the relevant authorities for securing the health and safety of persons working in or connected with the mine. A violation of the health and safety regulations or a failure to comply with the reasonable instructions of the relevant authorities could lead to, among other things, a temporary shutdown of all or a portion of the mine, a loss of the right to mine or the imposition of costly compliance procedures and, in the case of a violation of the regulations relating to health and safety, constitutes an offense under Ghanaian law. If Ghanaian health and safety authorities require Gold Fields to shut down all or a portion of its mines or to implement costly compliance measures, whether pursuant to existing or new health and safety laws and regulations, such measures could have a material adverse effect on Gold Fields' business, operating results and financial condition. See [Information on the Company Environmental and Regulatory Matters Ghana Health and Safety](#).

Gold Fields, as the holder of the mining lease, has potential liability arising from injuries to, or deaths of, workers, including, in some cases, workers employed by its contractors. In Ghana, statutory workers' compensation is not the exclusive means for workers to claim compensation. Gold Fields' insurance for health and safety claims or the relevant workers' compensation arrangements may not be adequate to meet the costs that may arise upon any future health and safety claims.

***Gold Fields' mineral rights in Ghana are currently subject to regulations, and may become subject to new regulations, which could impose significant costs and burdens.***

In Ghana, the ownership of land on which there are mineral deposits is separate from the ownership of the minerals. All minerals in their natural state in or upon any land or water are, under Ghanaian law, the property of Ghana and vested in the President on behalf of the people of Ghana. The Minerals and Mining Act, 2006 (Act 703), or the Minerals and Mining Act, was passed by the Ghanaian Parliament in fiscal 2006.

The Minerals and Mining Act repealed the Minerals and Mining Law, 1986 (PNDCL 153), as amended, or the Minerals and Mining Law, although, as regards existing mineral rights, the Minerals and Mining Law continues to

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apply to Gold Fields Ghana and Abooso Goldfields Limited, or Abooso, unless the Minister responsible for mines provides otherwise by legislative instrument. Under the Minerals and Mining Law, mining companies must pay royalties of 5% of the total revenue earned from minerals. Companies must also pay corporate taxes and the government has a right to obtain a 10% free-carried interest in mining leases.

Moreover, the Ghanaian parliament has passed a bill that, effective March 9, 2012 increases taxes on mining companies in order to benefit from the movement in gold prices. These changes included introducing a separate tax category for companies engaged in mining which would raise the applicable corporate tax rate from 25% to 35% as well as introducing a much less favorable capital allowance regime, which may affect Gold Fields' future capital expenditure decisions. Further, a draft bill is being prepared proposing a windfall tax on mining activities but it has not yet been released for comment.

If new amendments or provisions are passed under the Minerals and Mining Act or new laws are passed which impose significant new costs or burdens on Gold Fields' abilities to mine in Ghana or to obtain new mining leases for properties on which deposits are identified, this could have a material adverse effect on Gold Fields' business, operating results and financial condition. See Information on the Company Environmental and Regulatory Matters Ghana Mineral Rights .

***Gold Fields' operations in Australia are subject to environmental and health and safety laws and regulations, which could impose significant costs and burdens.***

Gold Fields' Australian operations are subject to various laws and regulations relating to the protection of the environment. Gold Fields may incur significant costs to comply with Australian environmental requirements imposed under existing or new legislation, regulations or permit requirements or to comply with changes in existing laws and regulations or the manner in which they are applied. These costs may have a material adverse effect on Gold Fields' business, operating results and financial condition.

Australian mining companies are required by law to undertake rehabilitation works as part of their ongoing operation and the Gold Fields subsidiaries that hold its Australian operations provide unconditional bank-guaranteed performance bonds to the Western Australian government as security for the estimated costs. These bonds would not necessarily cover the actual cost of rehabilitation for events that were unforeseen at the time the bond was taken. Changes in the required method of calculation for these bond amounts, or an unforeseen circumstance that produces unexpected costs, may materially and adversely affect future environmental expenditures. See Information on the Company Environmental and Regulatory Matters Australia Environmental .

Gold Fields is obligated to provide and maintain a working environment that is safe for mine workers. A violation of the health and safety laws or a failure to comply with the instructions of the relevant health and safety authorities could lead to, among other things, a temporary shutdown of all or a portion of the mine, a loss of the right to mine or the imposition of costly compliance procedures and penalties (including imprisonment). If health and safety authorities require Gold Fields to shut down all or a portion of the mine or to implement costly compliance measures, whether pursuant to existing or new health and safety laws and regulations, such measures could have a material adverse effect on Gold Fields' business, operating results and financial condition. See Information on the Company Environmental and Regulatory Matters Australia Health and Safety .

***Some of Gold Fields' tenements in Australia are subject to native title claims and include Aboriginal heritage sites, which could impose significant costs and burdens.***

Certain of Gold Fields' tenements are subject to native title claims, and there are Aboriginal heritage sites located on certain of Gold Fields' tenements. Native title and Aboriginal legislation protects the rights of Aboriginals in relation to the land in certain circumstances. Other tenements may become subject to native title claims if Gold Fields seeks to expand or otherwise change its interest in rights to those tenements. Native title claims could require costly negotiations with the claimants or could affect Gold Fields' access to or use of its tenements, and, as a result, have a material adverse effect on Gold Fields' business, operating results and financial condition.

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Aboriginal heritage sites relate to distinct areas of land that have either ongoing ethnographic, archaeological or historic significance. Aboriginal heritage sites have been identified with respect to portions of some of Gold Fields' Australian mining tenements. Additional Aboriginal heritage sites may be identified on the same or additional tenements. Gold Fields may, in the future, incur significant costs as a result of changes in the interpretation of, or new laws regarding, native title and Aboriginal heritage, which may have a material adverse affect on Gold Fields' business, operating results and financial condition. See [Information on the Company Environmental and Regulatory Matters Australia Land Claims](#) .

***Gold Fields' mineral rights in Peru are currently subject to regulations that may be subject to change, and may become subject to new regulations, which could impose significant costs and burdens.***

Gold Fields' operations in Peru depend on mining concessions for exploration and exploitation works, obtained from the Geologic, Mining and Metallurgic Institute (*Instituto Geológico Minero Metalúrgico*), or the INGEMMET. In addition, Gold Fields' operations in Peru depend on obtaining other administrative rights, such as provisional permits, from the Ministry of Energy and Mines, or the MEM, for exploration rights on the area of a claim, and beneficiation or processing concessions, obtained from the MEM, for treatment of mining ores.

Under Peru's current regulatory regime, mining concessions for the exploration and exploitation of minerals have an indefinite term, subject to compliance by the titleholder with the obligations set forth by the General Mining Act (*Ley General de Minería*), or the LGM. Compliance with such obligations is required to maintain the mining concessions in good standing. Among such obligations are the payment of an Annual Concession Fee (equivalent to U.S.\$3.00 per hectare) and compliance with a minimum annual production target. Gold Fields' processing concession at Cerro Corona also has an indefinite term, subject to compliance with the obligations established by the LGM. Payment of an Annual Concession Fee (calculated on the production capacity of the processing plant) is also required to maintain the processing concession in good standing.

If the INGEMMET or the MEM revoke or cancel any of Gold Fields' concessions, Gold Fields' financial condition and results of operations could be adversely affected. See [Information on the Company Environmental and Regulatory Matters Peru Concessions](#) .

In addition to general taxation, mining companies in Peru are subject to a royalty and a special tax regime established in September 2011. Any additional mining royalties, taxes, charges or payments could have an adverse effect on Gold Fields' results of operations or financial condition. See [Information on the Company Environmental and Regulatory Matters Peru Mining Royalty and Other Special Mining Taxes and Charges](#) and [Operating and Financial Review and Prospects Costs Income and Mining Taxes Peru](#) .

***Gold Fields' operations in Peru are subject to environmental laws, health and safety laws, labor laws and other regulations, which could impose significant costs and burdens.***

Gold Fields' exploration, mining and milling activities in Cerro Corona are subject to a number of Peruvian laws and regulations, including environmental and health and safety laws and regulations. All mines, including Cerro Corona, must obtain environmental permits from the government and have an Environmental Impact Assessment approved. Other matters subject to regulation include, but are not limited to, transportation of ore or hazardous substances, water use and discharges, power use and generation, use and storage of explosives, housing and other facilities for workers, reclamation, labor standards and mine safety and occupational health. Moreover, recent legislation requires the government to consult with indigenous or tribal communities on legislative or administrative measures that may directly affect their collective rights.

Gold Fields may in the future incur significant costs to comply with Peruvian environmental and health and safety requirements imposed under existing or new legislation, regulations or permit requirements. For example, as part of Cerro Corona's mine closure plan review, Gold Fields recently concluded a set of studies that were required by the MEM to analyze post-closure water treatment requirements. The conclusion of these studies was that Cerro Corona will require post-closure water treatment, which represents a change with respect to Cerro Corona's previous closure plan. Gold Fields is in the process of conferring with the MEM regarding its



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post-closure plans and cannot provide a precise estimate of the cost impact of these water treatment requirements at this stage. While the cost of these water treatment requirements is not expected to be material, future costs of compliance could have a material adverse effect on Gold Fields business, operating results and financial condition.

There can be no assurance that current environmental laws, health and safety laws, labor laws and other regulations that may have an impact on Gold Fields operations will not be replaced or modified in the future, or that Gold Fields will not become subject to new more stringent regulations, which could impose significant costs and burdens on its operations. For instance, the development of more stringent environmental protection programs in Peru could impose constraints and additional costs on Gold Fields operations in Peru. Likewise, existing or new health and safety laws and regulations could cause health and safety authorities to require Gold Fields to shut down all or a portion of the mine or to implement costly compliance measures. Further, changes to existing or new labor laws could raise benefit requirements or strengthen unions. Any of these events could have a material adverse effect on Gold Fields business, operating results and financial condition. See Information on the Company Environmental and Regulatory Matters Peru Environmental .

***The acquisition of Western Areas, BGSA and South Deep may expose Gold Fields to unknown liabilities and risks.***

Prior to acquiring a 100% interest in South Deep in 2007 from GFI Joint Venture Holdings (Proprietary) Limited (previously known as Barrick Gold South Africa (Pty) Limited, or BGSA), a subsidiary of Barrick Gold Corporation, or Barrick, and Gold Fields Operations Limited (previously known as Western Areas Limited, or Western Areas), Gold Fields was able to conduct only limited due diligence on South Deep, Western Areas and BGSA. There can be no assurance that Gold Fields identified all the liabilities of, and risks associated with, South Deep, BGSA or Western Areas prior to acquiring them or that it will not be subject to unknown liabilities of, and risks associated with, South Deep, Western Areas or BGSA, including liabilities and risks that may become evident only after Gold Fields has been involved in the operational management of South Deep for a longer period of time. On August 21, 2008, Western Areas received a summons from Randgold and Exploration Company Limited, or R&E, and African Strategic Investment (Holdings) Limited. The summons claims that, under prior ownership, Western Areas was part of a fraud whereby JCI Limited unlawfully disposed of shares owned by R&E in Randgold Resources Limited and Afrikander Lease Limited, now known as Uranium One. The action currently remains in abeyance. See Information on the Company Legal Proceedings .

***Gold Fields relies on information technology and communications systems, the failure of which could significantly impact its operations and business***

Gold Fields relies on its information technology and communications systems, in particular its SAP, payroll and time and attendance applications. Gold Fields information technology and communications systems could be exposed to, among other things, damage or interruption from telecommunications failure, unauthorized entry and malicious computer code, fire, natural disaster, power loss, industrial action and human error. While Gold Fields has offsite backup systems in place, the occurrence of any of the above may also disrupt Gold Fields information technology and communications systems and may lead to important data (including the geophysical and geological data) being irretrievably lost or damaged. Such damage or interruption may adversely affect Gold Fields business, prospects and results of operations.

***Shareholders outside South Africa may not be able to participate in future issues of securities (including ordinary shares) carried out by or on behalf of Gold Fields.***

Securities laws of certain jurisdictions may restrict Gold Fields ability to allow participation by certain shareholders in future issues of securities (including ordinary shares) carried out by or on behalf of Gold Fields. In particular, holders of Gold Fields securities who are located in the United States (including those who hold ordinary shares or ADSs) may not be able to participate in securities offerings by or on behalf of Gold Fields unless a registration statement under the Securities Act is effective with respect to such securities or an exemption from the registration requirements of the Securities Act is available thereunder.

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Securities laws of certain other jurisdictions may also restrict Gold Fields' ability to allow the participation of all holders in such jurisdictions in future issues of securities carried out by Gold Fields. Holders who have a registered address or are resident in, or who are citizens of, countries other than South Africa should consult their professional advisors as to whether they require any governmental or other consents or need to observe any other formalities to enable them to participate in any offering of Gold Fields securities.

***Investors in the United States and other jurisdictions outside South Africa may have difficulty bringing actions, and enforcing judgments, against Gold Fields, its directors and its executive officers based on the civil liabilities provisions of the federal securities laws or other laws of the United States or any state thereof or under the laws of other jurisdictions outside South Africa.***

Gold Fields is incorporated in South Africa. All of Gold Fields' directors and executive officers (as well as Gold Fields' independent registered public accounting firm) reside outside of the United States. Substantially all of the assets of these persons and substantially all of the assets of Gold Fields are located outside the United States. As a result, it may not be possible for investors to enforce against these persons or Gold Fields a judgment obtained in a United States court predicated upon the civil liability provisions of the federal securities or other laws of the United States or any state thereof. In addition, investors in other jurisdictions outside South Africa may face similar difficulties. A foreign judgment is not directly enforceable in South Africa, but constitutes a cause of action which will be enforced by South African courts provided that:

the court which pronounced the judgment had jurisdiction to entertain the case according to the principles recognized by South African law with reference to the jurisdiction of foreign courts;

the judgment is final and conclusive (that is, it cannot be altered by the court which pronounced it);

the judgment has not lapsed;

the recognition and enforcement of the judgment by South African courts would not be contrary to public policy, including observance of the rules of natural justice which require that the documents initiating the proceedings outside South Africa were properly served on the defendant and that the defendant was given the right to be heard and represented by counsel in a free and fair trial before an impartial tribunal;

the judgment was not obtained by fraudulent means;

the judgment does not involve the enforcement of a penal or revenue law; and

the enforcement of the judgment is not otherwise precluded by the provisions of the Protection of Businesses Act 99 of 1978, as amended, of the Republic of South Africa.

It is the policy of South African courts to award compensation for the loss or damage actually sustained by the person to whom the compensation is awarded. Although the award of punitive damages is generally unknown to the South African legal system, that does not mean that such awards are necessarily contrary to public policy. Whether a judgment is contrary to public policy depends on the facts of each case. Exorbitant, unconscionable or excessive awards will generally be contrary to public policy. South African courts cannot enter into the merits of a foreign judgment and cannot act as a court of appeal or review over the foreign court. South African courts will usually implement their own procedural laws and, where an original action based on an international contract is brought before a South African court, the capacity of the parties to the contract will usually be determined in accordance with South African law. It is doubtful whether an original action based on United States federal securities laws or the laws of other jurisdictions outside South Africa may be brought before South African courts. A plaintiff who is not resident in South Africa may be required to provide security for costs in the event of proceedings being initiated in South Africa. Furthermore, the Rules of the High Court of South Africa require that documents executed outside South Africa must be authenticated for the purpose of use in South Africa.



**Table of Contents*****Investors may face liquidity risk in trading Gold Fields' ordinary shares on JSE Limited.***

Historically, trading volumes and liquidity of shares listed on the JSE have been low in comparison with other major markets. The ability of a holder to sell a substantial number of Gold Fields' ordinary shares on the JSE in a timely manner, especially in a large block trade, may be restricted by this limited liquidity. See "The Offer and Listing - JSE Limited".

***Gold Fields may not pay dividends or make similar payments to its shareholders in the future and any dividend payment may be subject to withholding tax.***

Gold Fields pays cash dividends only if funds are available for that purpose. Whether funds are available depends on a variety of factors, including the amount of cash available and Gold Fields' capital expenditures (on both existing infrastructure as well as on exploration and other projects) and other cash requirements existing at the time. Under South African law, Gold Fields will be entitled to pay a dividend or similar payment to its shareholders only if it meets the solvency and liquidity tests set out in the Companies Act No. 71 of 2008, or the Companies Act, and Gold Fields' Memorandum of Incorporation. Given these factors (including the capital and investment needs of the business) and the Board of Directors' discretion to declare a dividend (including the amount and timing thereof) cash dividends or other similar payments may not be paid in the future. It should be noted that a 15% withholding tax on dividends declared by South African resident companies to non-resident shareholders or non-resident ADS holders is expected to be introduced with effect from January 1, 2012. See "Additional Information - Taxation - Certain South African Tax Considerations - Withholding Tax on Dividends".

***Gold Fields' non-South African shareholders face additional investment risk from currency exchange rate fluctuations since any dividends will be paid in Rand.***

Dividends or distributions with respect to Gold Fields' ordinary shares have historically been paid in Rand. The U.S. dollar or other currency equivalent of any dividends or distributions with respect to Gold Fields' ordinary shares will be adversely affected by potential future reductions in the value of the Rand against the U.S. dollar or other currencies. In the future, it is possible that there will be changes in South African exchange control regulations, such that dividends paid out of trading profits will no longer be freely transferable outside South Africa to shareholders who are not residents of the Common Monetary Area. See "Additional Information - South African Exchange Control Limitations Affecting Security Holders".

***Gold Fields' ordinary shares are subject to dilution upon the exercise of Gold Fields' outstanding share options.***

As of December 31, 2011, Gold Fields had an aggregate of 1,000,000,000 ordinary shares authorized to be issued and as of that date an aggregate of 723,735,186 ordinary shares were issued, listed and outstanding. Gold Fields currently has two securities option plans which are authorized to grant options in an amount of up to an aggregate of 35,309,563 ordinary shares. As of December 31, 2011, 12,752,380 shares are allocated and outstanding under these plans.

Gold Fields' employees and directors had outstanding, as of December 31, 2011, options to purchase a total of 311,225 ordinary shares at exercise prices of between Rand 60.40 and Rand 140.66 that expire between January 3, 2012 and August 18, 2013. Such expiry dates may be extended due to unscheduled closed periods during which certain Gold Fields employees and directors may be prohibited from exercising options. Gold Fields had outstanding, as of December 31, 2011, 5,030,143 share appreciation rights at strike prices of between Rand 69.48 and Rand 136.29, which expire between March 24, 2012 and December 1, 2017, and 7,369,112 performance vesting restricted shares due to be settled between March 1, 2012 and September 1, 2013. As of the same date, Gold Fields had outstanding, 41,900 restricted shares due to be settled in November 2012 under The Gold Fields Limited 2005 Non-Executive Share Plan. Shareholders' equity interests in Gold Fields will be diluted to the extent of future exercises or settlements of these rights and any additional rights. See "Directors, Senior Management and Employees - The GF Management Incentive Scheme, Directors, Senior Management and Employees - The Gold Fields Limited 2005 Share Plan, and Directors, Senior Management and Employees - The Gold Fields Limited 2005 Non-Executive Share Plan".

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**ITEM 4: INFORMATION ON THE COMPANY**

**Introduction**

Gold Fields is a significant producer of gold and major holder of gold reserves in South Africa, Ghana, Australia and Peru. In Peru, Gold Fields also produces copper. Gold Fields is primarily involved in underground and surface gold and copper mining and related activities, including exploration, extraction, processing and smelting. Gold Fields also has an interest in a platinum group metal (and associated by-product metals) exploration project in Finland. Gold Fields is one of the largest gold producers in the world, based on annual production.

Approximately half of Gold Fields' operations, based on gold production, are located in South Africa. Its South African operations are KDC, Beatrix and South Deep. Gold Fields also owns the St. Ives and Agnew gold mining operations in Australia and has a 90.0% interest in each of the Tarkwa gold mine and the Damang gold mine in Ghana. Gold Fields also owns a 98.5% economic interest in the Cerro Corona mine, which started producing in the first quarter of fiscal 2009. In addition, Gold Fields has gold and other precious metal exploration activities and interests in Africa, Eurasia, Australasia and the Americas.

As of December 31, 2011, Gold Fields had attributable proven and probable reserves of approximately 80.6 million ounces, including copper expressed as gold equivalent ounces, as compared to the 76.7 million ounces (including copper) reported as of December 31, 2010. See Reserves of Gold Fields as of December 31, 2011 Methodology .

In fiscal 2011, Gold Fields processed 59.4 million tons of ore and produced 3.70 million ounces of gold (including gold equivalent ounces). On an attributable basis, Gold Fields produced 3.49 million ounces of gold (including gold equivalent ounces).

**Developments since June 30, 2010**

Since the end of fiscal 2010, the following significant events have occurred:

On October 1, 2010, Gold Fields announced an international offering of 10 year, U.S.\$1 billion bonds consisting of 4.875% bonds due in 2020. The offering closed on October 7, 2010. See Operating and Financial Review and Prospects Credit Facilities and Other Capital Resources \$1 Billion Note Issue .

On November 4, 2010, as a part of the BPR, Gold Fields announced the restructuring of the South Africa Region, and specifically the Driefontein and Kloof mines. The South Africa Region has been reorganized into three operations a combined Driefontein/Kloof, or KDC; Beatrix; and South Deep. The Kloof and Driefontein executive offices and the regional office have been combined into a new management team, whose primary role is to service KDC, but which also has governance oversight across the South Africa Region. The team is based in Libanon and the Regional Office at Constantia was closed in December 2010. A Strategic Management Office has been established to implement the restructuring and to identify future areas for value. Progress in terms of this project will be reported each quarter under the cost and revenue optimization initiatives for the South Africa region.

On March 22, 2011, Gold Fields Corona (BVI) Limited, a wholly owned subsidiary of Gold Fields made a voluntary purchase offer to acquire the outstanding common voting shares and investment shares of Gold Fields La Cima S.A.A., or La Cima, that were not already owned. The offer closed on April 15, 2011. With the closing of the offer and with further purchases of shares after that date, Gold Fields' effective economic shareholding in La Cima increased to 98.5% from 80.7% for a total cash consideration of U.S.\$382 million. La Cima holds the Cerro Corona mine in Peru.

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On June 22, 2011, Gold Fields acquired the 18.9% minority stake of IAMGold Corporation, or IAMGold, in the Tarkwa and Damang gold mines in Ghana, for a cash consideration of U.S.\$667 million, increasing Gold Fields' interest in each of the Tarkwa and Damang gold mines from 71.1% to 90.0%, the remaining 10.0% interest being held by the government of Ghana.

On January 24, 2012, Gold Fields entered into a Memorandum of Understanding with Gold One International Limited, or Gold One, to investigate the viability of concurrently retreating their combined surface tailings deposits. The deposits are located in the West Rand region of the Witwatersrand Basin in South Africa. Gold Fields and Gold One currently operate mines in the West Rand region and will consider creating a joint venture consisting of surface assets for retreatment. The included assets are expected to exceed 700 million tons, representing over 60% of the region's total tailings material. The parties intend to complete a detailed scoping study by the middle of 2012 and use the results of that study to determine whether to progress to a feasibility study. If the joint venture proceeds, the parties plan to concurrently reprocess their combined tailings to recover residual gold, uranium and sulphur.

On March 22, 2012, Gold Fields exercised its 40% option in the gold-copper Far Southeast Project, or FSE, in the Philippines after making a \$110-million payment. On September 20, 2010 Gold Fields entered into two option agreements with Lepanto Consolidated Mining Company, or Lepanto, the 60% owner of FSE, and Liberty Express Assets, or Liberty, the 40% owner of FSE, granting Gold Fields an option to acquire a 60% interest in FSE for a total consideration of \$340-million.

After paying option fees of \$10.0 million and making two down-payments of \$44 million and \$66 million in September 2010 and September 2011 respectively, Gold Fields brought forward half of the remaining \$220 million payment to acquire Liberty's 40% interest in FSE. Gold Fields continues to hold its option to acquire an additional 20% stake in FSE from Lepanto for a further US\$110 million, which, if exercised, would increase its total interest in FSE to 60%.

The Liberty and Lepanto options were initially granted to Gold Fields for the later of 18 months from signature in September 2010 or the date of receiving a Financial or Technical Assistance Agreement, or FTAA, for the project. A FTAA licence allows a foreign corporation to control a majority interest in a Philippine mining project. Notwithstanding this provision, Gold Fields has the discretion to exercise either option prior to the FTAA being granted. The FTAA application for FSE was filed in November 2011 and based on the date of the filing Gold Fields expects it could be granted in the second half of 2012. Gold Fields also expects to have a maiden resource statement for FSE and commence a pre-feasibility study later this year. See Growth & International Projects International Projects Far Southeast Scoping Study .

In 2010, Gold Fields changed its year end from June 30 to December 31 beginning in 2011 to align with Gold Fields' peers in the gold mining industry. Therefore, Gold Fields filed with the SEC a transition report on Form 20-F for the period from June 30, 2010 through December 31, 2010 on March 31, 2011.

Gold Fields is a public company incorporated in South Africa, with a registered office located at 150 Helen Road, Sandown, Sandton, 2196, South Africa, telephone number +27-11-562-9700.

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**Organizational Structure**

Gold Fields is a holding company with its significant ownership interests organized as set forth below.

**Group Structure<sup>(1)</sup>**

Notes:

- (1) As of December 31, 2011, unless otherwise stated, all subsidiaries are, directly or indirectly, wholly-owned by Gold Fields Limited.
- (2) See Additional Information Material Contracts Additional Black Economic Empowerment Transactions .
- (3) Not all other subsidiaries and investments are wholly-owned.

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### **Strategy**

Following the appointment of Nicholas Holland as Chief Executive Officer as of May 1, 2008, Gold Fields undertook a review of the Group strategy which concluded that, while the basic strategy remained robust and appropriate, a number of strategic adjustments needed to be made.

These changes were developed and assimilated into a new Gold Fields franchise which describes who we are, what we do, and how we do it, and is comprised of:

a new vision statement;

a new set of core values;

a new overarching strategic growth target;

the three long-standing but refocused core pillars of the strategy, namely a) Optimize Our Operations, b) Grow Gold Fields, and c) Secure Our Future; and

a new regional operational delivery model.

In addition a number of short- and medium-term strategic priorities were identified and implemented, most notably the elevation of safety as the Group's number one value and strategic priority, which is discussed in the *Secure Our Future* section below.

### ***Vision Statement***

During fiscal 2009, Gold Fields developed a simple yet powerful new vision for the Group:

*To be the Global Leader in Sustainable Gold Mining.*

The purpose was to establish a simple yet compelling new vision that all stakeholders, in particular Gold Fields employees around the globe, could understand and buy into, and which could serve as a common and powerful motivational force across the organization.

The vision statement, which was successfully introduced across the Group during fiscal 2010, reflects Gold Fields' desire to be the best at what it does rather than to be the biggest; the imperative to maintain a sustainable business model with particular regard to the social, economic and environmental impacts of the Group and its operations on current and future generations of stakeholders; and the fact that Gold Fields is a focused gold mining company as opposed to a diversified precious or poly metals company.

### ***Overarching Strategic Growth Target***

The Group's overarching strategic growth target is to increase its production from the 3.48 million attributable gold equivalent ounces achieved in fiscal 2011, to approximately five million attributable gold equivalent ounces, either in production or in development, by 2015. Towards achieving this goal, the South Africa region is expected to contribute approximately two million ounces per annum, with each of the Group's international regions (the West Africa region, the Australasia region and the South America region) contributing approximately one million attributable gold equivalent ounces by 2015. The majority of this growth is expected to come from improvements at the current operations, described in the *Optimize Our Operation* section below, and from both near mine and greenfields exploration success which is described in the *Grow Gold Fields* section below.

### ***Core Values***



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Supporting the vision statement and directing the strategy are six core values that every employee is expected to embrace and which define the way in which Gold Fields conducts its business. These values are:

### **Safety**

If we cannot mine safely, we will not mine;

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### **Responsibility**

We act responsibly and care for the environment, each other, and all of our stakeholders – our employees, our communities and our shareholders;

### **Honesty**

We act with fairness, integrity, honesty and transparency;

### **Respect**

We treat each other with trust, respect and dignity;

### **Innovation**

We encourage innovation and entrepreneurship; and

### **Delivery**

We do what we say we will do.

### ***Optimize Our Operations***

*Optimize Our Operations means bringing the Group's attributable mineral reserves of 80.6 million gold equivalent ounces to account in a way that is safe, cost effective and environmentally responsible.*

Gold Fields has eight world-class producing mines. Fundamental to the attainment of the Group's vision and overarching strategic goal is for each one of these mines to produce to its real potential, and to maintain stability, predictability and consistency at its steady state level.

The first element of *Optimize Our Operations* is pursuing "Zero Harm" through the Group's Safe Production philosophy which includes particular focus on the provision of a safe working environment and a transformation in the attitudes, behavior and accountability of its employees, which is discussed in the *Secure Our Future* section below.

The second element of *Optimize Our Operations* involves minimizing the Group's environmental impact, including projects to minimize pollution risks, maximize energy efficiencies, manage its carbon impacts and plan for the eventual closure of mines. This is also discussed further in the *Secure Our Future* section below.

The third element of *Optimize Our Operations* relates to maximizing the operational potential of the Group's mines, through investment in mechanization, infrastructure development, mining flexibility and ore reserve development. With attributable mineral reserves of 80.6 million gold equivalent ounces, it is essential to bring the Group's gold equivalent ounces to account in the most cost effective way and, in doing so, to ensure longevity for each of the mines. Equally important is the need to achieve the required levels of mineral reserve development to create mining flexibility, which is a prerequisite for maintaining stability, predictability and consistency. After safety, mineral reserve development is the most important strategic priority for all of the mines in the Group.

The Group also seeks to proactively manage costs with a view to maintaining a NCE margin of at least 20% in the short-term and 25% in the medium- to long-term at each mine excluding South Deep. To this end, the Group's Business Process Re-engineering program, or BPR, has been implemented at the KDC and Beatrix Mines in the South Africa region as well as at Tarkwa and Damang in Ghana and at St. Ives and Agnew in Australia. This has entailed a significant focus on operating costs, the rationalization of on-mine and regional overhead cost structures and a review of the mine-to-mill processes to reduce inefficiencies and improve productivity. The Group achieved NCE margin of 25% in fiscal 2011 and 15% in fiscal 2010. Although this increase was largely driven by higher gold prices, it also reflected the collective impact of Gold Fields wide range of cost saving initiatives. The Group believes this is a noteworthy achievement considering that the Group's NCE margin includes the costs entailed in the construction and development of its South Deep mine.



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### ***Grow Gold Fields***

*Grow Gold Fields is about growing the value of the business on a per share basis. It is not purely about size, or the number of ounces produced, but more about the quality of the portfolio and the generation of real value for shareholders, on a per share basis.*

In the medium-term, Gold Fields' target is to diversify and grow into a global gold producer, with a goal of approximately one million gold equivalent ounces per annum either in production or in development in each of its West Africa, Australasia and South America regions, and approximately two million ounces either in production or in development in the South Africa region by 2015.

The growth and diversification is based on near-mine exploration, the development of the Group's four advanced stage projects in Ghana, Finland, Peru and the Philippines as well as greenfield exploration, both within the Group's established Australasia, South America and West Africa regions, and in highly prospective locations such as those in Canada, Chile, Argentina, the Philippines and Kyrgyzstan.

Gold Fields believes the necessary steps for achieving the Group's strategic targets include:

building-up South Deep's production to a run rate of 700,000 ounces by the end of 2015;

maintaining broadly stable production at the mature mines in the South Africa region (KDC and Beatrix) over the next three to five years;

a wide range of near mine and organic growth opportunities at the Company's existing mines in the West Africa, Australasia, and South America regions with a view to maintaining production in those regions in line with current levels; and

an advancing exploration pipeline headed by four advanced stage projects that are expected to reach development decisions within the next two to three years.

Gold Fields does not pursue growth simply to add incremental ounces to its portfolio. Hence the philosophy that every incremental ounce should be better than the previous ounce in terms of NCE and, equally important, should offer shareholders growth in ounces per share and enhanced returns on a per share basis.

Despite the slogan *No Mergers & Acquisitions Heroics*, the Company will consider attractive investment opportunities by pursuing an opportunistic strategy on acquisitions of producing or late-stage development assets. However, the Company does believe that a continuing lack of quality gold discoveries in the industry has led to escalating competition for advanced exploration and production assets. This makes value accretive growth through mergers and acquisitions increasingly onerous and prone to dilution of existing shareholders. For this reason, Management believes that, in the current price environment, exploration success generally offers the most cost effective path to accretive and value adding growth.

The Company's growth strategy is thus premised on creating high quality growth opportunities mainly through an aggressive focus on near mine exploration at existing assets and an equally aggressive greenfields exploration program in the regions where the Company is based and in a limited number of other highly prospective 'new frontiers' around the world. To be considered by Gold Fields, generally growth projects must have the potential to meet certain target criteria (which vary depending on other strategic objectives and the quality of the project) described as 'The Rule of Twos': the potential for a minimum of 2,000,000 ounces of reserves; production rates in the range of 200,000 gold equivalent ounces per year; and a positive real internal rate of return of at least 5% for producing assets and brownfields projects, and at least 10% for greenfields projects, adjusted for project-specific and geo-political risks, at a long-term gold price of \$1,500 per ounce.

Understanding non-geological aspects of prospective projects, such as social, political, environmental and commercial risks, ensuring that an appropriate risk versus reward trade-off analysis is factored into the decision is critical to the overall assessment and goes beyond a decision on the risk premium to be factored into the



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required return, and often goes to the root of that project decision. Gold Fields is prepared to consider projects with a higher risk profile if it believes they will offer superior returns. The focus will remain on gold and its by-product metals.

In fiscal 2012, Gold Fields plans to spend about \$60 million on near mine exploration, and about \$110 million on greenfields exploration (excluding the resource development projects), the latter in the three targeted international regions and in new frontier areas.

Outside South Africa, the three key regions of West Africa, Australasia and South America have been identified as containing prospective emerging gold and mineral belts with medium to long-term potential where Gold Fields has existing operational capabilities. Gold Fields objective in each of these regions is to develop one million ounce per annum production profiles. In appropriate circumstances, Gold Fields will also consider opportunities outside its key regions of focus.

During fiscal 2011, Gold Fields made considerable progress on the development of its exploration pipeline. The Company has four advanced stage projects. These include the Chucapaca project in Peru, the expansion of the Damang pit in Ghana, the Arctic Platinum project in Finland and the FSE project in the Philippines. At the Chucapaca project in Peru, a feasibility study is underway with the aim to finalize the study by the second half of fiscal 2012. The Arctic Platinum Project, or APP, in Finland has progressed to a pre-feasibility consolidation study, or preliminary PFS, to review and update the previous feasibility study on this project, completed in 2005. The pilot plant metallurgical test work, which forms part of the preliminary PFS and is critical for success, was completed during the third quarter of 2011 and initial results have been positive. Additional work completed in 2011 included updating of the environmental permitting requirements for the Suhanko Project and potential extensions, and drilling of additional prospects in the immediate Suhanko North area to scope the potential for additional material for the project. Drilling, additional metallurgical testwork, and ongoing mining and project pre-feasibility studies will continue through 2012 with an aim to complete a pre-feasibility study by the end of 2012. In addition, the Company has a large number of exploration projects in earlier stages of development. The objective for fiscal 2012 is to progress all of the advanced stage projects significantly, and to get at least one more earlier stage exploration project to a scoping study stage.

For acquisitions of assets or companies outside South Africa, South African exchange control regulations limit Gold Fields' ability to provide guarantees or borrow outside South Africa without express approval from the SARB. However, the government has indicated that its intention is to gradually phase out the remaining exchange controls over time and Gold Fields has a good track record in gaining approval for its offshore acquisitions and in growing its international operations.

### ***Secure Our Future***

*Secure Our Future is about ensuring the long-term sustainability of the business. It encompasses safety and human resources, as well as a wide range of environmental social and economic parameters that impact on the business today and into the future. It is about acquiring and maintaining a social license to operate in each of the jurisdictions in which the Company operates.*

The fact that sustainability was introduced as a specific element in Gold Fields new vision statement, To be the Global Leader in Sustainable Gold Mining, reflects the importance with which this subject is viewed by the Group. Gold Fields views sustainable development as a balance between the optimal financial and operational performance of the Group; maintaining of world-class environmental management standards; and contributing meaningfully to socio-economic benefits for the communities in which it operates.

Gold Fields continues to be an active member of the International Council on Mining and Metals, or ICMM, and is a signatory to the United Nations Global Compact. All mines in the Group, as well as the exploration division, have ISO 14001 certified environmental management systems in place and have retained their certifications during fiscal 2011.

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During fiscal 2010, Gold Fields also became the first mining house to achieve full accreditation for its operations under the International Cyanide Management Code, or the Cyanide Code. The OHSAS 18001 Safety Management System is a company standard and all mines in the company are now OHSAS 18001 certified. Gold Fields' Carbon Management Policy was approved by the Board of Directors in November 2010. All operations are also ISO 14001 compliant.

The Company has developed a Sustainable Development Framework that is closely aligned with the sustainable development principles of the ICMM and the United Nations Global Compact, and Gold Fields is a member of both groups. Gold Fields sustainability policy has been informed by the Global Reporting Initiative Sustainable Reporting Framework, which guides reporting on environmental, social and governance issues by companies that subscribe to it. The Sustainable Development Framework consists of a Sustainability Policy, with subsidiary policies, strategies and practice guides in each of the following eight pillars of sustainable development, namely: occupational health and safety; human rights; ethics and corporate governance; risk management, environment; material stewardship and supply chain management, community and indigenous people and stakeholder management.

### *Safety*

Gold Fields' health and safety philosophy is premised on our most important value and the overarching moral imperative that *if we cannot mine safely, we will not mine*. This gives rise to the objective of striving towards a zero harm working environment for all its people. During fiscal 2011, 19 employees in South Africa lost their lives compared to 18 during fiscal 2010. In the six months ended December 31, 2010, 12 employees in South Africa lost their lives. Outside South Africa, there was one fatality during fiscal 2011, no fatalities during fiscal 2010 and one fatality during the six month period ended December 31, 2010. The fatal injury frequency rate for the Group showed a 9% deterioration, from 0.11 per million man hours worked in fiscal 2010 to 0.12 per million man hours worked in fiscal 2011. On a calendar year basis, the lost time injury frequency rate showed a 7% deterioration, from 4.39 per million man hours worked in calendar 2010 to 4.69 per million man hours worked in fiscal 2011. Since December 31, 2011, Gold Fields reported four fatalities at its operations in South Africa.

Following three years of consistent and significant improvements in safety at Gold Fields' South African operations, the trend has leveled off. Gold Fields remains committed to safety, and the safe operation of its mines continues to be its top strategic priority. The strategy to eliminate fatalities in the Group will focus on engineering out the risk, ensuring compliance to internal standards and bringing about behavioral changes in support of safe working practices by all employees. The experience of employee dynamics over the years has led Gold Fields to adopt a more comprehensive approach to the general well-being, and therefore the productivity, of its staff. To this end Gold Fields pursues a broad range of interventions encapsulated in the *24 Hours in the Life of a Gold Fields Employee* program. This program was first launched in the South Africa region in fiscal 2009 and implemented in three international regions during fiscal 2010. Based on a total well-being philosophy, the program is aimed at improving every facet of the life of each employee and includes interventions in the fields of occupational health and safety, healthcare, living conditions, nutrition, sport and recreation and education.

### *Carbon and Energy*

Addressing energy management is a key deliverable throughout the Company. Rising energy costs and growing concerns about the effect of climate change have elevated the importance of energy efficiency and carbon management on the global agenda. Against this backdrop, Gold Fields has been actively aligning the Company to a carbon-constrained economy. The Company's intention is to reduce carbon emission and improve energy efficiency within the Company. Therefore existing policies and strategies are being reviewed to move the Group closer to the attainment of these goals. Integral to this strategy is energy efficiency amid ever-rising energy costs. Specifically in the South Africa region the target is to deliver an additional 5% reduction in

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electricity consumption in fiscal 2012 (before new loads and growth at South Deep) and to partially offset the 16% per year electricity tariff increase from April 1, 2012 through to March 2013. Savings of 3% in electricity consumption were achieved in South Africa during fiscal 2011.

In line with this new approach to carbon management, Gold Fields has launched a number of initiatives to reduce the greenhouse gases emitted by its operations. In November 2010, the Group adopted a new Carbon Management Policy, which commits the Group to:

implement strategies to reduce its carbon footprint, improve its energy efficiency, pursue opportunities and use carbon friendly technology where possible;

identify and mitigate the risks posed by climate change;

provide comprehensive disclosure around carbon related issues;

comply with relevant legal requirements and other carbon management requirements; and

encourage business partners and suppliers to make similar commitments.

In calendar 2010, Gold Fields became the world's first gold mining company to enter into a contract to sell Certified Emissions Reductions, or CERs, the financial securities used to trade carbon emissions. The CERs were derived from the capture of methane gas at the Beatrix mine. The Beatrix Mine Methane Project was registered by the United Nations Framework Convention on Climate Change as a carbon credit project under the Kyoto Protocol on September 7, 2011 and is expected to generate approximately 4MW of electricity per annum once a cogeneration plant has been built using the gas as feedstock. This project could off-set the equivalent of 253,000 tons of CO<sub>2</sub>. In December 2011, Gold Fields was ranked first in the JSE's Top 100 Carbon Disclosure Leadership Index. Gold Fields also ranked fourth in the mining sector in the Dow Jones Sustainability Index, which indicates that Gold Fields' sustainability practices rank in the top 5% of resource companies worldwide.

*Stakeholder Relationship Management*

A central pillar of the Gold Fields Sustainable Development Framework is pro-active engagement with and management of the relationships with all stakeholders who have an influence over the affairs of the company or who are impacted by its activities. These include in particular the relationships with the Group's employees and their representative organizations and unions; local, regional and national governments; and the local communities in which Gold Fields operates or that are affected by its operations.

While Gold Fields has achieved significant progress in this respect and all its mines have implemented the AA 1000 Stakeholder Engagement Standard (a principles-based, open source framework for shareholder engagement published by Accountability, the company responsible for development of this standard), a higher level of engagement has become essential to underpin the sustainability of its operations.

This has become evident over the past few years with governments, communities, non-governmental organizations and trade unions in several jurisdictions seeking and, in some cases, implementing greater cost imposts on the mining industry.

Similar trends are evident in the cost of electricity and other levies imposed by governments in many of the countries in which Gold Fields operates. There is a risk that such additional imposts on mining projects will raise input costs to unsustainable levels, which would have negative consequences for the projects and, by implication, for the affected countries. In the near future Gold Fields will directly and through various industry forums continue and escalate its engagement with stakeholders to achieve greater appreciation for the impact these often ill-considered demands are having on the sector.



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Gold Fields recognizes that, by understanding the needs and concerns of various stakeholder groups, it can build constructive and positive relationships that will support the long-term objectives of the business. The Group spends considerable time and resources in building sound stakeholder relations.

Gold Fields begins the engagement process at the exploration stage by talking to community stakeholder groups to understand their needs and to obtain their input on future plans for the prospective development of a new mining operation.

### *Black Economic Empowerment*

In the South African environment, BEE and transformation in terms of the requirements of the MPRDA, and the associated Amended Mining Charter, remains a key business imperative and sustainability issue.

During May 2010, the DMR approved the conversion of the South Deep old order mining right into a new order mining right. Included in this approval was an additional portion of ground known as Uncle Harry's, which is contiguous to South Deep. The cumulative effect of this approval, together with the previous conversions for the Driefontein, Kloof (both now part of KDC) and Beatrix gold mines granted in January 2007, is that all of Gold Fields' South African mines have now received their new order mining right.

Following a review, the DMR amended the Mining Charter and the Amended Mining Charter was released on September 13, 2010. The requirement under the Mining Charter for mining entities to achieve a 26% HDSA ownership of mining assets by the year 2014 has been retained. Amendments to the Mining Charter in the Amended Mining Charter include, *inter alia*, the requirement by mining companies to (i) facilitate local beneficiation of mineral commodities; (ii) procure a minimum of 40% of capital goods, 70% of services and 50% of consumer goods from HDSA suppliers (i.e. suppliers of which a minimum of 25% + 1 vote of their share capital must be owned by HDSAs) by 2014. These targets will however be exclusive of non-discretionary procurement expenditure; (iii) ensure that multinational suppliers of capital goods contribute a minimum of 0.5% of their annual income generated from South African mining companies towards the socio-economic development of South African communities into a social development fund from 2010; (iv) achieve a minimum of 40% HDSA demographic representation by 2014 at executive management (board) level, senior management (EXCO) level, core and critical skills, middle management level and junior management level; (v) invest up to 5% of annual payroll in essential skills development activities; and (vi) implement measures to improve the standards of housing and living conditions for mineworkers by converting or upgrading mineworkers' hostels into family units, attaining an occupancy rate of one person per room and facilitating home ownership options for all mineworkers in consultation with organized labor, all of which must be achieved by 2014. In addition, mining companies are required to monitor and evaluate their compliance to the Amended Mining Charter, and must submit annual compliance reports to the DMR. The Scorecard for the Broad-Based Socio-Economic Empowerment Charter for the South African Mining Industry attached to the Amended Mining Charter, or the Scorecard, makes provision for a phased-in approach for compliance with the above targets over the five year period ending in 2014. For measurement purposes, the Scorecard allocates various weightings to the different elements of the Amended Mining Charter. Failure to comply with the provisions of the Amended Mining Charter will amount to a breach of the MPRDA and may result in the cancellation or suspension of a mining company's existing mining rights.

In 2010, Gold Fields completed three empowerment transactions which, together with previous transactions, enabled Gold Fields to meet its 2014 BEE equity ownership targets. These transactions included an Employee Share Option Plan for 10.75% of GFIMSA; a broad-based BEE transaction for 10% of South Deep; and a broad-based BEE transaction for a further 1% of GFIMSA, excluding South Deep. The three transactions had a combined value of approximately R2.4 billion. See [Additional Information](#) [Material Contracts](#) [Black Economic Empowerment Transactions](#).

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### ***Regional Delivery Model***

Gold Fields views itself as a global mining company, but believes that in some circles it is perceived as predominantly a South African company with some international operations. In order to change this perception and to help achieve its operational and growth aspirations, Gold Fields began restructuring its operations into four regions during fiscal 2009. These regions are: South Africa; West Africa; South America; and Australasia.

This restructuring was largely completed in fiscal 2010. All of the key regional executives have been appointed and good progress has been made in creating strong, entrepreneurial and appropriately resourced and incentivized management teams in each region. These teams are tasked with running the mines safely and efficiently, as well as driving and being significantly involved in the growth of the business within each region.

During fiscal 2009, the corporate office was relocated to new premises separate from the South African regional office. During fiscal 2010, the corporate office was further streamlined, in line with the strategy of relocating personnel to the regions that they service. The corporate office is now a focused business unit engaged in establishing and monitoring operational standards that apply across the regions in areas such as safety, health and environmental issues, finance and human resources, developing Group-wide strategy, and allocating capital. In fiscal 2011, Gold Fields further streamlined its operations in these regions through a series of initiatives as part of the BPR program focusing on operating costs, rationalization of on-mine and regional overhead and a review of the mine-to-mill process.

### ***Hedging***

As a general rule, Gold Fields sells the gold it produces at prevailing market prices and does not enter into hedging arrangements such as forward sales or derivatives which establish a price in advance for the sale of its future gold production. At December 31, 2011, Gold Fields had no outstanding hedges. Significant changes in the prices of gold and/or copper over a sustained period of time may lead Gold Fields to increase or decrease its production in the near-term, which could have a material impact on Gold Fields' revenues. See Management's Discussion and Analysis of Financial Condition and Results of Operations of the Group Factors Affecting Results of Operations Revenues .

Gold Fields may, from time to time, establish currency and/or interest rate financial instruments to protect underlying cash flows or to take advantage of potential favorable currency movements.

### ***Strategic Goals and Objectives***

#### *Progress against Strategic Goals and Objectives for Fiscal 2011*

##### **To achieve safe and stable production at the KDC and Beatrix mines in the South Africa region.**

During fiscal 2011, overall primary development at the KDC and Beatrix mines decreased by 10.7% from 76,591 meters to 68,382 meters. However, the percentage of flat-end development that was mechanized on the long-life shafts increased from 54.6% in fiscal 2010 to 89.6% in fiscal 2011. This has contributed positively to the health and safety of flat-end development workers and management believes that this increase lays the foundation for achieving reserve flexibility of 24 months developed ore reserves at all the long-life shafts.

During fiscal 2011, Gold Fields saw a leveling off in the overall safety performance of the Group. In particular, the fatal injury frequency rate showed a 9% deterioration, from 0.11 per million man hours worked in fiscal 2010 to 0.12 per million man hours worked in fiscal 2011, with the number of fatal injuries increasing from 18 in fiscal 2010 to 19 in fiscal 2011, while the lost time injury frequency rate rose to 4.68 per million man hours worked from 4.38 per million man hours worked. An external review of the safety culture in the South Africa region indicated a significant improvement in the overall safety culture in the region, which indicates that Gold Fields' efforts to boost safety on a

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sustainable basis are delivering results, and that Gold Fields' first value, if we cannot mine safely, we will not mine, has been thoroughly entrenched throughout the company.

**To continue the build-up of South Deep in order to achieve run-rate production of approximately 750,000 ounces per annum by the end of 2015.**

During fiscal 2011, gold production at South Deep increased by 3% from 265,000 ounces in fiscal 2010 to 273,000 ounces. The South Deep capital infrastructure program continues to meet its key delivery dates. During the year, South Deep completed the commissioning of its new Tailings Storage Facility. The ventilation shaft deepening project remains on track for commissioning in the third quarter of 2012 and the additional rock hoisting is expected to build to a nameplate capacity of 195,000 tons per month by October 2013. The gold plant expansion from 220,000 tons per month to 330,000 tons per month is under construction, with commissioning planned in the third quarter of 2012. Despite the progress made on the infrastructure projects, South Deep has experienced some challenges around the slow build-up of de-stress cut mining activities. These are being addressed, and South Deep had made some progress in improving the quality of its de-stress mining during the second half of 2011. The growth target for South Deep has been adjusted to a 700,000 ounce run-rate by the end of 2015. Capital expenditure in fiscal 2011 amounted to R1.982 billion (U.S.\$274.6 million) which is in line with the operation's five-year plan.

**To continue BPR programs across the Company to achieve a sustainable free cash flow and an NCE margin of 20% at each mine in the short-term and 25% in the medium-term, at long-term sustainable gold prices**

Management considers NCE and NCE margin to be the most important measures of financial performance, as they drive free cash flow generation. BPR programs are continuing at KDC, Beatrix, St. Ives, Agnew, Damang and Tarkwa. The Company has also completed the transition to owner mining at Damang. The Company has also completed the transition to owner mining for underground production mining at Agnew and St. Ives mines with development and surface mining continuing to be performed by contractors. Continued implementation of the BPR program in the South Africa region is expected to deliver savings of R500 million (U.S.\$63 million) over the two year period commencing January 2012 following significant savings already realized in fiscal 2011. This is expected to help the Company absorb some of the inflationary pressures it is facing in terms of input costs. In South Africa, BPR program initiatives delivered savings of R840 million (U.S.\$116 million) in fiscal 2011. In West Africa, BPR program initiatives commenced with a diagnostic and analysis phase during the six month period ended December 31, 2010 and delivered savings of U.S.\$43 million (R310 million) in fiscal 2011. In Australasia, BPR program initiatives commenced during fiscal 2011.

**To maintain and increase the Company's production profile through major near-mine projects**

The Group is focused on increasing the production profile of its operations through a series of projects to enhance current operations and to extend operations through near mine opportunities. At St. Ives, the Company is in the process of building up the Athena-Hamlet complex within the Argo-Athena camp. The camp sits within the St. Ives lease area, five kilometers from the central Lefroy mill. Construction at the Athena mine was completed during fiscal 2010 and the mine reached commercial levels of production during fiscal 2011. The first ore extraction from Hamlet occurred in November 2011, with stoping expected to commence in the latter half of 2012. Currently, it is estimated that there are reserves of over one million ounces at the Athena-Hamlet complex.

Further, the Damang mine is engaged in a drilling program with the intention to deliver additional mineable mineral reserves and to substantially increase the life of mine. Based on positive results of the recently completed Phase 1 proof of concept drilling program at Greater Damang, a preliminary PFS commenced in July 2011. This included a Phase 2 resource definition drilling program of 43,000 meters; however, Gold Fields achieved its objectives by drilling out 38,000 meters. Additional work includes detailed evaluation of the open pit cutback potential, geotechnical drilling of the deposit, design and financial evaluation of new processing facilities capable of supporting increased production

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rates, and a full environmental assessment. The project is progressing to schedule to be completed in the first half of 2012 and to potentially move into feasibility, assuming a positive result.

**To increase the Company's production profile through major resource development and feasibility projects**

During fiscal 2011, the Group made further advancement on its major greenfields projects so that development decisions can be made within the next 2 to 3 years. Specific areas of focus during this period included an intensive drilling program at the FSE gold-copper porphyry, finalization of the project feasibility study at Chucapaca by the second half of fiscal 2012 and at APP, completion of the drilling program at Suhanko North, finalization of the pre-feasibility study by the end of fiscal 2012 and consolidating the results of the pilot-plant testwork of Platsol to improve metal recoveries.

The Group has also continued the development of its greenfields exploration pipeline. During fiscal 2011, Gold Fields spent approximately U.S.\$120.5 million on greenfields exploration projects not adjacent to its mining operations.

**To implement a sustainable gold program that addresses both the concerns of stakeholders as well as emerging business and sustainable development risks**

During fiscal 2011, a wide range of projects was undertaken across the Company to enhance the sustainability of its operations. For example, Gold Fields participated in the piloting of the World Gold Council Responsible Gold standards relating to chain of custody and conflict free gold. During this period, Gold Fields started the process of compliance by beginning to include warranties on its waybills to refineries stating that the gold dore (gold bars containing approximately 90% gold) had been produced in a responsible manner.

Further, Gold Fields has identified relevant criteria for inclusion in employee balanced scorecards and other business processes, to ensure an integrated approach to sustainability across functional areas. In order to ensure that employees are compensated in accordance with the values of the Company, Gold Fields uses a fully integrated or balanced scorecard approach. This includes traditional measures of performance such as employee productivity, as well as environmental and safety metrics. Using this approach, Gold Fields is ensuring that business sustainability is integral to day-to-day operations and that there is accountability for the long-term performance of the company. All middle- to senior level employees participate in this performance management process, which forms an integral part of the Group's talent management.

*Specific Strategic Goals and Objectives for fiscal 2012*

The specific strategic goals and objectives for fiscal 2012 flow from the strategy and were designed to consolidate the operational gains made during fiscal 2011. The specific strategic goals and objectives for fiscal 2012 are:

**Achieve tangible improvements with respect to all safety and health metrics**

Gold Fields plans to continue working towards zero harm through a strategy of engineering-out risk, compliance with safe operating standards, procedures and cultural and behavioural change and improved stakeholder engagement as encapsulated in the 24 Hour in the Life of a Gold Fields Employee wellness initiative. At Gold Fields' international operations, the focus will be on reduced lost time injury frequency rates as well as improvements in occupational health performance.

**Reduce the rate of production decline at KDC between 3% and 5% against fiscal 2011**

Gold Fields intends to increase surface processing capacity at KDC for waste rock and tailings. In addition, Gold Fields expects to maintain its focus on efficiency projects, including improving quality mining volumes at KDC, increased mechanized flat-end development and improved safety performance.

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### **Regain momentum in the ramping up of production at South Deep**

Gold Fields plans to complete several fixed infrastructure projects at South Deep in fiscal 2012 in support of the build-up program, including the Twin Vent Shaft project and the processing plant expansion. Gold Fields also expects to make further progress on the installation of backfill infrastructure. The capital expenditure budget for South Deep is R2.544 billion (\$318 million) in fiscal 2012.

In addition, Gold Fields aims to establish a dedicated, on-site mechanized mining training center to support operations at South Deep.

### **Ensure that every mine (excluding South Deep) achieves an NCE margin of at least 20%**

The BPR program is expected to continue excluding South Deep in fiscal 2012. The second phase of the BPR program in South Africa has identified further cost reductions of R500 million (U.S.\$62.5 million) over the next two years through the optimization of staff structures, reduction in non-specialized contractors, lower electricity consumption and enhanced supply chain management.

At its Australian and Ghanaian mines, Gold Fields also plans to maximize the benefits realized by the implementation of owner mining, improved utilization and availability of mining equipment as well as the reduction in energy intensity.

### **Increase momentum on growth projects to achieve the goal of 5 million ounces, in production or in development, by 2015**

In fiscal 2012, Gold Fields plans to undertake the following projects at each of its four advanced stage projects:

- (i) *Chucapaca, Peru*: Gold Fields expects to complete a feasibility study for the Canahuire deposit and to reach a development decision in the second half of fiscal 2012.
- (ii) *Greater Damang Project, Ghana*: Gold Fields expects to complete a pre-feasibility study aiming to develop a large cutback on the existing Huni-Damang-Juno deposits. Gold Fields also plans to update the mineral resource and reserve position of the project.
- (iii) *Far Southeast, Philippines*: Gold Fields hopes to complete the Financial or Technical Assistance Agreement licensing process, which allows a foreign corporation to legally own and control a majority stake of any large scale mineral resource in the Philippines. On March 22, 2012, Gold Fields exercised its 40% option in FSE after making a US\$110 million payment. Gold Fields continues to hold its option to acquire an additional 20% stake in FSE for a further US\$110 million, which, if exercised, would increase its total interest in FSE to 60%. The options were initially granted to Gold Fields for the later of 18 months from signature in September 2010 or the date of receiving a Financial or Technical Assistance Agreement, or FTAA, for the project. A FTAA licence allows a foreign corporation to control a majority interest in a Philippine mining project. Notwithstanding this provision, Gold Fields has the discretion to exercise either option prior to the FTAA being granted and has done so in respect of the 40% option. Gold Fields also expects to have a maiden resource statement for FSE and commence a pre-feasibility study later this year.
- (iv) *Arctic Platinum Project, Finland*: Gold Fields expects to complete the drilling program at Suhanko North, test the ore for amenability to the Platsol process and to finalize the pre-feasibility study by the end of fiscal 2012.

### **Ensure Gold Fields has the financial capacity to fund growth projects in 2012 and beyond**

Gold Fields plans to maintain continued focus on strong operational cash flow generation in fiscal 2012. At the same time, Gold Fields intends to explore the potential for securing additional long-term funding for the business and the possibility of extending the maturity profile of its long-term debt.

**Ensure that sustainability is fully integrated into the business and is appropriately communicated to all levels of the business**

Gold Fields plans to achieve this goal, through initiatives such as ongoing development, implementation and monitoring of sustainability development strategies at the group-, region- and project-levels, additional integration of internal and external reporting and a dedicated sustainable

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development communications program, voluntary adoption of the World Gold Council Conflict and Free Gold Standards. Further, sustainable development measures have been incorporated into the balanced scorecards of key decision-makers across the Company.

**Ensure that climate change initiatives, carbon mitigation and adaptation strategies and energy efficiency initiatives are fully incorporated into the business**

Gold Fields plans to proceed with a number of climate change and carbon mitigation initiatives, including the implementation of a fully integrated Energy and Carbon Strategy, including the creation of a carbon and energy division, and the development, implementation and monitoring of Carbon Management Plans by all regions. Gold Fields also plans to roll out a number of energy efficiency and carbon emission reduction projects and to continue with the ongoing integration of carbon pricing into its financial planning to induce short-, medium- and long-term adaptation of the business. Gold Fields is also in the process of incorporating energy and carbon measures into the balanced scorecards of key decision-makers across the Company.

**Increase focus on the attraction, retention and development of people and skills**

Gold Fields will fully implement its new Remuneration Strategy. This strategy focuses on a number of initiatives to attract and retain skilled employees, including enhanced branding, increased talent development, the establishment of an integrated human resources data management system, an ongoing review of base salaries and quality of working life and improvements to internal and external skills pipelines.

**Reserves of Gold Fields as of December 31, 2011**

*Methodology*

While there are some differences between the definition of the South African Code for Reporting of Exploration Results, Mineral Resources and Mineral Reserves, or SAMREC Code, and that of the Securities and Exchange Commission's, or SEC's, industry guide number 7, only the reserves at each of Gold Fields' operations and exploration projects as of December 31, 2011 which qualify as reserves for purposes of the SEC's industry guide number 7 are presented in the table below. See *Glossary of Mining Terms*. In accordance with the requirements imposed by the JSE, Gold Fields reports its reserves using the terms and definitions of the SAMREC Code (2007 edition). Mineral or ore reserves, as defined under the SAMREC Code, are divided into categories of proved and probable reserves and are expressed in terms of tonnes to be processed at mill feed head grades, allowing for estimated mining dilution, recovery and other factors.

Gold Fields reports reserves using cut-off grades (international operations and South Deep) and pay limits (South Africa, excluding South Deep), due to the nature of the deep level underground operations, to ensure the reserves realistically reflect both the cost structures and required margins relevant to each mining operation. Cut-off grade is the grade that distinguishes the material within an ore body that is to be extracted and treated from the remaining material. The pay limit is the grade at which an ore body can be mined without profit or loss, calculated using an appropriate metal price and working costs, plus modifying factors. Modifying factors used to calculate the pay limit grades include adjustments to mill delivered amounts, due to dilution incurred in the course of mining. Modifying factors applied in estimating reserves are primarily historical, but commonly incorporate adjustments for planned operational improvements such as those described below under *Description of Mining Business Productivity Initiatives*. Tonnage and grade may include some mineralization below the selected pay limit and cut-off grade to ensure that the reserve comprises blocks of adequate size and continuity. Reserves also take into account cost levels at each operation and are supported by mine plans.

The estimation of reserves at the South African underground operations is based on surface drilling, underground drilling, surface three-dimensional reflection seismics, ore body facies modeling, structural modeling, underground mapping channel sampling and geostatistical estimation. The reefs are initially explored by drilling from the surface on an approximately 500 meter to 2,000 meter grid. Once underground access is

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available, drilling is undertaken on an approximately 30 meter to 90 meter grid. Underground channel sampling perpendicular to the reef is undertaken at three-meter intervals in development areas and five-meter intervals at stope faces.

The following sets out the reserve estimation methodologies for the different categories of reserves at the underground operations of each of the South African mines.

*KDC*

Reserve Classification	Sample Spacing	Maximum Distance
	Range Min/Max (meters)	Data is Projected
Proved	3 to 250	125
Probable (AI) <sup>(1)</sup>	3 to 1,140	570
Probable (BI) <sup>(1)</sup>	3 to 2,840	1,420

Note:

(1) AI is above infrastructure; BI is below infrastructure.

For proved reserves, the ore body is opened up and sampled on a three-meter spacing for development (such as raises), and a five-meter grid for stoping, together with underground borehole spacings ranging from tens to hundreds of meters. Blocks classified as proved are therefore generally adjacent to closely spaced sampling and generally pierced by a relatively dense irregular pattern of boreholes. Estimation is constrained within both geologically homogenous structural and facies zones, and is generally derived from either ordinary or simple kriged small-scale grids, ranging from 10 meter to 50 meter block sizes.

For above infrastructure probable reserves, the estimates are founded on significant numbers of samples on a three-meter spacing for development, and a five-meter grid for stoping bordering these areas. In addition underground borehole spacings ranging from tens to hundreds of meters are used together with surface boreholes and seismic surveys. Blocks classified as probable (AI) are generally adjacent to blocks classified as proved. Estimation is constrained within homogenous structural and facies zones, and is generally derived from either ordinary or simple kriged medium- to macro-scale-sized grids ranging from 50 meters to 420 meters, or through declustered averaging or Sichel t techniques. For planning purposes, these blocks are further evaluated to facilitate the selection of blocks above the pay limit.

For below infrastructure probable reserves, the estimates access the significant numbers of samples on a three-meter spacing for development, and a five-meter grid for stoping above these areas. In addition underground borehole spacings ranging from tens to hundreds of meters are used together with surface boreholes and seismic surveys. Blocks classified as probable (BI) are generally down dip of blocks classified as proved or probable (AI). Estimation is constrained within homogenous structural and facies zones, and is generally derived from either ordinary or simple kriged medium- to macro-scale-sized grids ranging from 50 meters to 420 meters, or through declustered averaging or Sichel t techniques. For planning purposes, these blocks are further evaluated to facilitate the selection of blocks above the pay limit.



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Reserve Classification	Sample Spacing	Maximum Distance
	Range Min/Max (meters)	Data is Projected
Proved	3 to 120	120
Probable (AI) <sup>(1)</sup>	3 to 820	700
Probable (BI) <sup>(1)</sup>	3 to 1,500	750

Note:

(1) AI is above infrastructure; BI is below infrastructure.

Estimations for proved reserves are made on the same basis as at KDC but with kriging blocks ranging from 10 meters to 40 meters.

Estimations for above infrastructure probable reserves are made on the same basis as at KDC but with medium-sized kriged blocks of 40 meters, and macro geological zone estimates being made through declustered averaging or Sichel t techniques or macro-scale-sized kriged grids of up to 300 meters. For planning purposes these blocks are further evaluated to facilitate the selection of blocks above the pay limit.

Estimations for below infrastructure probable reserves are made on the same basis as at KDC but with medium-sized kriged blocks being 40 meters, to macro geological zone estimates through declustered averaging or Sichel t techniques or macro scale sized kriged grids of up to 300 meters. The distinction between estimation techniques for above infrastructure and below infrastructure probable reserves is the same as at KDC. For planning purposes, these blocks are further evaluated to facilitate the selection of blocks above the pay limit.

*South Deep*

Reserve Classification	Sample Spacing	Maximum Distance
	Range Min/Max (meters)	Data is Projected
Proved	0 to 100	220
Probable (AI) <sup>(1)</sup>	100 to 180	450
Probable (BI) <sup>(1)</sup>	>180	1,200

Note:

(1) AI is above infrastructure; BI is below infrastructure.

For proved reserves, the ore body must be fully destressed for development (such as access ramps and drives), and similarly for stoping, with drilling planned at an approximate 30 meter by 30 meter grid-spacing. Estimation is constrained within both geologically homogenous structural and facies zones, and is generally derived from either ordinary or simple kriged small-scale grids.

For above infrastructure probable reserves, the estimates access a significant number of samples on spacing greater than the spacing for development and stoping bordering these areas. In addition, borehole spacings ranging from tens to hundreds of meters are used in conjunction with 3D seismic survey results that confirm certain structural elevations and surfaces. Reserves classified as probable above infrastructure are generally adjacent to those classified as proved. Estimation is constrained within homogenous structural and facies zones, and is generally derived from simple and ordinary kriging and through declustered averaging techniques.

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For below infrastructure probable reserves, the estimates access a significant number of samples on spacing greater than the spacing for development and stoping bordering these areas. In addition, borehole spacings ranging from tens to hundreds of meters are used in conjunction with 3D seismic survey results that confirm

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certain structural elevations and surfaces. Reserves classified as probable below infrastructure are generally adjacent to those classified as proved or probable above infrastructure. Estimation is constrained within homogeneous structural and facies zones, and is generally derived from simple and ordinary kriging and through declustered averaging techniques.

The primary assumptions of continuity of the geologically homogenous zones are driven by the geological model, which is updated when new information arises. Any changes to the model are subject to peer, internal technical corporate and external independent consultant review. Historically, mining at South African deep-level gold mines has shown significant geological continuity, so that new mines were started based on limited surface borehole information. Customarily, geological models are primarily based on the definition of different facies within each conglomerate horizon. These facies are extrapolated along palaeocurrent and grade trends into new, undeveloped areas taking into account any surface borehole data in those areas. Normally these facies are continuous, supported by extensive historical sample databases, and can be incorporated in the macro kriging of large blocks.

### *Ghana*

For the Tarkwa open pit operation, estimation of reserves is based on a combination of an initial 100- or 200-meter grid of diamond drilling and in certain areas a 12.5 meter to 25.0 meter grid of reverse circulation drilling. For the Damang open pit operation, estimation of reserves is based on a 20 meter to 80 meter grid of combined reverse circulation and diamond drilling and, in certain areas, reverse circulation drilling on an eight-meter by five-meter drill grid.

Diamond drilling provides continuous (solid) core from diamond drill bits, using water and chemicals for lubrication. Consequently, diamond drilling provides greater resolution of geological parameters such as lithologies, alterations, mineralisation and structures.

In surface drilling programs, reverse circulation drilling provides chip samples from percussion hammers powered by compressed air. The chips are transferred to surface up a central tube with the rods to eliminate contamination from the outer hole. Sampling is generally conducted at intervals relevant to the block model and mining dimensions. Reverse circulation drilling is generally quicker and less expensive than diamond drilling. However, there is a depth limitation to reverse circulation drilling and consequently all deep holes are conducted by diamond drilling.

Generally exploration programs will consist of a mix of reverse circulation and diamond drilling in order to provide the necessary geological resolution, as well as bulk analytical data for evaluation purposes. Infill drilling programs are usually conducted by reverse circulation, as are grade control drilling programs.

### *Australia*

At the Australian operations, the estimation of reserves for both underground and open pit operations is based on exploration, sampling and testing information gathered through appropriate techniques, primarily from boreholes and mine development. The locations of sample points are spaced close enough to deduce or confirm geological and grade continuity. Generally, drilling is undertaken on grids, which range between 20 meters by 20 meters to 40 meters by 40 meters, although this may vary depending on the continuity of the ore body. Due to the variety and diversity of mineralization at St. Ives and Agnew, sample spacing may also vary depending on each particular ore type.

### *Peru*

For the Cerro Corona operation, estimation is based on diamond drill and reverse circulation holes. The spacing of holes at Cerro Corona is generally around 50 meters, with some areas approximating a 25 meter grid.

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As of December 31, 2011, Gold Fields had aggregate attributable proved and probable gold reserves of approximately 77.6 million ounces as set forth in the following table.

**Gold ore reserve statement as of December 31, 2011<sup>(1)</sup>**

	Proved reserves			Probable reserves			Total reserves			Attributable gold production in Fiscal 2011 <sup>(2)</sup> (M oz)
	Tonnes (million)	Head Grade (g/t)	Gold (M oz)	Tonnes (million)	Head Grade (g/t)	Gold (M oz)	Tonnes (million)	Head Grade (g/t)	Gold (M oz)	
<b>Underground ( UG ) South Africa</b>										
KDC (UG) (total)	22.90	7.8	5.714	31.40	7.5	7.619	54.30	7.6	13.333	0.968
Above infrastructure <sup>(3)</sup>	22.90	7.8	5.714	31.40	7.5	7.619	54.30	7.6	13.333	0.968
Below infrastructure <sup>(3)</sup>										
South Deep (UG) (total) <sup>(6)</sup>	14.04	6.0	2.706	193.86	5.4	33.869	207.90	5.5	36.576	0.264
Above infrastructure <sup>(3)(6)</sup>	14.04	6.0	2.706	140.82	5.5	25.020	154.86	5.6	27.726	0.264
Below infrastructure <sup>(3)(6)</sup>				53.04	5.2	8.849	53.04	5.2	8.849	
Beatrix (UG) (total)	23.44	4.6	3.437	10.53	4.3	1.465	33.97	4.5	4.901	0.332
Above infrastructure <sup>(3)</sup>	23.44	4.6	3.437	10.53	4.3	1.465	33.97	4.5	4.901	0.332
Below infrastructure <sup>(3)</sup>										
<b>Australia</b>										
St. Ives	0.91	6.0	0.178	8.37	4.6	1.231	9.29	4.7	1.409	0.253
Agnew	1.14	6.2	0.230	5.45	6.0	1.046	6.59	6.0	1.276	0.167
<b>Total Underground</b>	62.44	6.1	12.264	249.60	5.6	45.230	312.04	5.7	57.495	1.984
<b>Total Surface (Rock Dumps &amp; Tailings Storage Facilities, or TSFs)</b>										
KDC	247.18	0.4	2.916	20.40	0.6	0.384	267.58	0.4	3.300	0.157
KDC	247.18	0.4	2.916	14.90	0.7	0.327	262.08	0.4	3.243	0.132
South Deep										0.009
Beatrix				5.50	0.3	0.057	5.50	0.3	0.057	0.015
<b>Surface (Production Stockpile)</b>										
<b>Ghana</b>										
Tarkwa	2.84	0.7	0.07				2.84	0.7	0.067	
Damang				2.43	1.0	0.08	2.43	1.0	0.078	
<b>Australia</b>										
St. Ives	5.60	1.0	0.174				5.60	1.0	0.174	
Agnew	0.31	1.7	0.017				0.31	1.7	0.017	
<b>Peru</b>										
Cerro Corona	1.1	1.2	0.05				1.17	1.2	0.047	
<b>Surface (Open Pit)</b>										
<b>Ghana</b>										
Tarkwa	106.27	1.3	4.45	129.24	1.2	4.79	235.51	1.2	9.243	0.576 <sup>(4)</sup>
Damang <sup>(5)</sup>	7.74	2.0	0.50	45.36	1.7	2.48	53.10	1.7	2.973	0.175 <sup>(4)</sup>
<b>Australia</b>										
St. Ives <sup>(5)</sup>	0.82	1.4	0.038	22.23	1.7	1.192	23.05	1.7	1.230	0.212 <sup>(4)</sup>
Agnew <sup>(5)</sup>	0.21	1.4	0.009				0.21	1.4	0.009	0.027 <sup>(4)</sup>
<b>Peru</b>										
Cerro Corona	84.05	0.9	2.47	23.14	0.7	0.51	107.19	0.9	2.980	0.150 <sup>(4)</sup>
<b>Total Surface</b>	209.01	1.2	7.771	222.40	1.3	9.046	431.40	1.2	16,817	1.140

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	Proved reserves			Probable reserves			Total reserves			Attributable gold production in Fiscal 2011 <sup>(2)</sup>
	Tonnes (million)	Head Grade (g/t)	Gold (M oz)	Tonnes (million)	Head Grade (g/t)	Gold (M oz)	Tonnes (million)	Head Grade (g/t)	Gold (M oz)	(M oz)
<b>Grand Total</b>	518.63	1.4	22,951	492.40	3.5	54,660	1,011.02	2.4	77,612	3,280
<b>Totals by Mine</b>										
KDC	270.08	1.0	8,630	46.30	5.3	7,946	316.38	1.6	16,576	1,100
South Deep	14.04	6.0	2,706	193.86	5.4	33,869	207.90	5.5	36,576	0,273
Beatrix	23.44	4.6	3,437	16.03	3.0	1,521	39.47	3.9	4,958	0,347
Tarkwa	109.11	1.3	4,515	129.24	1.2	4,795	238.35	1.2	9,310	0,576
Damang	7.74	2.0	0,497	47.79	1.7	2,554	55.53	1.7	3,051	0,175
St. Ives	7.34	1.7	0,390	30.60	2.5	2,423	37.94	2.3	2,813	0,465
Agnew	1.66	4.8	0,255	5.45	6.0	1,046	7.11	5.7	1,302	0,194
Cerro Corona	85.22	0.9	2,521	23.14	0.7	0,505	108.36	0.9	3,026	0,150
<b>Grand Total</b>	518.63	1.4	22,951	492.40	3.5	54,660	1,011.02	2.4	77,612	3,280

## Notes:

- (1) (a) Quoted as mill delivered metric tonnes and Run of Mine, or RoM, grades, inclusive of all mining dilutions and gold losses except mill recovery. Metallurgical recovery factors have not been applied to the reserve figures. The approximate metallurgical factors are as follows: (1) KDC underground 97% and surface 85% to 92%; (2) Beatrix underground 96% and surface 88%; (3) South Deep 97%; (4) Tarkwa 97% for milling, 49% to 89% for heap leach; (5) Damang 91.5% to 93.5%; (6) St. Ives 83% to 94% for milling, 55% to 75% for heap leach; (7) Agnew 94.5%; and (8) Cerro Corona 69% for gold and 87% for copper. The metallurgical recovery is the ratio, expressed as a percentage, of the mass of the specific mineral product actually recovered from ore treated at the plant to its total specific mineral content before treatment. The South African operations have a fairly consistent metallurgical recovery, while the recoveries on the International operations vary according to the mix of the source material and method of treatment.
- (b) For KDC, South Deep and Beatrix, a gold price of Rand 310,000 per kilogram (\$1,300 per ounce at an exchange rate of Rand 7.42 per \$1.00) was applied in valuing ore reserve. For the Tarkwa and Damang operations, ore reserve figures are based on an optimized pit at a gold price of \$1,300 per ounce. For the Australian operations, ore reserve figures are based on a gold price of A\$1,400 per ounce (\$1,300 per ounce at an exchange rate of A\$1.08 per \$1.00). Open pit ore reserves at the Australian operations are similarly based on optimized pits. The gold price used for reserves is the approximate three-year trailing average, calculated on a monthly basis, of the London afternoon fixing price of gold. These prices are approximately 17% higher in South African Rand terms, 30% higher in U.S. dollar terms and 14% higher in Australian dollar terms than the prices used for the December 31, 2010 declaration and reflect the effect of a consistently increasing gold price on historical average. For the Cerro Corona gold reserves, the optimized pit is based on a gold price of \$1,300 per ounce and a copper price of \$3.5 per pound, which, due to the nature of the deposit and the importance of net smelter returns, need to be considered together.
- (c) For the South African operations, mine dilution relates to the difference between the mill tonnage and the stope face tonnage and includes other sources stopping (which is waste that is broken on the mining horizon, other than on the stope face), development to mill and tonnage discrepancy (which is the difference between the tonnage expected on the basis of the mine's measuring methods and the tonnage accounted for by the plant). For the International operations, dilution relates to unplanned waste and/or low-grade material being mined and delivered to the mill. Ranges are given for those operations that have multiple ore body styles and mining methodologies. The mine dilution factors are as follows: (i) Driefontein 23%; (ii) Kloof 27%; (iii) Beatrix 23%; (iv) South Deep 6%; (v) Tarkwa 11%; (vi) Damang 10% to 15%; (vii) St. Ives 6% to 13% (open pits) and 2% to 47% (underground); (viii) Agnew 12% to 38%; and (ix) Cerro Corona 0%.
- (d) The mining recovery factor relates to the proportion or percentage of ore mined from the defined ore body at the gold price used for the declaration of reserves. This percentage will vary from mining area to mining area and reflects planned and scheduled reserves against total potentially available reserves (at the gold price used for the declaration of reserves), with all modifying factors, mining constraints and pillar discounts applied. The mining recovery factors are as follows: (i) Driefontein 81%; (ii) Kloof 77%; (iii) Beatrix 76%; (iv) Tarkwa 98%; (v) Damang 100%; (vi) St. Ives 90% to 99% (open pits) and 75% to 95% (underground); (vii) Agnew 100%; and (viii) South Deep 100%.
- (e) The pay limit (South African operations) and cut-off grade (International operations) vary per shaft, open pit or underground mine, depending on the respective costs, depletion schedule, ore type and dilution. The following are the average or range of values applied in the planning process: (i) Driefontein 1,420 cm.g/t; (ii) Kloof 1,610 cm.g/t; (iii) Beatrix 920 cm.g/t; (iv) South Deep 3.5 g/t (at South Deep, the values are expressed in g/t due to the mining method); (v) Tarkwa 0.3 g/t for heap leach and 0.44 g/t for mill feed; (vi) Damang 0.5 g/t to 0.7 g/t for fresh ore and 0.3 g/t to 0.4 g/t for oxide ore; (vii) St. Ives 0.4 to 0.6 g/t for heap leach, 0.7 g/t for mill feed open pit, and 2.6 g/t to 3.7 g/t for mill feed underground; (viii) Agnew 0.4 g/t for mill feed stockpiles, and 3.1 to 4.4 g/t for mill feed underground; and (ix) Cerro Corona \$18.01 net smelter return (combined copper and gold).
- (f) Totals may not sum due to rounding. Where this occurs it is not deemed significant.
- (g) A Mine Call Factor based on historic performance and planned improvements is applied to the mineral reserves. The following Mine Call Factors have been applied: KDC East 83%, KDC West 85%, Beatrix 79%, South Deep 104% to 108%, Damang 92%, St Ives 97%, with Tarkwa, Agnew and Cerro Corona at 100%.
- (2) Actual gold produced after metallurgical recovery.

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- (3) Above infrastructure reserves relate to mineralization which is located at a level at which an operation currently has infrastructure sufficient to allow mining operations to occur. Below infrastructure reserves relate to mineralization which is located at a level at which an operation currently does not have infrastructure sufficient to allow mining operations to occur, but where the operation has made plans to install additional infrastructure in the future which will allow mining to occur at that level. The current studies for below infrastructure reserves at Driefontein, which contemplate accessing the area through multiple declines, resulted in the exclusion of the below infrastructure reserve ounces at this operation due to economic and project prioritization reasons.
- (4) Includes some gold produced from stockpile material, which cannot be separately measured.
- (5) Excludes inferred material within the pit design.

The following table sets forth the proved and probable copper reserves of the Cerro Corona mine as of December 31, 2011 that are attributable to Gold Fields.

**Copper ore reserve statement as of December 31, 2011<sup>(1)(2)</sup>**

	Tonnes	Proved Reserves Grade Cu	Cu	Tonnes	Probable Reserves Grade Cu	Cu	Tonnes	Total Reserves Grade Cu	Cu	Attributable copper production in fiscal 2011 (million lbs)
	(million)	(%)	(million lbs)	(million)	(%)	(million lbs)	(million)	(%)	(million lbs)	(million lbs)
Surface (Open Pit) Peru										
Cerro Corona	85.2	0.5	897	23.1	0.4	212	108.4	0.5	1,109	79.12

Notes:

- (1) Metallurgical recovery factors have not been applied to the reserve figures. The approximate metallurgical factor for copper at Cerro Corona is 87%.
- (2) For the copper reserves, the optimized pit is based on a gold price of \$1,300 per ounce and a copper price of \$3.50 per pound, which, due to the nature of the deposit, need to be considered together.

**Gold and copper price sensitivity**

The amount of gold mineralization that Gold Fields can economically extract, and therefore can classify as reserves, is very sensitive to fluctuations in the price of gold. At gold prices significantly different than the gold price of \$1,300 per ounce used to estimate Gold Fields attributable gold reserves (excluding copper) of 77.6 million ounces of gold as of December 31, 2011 listed above, Gold Fields operations would have had materially different reserves. The following table indicates the Gold Fields reserves at different gold prices that are 10% above and below the \$1,300 per ounce gold price used to estimate Gold Fields attributable reserves, however the reserve sensitivities are not based on detailed depletion schedules and should be considered on a relative and indicative basis only.

	\$1,170/oz	\$1,300/oz ( '000 oz)	\$1,430/oz
KDC <sup>(1)</sup>	15,243	16,576	17,909
Beatrix <sup>(1)</sup>	3,772	4,958	5,553
South Deep	28,976	36,576	38,324
Tarkwa	8,289	9,310	10,188
Damang	2,723	3,051	3,222
St. Ives	2,430	2,813	3,112
Agnew	1,164	1,302	1,398
Cerro Corona <sup>(2)</sup>	3,026	3,026	3,026

Notes:

- (1) South African operations reserves include run-of-mine ore stockpiles, TSFs and low-grade strategic stockpiles.

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- (2) Under the current tailings dam design at Cerro Corona, reserves would not respond to an upward movement of the gold price because of current capacity constraints at the tailings storage facility for the Cerro Corona mine. A decrease of 10% in gold prices is insufficient to affect the level of gold reserves.

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The London afternoon fixing price for gold on March 23, 2012 was U.S.\$1,664 per ounce. Gold Fields' attributable gold reserves increased from 74.6 million ounces at December 31, 2010 to 77.6 million ounces at December 31, 2011, primarily due to increased reserves at South Deep, Cerro Corona, Damang and Tarkwa as a result of modeling enhancements, increased gold prices, the removal of constraints and further exploration. In addition, the West Wits Tailings Treatment Project has been included in the gold mineral reserve.

The amount of copper mineralization that Gold Fields can economically extract, and therefore can classify as reserves, could be sensitive to fluctuations in the price of copper. However, under the current tailings dam design at Cerro Corona, reserves would not respond to an upward movement of the copper price because of current capacity constraints at the tailings storage facility for Cerro Corona and a decrease of 10% in copper prices is insufficient to affect the level of copper reserves.

The London Metal Exchange, or LME, cash buyer price for copper on March 23, 2012 was U.S.\$8,401 per tonne.

Gold Fields' methodology for determining its reserves is subject to change and is based upon estimates and assumptions made by management regarding a number of factors as noted above under *Methodology*. Accordingly, the sensitivity analysis of Gold Fields' reserves provided above should not be relied upon as indicative of what the estimate of Gold Fields' reserves would actually be or have been at the gold or copper prices indicated, or at any other gold or copper price, nor should it be relied upon as a basis for estimating Gold Fields' ore reserves based on the current gold or copper price or what Gold Fields' reserves will be at any time in the future. See *Risk Factors*. Gold Fields' reserves are estimates based on a number of assumptions, any changes to which may require Gold Fields to lower its estimated reserves.

### ***Geology***

Approximately 53% of Gold Fields' gold production (excluding gold equivalent ounces) is derived from deep-level underground gold mines located along the northern and western margins of the Witwatersrand Basin in South Africa. Including gold equivalent ounces, Gold Fields' South African operations represent approximately 49% of total production. These properties include the KDC operation, the Beatrix operation and the South Deep operation. These mines are typical of the many Witwatersrand Basin operations, which have been the primary contributors to South Africa's production of a significant portion of the world's recorded gold output since 1886.

The Witwatersrand Basin comprises a 6,000 meter vertical thickness of sedimentary rocks, extending laterally for some 350 kilometers northeast to southwest by some 1,200 kilometers northwest to southeast, generally dipping at shallow angles toward the center of the basin. The basin outcrops at its northern extent near Johannesburg but to the west, south and east it is overlaid by up to 4,000 meters of volcanic and sedimentary rocks. The Witwatersrand Basin is Archaean in age, meaning the sedimentary rocks are of the order of 2.8 billion years old.

Gold mineralization occurs within laterally extensive quartz pebble conglomerate horizons called reefs, which are developed above unconformable surfaces near the basin margin. As a result of faulting and primary controls on mineralization processes, the goldfields are not continuous and are characterized by the presence or dominance of different reef units. The reefs are generally less than two meters in thickness and are widely considered to represent laterally extensive braided fluvial deposits or unconfined flow deposits, which formed along the flanks of alluvial fan systems around the edge of an inland sea. Dykes and sills of diabase or dolerite composition are developed within the Witwatersrand Basin and are associated with several intrusive and extrusive events.

The gold generally occurs in native form, often associated with pyrite, carbon and uranium. Pyrite and gold within the reefs display a variety of forms, some obviously indicative of detrital transport within the depositional system and others suggesting crystallization within the reef itself.



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The most fundamental controls of gold distribution are the primary sedimentary features such as facies variation and channel directions. Consequently, the modeling of sedimentary features within the reefs and the correlation of payable grades within certain facies is key to in situ reserve estimation as well as effective operational mine planning and grade control.

For a discussion of the geological features present at the Tarkwa, Damang, St. Ives, Agnew and the Cerro Corona mines, see the geology discussion contained in the description of each of those mines found below under [Gold Fields Mining Operations Ghana Operations Tarkwa Mine](#), [Gold Fields Mining Operations Ghana Operations Damang Mine](#), [Gold Fields Mining Operations Australia Operations St. Ives, Mining Operations Australia Operations Agnew](#), [Gold Fields Mining Operations Peru Operations Cerro Corona](#).

## **Description of Mining Business**

The discussion below provides a general overview of the mining business as it applies to Gold Fields.

### ***Exploration***

Exploration activities are focused on the extension of existing ore bodies and identification of new ore bodies both at existing sites and at undeveloped sites. Once a potential ore body has been discovered, exploration is extended and intensified in order to enable clearer definition of the ore body and the potential portions to be mined. Geological techniques are constantly refined to improve the economic viability of prospecting and mining activities.

### ***Mining***

Gold Fields currently mines only gold, with copper and silver as by-products. The mining process can be divided into two principal activities: (i) developing access to the ore body; and (ii) extracting the ore body once accessed. These two processes apply to both surface and underground mines.

#### ***Underground Mining***

##### ***Developing Access to the Ore body***

For Gold Fields South African underground mines, primary access to ore bodies is provided through vertical and inclined shaft systems. If access beyond the reach of a shaft or shaft system is required to fully exploit the ore body, sub-vertical or sub-inclined shafts (secondary or tertiary) may be sunk where it is economically feasible. Horizontal development at various intervals off a shaft, known as levels, extends laterally and provides access to the reef horizon. On-reef development opens up the ore body for mining.

##### ***Extracting the Ore body***

Once an ore body has been accessed and opened up for mining, production activities consisting of drilling, blasting, supporting and cleaning activities are carried out on a daily basis. At KDC and Beatrix, the broken ore is scraped into and along gullies to in-stope ore passes, which channel the broken ore to the crosscut below. The ore is then trammed by rail to the shaft system where it is tipped into transfer systems and then hoisted to the surface in skips. At South Deep, now a fully mechanized mine, ore is hauled by trucks along decline corridors to ore pass systems which connect the corridors to the crosscuts below. The ore is then transported by rail and tipped into the shaft transfer system and hoisted to the surface. At the Australian underground operations, the broken ore is loaded straight from the stope face into trucks, using mechanical loaders, and hauled to the surface by underground dump trucks via the decline. Mining methods employed at Gold Fields South African operations include de-stress mining, long hole open stoping, drift-and-fill mining, as well as drifting and benching at South Deep, longwall mining, closely spaced dip pillar mining and scattered mining at KDC and Beatrix. At the Australian underground operations, all mining activities are mechanized and trackless.

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### ***Open Pit-Mining***

#### ***Opening up the Ore body***

In open-pit mining, access to the ore is achieved by stripping the overburden in benches of fixed height to expose the ore below. This is most typically achieved by drilling and blasting an area, loading the broken rock with excavators into dump trucks and hauling the rock and/or soil to dumps.

#### ***Extracting the Ore body***

Extraction of the ore body in open pit mining involves the same activity as in stripping the overburden. Lines are established demarcating ore from waste material and the rock is then drilled and blasted. The ore is loaded into dump trucks and hauled to the crusher or stockpile, while the waste is hauled to waste rock dumps.

### ***Rock Dump and Production Stockpile Mining***

Gold Fields mines surface rock dumps and production stockpiles using mechanized earth-moving equipment.

### ***Mine Planning and Management***

Operational and planning management on the mines receives support from corporate management and centralized support functions. The current philosophy is one of top-down/bottom-up management, with the non-financial operational objectives at each mine defined by the personnel at the mine based on parameters, objectives and guidelines provided by Gold Fields corporate office. This is based on the premise that the people on the ground have the best understanding of what is realistically achievable.

Each operation compiles a detailed two-year operational plan that rolls into a life of mine, or LoM, plan prior to the commencement of each fiscal year. The plans are based on financial parameters determined by the Gold Fields Executive Committee, or the Executive Committee. See Directors, Senior Management and Employees Executive Committee . The operational plan is presented to the Executive Committee, which takes it to the Gold Fields Board of Directors, or the Board, for approval before the commencement of each fiscal year. The planning process is sequential and is based upon geological models, evaluation models, mine design, depletion schedules and, ultimately, financial analysis. Capital planning is formalized pursuant to Gold Fields capital spending planning process. Projects are categorized in terms of total expenditure, and all projects involving amounts exceeding Rand 250 million (South Africa), A\$35 million (Australia) and U.S.\$35 million (Ghana/Peru) are submitted to the Board for approval. Material changes to the plans have to be referred back to the Executive Committee and the Board.

The South African operations have implemented an integrated electronic reserve and resource information system, or IRRIS, to enhance LoM planning capabilities. This system provides a common planning platform to facilitate quicker, more flexible and more accurate short- and long-term planning and more timely identification of production shortfalls. Short-term planning on the operations is conducted monthly and aligned with the operational plan. Financial and economic parameters for the LoM and the operational plan are issued to the operations from the Executive Committee and relevant survey and evaluation factors are determined in accordance with Gold Fields guidelines. Significant changes in the LoM plans may occur from year-to-year as a result of mining experience, new ore discoveries, changes in the ore reserve estimates, changes in mining methods and rates, process changes, investment in new equipment and technology, input costs and metal prices.

### ***Processing***

Gold Fields currently has 15 gold processing facilities (eight in South Africa, three in Ghana, three in Australia and one in Peru) which treat ore to extract gold and, in the case of Cerro Corona, copper and gold. A typical processing plant circuit includes two phases: comminution and treatment.

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### *Comminution*

Comminution is the process of breaking up the ore to expose and liberate the gold and make it available for treatment. Conventionally, this process occurs in multi-stage crushing and milling circuits, which include the use of jaw and gyratory crushers and rod, tube, ball and semi-autogenous grinding, or SAG, mills. Most of Gold Fields' milling circuits utilize SAG milling where the ore itself and steel balls are used as the primary grinding media. Through the comminution process, ore is ground to a pre-determined size before proceeding to the treatment phase.

### *Treatment*

In most of Gold Fields' metallurgical plants, gold is extracted into a leach solution by leaching with cyanide in agitated tanks. Gold is then extracted onto activated carbon from the solution using either the CIL or CIP process. The activated carbon is then eluted with gold recovered by electrowinning.

Gold Fields has two active heap leach operations. In the heap leach process, crushed ore is stacked on impervious leach pads and a cyanide leaching solution is sprayed on the pile. The solution percolates through the heap and dissolves liberated gold. A system of underdrains removes the gold-containing solution, which is then passed through columns containing activated carbon. The loaded carbon is then eluted and the gold recovered by electrowinning.

As a final recovery step, gold recovered from the carbon using the above processes is smelted to produce rough gold bars. These bars are then transported to the refinery which is responsible for refining the bars to good delivery status.

At Cerro Corona, gold/copper concentrate is produced using a standard flotation process. The concentrate is then shipped to a third-party smelter for further processing.

### ***Productivity and Cost Initiatives***

Towards the end of fiscal 2008, Gold Fields' operations reviewed a number of their productivity and cost projects in order to ensure that focus was only on those projects with substantial value beyond the next five years. The result of the review was the identification of a suite of projects, as noted below:

**Business Process Re-engineering Program** The BPR program focuses on operating costs, the rationalization of on-mine and regional overhead and review of the mine-to-mill process. The BPR has been implemented across the Group. The BPR program focuses on reviewing the business processes at Gold Fields' mines, including operational production processes, costs and capital structures. The goals of the plan are to achieve a sustainable gold output at an NCE margin of 20% in the short-term, and 25% in the long-term. During fiscal 2011, the BPR program delivered more than R840 million in savings in South Africa, U.S.\$43 million in West Africa and commenced in Australia. The project consists of more than 300 initiatives. The second phase of the project, which has been incorporated into the 2012 operational plans for the South Africa region, seeks to achieve cost reductions through revising organizational structures and optimizing business processes, including enhanced supply chain management, reducing employee and non-specialized contractor headcount, and power consumption reduction.

*Stoping Full Potential Program* is a productivity initiative that aims to improve quality mining volumes by increasing the face advance by between 5% and 10% per annum, based on fiscal 2010 actuals. This should translate to similar improvements in tons broken over the same period. This should be achieved through the following key improvement initiatives:

drilling and blasting practices to improve advance per blast;

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support, cleaning and sweeping practices to improve blasting frequency;

mining cycle, labor availability and training; and

improved pay face availability.

*Developing Full Potential Program*, which is development on the horizontal plane, is a technology sub-group initiative aimed at mechanizing all flat-end development at the long-life shafts of KDC and Beatrix. The aim of the project is to improve safety and productivity, reduce development costs and increase ore reserve flexibility. The project achieved a mechanized rate of 89.6% of flat-end development at the long life shafts by December 31, 2011. South Deep is excluded as it is already a fully-mechanized mine.

NCE Full Potential Program is an initiative (previously known as Project 3M) that aims to reduce costs at the mature KDC and Beatrix mines by around R500 million (U.S.\$60 million) over the next two years and to improve Gold Fields' ability to absorb rising input costs. This program includes projects such as those discussed below:

*The Energy and Utilities Project* focuses on reducing, by the end of fiscal 2012, the consumption of power, compressed air and water by 10%. For example, in fiscal 2011, savings of 3% in power consumption were achieved in South Africa. This project is driven primarily at reducing the safety risk to employees of interruptible power supply, maintaining the integrity of equipment and machinery in the face of power supply risks and minimizing the erosion of operating margins due to higher power tariffs and oil prices.

Some of the key initiatives include on-line monitoring of power consumption, main fan inlet-vane control, energy-efficient lighting, energy-efficient machinery and equipment, and reducing compressed air and water usage through stope shut-off valves. In the case of diesel, strict controls are being enforced, supported by the replacement of diesel with battery locomotives.

*The Workplace Absenteeism Project ( Unavailables Project )* focuses on reducing workplace absenteeism in order to minimize the impact of lost shifts on production. In the South Africa region, the goal is to reduce absenteeism by 2%. Some of the key initiatives under this project include reducing unnecessary time spent by employees in training, work orientation and recruitment and healthcare assessment processes by creating a one-stop engagement and health-assessment center, particularly for KDC. Stricter controls have been implemented to manage sick leave and its abuse, while maintaining focus on continual improvement of wellness programs and employee and union relations.

*The Above-ground Cost Project* focuses on reducing surface costs by at least R100 million per annum. Various initiatives are in place including review of surface labor, improving workshop performance, implementing salvage and reclamation programs, enhancing procurement processes, and efficient management and utilization of inventories through a vigorous application of standards and norms.

**Project 4M** *Achievement of the Mine Health and Safety Council (MHSC) Milestones, as agreed to on June 15, 2003.* This initiative focuses on the Mine Health and Safety Council, or the MHSC, milestones agreed to on June 15, 2003 at a tripartite health and safety summit comprising representatives from the government, organized labor unions and associations, and mining companies. The focus is on achieving occupational health and safety targets and milestones over a ten year period. In order to meet the noise-induced hearing loss target of reducing the total noise level to not more than 110 dBA, a number of action plans, based on the highest potential exposure sources, were implemented. These include, *inter alia*: the silencing of all auxiliary fans, pneumatic loaders and diamond drills. Progress, as of December 31, 2011, across all operations for the NIHL target was 98.2% of all noise measurements taken were not more than 110 dBA.

Silicosis remains one of the biggest health risks associated with the gold mining industry. In order to meet the Silicosis target of reducing all silica dust measurement to below 0.1 mg/m<sup>3</sup> a number of action plans, based on the highest potential exposure sources, were implemented. These include, *inter alia*: the installation of tip



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foggers, tip doors and foot wall treatment, all designed to reduce the liberation of dust into the ventilating air. As of December 31, 2011, only 0.6 % of silica dust measurements taken were above the target of 0.1 mg/m<sup>3</sup>. Progress against all interventions is monitored monthly and reviewed quarterly. See Directors, Senior Management and Employees Employees Health and Safety Safety .

### ***Refining and Marketing***

#### ***South Africa***

Gold Fields has appointed Rand Refinery Limited, or Rand Refinery, to refine all of Gold Fields South African-produced gold. Rand Refinery is a non-listed public company in which Gold Fields holds a 34.9% interest, with the remaining interests held by other South African gold producers.

Since October 1, 2004, Gold Fields treasury department arranges the sale of all the gold production from the South African operations. Rand Refinery advises Gold Fields on a daily basis of the amount of gold available for sale. Gold Fields sells the gold at a price benchmarked against the London afternoon fixing price. Two business days after the sale of gold, Gold Fields deposits an amount in U.S. dollars equal to the value of the gold at the London afternoon fixing price into Rand Refinery's nominated U.S. dollar account. Rand Refinery deducts refining charges payable by Gold Fields relating to such amount of gold and deposits the balance of the proceeds into the nominated U.S. dollar account of Gold Fields.

#### ***Ghana***

All gold produced by Gold Fields at the Tarkwa and Damang mines in Ghana is refined by Rand Refinery pursuant to two non-exclusive evergreen agreements entered into in October 2004 between Rand Refinery and Gold Fields Ghana and between Rand Refinery and Abosso. Under these agreements, Rand Refinery collects, refines and sells gold as instructed by Gold Fields Ghana and Abosso. Rand Refinery assumes responsibility for the gold upon collection at either the Tarkwa or Damang mine. The gold is then transported to the Rand Refinery premises in Johannesburg, South Africa, where it is refined. Gold Fields Ghana and Abosso reimburse Rand Refinery for transportation costs. Under these agreements, Rand Refinery sells the refined gold on behalf of Gold Fields Ghana and Abosso at the London afternoon fixing price for gold on the date of delivery. Rand Refinery receives refining fees for gold received, and a realization fee for gold refined. Each of these agreements continues until either party terminates it upon 90 days written notice.

#### ***Australia***

In Australia, all gold produced by St. Ives and Agnew is refined by the Western Australian Mint. An evergreen agreement between St. Ives Gold Mining Company Pty Ltd, Agnew Gold Mining Company Pty Ltd and AGR Matthey, which became effective on September 1, 2002, has been transferred by Deed of Novation to the Western Australian Mint. The Western Australian Mint applies competitive charges for the collection, transport and refining services. The collection and transportation fees are calculated by the weight of the unrefined gold and a nominal fixed fee component. The refining fees are calculated per ounce of refined gold produced which includes small refining losses of both gold and silver, with additional assay and environmental disposal charges. The Western Australian Mint takes responsibility for the unrefined gold at collection from St. Ives and Agnew where they engage a sub-contractor, Brinks Australia. Brinks delivers the unrefined gold to the Western Australian Mint in Perth, Australia, where it is refined and the refined ounces of gold and silver are credited to the relevant metal accounts held by St. Ives and Agnew with the Western Australian Mint. St. Ives and Agnew then inform Gold Fields treasury in the corporate office in Johannesburg of the amount of fine gold available for sale in Perth, Australia. After such confirmation, Gold Fields treasury either sells the gold directly to the Western Australian Mint, at the London afternoon fixing price, or swaps it into London for a competitive fee per ounce, meaning the Western Australian Mint provides that volume of fine gold in London for sale by Gold Fields. In the case of a location swap, the Western Australian Mint is instructed to credit St. Ives or Agnew's metal account held with Deutsche Bank, London. Once the gold is sold to a third-party, Deutsche Bank

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in London is instructed by Gold Fields to deliver the gold to the relevant counterparty bank. All silver is sold to the Western Australian Mint at market rates. The agreement with the Western Australian Mint continues indefinitely until terminated by either party upon 90 days' written notice.

### *Peru*

La Cima has three contracts for the sale of approximately 75% of concentrate from the Cerro Corona mine, one with a Japanese refiner, one with a South Korean refiner and one with a German refiner. Two of the contracts expire on December 31, 2015, while the third contract expires on December 31, 2014. Under these contracts, La Cima is to sell approximately 25% of the concentrate to each company and to use reasonable efforts to spread the deliveries evenly throughout the year. Risk passes when the concentrate is loaded in the port of Salaverry, Peru or an alternative port chosen by La Cima. Pricing for copper and gold under each of the contracts is based on average LME copper prices and London Bullion Market Association gold prices, respectively. All production in excess of the amounts sold under long term contracts is sold on the spot market.

### *World Gold Council*

Gold Fields supports and participates in the gold marketing activities of the World Gold Council, or WGC, and, prior to January 1, 2009, contributed to the WGC in support of its activities at a rate of \$1.75 per ounce of the gold it produced in South Africa (excluding gold produced from the South Deep Project) and Australia and \$1.75 per ounce of its attributable production from Tarkwa and Damang. From January 1, 2009, the amount contributed per ounce increased to \$1.85 and from April 1, 2010, the amount contributed per ounce increased to \$2.00 per ounce.

### *Services*

Mining activities require extensive services, located both on the surface and underground at the mines. Services include:

mining-related services such as engineering, rock mechanics, ventilation and refrigeration, materials handling, operational performance evaluation and capital planning;

safety and training;

housing and health-related services, including hostel and hospital operations;

reserves management, including sampling and estimation, geological services, including mine planning and design, and mine survey;

metallurgy;

equipment maintenance; and

assay services.

Most of these services are provided directly by Gold Fields, either at the operational level or through the regional or corporate office, although some are provided by third-party contractors.

## **Gold Fields Mining Operations**

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Gold Fields conducts underground mining operations at each site except Tarkwa, Damang and Cerro Corona and conducts some processing of surface rock dump material at KDC, Beatrix and South Deep. Surface rock dump material at Agnew was completed in October 2008. Gold Fields conducts open pit mining at Tarkwa, Damang, St. Ives (which also conducts underground mining) and Cerro Corona and also processes material from production stockpiles at Tarkwa, Damang and St. Ives.



**Table of Contents****Total Operations**

The following table details the operating and production results (including gold equivalents) for each of fiscal 2011, the six month period ended December 31, 2010 and fiscal 2010 and 2009 for all operations owned by Gold Fields during that fiscal year.

	Fiscal 2009	Fiscal 2010	Six-Month Period Ended December 31, 2010	Fiscal 2011
<b>Production</b>				
Tons ( 000)	52,907	56,702	29,008	59,441
Recovered grade (g/t)	2.2	2.1	2.1	1.9
Gold produced ( 000 oz <sup>1</sup> )	3,691	3,841	1,983	3,697
<b>Results of operations (\$ million)</b>				
Revenues	3,228.3	4,164.3	2,564.2	5,800.1
Total production costs <sup>(2)</sup>	2,430.5	3,212.4	1,892.4	3,839.9
Total cash costs <sup>(3)</sup>	1,986.1	2,572.8	1,494.6	3,084.9
Cash profit <sup>(4)</sup>	1,242.2	1,591.5	1,069.6	2,715.2
<b>Cost per ounce of gold (\$)</b>				
Total production costs	659	837	953	1,039
Total cash costs	538	670	753	835
<b>Notional cash expenditure per ounce of gold produced (\$)<sup>(5)</sup></b>	<b>763</b>	<b>928</b>	<b>1,060</b>	<b>1,153</b>

## Notes:

- (1) In fiscal 2009, 3.414 million ounces were attributable to Gold Fields, in fiscal 2010, 3.497 million ounces were attributable to Gold Fields, in the six month period ended December 31, 2010, 1.806 million ounces were attributable to Gold Fields and in fiscal 2011, 3.485 million ounces were attributable to Gold Fields, with the remainder attributable to noncontrolling shareholders in the Ghana and Peru operations during each of those periods.
- (2) For a reconciliation of Gold Fields' total production costs to production costs, see "Operating and Financial Review and Prospects - Results of Operations - Years Ended December 31, 2011 and June 30, 2010 - Costs and Expenses", "Operating and Financial Review and Prospects - Results of Operations - Six Months Ended December 31, 2010 and 2009 - Costs and Expenses" and "Operating and Financial Review and Prospects - Results of Operations - Years Ended June 30, 2010 and 2009 - Costs and Expenses".
- (3) For a reconciliation of Gold Fields' total cash costs to production costs, see "Operating and Financial Review and Prospects - Results of Operations - Years Ended December 31, 2011 and June 30, 2010 - Costs and Expenses", "Operating and Financial Review and Prospects - Results of Operations - Six Months Ended December 31, 2010 and 2009 - Costs and Expenses" and "Operating and Financial Review and Prospects - Results of Operations - Years Ended June 30, 2010 and 2009 - Costs and Expenses".
- (4) Cash profit represents revenues less total cash costs.
- (5) For a reconciliation of Gold Fields' NCE to its production costs for fiscal 2011, the six month period ended December 31, 2010 and fiscal 2010 and 2009, see "Operating and Financial Review and Prospects - Costs - Notional Cash Expenditure".

**Table of Contents****Underground Operations**

The following table details the operating and production results for Gold Fields' underground operations for fiscal 2011, the six month period ended December 31, 2010 and fiscal 2010 and 2009. The underground operations include all of the mines in the South African operations and the underground portions of the mines in the Australian operations.

	Fiscal 2009	Fiscal 2010	Six-Month Period Ended December 31, 2010	Fiscal 2011
<b>Production</b>				
Tons ( '000)	11,541	11,714	6,219	11,516
Recovered grade (g/t)	6.2	5.7	5.6	5.4
Gold produced ( '000 oz <sup>1</sup> )	2,300	2,155	1,114	1,984
<b>Results of operations (\$ million)</b>				
Revenues	2,015.2	2,338.3	1,432.1	3,150.2
Total production costs	1,508.9	2,055.8	1,261.0	2,770.6
Total cash costs	1,216.6	1,640.0	996.8	2,268.7
Cash profit <sup>(2)</sup>	798.6	698.3	435.3	881.5
<b>Cost per ounce of gold (\$)</b>				
Total production costs	656	954	1,132	1,397
Total cash costs	529	761	894	1,144

Notes:

- (1) In fiscal 2009, 2.300 million ounces were attributable to Gold Fields. In fiscal 2010, all 2.155 million ounces were attributable to Gold Fields, in the six month period ended December 31, 2010, 1.078 million ounces were attributable to Gold Fields and in fiscal 2011, 1.983 million ounces were attributable to Gold Fields.
- (2) Cash profit represents revenues less total cash costs.

Tons milled from the underground operations decreased from 11.7 million tons in fiscal 2010 to 11.5 million tons in fiscal 2011. At the South African operations, the decrease was mainly due to reductions in the area mined resulting from wage-related industrial action, changes in mining practice in favor of improved safety and reduced face length available for mining. The amount of gold produced from underground operations decreased from 2.155 million ounces in fiscal 2010 to 1.984 million ounces in fiscal 2011. In addition to the effects of reduced underground volumes mined, this decrease was primarily due to a decline in grade associated with changes to the mining mix.

**Table of Contents****Surface Operations**

The following table details the operating and production results (including gold equivalents) for Gold Fields' surface operations for fiscal 2011, the six month period ended December 31, 2010 and fiscal 2010 and 2009. Surface operations include all of the mines in the Ghana, Australia and Peru operations, the open pit portions of the mines in the Australian operations and the surface rock dump material at the mines in the South African operation.

	Fiscal 2009	Fiscal 2010	Six-Month Period Ended December 31, 2010	Fiscal 2011
<b>Production</b>				
Tons ( '000)	41,366	44,988	22,789	47,925
Recovered grade (g/t)	1.0	1.2	1.2	1.1
Gold produced ( '000 oz <sup>1</sup> )	1,391	1,686	869	1,713
<b>Results of operations (\$ million)</b>				
Revenues	1,231.1	1,826.0	1,132.1	2,649.9
Total production costs	921.6	1,156.6	631.0	1,069.3
Total cash costs	769.5	932.8	497.8	816.2
Cash profit <sup>(2)</sup>	461.6	893.2	634.3	1,833.7
<b>Cost per ounce of gold (\$)</b>				
Total production costs	663	686	726	624
Total cash costs	553	553	574	476

## Notes:

(1) In fiscal 2009, 1.114 million ounces were attributable to Gold Fields, in fiscal 2010, 1.342 million ounces were attributable to Gold Fields, in the six month period ended December 31, 2010, 0.692 million ounces were attributable to Gold Fields and in fiscal 2011, 1.502 million ounces were attributable to Gold Fields, with the remainder attributable to noncontrolling shareholders in the Ghana and Peru operations during each period.

(2) Cash profit represents revenues less total cash costs.

Tons milled and treated from the surface operations increased from 45.0 million tons in fiscal 2010 to 47.9 million tons in fiscal 2011, mainly because of acceleration in the treatment of surface rock dump material facilitated through the introduction of the Python mobile processing plant at KDC.

**KDC Operation***Introduction*

The KDC mine is located in the Gauteng Province of South Africa in the Far West Rand mining district, some 60 kilometers southwest of Johannesburg. It is South Africa's largest mine by gold production, with KDC West having produced more than 100 million ounces of gold during its 75 year history. KDC is comprised of the Driefontein and Kloof mines, which were consolidated under a single management team as part of the BPR program.

In fiscal 2011, KDC produced 1.1 million ounces of gold. As of December 31, 2011, KDC had approximately 26,300 employees and approximately 4,000 outside contractors.

*History*

The Driefontein operation was formed from the consolidation in 1981 of the East Driefontein and West Driefontein mines. Gold mining began at Driefontein in 1952. The Kloof operation was the result of the consolidation of the Kloof, Libanon, Leeudoorn and Venterspost mines. Gold mining began in the area now covered by these operations in 1934.



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### *Geology*

Geologically, the KDC mine is located on the northwestern and western rims of the Witwatersrand Basin. Three primary reefs are exploited: the Ventersdorp Contact Reef, or VCR, located at the top of the Central Rand Group; the Carbon Leader Reef, or Carbon Leader, near the base; and the Middelvlei Reef, or MVR, which stratigraphically occurs some 50 to 75 meters above the Carbon Leader.

The Driefontein operation is located in the West Wits Line that forms part of the Far West Rand of the Witwatersrand Basin. The operation is geologically divided into an eastern section and a western section, separated by a bank anticline and associated faulting. Gold mineralization at the Driefontein operation is contained within three reef horizons. The Carbon Leader, the VCR, and the MVR, occur at depths of between 500 meters and 4,000 meters. Stratigraphically, the Carbon Leader is situated 40 to 70 meters below the VCR and MVR and is a generally high-grade reef comprising different facies and dips to the south at approximately 25 degrees. The Carbon Leader sub crops against the VCR in the eastern part of the mine. The west-dipping Bank Fault defines the eastern limit of both reefs. The VCR is most extensively developed in the east, and sub crops to the west. The MVR is a secondary reef, situated approximately 50 meters above the Carbon Leader, and, at present, it is a minor contributor to reserves and production. The average gold grades vary with lithofacies changes in all of the reefs.

The Kloof operation lies between the Bank Fault to the west, and the north trending West Rand Fault to the east. The latter truncates the VCR along the eastern boundary of the mine, with a 1- to 1.5-kilometer up throw to the east. Normal faults are developed sub-parallel to the westerly dipping West Rand Fault, with sympathetic north- northeast trending dykes that show little to no apparent offset of the stratigraphy. A conjugate set of faults and dykes occurs on a west-southwest trend, with throws of 1 to 15 meters. Structures that offset the VCR increase in frequency toward the southern portion of the mine as the Bank Fault is approached.

### *Mining*

KDC is comprised of 13 producing shaft systems that mine different contributions from pillars and open ground, five gold plants of which two process mainly underground ore and three process mainly surface material. Older portions of KDC West, which include Shafts No. 2 (West), 6 (West) and 8 (West), production is focused on remnant pillar extraction and accessing and mining of secondary reef horizons. In the southern, newer portions of the mine, which include Shafts No. 1 (West), 4 (West) and 5 (West), the focus is on scattered or closely spaced dip pillar mining. In the far western portion of the mine, at Shafts No. 10 (West) and 6 Tertiary (West), reclamation and cleaning operations are being conducted. The shafts at the deepest levels of the mine, consisting of Shaft No. 1 Tertiary (West) and Shaft No. 5 Sub-Vertical (West), employ the closely spaced dip pillar mining method. This method provides additional mining flexibility. The current preferred mining method at KDC is breast stoping with closely spaced dip pillar mining, with limited application of scattered and remnant pillar mining in the mature areas. Shafts No. 1 (East), 3 (East), 4 (East) and 7 (East) provide the main centers of current production at the KDC East operation.

Additionally at KDC, over the last several years, the planned extraction schedule for the Shaft No. 1 (East) pillar, or the Main Shaft Pillar, in the VCR, was reduced from an initial 6,000 square meters per month to approximately 2,000 square meters in order to decrease seismicity. Recent work by Gold Fields and Groundwork Consulting (Pty) Ltd. indicated that, towards the latter stages of extraction, the sub-vertical shaft barrels would be threatened and would necessitate a replacement infrastructure, hence alternative scenarios that are being reviewed include not mining the inner section of the pillar in order to protect the Main Shaft infrastructure. Moreover, the profile for Shaft No.7 (East) has also been significantly reduced and simulations of building up Shaft No. 4 (East) production to replace the declining Shaft No. 7 (East) profile are underway. Shaft No. 8 (East) is predominantly mining the lower-grade MVR with reduced remnant mining on the VCR horizon.

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Short-term grade management is well-entrenched at KDC and initiatives to drive the mine call factor, or MCF, and quality mining is in place to help achieve the full potential of the mining grade. The objective of the MCF program is to reduce the gap in grade between the stope face and the plant, by optimizing the size of rock fragments delivered to the plant and ensuring effective cleaning of ore accumulations.

Detailed below are the operating and production results at KDC for fiscal 2011 and the six month period ended December 31, 2010 and the operating and production results for Driefontein and Kloof for fiscal 2010 and 2009.

	Fiscal 2009		Fiscal 2010		Six-Month Period Ended December 31, 2010	Fiscal 2011
	Driefontein	Kloof	Driefontein	Kloof		
<b>Production</b>						
Tons ( 000)	6,217	3,319	6,084	4,299	5,152	10,831
Recovered grade (g/t)	4.2	6.0	3.6	4.1	3.8	3.2
Gold produced ( 000 oz)	830	643	710	567	634	1,100
<b>Results of operations (\$ million)</b>						
Revenues	726.5	562.3	770.9	613.2	814.4	1,745.5
Total production costs <sup>(1)</sup>	448.7	413.7	579.1	548.4	675.0	1,309.3
Total cash costs <sup>(2)</sup>	373.8	328.7	490.4	435.5	545.4	1,059.7
Cash profit <sup>(3)</sup>	352.7	233.6	280.5	177.7	269.0	685.8
<b>Cost per ounce of gold (\$)</b>						
Total production costs	541	643	816	968	1,065	1,190
Total cash costs	450	511	691	769	860	963
<b>Notional cash expenditure per ounce of gold produced (\$)<sup>(4)</sup></b>						
	610	698	923	1,053	1,149	1,248

Notes:

- (1) For a reconciliation of Gold Fields' total production costs to production costs, see Operating and Financial Review and Prospects Results of Operations Years Ended December 31, 2011 and June 30, 2010 Costs and Expenses, Operating and Financial Review and Prospects Results of Operations Six Months Ended December 31, 2010 and 2009 Costs and Expenses and Operating and Financial Review and Prospects Results of Operations Years Ended June 30, 2010 and 2009 Costs and Expenses.
- (2) For a reconciliation of Gold Fields' total cash costs to production costs, see Operating and Financial Review and Prospects Results of Operations Years Ended December 31, 2011 and June 30, 2010 Costs and Expenses, Operating and Financial Review and Prospects Results of Operations Six Months Ended December 31, 2010 and 2009 Costs and Expenses and Operating and Financial Review and Prospects Results of Operations Years Ended June 30, 2010 and 2009 Costs and Expenses.
- (3) Cash profit represents revenues less total cash costs.
- (4) For a reconciliation of Gold Fields' NCE to its production costs for fiscal 2011, the six month period ended December 31, 2010 and fiscal 2010 and 2009, see Operating and Financial Review and Prospects Costs Notional Cash Expenditure.

While no direct comparison can be drawn between the operating and production results of KDC in fiscal 2011 and those of Driefontein and Kloof in fiscal 2010, factors affecting the operating and production results at KDC in fiscal 2011 included changes implemented under the BPR program, safety related stoppages and industrial action.

The KDC operation is engaged in both underground and rock dump mining, and is thus subject to all of the underground and rock dump mining risks discussed in Risk Factors. The primary safety challenges facing the KDC underground operation include falls of ground, seismicity, flammable gas, water intrusion and temperatures. Water intrusion is dealt with through drilling, cementation sealing techniques and an extensive

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water-pumping network. Also, because rock temperatures tend to increase with depth, KDC requires an extensive cooling infrastructure. Gold Fields seeks to reduce the impact of seismicity at KDC by using the closely spaced dip pillar mining method. Early detection and increased ventilation of the shafts are being used to minimize the risk of incidents caused by flammable gas. Additionally, KDC has instituted a number of initiatives to reduce the risks posed by seismicity, including a detailed analysis of previous seismic events, precondition blasting and backfilling, the use of a support system to reduce the impact of seismic ground motion and to monitor seismic risk parameters to allow quicker reactions to changes. Centralized blasting systems have also been installed to allow better control of blasting so that most of the mine seismicity is triggered during off-shift periods. In addition, during fiscal 2009, the Driefontein operation adopted a revised stope support standard in all areas with friable hang wall and in areas that have the Westonia Formation Lava hang wall. Continued reviews of remnant and pillar mining areas were also conducted during the year leading to the stoppage of extraction at numerous higher risk areas across the mine. These stoppages reduced the falls of ground incidents, improving mine safety. The Driefontein operation contracted with external seismologists and rock engineers as a seismic task team to assess and improve seismic strategies.

As a result of the electricity stoppages experienced in 2008, and capital allocation decisions, sinking operations at Shaft No. 9 (West) were suspended indefinitely. In the interim, KDC will continue with the drilling program in the area below the lowest area currently being mined, targeting the area expected to be accessed by Shaft No. 9 (West). Gold Fields is also conducting an optimization study on mining below current infrastructure. This study is currently investigating a viable alternative to the Shaft No. 9 (West) project, such as a phased mini-decline system.

KDC continued to process low-grade surface material in fiscal 2011, for which the biggest risk is a decrease in grade of the remaining dumps. Grade management is undertaken through the screening of material to separate out the smaller fraction sizes of ore, which tend to be of higher grade. This process reduces the tonnage that will be available for processing. The surface operation safety risks include problems with ground stability, moving machinery and dust generation. KDC has a risk management system in place that guides the mining of the rock dumps to minimize these risks.

In total, during fiscal 2011, there were 13 fatalities at KDC. Of these, five were due to seismic related falls of ground, five resulted from gravity related falls of ground, two related to tramming operations and one related to a person falling from height. On a calendar year basis, the lost time injury frequency rate (see [Defined Terms and Conventions](#)) for fiscal 2011 was 7.95 lost time injuries for every million hours worked, as compared to a lost time injury frequency rate of 6.31 for calendar 2010 and 5.26 for calendar 2009. The fatal injury frequency rates for fiscal 2011, fiscal 2010 and fiscal 2009 were 0.17, 0.13 and 0.24 fatalities for every million hours worked, respectively. Since December 31, 2011, there have been two fatalities to date. A major source of accidents in the mine remains falls of ground, which make up approximately 28% of all accidents. KDC has embarked on a risk management approach whereby significant risks, such as falls of ground, are reviewed by a dedicated committee of specialists and representatives. Aspects such as accident and incident trends, leading practices within the mining industry, as well as lessons learned from internal and external sources, are considered when compiling codes of practice, mine standards and training lesson plans. KDC has on four occasions during the year, achieved the milestone of one million fatality-free shifts, with three of its major producing shafts achieving a fatality-free fiscal 2011. KDC achieved its Occupational Health and Safety Assessment Series, or OHSAS 18001 certification, through external audits conducted in fiscal 2011.

During fiscal 2011, after each major mine incident or accident, KDC received, and complied with, various instructions to halt operations from the Principal Inspector of the Gauteng area of the DMR. See [Directors, Senior Management and Employees](#) [Employees](#) [Safety](#).

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During fiscal 2011, there was one mine-wide work stoppage, related to wage negotiations, that affected production at KDC. This industry-wide strike affected KDC for four days with a DMR stoppage extending the work stoppage to six days in total. The total shaft hoisting capacity of KDC is detailed below.

Shaft System	Hoisting capacity (tons/month)
No. 1 (West)	105,000
No. 2 (West)	205,000
No. 4 (West) <sup>(2)</sup>	57,000
No. 5 (West)	159,000
No. 6 (West) <sup>(1)</sup>	66,000
No. 7 (West)	
No. 8 (West)	66,000
No. 10 (West) <sup>(1)</sup>	
No. 1 (East)	91,000
No. 3 (East) <sup>(2)</sup>	76,500
No. 4 (East)	82,000
No. 7 (East)	136,000
No. 8 (East)	73,600

Notes:

(1) Shafts No. 6 Tertiary (West) and 10 (West) are currently only operated on a limited scale, with the focus on reclamation and cleaning.

(2) These shafts do not hoist material to the surface. The hoisting capacity refers to sub-surface hoisting.

Assuming that Gold Fields does not increase or decrease reserve estimates at KDC and that there are no changes to the current mine plan at KDC, KDC's December 31, 2011 proven and probable reserves of 16.6 million ounces (13.3 million ounces if excluding surface sources) of gold will be sufficient to maintain production through approximately fiscal 2028. However, as discussed earlier in Risk Factors and Mine Planning and Management, there are numerous factors which can affect reserve estimates and the mine plan, which thus could materially change the life of mine. KDC achieved full compliance certification under the International Cyanide Management Code in October 2009.

*Processing*

The following table sets forth year commissioned, processing techniques and processing capacity per month, as well as average tons milled per month and metallurgical recovery factors during fiscal 2011, for each of the plants at KDC:

**Processing Techniques**

Plant	Year commissioned <sup>(1)</sup>	Comminution phase	Treatment phase	Capacity <sup>(2)</sup> (tons/month)	Average milled for fiscal 2011 (tons/month)	Approximate recovery factor for fiscal 2011 <sup>(5)</sup>
KDC West DP 1	1972	SAG milling	CIP treatment	255,000	221,750	97%
			and electrowinning			
KDC West DP 2	1964	SAG/ball milling	CIP treatment <sup>(3)</sup>	200,000	197,853	91%
KDC West DP 3	1998	SAG milling	CIP treatment <sup>(3)</sup>	115,000	96,424	90%
KDC East KP 1	1968	Pebble milling	CIP treatment <sup>(4)</sup>	170,000	174,135	91%
KDC East KP 2	1989	SAG milling	CIP treatment	162,000	167,622	98%
			and electrowinning			



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KDC East Python 1 <sup>(4)</sup>	2011	Crushing	Flotation	71,000	39,873	87%
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### Notes:

- (1) KDC West DP 1 was substantially upgraded in fiscal 2004, and KDC West DP 2 was substantially upgraded in fiscal 2003. KDC West DP 3 was originally commissioned as a uranium plant and was upgraded to a gold plant in 1998. Therefore, KDC West DP 3 lists the year commissioned as a gold plant.
- (2) Nameplate capacity. Plant/Mill nameplate capacities are based on a number of operating assumptions, including assumptions regarding the blend of soft and hard ores processed, that can change and which may result in an increased level of throughput over and above the designed nameplate capacity.
- (3) After CIP treatment, electrowinning occurs at KDC West DP 1 or KDC East KP 2.
- (4) KDC East Python 1 commissioned during 2011.
- (5) Percentages are rounded to the nearest whole percent.

In fiscal 2011, the KDC plants collectively extracted approximately 97% of the gold contained in ore delivered for processing.

### *Capital Expenditure*

Gold Fields spent approximately \$319 million on capital expenditures at the KDC operation in fiscal 2011, primarily on the Shaft No. 4 (West) pillar extraction, metallurgical growth plant, residential upgrades, and ore reserve development. Gold Fields has budgeted approximately \$333 million of capital expenditures at KDC for fiscal 2012, principally for the Shaft No. 5 (West) decline development, Shaft No. 4 (East) expansion, and ore reserve development.

### ***Beatrix Operation***

#### *Introduction*

The Beatrix operation is located in the Free State Province of South Africa, some 240 kilometers southwest of Johannesburg, near Welkom and Virginia, and comprises the Beatrix mine. Beatrix operates under mining rights covering a total area of approximately 16,800 hectares. Beatrix is an underground only operation. Beatrix has four shaft systems, with five ventilation shafts to provide additional up-cast and down-cast ventilation capacity and is serviced by two metallurgical plants. It is a shallow to intermediate-depth mining operation, at depths between 700 meters and 2,200 meters below surface. The Beatrix mine has access to the national electricity grid and water, road and rail infrastructure and is located near regional urban centers where it can routinely obtain needed supplies. In fiscal 2011, Beatrix produced 0.347 million ounces of gold. As of December 31, 2011, Beatrix had approximately 9,200 employees and approximately 1,000 outside contractors.

#### *History*

Beatrix's present scope of operations is the result of the consolidation with effect from July 1, 1999 of two adjacent mines: Beatrix and Oryx. Gold mining commenced at Beatrix in 1985 and at Oryx in 1991.

#### *Geology*

The Beatrix mine exploits the Beatrix Reef, or BXR, at Shafts No. 1, 2 and 3, and the Kalkoenkrans Reef, or KKR, at Shaft No. 4 (the former Oryx mine). The reefs are developed on the Aandenk erosional surface and dip to the north and northeast at between four degrees and nine degrees.

In general, the BXR occurs at depths of between 570 meters and 1,380 meters and the KKR occurs at depths of between 1,800 meters and 2,200 meters. Both the BXR and KKR reefs are markedly channelized and consist of multi-cycle, upward fining conglomerate beds with sharp erosive basal contacts. A general east-west trending pay-zone, some 500 to 800 meters wide, has been identified east of Shaft No. 4 and is known as the main channel

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Zone 2. In addition, surface exploratory drilling, and underground development has confirmed the reserves to the south of Beatrix's Shaft No. 4 main channel in Zone 5, which now represents the majority of the reserves at the operation. Ongoing development and underground exploration drilling has continued over the past fiscal year so that all facies and structures have been updated and layouts and planning adapted. All new information is used as part of customary mine planning practices.

*Mining*

Beatrix is managed as three operational sections: the North Section (comprising Shaft No. 3), the South Section (comprising Shaft No. 2 and Shaft No. 1) and the West Section (comprising Shaft No. 4). No shafts were closed or opened in fiscal 2011.

Mining at Beatrix is based upon a scattered mining method with the North Section being the primary source of production. Focus on increasing development volumes at Shafts No. 3 and No. 4 to provide future mining flexibility and ore body definition remains essential at Beatrix. However, cessation of activities on some levels, as well as delays associated with water intersections and secondary support upgrading, resulted in a 21% decrease in main development volumes at Beatrix in fiscal 2011, as compared to fiscal 2010. The emphasis on development volumes is planned to continue in fiscal 2012. Overall stoping volumes per month at Beatrix decreased by 13% between fiscal 2010 and fiscal 2011.

During fiscal 2011, development and stoping volumes were in line with expectations but were lower year on year due to a national strike and safety related stoppages. The overall mining grade at the North Section declined between fiscal 2010 and fiscal 2011 and gold output was affected by the lower mine call factor, or MCF, and lower volumes mined. Beatrix continues to seek to improve the MCF at the mine. The power source being used for a variety of activities including drilling is primarily hydropower, as opposed to compressed air, with a majority of the mining equipment being run off a high-pressure water system. The benefits of the system include improved cooling underground, improved machine efficiency, lower noise levels and less electrical power usage.

The performance at Shaft No. 4 did not meet expectations in fiscal 2011, primarily as a result of lower than planned volumes mined and a lower MCF, offset by higher values mined.

In fiscal 2011, ongoing improvements were made to rail tracks and ventilation conditions, to increase the logistics capacity and support future mining volumes, and they are expected to continue in fiscal 2012. Lower-grade and marginal mining activities continued to be curtailed at Beatrix in fiscal 2011, despite the increasing gold price, as the mine plans to maintain operating margins.

Beatrix requires cooling infrastructure to maintain an underground working environment conducive to health and safety for workers at depth. The mine therefore has a refrigeration and cooling infrastructure in both its North and West Sections. The cooling infrastructure in the West Section consists of two bulk air coolers on surface. In the Zone 5 mining area, it consists of two bulk air coolers and some strategically placed cooling coils, and, in the North Section, it consists of a surface bulk air cooler constructed at Shaft No. 3.

Based on the higher gold price received and in anticipation of improving gold prices in the longer term, a number of incremental expansion opportunities are being examined at Beatrix. Initial development work on the Vlakpan project area commenced in fiscal 2008 which involves an extension of access levels from the infrastructure of Shaft No. 1 and Shaft No. 3. The down dip extension project to access ground below the bottom level of Shaft No. 3 has been revised due to the hoisting constraint at Shaft No. 3. Selected high grade areas below current infrastructure will now be mined via winches extending below the current infrastructure.

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Detailed below are the operating and production results at Beatrix for fiscal 2011, the six month period ended December 31, 2010 and fiscal 2010 and 2009.

	Fiscal 2009	Fiscal 2010	Six-Month Period Ended December 31, 2010	Fiscal 2011
<b>Production</b>				
Tons ( 000)	2,991	3,051	1,965	3,817
Recovered grade (g/t)	4.1	4.0	3.2	2.8
Gold produced ( 000 oz)	391	392	202	347
<b>Results of operations (\$ million)</b>				
Revenues	339.1	424.6	259.1	555.4
Total production costs <sup>(1)</sup>	267.7	364.0	213.2	409.9
Total cash costs <sup>(2)</sup>	217.7	290.3	175.3	335.9
Cash profit <sup>(3)</sup>	121.4	134.3	83.8	219.5
<b>Cost per ounce of gold (\$)</b>				
Total production costs	684	929	1,056	1,182
Total cash costs	557	741	868	969
<b>Notional cash expenditure per ounce of gold produced (\$)<sup>(4)</sup></b>	<b>757</b>	<b>985</b>	<b>1,098</b>	<b>1,221</b>

Notes:

- (1) For a reconciliation of Gold Fields' total production costs to production costs, see "Operating and Financial Review and Prospects - Results of Operations - Years Ended December 31, 2011 and June 30, 2009 - Costs and Expenses", "Operating and Financial Review and Prospects - Results of Operations - Six Months Ended December 31, 2010 and 2009 - Costs and Expenses" and "Operating and Financial Review and Prospects - Results of Operations - Years Ended June 30, 2010 and 2009 - Costs and Expenses".
- (2) For a reconciliation of Gold Fields' total cash costs to production costs, see "Operating and Financial Review and Prospects - Results of Operations - Years Ended December 31, 2011 and June 30, 2009 - Costs and Expenses", "Operating and Financial Review and Prospects - Results of Operations - Six Months Ended December 31, 2010 and 2009 - Costs and Expenses" and "Operating and Financial Review and Prospects - Results of Operations - Years Ended June 30, 2010 and 2009 - Costs and Expenses".
- (3) Cash profit represents revenues less total cash costs.
- (4) For a reconciliation of Gold Fields' NCE to its production costs for fiscal 2011, the six month period ended December 31, 2010 and fiscal 2010 and 2009, see "Operating and Financial Review and Prospects - Costs - Notional Cash Expenditure".

Total tons milled increased from 3.05 million tons to 3.82 million tons as the decrease in underground tonnage milled from fiscal 2010 to fiscal 2011 was primarily due to hoisting constraints at Shaft No. 3 during the first half of the year, offset by low grade material (selected underground and surface dump waste) processed at No. 2 plant partially offset by a decrease in underground tonnage milled which was caused by hoisting constraints at Shaft No. 3 during the first half of the year. Gold production was lower in fiscal 2011 and the overall recovered grade in fiscal 2011 decreased compared to fiscal 2010 due to the milling of the lower grade material from surface.

Beatrix processed 1.4 million tons of low grade material during the year and is expected to process more of its low-grade dumps during fiscal 2012 by milling and treating incremental underground waste from the West Section, and selected waste from the northern waste dump at the West Section. The increase in total cash costs per ounce of gold and total production costs per ounce of gold between fiscal 2010 and fiscal 2011 resulted primarily from increases in labor and electricity costs.

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Current mine planning and project implementation have taken these power cost increases into account and are aligned with power availability. Beatrix participates in the BPR program to, among other things, reduce energy and utility consumption. Beatrix also participates in a carbon credit program, whereby it will earn carbon emission reduction credits by extracting underground methane. Such methane can also be used to generate electricity.

See Risk Factors Power stoppages, fluctuations and power cost increases may adversely affect Gold Fields' results of operations and its financial condition .

The Beatrix mine is engaged in underground and surface mining, and thus is subject to all of the underground and surface mining risks discussed in Risk Factors . The primary safety risks at Beatrix are falls of ground, trampling accidents, winches, ventilation control and flammable gas explosions. Beatrix does experience seismic events and, while the seismic risk is much lower at Beatrix than it is at KDC, the operation manages these events with a seismic network consisting of several geophones.

In February 2009, Beatrix introduced Khuseleka (be protected) phase II, which consist of a two day theory and practical training course to improve supervisors' understanding of certain safety requirements such as risk assessment, planned inspections and observations, and communication. The focus remains on the predominant causes of incidents, namely falls of ground, trampling and winches/rigging, which are part of a formal remedial action tracking system. Methane hazard awareness training also remains an area of focus. During fiscal 2011, following two surveillance audits, Beatrix retained its OHSAS 18001 certification. Beatrix achieved one million fatality free shifts during fiscal 2011, as well as a 28% improvement in all injury rates.

The mine has an ongoing methane management system which includes the declaration by competent ventilation staff of certain locations as hazardous, methane emission rate monitoring, ongoing awareness campaigns as well as the deployment of gas, velocity and fan sensors connected to an electronic telemetry system to act as early warning. These safety systems are monitored on a 24-hour basis from a central control room from which action is taken in the event of alarm.

Although there were five fatalities at Beatrix in fiscal 2011, Beatrix experienced no shaft closures for any material length of time due to accidents. One fatality was the result of a scraper winch accident, two fatalities resulted from gravity related falls of ground, one fatality was due to drilling into a misfire and the other fatality was the result of a rail bound equipment accident. On a calendar year basis, the lost time injury frequency rate (See Defined Terms and Conventions ) for fiscal 2011 was 2.95 lost time injuries for every million hours worked compared to 3.31 in calendar 2010 and 3.92 in calendar 2009. In fiscal 2011, the fatal injury frequency rate was 0.19 fatalities for every million hours worked, while the rate was 0.18 in fiscal 2010 and 0.10 in fiscal 2009. Since December 31, 2011, there have been two fatalities at Beatrix to date.

In fiscal 2011, Beatrix was affected by a work stoppage for five days when the National Union of Mineworkers (NUM) called for a national stayaway. See Directors, Senior Management and Employees Employees Labor Relations South Africa .

The total shaft hoisting capacities of Beatrix are detailed below.

Shaft System	Hoisting capacity (tons/month)
No. 1	138,000
No. 2	138,000
No. 3	170,000
No. 4	120,000

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Assuming that Gold Fields does not increase or decrease reserves estimates at Beatrix and that there are no changes to the current life of mine plan, Beatrix's December 31, 2011 proven and probable reserves of 5.0 million ounces of gold will be sufficient to maintain production through to approximately fiscal 2025. However, as discussed earlier in Risk Factors and Mine Planning and Management, there are numerous factors which can affect reserve estimates and the mine plan, which could thus materially change the life of mine.

Beatrix achieved full compliance certification under the International Cyanide Management Code in July 2009.

*Processing*

The following table sets forth the year of commissioning, processing techniques and processing capacity per month, as well as average tons milled per month and metallurgical recovery factor during fiscal 2011, for each of the plants at Beatrix.

**Processing Techniques**

<b>Plant</b>	<b>Year commissioned</b>	<b>Comminution phase</b>	<b>Treatment phase</b>	<b>Capacity<sup>(1)</sup> (tons/month)</b>	<b>Average milled for fiscal 2011 (tons/month)</b>	<b>Approximate recovery factor for fiscal 2011<sup>(2)</sup></b>
No. 1 Plant	1983	SAG milling	CIP treatment	246,000	204,000	96%
No. 2 Plant	1992	SAG milling	CIP treatment	130,000	115,000	93%

## Notes:

- (1) Nameplate capacity. Plant/Mill nameplate capacities are based on a number of operating assumptions, including assumptions regarding the blend of soft and hard ores processed, that can change and which may result in an increased level of throughput over and above the designed nameplate capacity.
- (2) Percentages are rounded to the nearest whole percent.

In fiscal 2011, the Beatrix plants collectively extracted approximately 95.4% of gold contained in ore delivered for processing. In fiscal 2004, Gold Fields installed a Knelson concentrator at the No. 1 Plant which removes gold earlier in the metallurgical process. A gravity concentrating circuit, which was commissioned in November 2006, was installed at No. 2 Plant in order to reduce locked-up gold in the mills and to improve the overall recovery. These improvements to capacity are expected to remain effective going forward.

*Capital Expenditure*

Gold Fields spent approximately \$85 million on capital expenditures at the Beatrix operation in fiscal 2011, primarily on ore reserve development, upgrade to rail infrastructure from high-volume stoping areas, continuing infrastructure development at Shaft No. 3, hydropower equipment, changes to employee hostel accommodations. Gold Fields expects to spend approximately \$92 million on capital expenditures at Beatrix in fiscal 2012, primarily on ore reserve development, upgrades to rail infrastructure, continuing hostel accommodation changes, and the continuing infrastructure development at Shaft No. 3.

**South Deep Operation***Introduction*

Gold Fields acquired control of South Deep on December 1, 2006. South Deep is situated adjacent to KDC, in the Gauteng Province of South Africa. South Deep is a capital project and remains a developing mine where the permanent infrastructure to support expanded production is currently under construction. During calendar 2010, the DMR approved the conversion of the South Deep old order mining rights into a new order mining right. Included in this approval was an additional portion of ground known as Uncle Harry's, which is contiguous

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to South Deep. The cumulative effect of this approval, together with the previous conversions for the KDC and Beatrix mines granted in January 2007, is that all of Gold Fields' South African mines have now received their new order mining rights.

South Deep is engaged in underground mining and is comprised of one metallurgical plant and two operating shaft systems, the older South Shaft complex and the newer Twin Shaft complex. The South Shaft complex includes a main shaft and three sub-vertical (SV) shafts, two of which are operational. SV2 is used to hoist rock with SV3 being used to transport personnel and materials. SV1 is on care and maintenance and only the upper half of the shaft is accessible as shaft sidewall failure damaged the lower portion of the shaft prior to acquisition by Gold Fields. The Twin Shaft complex consists of a single-barrel main shaft and an adjacent bratticed ventilation shaft, or the Twins Main Ventilation Shaft. While the Twin Shaft complex forms the center of production and capital development activities, opening up, equipping and diamond drilling operations are being conducted in the South Shaft area in order to access new mining areas. The South Shaft complex operates to a depth of 2,650 meters below surface and the Twin Shaft complex operates to a depth of 2,995 meters below surface. South Deep's workings are at depth and therefore require a significant cooling infrastructure. The South Deep operation has access to the national electricity grid, water, and road infrastructure and is located near regional urban centers where it can obtain needed supplies and services. In fiscal 2011, South Deep produced 0.273 million ounces of gold. As of December 31, 2011, South Deep employed approximately 3,500 employees and approximately 3,800 contractors.

### *History*

The current South Deep operations derive from the Barrick Gold Western Areas Joint Venture, which Gold Fields acquired in a series of transactions in the second and third quarters of fiscal 2007. The Barrick Gold Western Areas Joint Venture is named the South Deep Joint Venture.

### *Geology*

Gold mineralization at South Deep is hosted by conglomerates of the Upper Elsberg reefs and the VCR. The Upper Elsberg reefs sub-crop against the VCR in a Northeasterly trend, which defines their western limits. To the east of the sub-crop, the Upper Elsberg reefs are preserved in an easterly diverging sedimentary wedge attaining a total thickness of approximately 120 meters, which is subdivided into the lower Individuals and the overlying Massives. To the west of the sub-crop, only the VCR is preserved.

The stratigraphic units at South Deep generally dip southward at approximately 12 to 15 degrees and the gold-bearing reefs occur at depths of 1,500 meters to 3,500 meters below surface.

Production at South Deep is currently derived from the Upper Elsberg Reefs. In general terms, the Upper Elsberg succession represents an easterly prograding sedimentary sequence, with the Massives containing higher gold grades and showing more proximal sedimentological attributes in the eastern sector of the mining authorization than the underlying Individuals. The sedimentary parameters of the Upper Elsberg reef units influence the overall tenor of the reefs with gold grade displaying a gradual, general decrease toward the East, away from the sub crop.

The North-South trending normal West Rand and Panvlakte faults, which converge on the Western side of the lease area, are the most significant large-scale faults in the area and form the western limit to gold mineralization for the mine.

### *Mining*

At South Deep the main target reef horizon is the Upper Elsberg Massives zone. South Deep uses trackless mechanized mining methods comprising an array of techniques and mobile machines to achieve the most efficient extraction system for any given area in the ore body.

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In order to effectively mine the target reefs through massive mining methods at depths between 2,500 and 3,500 meters below surface, the in situ rock stresses need to be reduced from 80Mpa to between 30 and 40Mpa. To achieve this, it is necessary to de-stress the main target reef horizons by mining a 2.2 meter high horizontal slice through the ore body at 17 meter intervals. This is achieved through mechanized mining methods using low profile equipment.

Once an area has been de-stressed, the Elsburg Massives can then be mined through a combination of long hole open stoping, drift-and-fill and drift-and-benching mining methods. During fiscal 2011, the mine successfully continued its trials of long hole stoping at various areas across the mine. As a result, long hole stoping is expected to be a major component of production going forward.

As a developing mine, South Deep is being prepared to ramp up production to 330,000 tons per month by the end of 2015. During fiscal 2011, reef production at South Deep stabilized at approximately 130,000 tons per month. Simultaneously, the development of the infrastructure necessary for the New Mine area continues at a steady pace.

In order to achieve the planned ramp up, efforts are focused on completing adequate de-stress mining to ensure that adequate stoping reserves are available for mining. Significant progress was made in fiscal 2011, and there are currently nine de-stress project areas established and mining compared to five in fiscal 2010.

The Twin Ventilation shaft sinking has been substantially completed with a two meter plug remaining. The new rock winder for the Twin Ventilation shaft has been installed and is on track for full commissioning by July 2012. The new tailings storage facility, or TSF, required at South Deep for the life of mine production, has been completed and was handed over to the mine operational team in May 2011. The near mine surface exploration program for the New Mine project is 82% complete, with the last drill hole expected by August 2013. Capital development rates below the current mining area have improved with 9,463 meters completed to date. The earthworks and civil construction for the Metallurgical plant expansion has commenced and is progressing well.

South Deep secured continuity in the mining operations through the implementation of a two-blasting-shift-day and seven day operational week beginning in fiscal 2010. This intervention has supported the production levels achieved at the mine in fiscal 2011. Progress is also being made on removing hoisting and infrastructure constraints, and implementing systems and procedures that will support the mine at full production. Detailed below are the operating and production results at South Deep for fiscal 2011, the six month period ended December 31, 2010 and fiscal 2010 and 2009.

	Fiscal 2009	Fiscal 2010	Six-Month Period Ended December 31, 2010	Fiscal 2011
<b>Production</b>				
Tons ( 000)	1,241	1,681	1,101	2,440
Recovered grade (g/t)	4.4	4.9	4.1	3.5
Gold produced ( 000 oz)	175	265	146	273
<b>Results of operations (\$ million)</b>				
Revenues	155.2	288.7	188.2	427.5
Total production costs <sup>(1)</sup>	157.6	276.3	175.5	370.6
Total cash costs <sup>(2)</sup>	125.3	216.1	137.5	293.0
Cash profit <sup>(3)</sup>	29.9	72.6	50.7	134.5
<b>Cost per ounce of gold (\$)</b>				
Total production costs	902	1,043	1,200	1,357
Total cash costs	717	816	940	1,073
<b>Notional cash expenditure per ounce of gold produced (\$)<sup>(4)</sup></b>	1,403	1,640	1,914	2,092



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Notes:

- (1) For a reconciliation of Gold Fields' total production costs to production costs, see "Operating and Financial Review and Prospects - Results of Operations - Years Ended December 31, 2011 and June 30, 2010 - Costs and Expenses", "Operating and Financial Review and Prospects - Results of Operations - Six Months Ended December 31, 2010 and 2009 - Costs and Expenses" and "Operating and Financial Review and Prospects - Results of Operations - Years Ended June 30, 2010 and 2009 - Costs and Expenses".
- (2) For a reconciliation of Gold Fields' total cash costs to production costs, see "Operating and Financial Review and Prospects - Results of Operations - Years Ended December 31, 2011 and June 30, 2010 - Costs and Expenses", "Operating and Financial Review and Prospects - Results of Operations - Six Months Ended December 31, 2010 and 2009 - Costs and Expenses" and "Operating and Financial Review and Prospects - Results of Operations - Years Ended June 30, 2010 and 2009 - Costs and Expenses".
- (3) Cash profit represents revenues less total cash costs.
- (4) For a reconciliation of Gold Fields' NCE to its production costs for fiscal 2011, the six month period ended December 31, 2010 and fiscal 2010 and 2009, see "Operating and Financial Review and Prospects - Costs - Notional Cash Expenditure".

The increase in tonnage and gold production was due primarily to the continued build-up in mining production through an increase in long hole stopping and benching, and the milling of low grade surface material. Higher productivity partly offset rising cash costs that resulted primarily from the planned increase in labor in line with the project build-up, wage and normal inflationary increases.

South Deep is engaged in underground mining and is thus subject to all of the underground mining risks discussed in "Risk Factors". The primary safety issues facing South Deep underground operations include seismicity (including seismically induced falls of ground), falls of ground due to gravity and the risk of pedestrians being struck by mobile equipment. Aerial support has been installed to prevent falls of ground. Strict adherence to safe operating practices and procedures are enforced to prevent pedestrians being struck by mobile equipment. In addition, all vehicles and employees' lamps are being fitted with sensors to prevent employees from being struck by trackless mobile machines. South Deep is mitigating the seismic risks through de-stress mining, the application of backfill and leaving of regional support pillars. In addition, mechanized mining requires fewer workers and reduces the exposure of employees to higher risk areas. South Deep is using a one-pass mesh and bolt ground reinforcement and support system which greatly reduces the incidence of falls of ground.

Gold Fields' power needs in South Africa are increasing as it builds up production and prepares for the development of long-term infrastructure at its South Deep mine. Eskom has agreed to the additional power requirements for the build up and is installing additional transformers and transmission lines. Annual power cost increases in excess of inflation have been approved by the national energy regulator until fiscal 2013, and the next three-year Multi Year Pricing Agreement is under discussion. In order to mitigate the cost impact, numerous power saving projects have been initiated to reduce power consumption by 5% in fiscal 2012.

On a calendar year basis, the lost time injury frequency rate (see "Defined Terms and Conventions") for fiscal 2011 was 1.67 injuries for every million hours worked, as compared to 2.87 in calendar 2010 and 2.74 in calendar 2009. The fatal injury frequency rate in fiscal 2011 was 0.04 fatalities for every million hours worked compared to 0.07 in fiscal 2010 and 0.08 in fiscal 2009. There was one fatality at the South Deep operation in fiscal 2011 related to a shaft accident. Since December 31, 2011, there have been no fatalities. South Deep conducts regular audits on its safety systems and performance in order to highlight areas of risk. The mine has formulated a comprehensive safety improvement plan, which involves all stakeholders. See "Information on the Company - Environmental and Regulatory Matters - South Africa - Health and Safety".

There was one labor-related work stoppage at South Deep in fiscal 2011. Industrial action as a result of a deadlock in the annual wage negotiations commenced on Thursday, July 28, 2011, and work only recommenced on Tuesday, August 2, 2011.

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Both the ISO 14001:2004 Environmental Management System and the OHSAS 18001 certifications were successfully maintained in fiscal 2011. South Deep's certification under the International Cyanide Management Code which it received in December 2008 was reviewed in October 2011. In December 2011, South Deep received its water use license.

The total shaft hoisting capacities of South Deep are detailed below.

Shaft System	Hoisting capacity (tons/month)
Twins Main Shaft	175,000
Twins Main Ventilation Shaft <sup>(1)</sup>	195,000
SV2 Shaft <sup>(2)</sup>	60,000
South Main Shaft <sup>(3)</sup>	60,000

Notes:

- (1) The Twins Main ventilation shaft is under construction and is planned to have a hoisting capacity of 195,000 tons/month once commissioned at the end of fiscal 2012.
- (2) This sub vertical shaft is currently being refurbished and does not hoist material to the surface. It has a capacity of 60,000 tons per month for sub-surface hoisting during the repair process. Material from SV2 is hoisted to the surface via the South Main Shaft. Therefore, the South Shaft complex has a current combined hoisting capacity of 60,000 tons per month.
- (3) This shaft is currently being refurbished and has a capacity of 60,000 tons per month during the repair process.

Assuming that Gold Fields does not materially increase or decrease reserves estimates at South Deep and that there are no significant changes to the life of mine plan, South Deep's December 31, 2011 proven and probable managed reserves of 39.6 million ounces (approximately 36.6 of which are attributable to Gold Fields, with the rest attributable to noncontrolling shareholders) will be sufficient to maintain production through to approximately fiscal 2080. However, as discussed earlier in Risk Factors and Mine Planning and Management, there are numerous factors which can affect reserve estimates and the mine plan, which could thus materially change the life of mine.

**Processing**

All processing at South Deep is provided by a single plant. The following table sets forth year commissioned, processing techniques and processing capacity per month, as well as average tons milled per month and metallurgical recovery factors during fiscal 2011 for the plant.

**Processing Techniques**

Plant	Year commissioned	Comminution phase	Treatment phase	Capacity <sup>(1)</sup> (tons/month)	Average milled for fiscal 2011 (tons/month)	Approximate recovery factor for fiscal 2011 <sup>(2)(3)</sup>
Twin Shaft Plant	2002	Primary SAG and Secondary Ball milling	Leach, CIP treatment with elution and electrowinning	220,000	200,000 <sup>(2)</sup>	95.2% <sup>(4)</sup>

Notes:

- (1) Nameplate capacity as designed. Plant/Mill nameplate capacities are based on a number of operating assumptions, including assumptions regarding the blend of soft and hard ores processed, that can change and which may result in an increased level of throughput over and above the designed nameplate capacity.

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- (2) Excludes Kloof low grade surface material.
- (3) Percentages are rounded to the nearest whole percent.
- (4) Includes carbonaceous low recovery surface material.

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During fiscal 2011, the South Deep plant treated an average of 0.2 million tons per month (excluding Kloof mine toll treatment) consisting of an average of 167,000 tons per month of underground material and 31,000 tons per month of surface material from South Deep. Currently, the plant capacity is being upgraded from 220,000 tons per month to 330,000 tons per month. This upgrade is expected to be completed during the second half of 2012.

During fiscal 2011, 21% by mass of the annual tons milled was returned underground as backfill with the remainder sent to the TSF. The new full plant backfill tailings plant scheduled for commissioning in 2012 will be able to recover up to 78% by mass of the annual tons milled to be returned underground as backfill. The old TSFs were decommissioned in September 2011 and a care and maintenance program was introduced. The first deposit on the newly constructed Doornpoort TSF was in April 2011, becoming fully operational in September 2011. The new TSF has a capacity for the life of the mine.

### *Capital Expenditure*

Gold Fields spent approximately \$275 million on capital expenditures at the South Deep operation in fiscal 2011, primarily on continuing the infrastructure development, ventilation shaft deepening and the new tailings dam facility. Gold Fields expects to spend approximately \$318 million on capital expenditures at South Deep in fiscal 2012, primarily on development, ventilation shaft deepening, the upgrade of the metallurgical plant to 330,000 tons per month and the full plant tailings backfill system.

### *Ghana Operations*

The Ghana operations are comprised of the Tarkwa and Damang mines.

#### *Tarkwa Mine*

##### *Introduction*

Gold Fields Ghana, which holds the interest in the Tarkwa mine, was owned 71.1% by Gold Fields, 18.9% by IAMGold and 10.0% by the government of Ghana. On June 22, 2011, Gold Fields acquired the indirect 18.9% minority stake from IAMGold in the Tarkwa and Damang gold mines in Ghana, for a cash consideration of U.S.\$667 million, increasing Gold Fields' interest in each of the Tarkwa and Damang gold mines from 71.1% to 90.0%, the remaining 10.0% interest being held by the government of Ghana.

The Tarkwa mine is located in southwestern Ghana, about 300 kilometers by road west of Accra. The Tarkwa mine consists of several open pit operations on the original Tarkwa property and the adjacent southern portion of the property, which was formerly referred to as the Teberebie property and was acquired by Gold Fields in August 2000, together with a heap leach facility, referred to as the North Plant Heap Leach Facility. A new SAG mill and CIL plant commenced continuous operations at the Tarkwa property in November 2004. In December 2008, the expanded CIL plant was commissioned and the stacking of new ore at the South Plant Heap Leach Facility was terminated, although gold harvesting for the existing heaps will continue while it is economically viable. The expansion of the CIL Plant to incorporate a ball mill in close circuit with the SAG mill doubled the capacity of the CIL Plant to 12.3 million tons treated annually. In fiscal 2010, a High Pressure Grinding Rolls Facility was commissioned to re-treat stockpile material and to test the viability of re-treating the South Heap. The capacity of the facility is 3.3 million tons per annum. The total treatment capacity including both the North Plant, the High Pressure Grinding Roll Facility and the CIL Plant is estimated to be 24 million tons per annum.

The Tarkwa mine operates under mining leases with a total area of approximately 20,800 hectares, the entirety of which are surface operations. The Tarkwa mine has access to the national electricity grid, water, road and railroad infrastructure. Most supplies are trucked in from either the nearest seaport, which is approximately

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90 kilometers away by road in Takoradi, or from Tema near Accra, which is approximately 300 kilometers away by road. In fiscal 2011, Tarkwa produced 0.717 million ounces of gold, of which 0.576 million ounces were attributable to Gold Fields, with the remainder attributable to minority shareholders in Gold Fields Ghana. As of December 31, 2011, Tarkwa had approximately 2,600 employees and approximately 1,700 outside contractors.

Gold Fields is committed to sustainable development and acquiring and maintaining a social license to operate in each of the regions in which it operates. As part of this commitment, the Gold Fields Ghana Foundation supports a wide range of projects in the fields of social and economic development, education, and health.

### *History*

Investment in large-scale mining in the Tarkwa area commenced in the last quarter of the nineteenth century. In 1993, Gold Fields of South Africa, or GFSA, took over an area previously operated by the State Gold Mining Corporation, or SGMC. SGMC had, in turn, acquired the property from private companies owned by European investors. Following initial drilling, feasibility studies and project development (which included the removal of overburden and the resettlement of approximately 22,000 people), mining operations commenced in 1997.

### *Geology*

Gold mineralization at Tarkwa is hosted by Proterozoic Tarkwaian metasediments, which overlie but do not conform to a Birimian greenstone belt sequence. Gold mineralization is concentrated in conglomerate reefs and has some similarities to deposits in the Witwatersrand Basin in South Africa. The deposit comprises a succession of stacked, tabular paleoplacer units consisting of quartz pebble conglomerates. Approximately 10 such separate economic units occur in the concession area within a sedimentary package ranging from 40 meters to 110 meters in thickness. Low-grade to barren quartzite units are interlayered between the separate reef units.

### *Mining*

The existing surface operation currently exploits narrow auriferous conglomerates from six pits, namely Pepe, Akontansi, Teberebie, Atuabo, Maintrain and Kottraverchy. Two pits, Atuabo and Maintrain were previously temporarily suspended whilst the VRA substation was being relocated. The substation has since been commissioned and mining has resumed.

Tarkwa uses the typical open pit mining methods of drilling, blasting, loading and hauling. The progression of blasting in the open pit occurs in steps of six meters (or in some cases three meters) with the ore loaded into 144-ton dump trucks.

Tarkwa currently presents no unusual challenges beyond those faced at most open pit and heap leaching mining operations, including variations in amenability of ores to heap leaching. However, harder ores are expected at Tarkwa which could reduce throughput and recoverable grade at the north heap leach plant. As yet, throughput has not been affected, but heap leach recoveries declined from 75% in fiscal 2010 to 67% in fiscal 2011 as a result of the increase in competent ore, which is less amenable to heap leaching. The operational challenges during the year consisted of increased haul distances and pit depths resulting from greater than expected climatic delays due to heavy rainfall, along with increased fleet capacity and upgrading infrastructure. Due to the hardness of the ore, Tarkwa has focused on operational efficiency and throughput rates through ongoing business improvement initiatives. Additionally, the a secondary crushing circuit in the CIL plant is currently being commissioned, to counteract the impact of the harder ore on the current CIL throughput rate.

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Detailed below are the operating and production results at Tarkwa for fiscal 2011, the six month period ended December 31, 2010 and fiscal 2010 and 2009.

	Fiscal 2009	Fiscal 2010	Six-Month Period Ended December 31, 2010	Fiscal 2011
<b>Production</b>				
Tons ( 000)	21,273	22,716	11,496	23,138
Recovered grade (g/t)	0.9	1.0	1.0	1.0
Gold produced ( 000 oz <sup>1</sup> )	612	721	362	717
<b>Results of operations (\$ million)</b>				
Revenues	537.2	790.1	468.1	1,122.9
Total production costs <sup>(2)</sup>	417.8	533.6	279.0	534.8
Total cash costs <sup>(3)</sup>	368.1	470.0	251.9	479.2
Cash profit <sup>(4)</sup>	169.1	320.1	215.2	643.7
<b>Cost per ounce of gold (\$)</b>				
Total production costs	682	740	771	746
Total cash costs	601	652	696	668
<b>Notional cash expenditure per ounce of gold produced (\$)<sup>(5)</sup></b>	<b>831</b>	<b>743</b>	<b>892</b>	<b>913</b>

Notes:

- (1) In fiscal 2009, fiscal 2010, the six month period ended December 31, 2010 and fiscal 2011, 0.435 million ounces, 0.513 million ounces, 0.257 million ounces and 0.576 million ounces of production, respectively, were attributable to Gold Fields, with the remainder attributable to minority shareholders in the Ghana operations.
- (2) For a reconciliation of Gold Fields' total production costs to production costs, see "Operating and Financial Review and Prospects - Results of Operations - Years Ended December 31, 2011 and June 30, 2010 - Costs and Expenses", "Operating and Financial Review and Prospects - Results of Operations - Six Months Ended December 31, 2010 and 2009 - Costs and Expenses" and "Operating and Financial Review and Prospects - Results of Operations - Years Ended June 30, 2010 and 2009 - Costs and Expenses".
- (3) For a reconciliation of Gold Fields' total cash costs to production costs, see "Operating and Financial Review and Prospects - Results of Operations - Years Ended December 31, 2011 and June 30, 2010 - Costs and Expenses", "Operating and Financial Review and Prospects - Results of Operations - Six Months Ended December 31, 2010 and 2009 - Costs and Expenses" and "Operating and Financial Review and Prospects - Results of Operations - Years Ended June 30, 2010 and 2009 - Costs and Expenses".
- (4) Cash profit represents revenues less total cash costs.
- (5) For a reconciliation of Gold Fields' NCE to its production costs for fiscal 2011, the six month period ended December 31, 2010 and fiscal 2010 and 2009, see "Operating and Financial Review and Prospects - Costs - Notional Cash Expenditure".

In fiscal 2011, overall ore tonnage mined was 23.1 million tons compared with 22.7 million tons for fiscal 2010. Total waste mined decreased by 20.8 million tons, from 114.4 million tons to 93.6 million tons, compared with fiscal 2010 due to mid-life rebuild requirements and excessive rainfall. Compared to fiscal 2010 levels, gold production at Tarkwa decreased slightly in fiscal 2011 primarily because of reduced throughput at the north heap leach plant due to ore hardness. Total cash costs per ounce of gold decreased by approximately 2% during fiscal 2011, primarily due to higher gold in process credits. However, savings were achieved through the BPR program.

The Ghanaian gold mining companies which constitute the deregulated mining companies, or DMC, are currently in negotiation with the VRA regarding tariffs applicable for the period June 1, 2011 to December 31, 2011 and have been notified by the VRA of new rates of around U.S.\$0.15 per kilowatt hour. The services of the VRA and the services of the transmission and distribution utility are billed separately, while the ECG services are

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all inclusive. The VRA has provided Gold Fields and the DMC with a draft revised Power sales and purchase agreement between VRA and Gold Fields Ghana which is expected to be concluded in April 2012. VRA tariffs for the period from January 2011 to December 2011 have been concluded. A tariff has been agreed with the ECG covering the period June 1, 2010 to May 31, 2011. Tariff rates for June 2011 to May 2012 are being negotiated. The Ghanaian operations are bulk permit holders, which allow them to negotiate rates with the electricity suppliers. The Energy Commission, the regulator of the industry, has notified all participants that power supply and purchase and transmission agreements must be in place by December 31, 2011. Due to the fact that negotiations with the government are still underway, Gold Fields formally notified the Energy Commission that it would not be able to meet the deadline and copied all relevant entities.

During fiscal 2009, the VRA ceased providing electricity transmission as part of the power sector restructuring program in Ghana. A new government-owned transmission company called the Ghana Grid Company Limited, or GridCo, was formed to carry out the transmission functions. The VRA is now responsible for the generation of power alongside other emerging power generation companies. A new VRA substation has been installed close to the Tarkwa mine CIL Plant and the mine has been connected to the national network to the north in addition to the existing southern connection, which is expected to result in more reliable electricity transmission.

See Risk Factors Power stoppages, fluctuations and power cost increases may adversely affect Gold Fields results of operations and its financial condition .

Assuming that Gold Fields does not increase or decrease reserves estimates at Tarkwa and that there are no changes to the current mine plan at Tarkwa, Tarkwa's December 31, 2011 proven and probable reserves of 10.3 million ounces (9.3 million of which were attributable to Gold Fields, with the remainder attributable to the Ghanaian government) will be sufficient to maintain production through approximately fiscal 2022. However, as discussed earlier in Risk Factors and Mine Planning and Management, there are numerous factors which can affect reserve estimates and the mine plan, which could thus materially change the life of mine.

The Tarkwa mine is engaged in open pit mining and is thus subject to all of the risks associated with open pit mining discussed in Risk Factors . Although surface mining generally is less dangerous than underground mining, serious and even fatal accidents do still occur. Tarkwa had one fatality in fiscal 2011, one fatality in the six months ended December 31, 2010, no fatalities in fiscal 2010 and no fatalities in fiscal 2009. Since December 31, 2011, there have been no fatalities at Tarkwa. On a calendar year basis, the lost time injury frequency rate for fiscal 2011, calendar 2010 and calendar 2009 was 0.21, 0.43 and 0.13 lost time injuries for every million hours worked, respectively. The fatal injury frequency rate (see Defined Terms and Conventions ) for fiscal 2011 was 0.05 fatal injuries for every million hours worked, while for fiscal 2010 and fiscal 2009 it was 0.06 and 0.0 fatal injuries for every million hours worked, respectively. Tarkwa mine received OHSAS 18001 recertification during the year and maintained its ISO 14001 certification. Tarkwa achieved full compliance certification under the International Cyanide Management Code in June 2008 and was successfully recertified in fiscal 2011.

### *Processing*

Tarkwa's ore can be processed using either conventional heap leach techniques with acceptable recoveries or SAG milling with a CIL plant. The operation incorporates two separate heap leach circuits, the North Plant and the South Plant. The operation also incorporates a SAG mill with a CIL plant which was commissioned in 2004. An expansion of the CIL Plant to incorporate a ball mill was commissioned in December 2008. The construction of a secondary crushing step on the CIL plant is currently being commissioned to ensure current throughput rates are maintained. The following table sets forth year commissioned, processing techniques and processing capacity per month, as well as average tons milled per month and metallurgical recovery factors during the fiscal year ended December 31, 2011, for each of the plants at Tarkwa.

**Table of Contents****Processing Techniques**

<b>Plant</b>	<b>Year commissioned</b>	<b>Comminution phase</b>	<b>Treatment phase</b>	<b>Capacity<sup>(1)</sup> (tons/month)</b>	<b>Average milled for fiscal 2011<sup>(4)</sup> (tons/month)</b>	<b>Approximate recovery factor for fiscal 2011<sup>(2)</sup></b>
CIL Plant	2004	SAG milling (with ball mill) <sup>(3)</sup>	CIL treatment	1,000,000	939,778	97%
North Plant Heap Leach Facility	1997	Multiple-stage crushing and screening process and agglomeration	Heap leach with ADR treatment	680,000	689,277	67%
High Pressure Grinding Rolls Facility	2010	High Pressure Grinding Roll Milling	Heap leach with ADR treatment	275,000	286,994	53%

**Notes:**

- (1) Nameplate capacity as designed. Plant/Mill nameplate capacities are based on a number of operating assumptions, including assumptions regarding the blend of soft and hard ores processed, that can change and which may result in an increased level of throughput over and above the designed nameplate capacity.
- (2) Percentages are rounded to the nearest whole percent.
- (3) The ball mill was added in December 2008.
- (4) Heap leach recoveries are the result of an extended solution application process with full recovery requiring several leach cycles. Full recovery of all recoverable gold for current ores is only achieved over several years. Thus, recoveries must be considered in terms of recovery as time progresses, or a progressive recovery. Over time, Gold Fields expects both plants to achieve progressive recovery factors of about 64% of contained gold, equivalent to full recovery of all recoverable gold during the life of mine.

The SAG Mill and CIL plant operated 6.0% below nameplate capacity during fiscal 2011. The amount of tonnage treated at the heap leach facilities decreased from 9.37 million tons in fiscal 2010 to 8.23 million tons in fiscal 2011 as a result of increasing ore competency. The CIL plant processed 11.43 million tons in fiscal 2011, as compared to 11.18 million tons in fiscal 2010. The High Pressure Grinding Rolls Facility processed 3.49 million tons in fiscal 2011.

**Capital Expenditure**

Gold Fields spent approximately U.S.\$125 million on capital expenditures at the Tarkwa operation in fiscal 2011 (excluding U.S.\$94 million spent on capital waste mining, which is expensed), principally for the primary and ancillary mining fleet, heavy maintenance equipment infrastructure, secondary crusher and the Tailings Storage Facility 3 construction. Gold Fields has budgeted approximately U.S.\$172 million for capital expenditures at Tarkwa for fiscal 2012 (excluding U.S.\$107 million to be spent on capital waste mining, which is expensed), principally for primary and ancillary mining fleet, heavy maintenance equipment infrastructure and tailing storage facility projects.

**Damang Mine****Introduction**

Abosso, which owns the interest in the Damang mine, was owned 71.1% by Gold Fields, 18.9% by IAMGold and 10% by the Ghanaian government, mirroring the shareholding structure of Gold Fields Ghana. On June 22, 2011, Gold Fields acquired the indirect 18.9% minority stake from IAMGold in the Tarkwa and Damang gold mines in Ghana, for a cash consideration of U.S.\$667 million, increasing Gold Fields interest in each of the Tarkwa and Damang gold mines from 71.1% to 90.0%, the remaining 10.0% interest being held by the government of Ghana.





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The Damang deposits are located in the Wassa West District in southwestern Ghana approximately 330 kilometers by road west of Accra and approximately 30 kilometers by road northeast of the Tarkwa mine. The Damang mine consists of an open pit operation with a SAG mill and CIL processing plant.

Damang operates under a mining lease with a total area of approximately 8,100 hectares. The Damang mine has access to the national electricity grid and water and road infrastructure. Most supplies are brought in by road from the nearest seaport, Takoradi, which is approximately 135 kilometers away, or from Accra, which is approximately 360 kilometers away by road. In fiscal 2011, the Damang mine produced 0.218 million ounces of gold, of which 0.175 million ounces were attributable to Gold Fields, with the remainder attributable to noncontrolling shareholders in Abosso. As of December 31, 2011, Damang had approximately 1,000 employees and approximately 900 outside contractors.

### *History*

Mining on the Abosso concession began with underground mining in the early twentieth century. Surface mining at Damang commenced in August 1997 and Gold Fields assumed control of operations on January 23, 2002. Historically, the underground mine was in operation from 1878 until 1956.

### *Geology*

Damang is located on the Damang Anticline, which is marked by Tarkwaian metasediments on the east and west limbs, around a core of Birimian metasediments and volcanics. Gold in the Tarkwaian metasediments and volcanics is predominantly found in the conglomerates of the Banket Formation and is similar to the Witwatersrand in South Africa; however, at Damang, hydrothermal processes have enriched much of this palaeoplacer mineralization. Within the region, the contact between the Birimian and Tarkwaian metasediments and volcanics is commonly marked by zones of intense shearing and is host to a number of significant shear hosted gold deposits including Prestea, Bogoso, and Obuasi.

Palaeoplacer mineralization occurs on the west limb of the anticline at Abosso, Chida, and Tomento, and on the east limb of the anticline at the Kwesie, Lima South, and Bonsa North locations. Hydrothermal enrichment of the Tarkwaian palaeoplacer occurs at the Rex, Amoanda, and Nyame areas on the west limb and the Damang and Bonsa areas on the east limb.

### *Mining*

Damang uses the typical open pit mining methods of drilling, blasting, loading and hauling. The progression of blasting in the open pit occurs in six-meter benches, which are then combined to form steps of three meters with the ore and waste loaded into 100-ton dump trucks. The primary operational challenges include managing the Damang Pit Cutback, or DPCB, and maintaining adequate and timely supply of appropriate plant feed blend. There were no material stoppages to the mining operations during fiscal 2011.

During fiscal 2011, the DPCB pit remained the high-grade fresh ore feed source to the plant. Of the five Tomento pits, four were fully depleted by the end of fiscal 2008 and the oxide in the fifth pit, the Tomento pit 2, was depleted during fiscal 2011. Currently, the main oxide feed sources to the plant are the DPCB, Juno and Rex pits.

The DPCB waste stripping continued in fiscal 2011. A prefeasibility study is currently being conducted for additional waste stripping expenditure over the life of the pit. The waste stripping expenditure, which is projected to increase compared to the original forecast due to the increase in mining volumes, is required for the continued development of the DPCB. The current focus for immediate growth will be concentrated on the larger DPCB, Huni and Juno pits with exploration work being carried out during the fourth quarter of fiscal 2011 and the first half of 2012.

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The extension of mining activities to the old Abosso mine tailings coupled with the sterilization drilling of the proposed waste dumping area resulted in compensation needing to be paid to farmers and a resettlement of 44 property owners from four smaller villages in fiscal 2010. The sterilization program became necessary due to limited space being available for waste dumping facilities around the Damang cutback. Resettlement agreements were signed and houses were constructed for property owners in the Huni-Valley and Damang villages without any community incident. Compensation payments and resettlement efforts were required for the Amoanda Tomonto corridor area in fiscal 2011, due to ongoing extensive exploration in the area.

AMS performed a substantial proportion of the mining operations at Damang. Gold Fields has terminated the contract with AMS which termination was effective March 24, 2011. After a study which indicated a substantial cost saving, Damang moved from the outsourced contract with AMS to owner mining from March 2011.

In fiscal 2011, a contractor, Engineers & Planners Company Limited, performed the ore haulage contract work at Damang, using 30-ton trucks to haul the material from the various satellite pits to the Run of Mine, or RoM, pad, which is the ore stockpile dump close to the crushing plant.

Detailed below are the operating and production results at Damang for fiscal 2011, the six month period ended December 31, 2010 and fiscal 2010 and 2009.

	Fiscal 2009	Fiscal 2010	Six-Month Period Ended December 31, 2010	Fiscal 2011
<b>Production</b>				
Tons ( 000)	4,991	5,028	2,491	4,942
Recovered grade (g/t)	1.2	1.3	1.5	1.4
Gold produced ( 000 oz <sup>1</sup> )	200	207	117	218
<b>Results of operations (\$ million)</b>				
Revenues	175.7	226.9	152.1	340.8
Total production costs <sup>(2)</sup>	144.0	135.5	87.5	201.2
Total cash costs <sup>(3)</sup>	134.4	128.7	74.6	186.1
Cash profit <sup>(4)</sup>	41.3	98.2	77.5	154.7
<b>Cost per ounce of gold (\$)</b>				
Total production costs	719	653	748	924
Total cash costs	671	621	638	855
<b>Notional cash expenditure per ounce of gold produced (\$)<sup>(5)</sup></b>	<b>745</b>	<b>738</b>	<b>1,111</b>	<b>1,056</b>

Notes:

- (1) In fiscal 2009, 2010, the six month period ended December 31, 2010 and fiscal 2011, 0.142 million ounces, 0.147 million ounces, 0.083 million ounces and 0.175 million ounces of production, respectively, were attributable to Gold Fields, with the remainder attributable to noncontrolling shareholders in Abosso.
- (2) For a reconciliation of Gold Fields' total production costs to production costs, see "Operating and Financial Review and Prospects - Results of Operations - Years Ended December 31, 2011 and June 30, 2010 - Costs and Expenses", "Operating and Financial Review and Prospects - Results of Operations - Six Months Ended December 31, 2010 and 2009 - Costs and Expenses" and "Operating and Financial Review and Prospects - Results of Operations - Years Ended June 30, 2010 and 2009 - Costs and Expenses".
- (3) For a reconciliation of Gold Fields' total cash costs to production costs, see "Operating and Financial Review and Prospects - Results of Operations - Years Ended December 31, 2011 and June 30, 2010 - Costs and Expenses", "Operating and Financial Review and Prospects - Results of Operations - Six Months Ended December 31, 2010 and 2009 - Costs and Expenses" and "Operating and Financial Review and Prospects - Results of Operations - Years Ended June 30, 2010 and 2009 - Costs and Expenses".
- (4) Cash profit represents revenue less total cash costs.

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(5) For a reconciliation of Gold Fields' NCE to its production costs for fiscal 2011, the six month period ended December 31, 2010 and fiscal 2010 and 2009, see Operating and Financial Review and Prospects' Costs' Notional Cash Expenditure.

The gold production in fiscal 2011 increased primarily as a result of increase in the ore grade mined. Total production and cash costs increased in fiscal 2011 due to increased fuel, power and royalty costs.

Damang obtains its electricity indirectly from the VRA, which generates the electricity. The electricity is distributed by Electricity Company of Ghana, or ECG, which is a distributor for GridCo, the electricity transmission utility. A tariff was agreed with the ECG covering the period June 1, 2010 to May 31, 2011. Tariff rates for June 2011 to May 2012 are being negotiated. See Risk Factor' Power stoppages, fluctuations and power cost increases may adversely affect Gold Fields' results of operations and its financial condition.

Damang has a back-up power generation facility that is owned and controlled by the mine. This is only used during power outages or reduced grid supply capacity from the VRA or the ECG.

Assuming that Gold Fields does not increase or decrease reserves estimates at Damang and that there are no changes to the current mine plan at Damang, Damang's December 31, 2011 proven and probable reserves of 3.4 million ounces (approximately 3.1 million of which were attributable to Gold Fields, with the remainder attributable to noncontrolling shareholders in the Ghana operations) will be sufficient to maintain production through approximately fiscal 2024 (as per new Life of Mine). However, as discussed earlier in Risk Factors' and Mine Planning and Management, there are numerous factors that can affect reserve estimates and the mine plan, which could thus materially change the life of mine.

The Damang mine comprises open pit mining, and is thus subject to all of the risks associated with open pit mining discussed in Risk Factors'. Although surface mining generally is less dangerous than underground mining, serious and even fatal accidents do still occasionally occur. The Damang mine has not had a fatal injury since its acquisition by Gold Fields in 2002, including to date. On a calendar year basis, the lost time injury frequency rate (see Defined Terms and Conventions) at Damang for fiscal 2011, calendar 2010 and calendar 2009 was 0.19, 0.64 and 0.17 lost time injuries for every million hours worked, respectively.

The Damang mine has introduced a safety management system in accordance with OHSAS 18001 and, in fiscal 2011, it was again selected by the Ghana Inspector of Mines as the safest mine in Ghana. The environmental management system at the mine is certified to the ISO 14001 standard. There were no strikes or material work stoppages at Damang in fiscal 2011 or to date. Damang achieved full compliance certification under the International Cyanide Management Code in May 2008 and was successfully recertified in fiscal 2011.

**Processing**

All ore at Damang is processed through a single facility. The following table sets forth the year commissioned, processing techniques and processing capacity per month, as well as average tons milled per month and metallurgical recovery factor during fiscal 2011 for the plant.

**Processing Techniques**

Plant	Year commissioned	Comminution phase	Treatment phase	Capacity <sup>(1)</sup> (tons/month)	Average milled for fiscal 2011 (tons/month)	Approximate recovery factor for fiscal 2011 <sup>(2)</sup>
Processing Plant	1997 <sup>(3)</sup>	Primary and two-stage secondary crushing with SAG and ball milling	CIL treatment	383,000	411,130	92%

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Notes:

- (1) Nameplate capacity as designed. Plant/Mill nameplate capacities are based on a number of operating assumptions, including assumptions regarding the blend of soft and hard ores processed, that can change and which may result in an increased level of throughput over and above the designed nameplate capacity.
- (2) Percentages are rounded to the nearest whole percent.
- (3) The secondary crusher was commissioned in 2010.

Optimization of the Damang mill involves careful blending of hard and soft ores to maximize use of the milling circuit, which remains the major throughput constraint in this plant. Mining operations continue to focus on maintaining an appropriate plant feed blend.

The installation and commissioning of a secondary crusher, intended to increase the higher-grade, hard fresh ore production in the mill feed, was completed on April 30, 2010. The East Tailings storage capacity is currently in the process of being increased to 7.2 million tons (15-month storage) to sustain production through July 2013 by raising the current level to 1,000 meters above sea level.

### *Capital Expenditure*

Gold Fields spent approximately U.S.\$57 million on capital expenditures at the Damang operation in fiscal 2011 (excluding U.S.\$31 million spent on capital waste mining, which is expensed), principally for the primary and ancillary mining fleet, exploration, and Tailings storage facility construction. Gold Fields has budgeted approximately U.S.\$60 million for capital expenditures at Damang for fiscal 2012 (excluding U.S.\$32 million to be spent on capital waste mining, which is expensed), principally for primary and ancillary mining fleet, exploration and Tailings storage facility projects.

### **Australia Operations**

When Gold Fields acquired the St. Ives and Agnew gold mining operations from WMC Resources Limited, or WMC, on November 30, 2001, part of the purchase consideration included Gold Fields agreeing to pay a royalty to WMC (a right sold to Morgan Stanley in 2002). Separate, but similar, royalties were payable for gold produced from the St. Ives and Agnew operations.

On June 26, 2002, WMC agreed to give up its right to receive royalties from the Agnew operation in exchange for a payment of A\$3.6 million. On August 26, 2009, Gold Fields executed an agreement with Morgan Stanley pursuant to which the royalty payable by St. Ives to certain subsidiaries of Morgan Stanley was terminated for a consideration of A\$308 million (\$267.1 million).

### ***St. Ives***

#### *Introduction*

St. Ives is located 80 kilometers south of Kalgoorlie and 20 kilometers south of Kambalda, straddling Lake Lefroy in Western Australia. It holds exploration licenses, prospecting licenses and mining leases covering a total area of approximately 97,700 hectares. St. Ives is both a surface and underground operation, with a number of open pits, four operating underground mines, a metallurgical CIP plant and a heap leach facility. The St. Ives operation obtains electricity pursuant to a contract with a major mining company that expires in January 2014 and has access to water, rail, air and road infrastructure. Needed supplies are trucked in locally from both Perth and Kalgoorlie. In fiscal 2011, St. Ives produced 0.465 million ounces of gold. St. Ives had a workforce of approximately 470 employees and approximately 550 outside contractors as of December 31, 2011.

Gold production takes place over an extensive area at St. Ives, although it is mainly concentrated in a 55-kilometer corridor extending south-southeast from Kambalda across Lake Lefroy.

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### *History*

Gold mining began in the St. Ives area in 1897, with WMC commencing gold mining operations at St. Ives in 1980. Gold Fields acquired the St. Ives gold mining operation from WMC in November 2001.

### *Geology*

The gold deposits of St. Ives are located at the southern end of the Norseman-Wiluna greenstone belt of the West Australian Goldfields Province. In the St. Ives area the belt consists of Kalgoorlie Group volcanic rocks, Black Flag group felsic volcanic rocks and sediments and a variety of intrusive and overlying post-tectonic sediments. The area is structurally complex, with host rocks metamorphosed to upper greenschist and lower amphibolite facies. Gold mineralization discovered to date is best developed in the mafic-dominated parts of the sequence, hosted in minor structures including vein arrays, breccia zones and central, quartz-rich and mylonitic parts of shear zones. Deposit styles and ore controls are varied, but deposits are commonly associated with subsidiary structures which splay off the regionally extensive Boulder-Lefroy Fault.

### *Mining*

St. Ives sources production from a variety of underground and surface operations. The site has a mill that treats primary ore and a heap leach facility which treats low- and marginal-grade ore. The principal production sources in fiscal 2011 included the Argo, Athena, Belleisle and Cave Rocks underground mines together with the Agamemnon, Apollo, Diana, Formidable, Leviathan and Mars Minotaur Link open pits.

*Argo Complex.* Stopping activities at the Argo mine commenced in November 2003. Production at the Argo underground mine continued throughout fiscal 2011 at similar levels to previous years. Production at Argo in fiscal 2012 is expected to reduce as the available stopping areas diminish. Based on the December 31, 2011 reserves, Argo has a further 18 months of production. Exploration activities are continuing with a view to extending the life of the mine.

*Greater Revenge Complex.* Mining at the Greater Revenge Area commenced in 1989. The operation utilizes typical open pit and lake sediment mining methods. Cutbacks of the Agamemnon and Mars Minotaur Link pits were mined during fiscal 2011. Limited mining is planned for the Greater Revenge Area in fiscal 2012.

*Belleisle Underground Mine.* The Belleisle deposit lies in the Greater Revenge Area adjacent to the depleted Mars open pit. The final 20,000 ounces were mined from Belleisle in fiscal 2011 and the mine was closed as scheduled in May 2011.

*Cave Rocks underground Mines.* Cave Rocks is located approximately six kilometers to the west of the Kambalda West township and was previously an open pit mine completed in 1985. The underground mine utilizes primarily open stopping methods without backfill to extract ore as originally planned and is currently undergoing an intensive delineation and exploration program to extend the life of mine through to 2014.

*Leviathan Open Pit.* The Leviathan open pit is based on the expansion of a pre-existing open pit located approximately two kilometers southeast of the Lefroy processing plant. The mine utilizes conventional truck and shovel mining practices. Mining occurs through areas previously exploited by underground mining methods, requiring special care when passing through these mined areas. Procedures based on industry best practice in the mining district have been implemented to manage the risks associated with these zones. Production continued at Leviathan throughout fiscal 2011 and is expected to continue until mid-2012.

*Athena and Hamlet Underground Mines.* Construction at the Athena mine was completed during fiscal 2010 and reached commercial levels of production in July 2011. The construction of the decline from Athena to the new Hamlet mine commenced in December 2010. The first ore extraction from Hamlet occurred in November 2011, with stopping expected to commence in the latter half of 2012. Based on reserves at December 31, 2011 Athena has a life of mine of four years and Hamlet has a life of seven years with prospects of extensions to those lives.

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St. Ives' exploration program in fiscal 2011 led to an improved understanding of the underlying geological mineralization of all mines, enabling consolidation of mine geology and a number of key project areas going forward. At all mines and in particular Cave Rocks, extensional drilling continued in order to replace and extend the existing ore bodies. Continued early-stage exploration and follow-up of prospective targets with first-pass exploratory drilling was also completed in a number of areas. The new mine developments of the Athena underground and the Diana, Formidable and Mars Minotaur Link open pits significantly enhanced production in fiscal 2011. The Leviathan and Formidable open pits are expected to continue to provide the primary source of open pit ore in fiscal 2012.

Underground mining activities at Belleisle, Cave Rocks and Argo were undertaken under an agreement with Carlowen Proprietary Ltd, which trades as GBF Underground Mining, or GBF. GBF provided all the employees and equipment necessary to complete the underground development and stoping for Belleisle, Cave Rocks and Argo. In July 2011, St. Ives transitioned to owner mining at Cave Rocks and Argo (Belleisle was closed in May 2011) with the assistance of GBF who continue to undertake underground development work on access tunnels under a fixed and variable contract expiring in July 2013.

A separate two-year contract for the capital development of the new Athena underground mine (Hamlet was subsequently added) was awarded to Byrncut Mining Propriety Limited, or Byrncut, commencing in January 2010. This contract was extended to January 2013. Byrncut is an access tunnel development and underground contract miner. Byrncut is liable for claims arising from its performance or non-performance, and any loss, damage, injury or death related to the presence of its employees on site. Byrncut is not liable for liabilities or losses that are the result of negligence or a breach of a statutory duty of the mine owner. Byrncut is required to ensure that it and any subcontractors have adequate insurance.

Leighton Contractors Proprietary Limited, or Leighton, performs the surface mining at St. Ives under an alliance agreement. As of December 1, 2011, Gold Fields informed Leighton that it would undertake owner mining after the requisite 6-month notice period. Leighton provides employees and equipment for mining ore and waste from the open pit mines. Leighton is reimbursed 100% of its approved costs and earns an additional margin payment contingent upon Leighton achieving targets in regards to certain key performance indicators. Under the terms of the agreement, Leighton is liable for claims arising from any loss and/or damage related to the negligence, injury or death of its employees and/or damage to any property on the sites. Leighton is not liable for claims or loss resulting from the mine owner's negligence. Leighton's liability under the agreement is subject to an aggregate liability cap of A\$15 million and excludes losses for business interruption, loss of actual or anticipated revenue, income or profits, and any indirect, contingent or penal damages. Leighton is required to ensure that it and any subcontractors have adequate insurance.

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Detailed below are the operating and production results at St. Ives for fiscal 2011, the six month period ended December 31, 2010 and fiscal 2010 and 2009.

	Fiscal 2009	Fiscal 2010	Six-Month Period Ended December 31, 2010	Fiscal 2011
<b>Production</b>				
Tons ( 000)	7,262	6,819	3,284	6,745
Recovered grade (g/t)	1.8	1.9	2.3	2.1
Gold produced ( 000 oz)	428	421	243	465
<b>Results of operations (\$ million)</b>				
Revenues	378.6	460.6	313.4	734.2
Total production costs <sup>(1)(2)</sup>	350.3	450.6	273.6	575.1
Total cash costs <sup>(3)</sup>	280.2	318.0	173.9	409.9
Cash profit <sup>(4)</sup>	98.4	142.6	139.5	324.3
<b>Cost per ounce of gold (\$)</b>				
Total production costs	818	1,070	1,126	1,238
Total cash costs	654	755	716	882
<b>Notional cash expenditure per ounce of gold produced (\$)<sup>(5)</sup></b>	<b>802</b>	<b>1,023</b>	<b>918</b>	<b>1,192</b>

Notes:

- (1) For purposes of allocating production costs between St. Ives and Agnew, the consideration paid for the Australian operations in excess of the book value of the underlying net assets was allocated pro rata to the value of the underlying assets.
- (2) For a reconciliation of Gold Fields' total production costs to production costs, see Operating and Financial Review and Prospects Results of Operations Years Ended December 31, 2011 and June 30, 2010 Costs and Expenses, Operating and Financial Review and Prospects Results of Operations Six Months Ended December 31, 2010 and 2009 Costs and Expenses and Operating and Financial Review and Prospects Results of Operations Years Ended June 30, 2010 and 2009 Costs and Expenses.
- (3) For a reconciliation of Gold Fields' total cash costs to production costs, see Operating and Financial Review and Prospects Results of Operations Years Ended December 31, 2011 and June 30, 2010 Costs and Expenses, Operating and Financial Review and Prospects Results of Operations Six Months Ended December 31, 2010 and 2009 Costs and Expenses and Operating and Financial Review and Prospects Results of Operations Years Ended June 30, 2010 and 2009 Costs and Expenses.
- (4) Cash profit represents revenues less total cash costs.
- (5) For a reconciliation of Gold Fields' NCE to its production costs for fiscal 2011, the six month period ended December 31, 2010 and fiscal 2010 and 2009, see Operating and Financial Review and Prospects Costs Notional Cash Expenditure.

From fiscal 2010 to fiscal 2011, tonnages at St. Ives remained relatively stable. Gold production was significantly higher than that achieved during fiscal 2010 due to the Athena mine coming into production partially offset by the closure of Belleisle in May 2011. The increase in cash costs from fiscal 2010 to fiscal 2011 as expressed in U.S. dollars was predominantly due to the strengthening of the Australian dollar.

Assuming that Gold Fields does not increase or decrease reserves estimates at St. Ives and that there are no changes to the current mine plan at St. Ives, St. Ives' December 31, 2011 proven and probable reserves of 2.8 million ounces will be sufficient to maintain production through approximately fiscal 2018. However, as discussed earlier in Risk Factors and Mine Planning and Management, there are numerous factors which can affect reserve estimates and the mine plan, which could thus materially change the life of mine.

St. Ives is engaged in underground mining and in both open pit and production stockpile surface mining, and is thus subject to all of the underground and surface mining risks discussed in Risk Factors. Seismicity is the



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primary underground safety risk with mining increasingly occurring at depths below 500 meters. The risk is addressed through the use of backfilling and by mining different parts of the ore body in controlled steps to improve stability, which is called stope sequencing. No fatalities were recorded in fiscal 2009, 2010, 2011 or to date. On a calendar year basis, the lost time injury frequency rate (see Defined Terms and Conventions ) for fiscal 2011, calendar 2010 and calendar 2009 was 2.86, 5.03 and 1.63 lost time injuries per million hours worked, respectively. St. Ives has a health and safety system that conforms to the requirements of OHSAS 18001 and is integrated with its ISO 14001 environmental management system. Certifications in this respect were maintained during fiscal 2011. St. Ives achieved full compliance certification under the International Cyanide Management Code in August 2009. There were no strikes or material work stoppages at St. Ives in fiscal 2011 or to date in fiscal 2012.

*Processing*

The table below sets forth year commissioned, processing techniques and processing capacity per month, as well as average tons milled per month and metallurgical recovery factors during fiscal 2011, for each of the plants at St. Ives.

**Processing Techniques**

Plant	Year commissioned	Comminution phase	Treatment phase	Capacity <sup>(1)</sup> (tons/month)	Average milled for fiscal 2011	Approximate recovery factor for fiscal 2011 <sup>(2)</sup>
Lefroy Plant	2005	Single-stage crushing and SAG milling	CIP	375,000	399,425	94%
Heap Leach Facility	2000	Multiple-stage crushing and screening process	Carbon absorption	167,000	162,682	55% <sup>(3)</sup>

## Notes:

- (1) Nameplate capacity as designed. Plant/Mill nameplate capacities are based on a number of operating assumptions, including assumptions regarding the blend of soft and hard ores processed, that can change and which may result in an increased level of throughput over and above the designed nameplate capacity.
- (2) Percentages are rounded to the nearest whole percent.
- (3) Heap leach recoveries are the result of an extended solution application process with full recovery requiring several leach cycles. Thus, recoveries must be considered in terms of recovery as time progresses, or a progressive recovery. Over time, Gold Fields expects the plant to achieve progressive recovery factors of about 60% of contained gold, equivalent to full recovery of all recoverable gold.

The Lefroy Plant was fully commissioned in February 2005 and is located on the south shore of Lake Lefroy, approximately 12 kilometers south of the township of Kambalda. The plant consistently achieved in excess of nameplate capacity throughout fiscal 2011. Optimization continued throughout the year to realize incremental improvements in recovery while maintaining throughput and minimizing costs.

The Heap Leach Facility treats low- and marginal-grade ore from St. Ives. Fiscal 2011 saw significant variability in the costs of operating this process stream. An optimization study was undertaken as part of the BPR program to identify key projects that may improve the overall operating characteristics of the Heap Leach process stream at St. Ives. All such recommendations were implemented by the end of fiscal 2011, resulting in improved throughput capacity and improved unit costs.

The Lake Disturbance Permit required to operate on Lake Lefroy expired in 2011 and a new permit was approved in the same year.

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### *Capital Expenditure*

Gold Fields spent approximately A\$156 million on capital expenditures at St. Ives in fiscal 2011 (excluding A\$21 million on pre-stripping at the open pits, which is expensed), primarily on the development of the Athena and Hamlet underground mines, continued development at the Argo and Cave Rocks underground mines and exploration drilling. Gold Fields has budgeted approximately A\$207 million for capital expenditures at St. Ives in fiscal 2012 (excluding A\$47 million on pre-stripping at the open pits, which is expensed). These funds are principally earmarked for the continuing development at Athena and Hamlet, establishment of a new tailings facility and exploration drilling.

### *Agnew*

#### *Introduction*

Agnew is located 23 kilometers west of Leinster, approximately 375 kilometers north of Kalgoorlie and 630 kilometers northwest of Perth, Western Australia. It holds exploration licenses, prospecting licenses and mining leases covering a total area of approximately 54,000 hectares. Agnew operated both an underground and the Songvang open pit in fiscal 2011. Underground mining is conducted from the Waroonga Underground Complex which comprises multiple ore zones. Agnew has one metallurgical plant. Agnew is serviced by sealed road infrastructure to the mine gate. Agnew is largely a fly-in fly-out site. Local services including air transport with a sealed runway and accommodation is provided pursuant to an arrangement with a neighboring mine operated by a major mining company. Agnew has access to electricity pursuant to a contract with the same neighboring mine which expires in January 2014. The bulk of the water is supplied from the mining operations and recovered from the in-pit tailings facility. Supplies are generally trucked in from Perth or Kalgoorlie. In fiscal 2011, the operation produced 0.194 million ounces of gold. As of December 31, 2011, Agnew had approximately 240 employees and approximately 200 outside contractors.

#### *History*

Gold was discovered at Agnew in 1895 and production was intermittent until Western Mining Corporation, or WMC, acquired the operation in the early 1980s and constructed the current mill in 1986. Since that time, numerous open pits and underground operations have been mined.

#### *Geology*

The Agnew deposits are located within the northwest portion of the Norseman-Wiluna greenstone belt of the Western Australian Goldfields. In the Agnew area the greenstone belt consists of an older sequence of ultramafic flows, gabbros, basalts, felsic volcanics and related sedimentary rocks. The rocks are folded about the large, moderately north plunging Lawlers Anticline. The Agnew deposits are located on the western limb of this anticline, and major deposits discovered to date lie on sheared contacts between stratigraphic units. The anticline is cut by north-northeast trending faults such as the Waroonga and East Murchison Unit shear zones.

#### *Mining*

The principal production source in fiscal 2011 at Agnew was the Waroonga underground mining complex. The northern cutback of the Songvang open pit commenced in 2011 and this ore has supplemented underground feed to the mill. Mining of this cutback was completed in early 2012 and the stockpiled ore will again supplement underground production throughout 2012. Gold Fields expects that the Waroonga complex will remain the principal production source in fiscal 2012.

*Waroonga Underground Complex.* The Waroonga Underground Complex currently includes underground mining of the Kim South, Rajah and Main Lode ore bodies. The mining method involves longhole open stoping with paste filling. Ore development tunnels are developed on 20 to 25 meter vertical spacings, with stoping

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taking place between these tunnels in blocks of 20 to 40 meters along strike depending on ground conditions. Each stope is mucked clean using tele-remote loaders prior to paste filling. Access to the ore body is through a decline tunnel which accommodates workers, materials and equipment. Waroonga underground performance averaged 52,000 tons per month in the fiscal 2011.

During fiscal 2011, development of a new primary return air shaft was completed and new surface fans were installed. This system was designed to ensure sufficient ventilation underground for the life of the mine and will double the current ventilation capacity. Capital development of the Kim and Main declines has been accelerated to enable detailed ore definition drilling of the ore body prior to ore development and to provide drilling platforms for future reserve conversion. See Growth and International Projects Near Mine Exploration . As part of the BPR program, Agnew has been focused on securing productivity improvements since the implementation of owner mining in mid-2010. In addition, Agnew terminated its contract with its equipment maintenance provider in May 2011 in order to achieve cost improvements. Underground development is performed by Barmenco Limited or Barmenco. Barmenco provides employees, consumables and equipment including drilling, blasting and haulage of development ore and waste. Barmenco receives fees under an agreement which depend on the type of service being performed and the equipment being used, with adjustments for performance. Under the terms of the agreement, Barmenco is liable for claims arising from its performance or non-performance and any loss, damage or injury related to the presence of its employees on the sites. Barmenco is not liable for claims or loss due to the mine owner's negligence. Barmenco is required to ensure that it and any subcontractors have adequate insurance. Barmenco was awarded a three-year contract for mine development in June 2010. Detailed below are the operating and production results at Agnew for fiscal 2011, the six month period ended December 31, 2010 and fiscal 2010 and 2009.

	Fiscal 2009	Fiscal 2010	Six-Month Period Ended December 31, 2010	Fiscal 2011
<b>Production</b>				
Tons ( '000)	1,066	883	417	935
Recovered grade (g/t)	5.6	5.8	5.9	6.5
Gold produced ( '000 oz)	192	165	80	194
<b>Results of operations (\$ million)</b>				
Revenues	169.9	177.8	102.4	313.1
Total production costs <sup>(1)(2)</sup>	94.1	108.4	60.1	178.8
Total cash costs <sup>(3)</sup>	77.6	87.7	50.2	149.3
Cash profit <sup>(4)</sup>	92.3	90.1	52.2	163.8
<b>Cost per ounce of gold (\$)</b>				
Total production costs	490	656	755	921
Total cash costs	404	531	631	769
<b>Notional cash expenditure per ounce of gold produced (\$)<sup>(5)</sup></b>	564	874	961	1,105

Notes:

- (1) For purposes of allocating production costs between St. Ives and Agnew, the consideration paid for the Australian operations in excess of the book value of the underlying net assets was allocated pro rata to the value of the underlying assets.
- (2) For a reconciliation of Gold Fields' total production costs to production costs, see Operating and Financial Review and Prospects Results of Operations Years Ended December 31, 2011 and June 30, 2010 Costs and Expenses , Operating and Financial Review and Prospects Results of Operations Six Months Ended December 31, 2010 and 2009 Costs and Expenses and Operating and Financial Review and Prospects Results of Operations Years Ended June 30, 2010 and 2009 Costs and Expenses .
- (3) For a reconciliation of Gold Fields' total cash costs to production costs, see Operating and Financial Review and Prospects Results of Operations Years Ended December 31, 2011 and June 30, 2010 Costs

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- and Expenses , Operating and Financial Review and Prospects Results of Operations Six Months Ended December 31, 2010 and 2009 Costs and Expenses and Operating and Financial Review and Prospects Results of Operations Years Ended June 30, 2010 and 2009 Costs and Expenses .
- (4) Cash profit represents revenues less total cash costs.
- (5) For a reconciliation of Gold Fields' NCE to its production costs for fiscal 2011, the six month period ended December 31, 2010 and fiscal 2010 and 2009, see Operating and Financial Review and Prospects Costs Notional Cash Expenditure .
- In fiscal 2011, 0.935 million tons of ore were processed and 0.194 million ounces of gold were produced. Tons processed were higher than fiscal 2010. Gold production was higher than fiscal 2010 due to improved performance at the Waroonga underground mine and access to ore from the Songvong cutback. 94% of ounces produced came from underground, which is a lower proportion than fiscal 2010 due to mining at the Songvong cutback. Total cash costs increased in U.S. dollar terms due to the strengthening of the Australian dollar and the impact of expensing the pre-strip of the Songvong cutback under U.S. GAAP.

Exploration to extend reserves at Waroonga continued to focus on down-dip extensions to the Kim South and Main Lode resources. Deep drilling below the current Main Lode identified several potential high grade but narrow ore bodies. Further delineation of these ore bodies will continue in 2012.

Assuming that Gold Fields does not increase or decrease reserves estimates at Agnew and that there are no changes to the current mine plan at Agnew, Agnew's December 31, 2011 proven and probable reserves at 1.3 million ounces will be sufficient to maintain production through approximately fiscal 2018. However, as discussed earlier in Risk Factors and Mine Planning and Management, there are numerous factors which can affect reserve estimates and the mine plan, which could thus materially change the life of mine.

Agnew is engaged in underground and surface mining and expects to reclaim stockpiles arising from the mined out Songvong operation in 2012. Agnew may pursue further open pit opportunities in the future and is thus subject to all of the underground and surface mining risks discussed in Risk Factors . The primary safety risk at Agnew is falls of ground at the underground operations, which is addressed through the use of ground support, backfilling of open voids and sequencing of mine operations to improve overall stability of the ground. There were no fatalities at Agnew in fiscal 2011, fiscal 2010, fiscal 2009 or to date. On a calendar year basis, the lost time injury frequency rate for fiscal 2011, calendar 2010 and calendar 2009 was 2.72, 1.11 and 2.13 lost time injuries per million hours worked, respectively.

Agnew deploys a health and safety management system that conforms to the requirements of OHSAS 18001. The mine also has an environmental management system that is certified to the ISO 14001 standard. Agnew has retained ISO 14001 certification following a successful audit undertaken in March 2011. Agnew achieved full compliance certification under the International Cyanide Management Code in March 2010. There were no strikes or material work stoppages at Agnew in fiscal 2011 or to date.

*Processing*

All processing at Agnew is provided by a single plant. The following table sets forth year commissioned, processing techniques and processing capacity per month, as well as average tons milled per month and the metallurgical recovery factor during the fiscal year ended December 31, 2011 for the plant:

**Processing Techniques**

Plant	Year commissioned	Comminution phase	Treatment		Average milled for fiscal 2011	Approximate recovery factor for fiscal 2011 <sup>(2)</sup>
			phase	Capacity <sup>(1)</sup>		
Main Plant	1986	2-stage ball milling	CIP treatment (tons/month)	100,00	77,918	94%

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## Notes:

- (1) Nameplate capacity as stated by the manufacturer. Plant/Mill nameplate capacities are based on a number of operating assumptions, including assumptions regarding the blend of soft and hard ores processed, that can change and which may result in an increased level of throughput over and above the designed nameplate capacity.
- (2) Percentages are rounded to the nearest whole percent.

*Capital Expenditure*

Gold Fields spent approximately A\$61 million on capital expenditures at Agnew in fiscal 2011 (excluding A\$11 million on capital waste mining), primarily on further development of the Kim South and Main Lode declines, various capital works projects in the processing plant, including a new gravity circuit, exploration, purchase of underground mobile equipment, and new primary ventilation infrastructure. Gold Fields has budgeted approximately A\$72 million for capital expenditures at Agnew for fiscal 2012 (excluding nil budgeted for capital waste mining), primarily for mine development, exploration, mobile equipment rebuilds, and capital works.

*Peru Operation*

Gold Fields owned a 92% voting interest (80.7% economic interest) in the Cerro Corona mine through its shareholding in La Cima. On April 15, 2011, Gold Fields increased its economic interest in La Cima from 80.7% to its present 98.5% following a voluntary offer to minority shareholders in La Cima to acquire their shares at a cost of \$382 million.

*Cerro Corona**Introduction*

The Cerro Corona mine became operational by the end of the first quarter of fiscal 2009. It forms part of a porphyry copper-gold deposit situated within the Hualgayoc Mining District in northern Peru. It is located in the highest part of the Western Cordillera of the Andes, in northern Peru, close to the headwaters of the Atlantic continental basin. Cerro Corona is located approximately 80 kilometers by road north of the City of Cajamarca. Cerro Corona holds mining leases covering a total area of approximately 1,600 hectares and the project was developed over an area of 940 hectares. Cerro Corona's electricity is supplied through a long-term contract with a Peruvian power supplier and transported through the national power transmission system and a 34 kilometer transmission line constructed by the project. Cerro Corona's water requirements are provided primarily by retention of rainfall and pit dewatering; water is continuously recycled. In fiscal 2011, the operation produced 0.161 million ounces of gold and 38,641 tons of copper for a total of 0.383 million gold equivalent ounces, of which 0.159 million ounces of gold and 38,061 tons of copper for a total of 0.377 million gold equivalent ounces were attributable to Gold Fields. As of December 31, 2011, Cerro Corona had approximately 400 employees involved in operating the mine and approximately 1,300 outside contractors involved in both mine operations and tailings dams construction programs.

*History*

In December 2003, Gold Fields, through a subsidiary, signed a definitive agreement to purchase an 80.7% economic and 92% voting interest in the Cerro Corona mine from a Peruvian family-owned company, Sociedad Minera Corona S.A., or SMC. The agreement called for a reorganization whereby the assets of Cerro Corona were transferred to La Cima, in July 2004. Following approval of an environmental impact assessment on December 2, 2005, Gold Fields completed the purchase of the 92% voting interest (80.7% economic interest) in La Cima in January 2006, for a total consideration of \$40.5 million. La Cima subsequently acquired all requisite additional permits to construct the mine and construction commenced in May 2006.

**Table of Contents***Geology*

The Cerro Corona gold-copper deposit is hosted by a 600- to 700-meter diameter sub-vertical cylindrical- shaped quartz diorite porphyry stock emplaced into mid-Cretaceous limestone and marls. Within the porphyry, gold-copper mineralization is primarily hosted by extensive zones of stockwork veining. There are at least two phases of diorite placement, only one of which is mineralized. The non-mineralized diorite is generally regarded as the last phase, and is referred to as barren core. The latest re-modeling suggests that the Cerro Corona porphyry is probably comprised of four or five satellite stocks with the last two being barren. The intrusive has been emplaced at the intersection of Andean-parallel and Andean-normal (transandean) structures. Supergene oxidation and leaching processes at Cerro Corona have led to the development of a weak to moderate copper enrichment blanket, allowing for the subdivision of the deposit, from the surface downward, into an oxide zone, a mixed oxide-sulphide zone, a secondary enriched (supergene) sulphide zone and a primary (hypogene) sulphide zone.

*Mining*

The Cerro Corona deposit is mined by conventional, bulk surface mining methods. The Cerro Corona operation involves a single surface mine. This ore is treated in a conventional milling and sulphide flotation concentrator capable of treating 6.2 million tons per annum of ore and producing between 100,000 and 140,000 tons per annum of copper and gold containing concentrate, which is treated mainly at smelters in Japan, Korea and Europe.

The construction of the Cerro Corona mine was completed in July 2008 and the first concentrate shipment was made in September of the same year.

Detailed below are the operating and production results at Cerro Corona the 10-month period from September 2008 to June 30, 2009 (the period of operations at the mine in fiscal 2009), in fiscal 2010 and fiscal 2011.

	10-month period ended June 30, 2009	Fiscal 2010	Six-Month Period Ended December 31, 2010	Fiscal 2011
<b>Production</b>				
Tons ( 000)	4,547	6,141	3,102	6,593
Recovered gold grade (g/t)	0.7	0.7	0.8	0.8
Recovered copper grade (%)	0.78	0.70	0.66	0.61
Combined yield (g/t)	1.5	2.0	2.0	1.8
Gold produced ( 000 oz)	105	139	80	161
Copper produced ( 000 tons)	24	41	20	39 <sup>(1)</sup>
Gold Equivalent Ounces	219	394	200	383
<b>Results of operations (\$ million)</b>				
Revenues <sup>(1)</sup>	183.8	411.4	266.6	560.5
Total production costs <sup>(2)</sup>	120.4	196.7	112.3	238.9
Total cash costs <sup>(3)</sup>	80.3	135.5	80.6	171.1
Cash profit <sup>(4)</sup>	103.5	275.9	186.0	389.4
<b>Cost per ounce of gold (\$)<sup>(5)</sup></b>				
Total production costs	553	504	558	624
Total cash costs	369	348	401	447
<b>Notional cash expenditure per equivalent ounce of gold produced (\$)<sup>(6)</sup></b>				
	908	560	548	604

Notes:

(1) Equates to 383,068 ounces on a gold equivalent basis at a price of \$1,566 per ounce of gold and \$8,859 per ton of copper.

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- (2) For a reconciliation of Gold Fields' total production costs to production costs, see Operating and Financial Review and Prospects' Results of Operations' Years Ended December 31, 2011 and June 30, 2010' Costs and Expenses', Operating and Financial Review and Prospects' Results of Operations' Six Months Ended December 31, 2010 and 2009' Costs and Expenses' and Operating and Financial Review and Prospects' Results of Operations' Years Ended June 30, 2010 and 2009' Costs and Expenses'.
- (3) For a reconciliation of Gold Fields' total cash costs to production costs, see Operating and Financial Review and Prospects' Results of Operations' Years Ended December 31, 2011 and June 30, 2010' Costs and Expenses', Operating and Financial Review and Prospects' Results of Operations' Six Months Ended December 31, 2010 and 2009' Costs and Expenses' and Operating and Financial Review and Prospects' Results of Operations' Years Ended June 30, 2010 and 2009' Costs and Expenses'.
- (4) Cash profit represents revenues less total cash costs.
- (5) Calculated on the basis of a total of 383,035 ounces of gold and gold equivalent sold.
- (6) Calculated on the basis of a total of 383,068 ounces of gold and gold equivalent produced. For a reconciliation of Gold Fields' NCE to its production costs for fiscal 2011, see Operating and Financial Review and Prospects' Costs' Notional Cash Expenditure'.

In fiscal 2011, 6,593 million tons of ore were processed compared to 6,141 million tons in fiscal 2010, and 0.161 million ounces of gold were produced, compared to 0.139 million ounces in fiscal 2010, 0.038 million tons of copper were produced compared to 0.041 million tons in fiscal 2010 and 0.383 million gold equivalent ounces were produced, compared to 0.394 million gold equivalent ounces in fiscal 2010. Tons processed and gold production were higher than in fiscal 2010, primarily due to operational improvement projects which resulted in higher throughput and increased recovery.

The single largest contractor employer is Minera San Martin. Minera San Martin carries out all mining activities under the direction of the La Cima mining and geology department. All mine planning, excavation and head grade and engineering specifications to meet the required design performance through the life of mine are directly managed by La Cima personnel. Other contractors provide camp administration and catering, security, safety and laboratory operations. In addition, during the third phase of the TMF construction, which was completed in August 2011, an average of approximately 550 temporary contractors per month were involved in the construction program.

Assuming that Gold Fields does not increase or decrease reserve estimates at Cerro Corona and that there are no changes to the current mine plan, Cerro Corona's December 31, 2011 proven and probable reserves of 3.1 million ounces of gold and 1,114 million pounds of copper (of which, 3.0 million ounces of gold and 1,109 million pounds of copper were attributable to Gold Fields, with the remainder attributable to noncontrolling shareholders at La Cima) will be sufficient to maintain production through approximately fiscal 2028. However, as discussed earlier in Risk Factors' and Mine Planning and Management, there are numerous factors that can affect reserve estimates and the mine plan, which could thus materially change the life of mine.

The Cerro Corona mine involves open pit mining, and is thus subject to all of the risks associated with open pit mining discussed in Risk Factors'. Although surface mining generally is less dangerous than underground mining, serious and even fatal accidents do still occasionally occur.

There were no fatalities at Cerro Corona in fiscal 2011 and none to date in fiscal 2012. On a calendar year basis, the lost time injury frequency rate at Cerro Corona for fiscal 2011, calendar 2010, and calendar 2009 was 0.18, 0.00 and 0.32 lost time injuries for every million hours worked, respectively. Cerro Corona has implemented a health and safety management system in accordance with the Gold Fields Full Compliance Health and Safety Management System and in accordance with the OHSAS 18001. OHSAS 18001 certification was obtained in June 2010. The second audit of the integrated ISO 14001 and OHSAS 18001 requirements was successfully completed in August 2011. The fourth amendment to the Cerro Corona environmental impact assessment, or EIA, was approved by MEM in September 2011. In fiscal 2011, for the second consecutive year, Cerro Corona was ranked first for its safety practices in open pit

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mining by the National Institute of Mining. Further, Cerro Corona incorporated a non-profit organization, Asociación Puentes para el Desarrollo, to administrate and co-finance specific social programs.

La Cima entered into a five year labor agreement with the Cerro Corona workers union in November 2011. Over the last few years Peru has seen many cases of conflict and dissention between local communities and mining operations and mining projects, stemming largely from the communities' desire for greater participation in the economic benefits of these mining projects. Cerro Corona has undertaken extensive community consultation and negotiation since 2003 through the land purchase and permitting process to achieve agreement with local communities on various aspects of community involvement. A comprehensive strategy to work with the communities has been implemented through the operations stages. The main focus of this strategy relies on three pillars which are (i) promoting the development of basic local infrastructure such as roads, telecommunications, electricity, potable water, education and health, (ii) training and employing the local communities, including employing more than 1,000 locals during construction and approximately 500 currently, and developing more than 50 local contractors and (iii) developing economically self-sustaining projects such as a natural pastures and forestation. Gold Fields believes its social strategy has created goodwill with the local communities, with the implementation of key projects such as the paving of the road to Hualgayoc, rural electrification, a potable water plant, and the Kunturwasi highway, among others. The sustainable development projects have been very successful, with more than 700 hectares of natural pastures improved and 300 cows genetically enhanced to improve production of milk. Through the construction and operations phase, La Cima has carefully prioritized the agreements with local communities.

Gold Fields believes that, over time, Cerro Corona has generated strong community relationships; however, there have been instances of conflict with the local communities in the past and members of local communities have blocked road access to Cerro Corona on occasion. The Cerro Corona social team is continuously working to ensure continuity in the relationships. No blockades or demonstrations directly against Gold Fields occurred during fiscal 2011 or to date that have impacted Cerro Corona's operations. However, a road blockade against the neighboring Conga Project (Yanacocha) did impact the access to Cerro Corona for 11 days in December 2011. Despite this blockade, La Cima did not experience any work stoppages in fiscal 2011.

Activity at Gold Fields 50:50 joint venture, Consolidada de Hualgayoc, was restarted by the joint venture partner in fiscal 2011, with funding provided by La Cima, following a suspension in September 2009 due to disturbances between local communities. See Growth and International Projects Near Mine Exploration

*Processing*

The following table sets forth year commissioned, processing techniques and processing capacity per month, for the processing plant at Cerro Corona:

**Processing Techniques**

Plant	Year commissioned	Comminution phase	Treatment phase	Capacity <sup>(1)</sup> (tons/month)	Average milled for fiscal 2011	Approximate recovery factor for fiscal 2011 <sup>(2)</sup>
Processing Plant	2008	SAG/ball milling	Conventional sulphide flotation circuit	517,000	549,000	Gold 65% Copper 83%

## Notes:

- (1) Nameplate capacity as designed. Plant/Mill nameplate capacities are based on a number of operating assumptions, including assumptions regarding the blend of soft and hard ores processed, that can change and which may result in an increased level of throughput over and above the designed nameplate capacity.
- (2) Percentages are rounded to the nearest whole percent.



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Gold Fields operates a concentrate storage warehouse at the port of Salaverry in Trujillo city, approximately 450 kilometers away from Cerro Corona. Concentrate is shipped from the Salaverry port in bulk carrier vessels. Gold Fields entered into a five-year contract with Transportes Rodrigo Carranza, or TRC, in the third quarter of fiscal 2008 pursuant to which TRC handles the logistics of trucking concentrate from the mine to the warehouse and then transferring it to the ships. Operations at Salaverry are managed under the same safety and environmental standards as those at Cerro Corona. La Cima has contributed to improvement of the environmental practices at the port by implementing the first fully hermetic shiploading equipment in Peru.

Studies are currently being conducted to evaluate alternatives for the treatment of oxide ores which have previously been mined and stockpiled on surface. Management is also considering a heap leach option to treat these ores.

### *Capital Expenditure*

Gold Fields spent approximately \$69 million on capital expenditures at Cerro Corona in fiscal 2011, consisting primarily of the construction of further raises to the tailings dam. Gold Fields has budgeted approximately \$89 million for capital expenditures at Cerro Corona for fiscal 2012, primarily on the fifth phase of the tailings dam construction and improvements of the process plant facilities, such as de-bottlenecking projects.

### *Growth & International Projects*

Gold Fields Growth & International Projects Group, or GIP, manages a diverse portfolio of exploration and development projects in Africa, Europe, Central Asia, the Americas and Australasia. In addition, Gold Fields has a number of exploration projects associated with mineral rights it holds which are adjacent to its active mining operations in South Africa, Ghana, Peru and Australia. The GIP programs are managed from two exploration hubs in Perth, Western Australia and Denver, Colorado. The company also has offices in Santiago, Chile; Lima, Peru; Mendoza, Argentina; Vancouver, Canada; Bamako, Mali; Accra, Ghana; Bishkek, Kyrgyzstan; and Beijing, China. As of December 31, 2011, Gold Fields exploration team included 483 full-time and contract employees, of which 148 are geoscientists, who provide the key exploration capability in the regions of focus around the world. In addition to these 483 employees, Gold Fields exploration team also employs approximately 600 outside contractors. Gold Fields growth strategy is based on a balanced approach to projects, which provides the ability to consider a project at any stage of development, from the greenfields stage through to full feasibility study.

The goal of this strategy is to maintain a consistent pipeline covering all stages of the exploration process in order to deliver a new feasibility level project every one to two years.

Gold Fields budgets to spend about \$30 per ounce of gold produced on greenfields exploration, as distinct from the resource development and feasibility staged projects and near mine exploration which refers to exploration around Gold Fields mine sites.

Gold Fields focuses its greenfields exploration activities on finding opportunities with the correct balance of quality, size and risk. When determining whether it will proceed with a project, Gold Fields weighs a variety of factors, including acquisition costs, expected operating and capital costs of production, as well as the possible technical, commercial, social, environmental and geo-political risks against the expected returns for the project. Other important considerations include the optionality embedded in the project and its strategic importance in terms of geographic diversification and production profiles. This could result in consideration of additional multi-commodity targets such as copper-gold deposits or gold-silver type deposits.

Outside South Africa, the focus is on growing Gold Fields three international regions of West Africa, Australasia and South America with the objective of achieving one million ounces per annum of production from

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each region. Gold Fields will leverage off its established infrastructure wherever possible to reduce development hurdles and delivery timelines for new opportunities. Near mine exploration projects, which are adjacent to Gold Fields' existing mining operations, endeavor to capture any possible operating synergies which can be realized, for example, by sharing processing plants and other infrastructure, which has a knock-on effect with regard to minimum project size criteria. For greenfields projects, Gold Fields makes use of its existing operating centers in Ghana (through Gold Fields Exploration (Ghana) Ltd.), Australia (through Gold Fields Australasia Pty. Ltd.) and Peru (through Minera Gold Fields Peru S.A.) to pursue, incubate and facilitate new opportunities within other prospective countries in the respective regions.

In the longer term, Gold Fields is also considering a limited number of opportunities in jurisdictions outside its established regions. The focus is on areas of the world which are historically under-explored or where new technologies and concepts can be applied to improve the likelihood of discovery. Gold Fields has successfully expanded its exploration activities in countries and regions where it has limited experience by means of equity investments in, and strategic alliances with, junior mining partners who are already well established in those areas. Gold Fields has historically applied this strategy to exploration projects in Mali, China, Philippines and Kyrgyzstan, amongst others.

Gold Fields divides the different phases of an exploration target's development into what it refers to as the resource pipeline. An exploration project normally comprises several distinct exploration targets and the resource pipeline provides for the progression of the exploration targets in five stages: (1) target definition, (2) initial drilling, (3) advanced drilling, (4) resource development and (5) feasibility study. To be successful, exploration targets need to be drill tested and moved up to the next exploration phase, or be divested. There is therefore a focus on turning over targets as quickly and as effectively as possible by drill testing. Greenfields exploration is generated by reviewing and ranking the most prospective terrains across the world and exploration areas are selected after considering country risk and strategic fit. Each exploration region continuously monitors and reviews third party projects at all stages of development.

### *Greenfields Exploration*

The table below provides a breakdown of the number of targets in Gold Fields' four main exploration regions, as well as targets in the rest of the world, for each of the five stages of the resource triangle as of December 31, 2011. The table does not include near mine exploration projects on sites adjacent to Gold Fields' existing operations.

Phase	Africa	Australasia	South America	North America	Rest of World	Worldwide
Feasibility Study	0	0	1	0	0	1
Resource Development	0	1	0	0	1	2
Advanced Drilling	1	0	0	1	1	3
Initial Drilling	3	16	5	3	0	27
Target Definition	94	21	25	1	0	141

During fiscal 2011, Gold Fields spent approximately \$80 million on greenfields exploration projects not adjacent to its mining operations. Gold Fields' total budget for greenfields exploration for fiscal 2012 is approximately \$110 million.

### *Initial Drilling Projects*

In the East Lachlan Fold Belt of New South Wales, Australia, Gold Fields holds an 80% interest in six project areas (Wellington North, Cowal East, Jemalong, Moorefield, Parkes-Clancy and Parkes-Centaurus) and has completed the 51% earn-in of a potential 80% earn-in in the Myall joint venture. Gold Fields has expanded its own ground position in this world class gold-copper porphyry belt with the addition of four new project areas in its own right and now holds approximately 2,100 square kilometers in the belt.

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A substantial full field air-core drilling program remains ongoing at the Myall concession focused on the discovery of concealed porphyry gold-copper systems that have breached the paleo-surface. Elsewhere in the belt, 14 initial drill targets have been tested in fiscal 2011 with some encouraging results. Focused target definition work consisting of airborne and ground geophysical surveys and auger drilling coupled with multi-element and multi-spectral analysis has revealed a number of porphyry related anomalies at the Wellington North project. Further work at the Cowal East joint venture has identified both epithermal gold and porphyry gold-copper targets. These and other targets are scheduled for initial drilling in early 2012 while greenfields target definition work continues.

Gold Fields currently manages over 20,000 square kilometers of tenements at its Delamerian project in South Australia. This large landholding is comprised of both 100% Gold Fields-owned concessions, concession applications and concessions under a joint venture agreement with Australian Zircon Limited. This is an early stage greenfields project targeting covered orogenic gold mineralization in an unexplored province. Geophysical surveys, aircore drilling and soil sampling have identified a number of target areas of low level anomalism. A single diamond drill hole completed at the Haylands target intersected hydrothermal alteration associated with anomalous gold, zinc, copper and bismuth values which validates the targeting criteria. Additional targets have been defined and prioritized for initial drilling in 2012.

In the Newcastle Range area of Queensland, Australia, six new tenements covering 1,186 square kilometers have been acquired targeting epithermal and intrusion related gold mineralization in Permo-Carboniferous rhyolitic breccia complexes akin to the adjacent Kidston gold mine. Initial exploration involving target generation and initial drilling will take place in 2012.

In the Drummond Basin area of Queensland, Australia, six tenements covering 1,342 square kilometers have been applied for targeting porphyry copper-gold style mineralization. Field programs are scheduled to commence upon granting of the licenses in 2012.

At the historical mining district of Mt. Morgan, Queensland, Australia, Gold Fields has acquired five tenements covering 902 square kilometers targeting porphyry copper-gold deposits. First pass geological reconnaissance has been undertaken with the 2012 work program currently under consideration.

In the Philippines, Gold Fields terminated its earn-in agreement on its three Batangas joint ventures with Mindoro Resources in the first quarter of fiscal 2011. All targets were drill tested and results did not warrant further work. Gold Fields retains no further interest in the projects.

In September 2011, Gold Fields signed an option agreement with Bezant Resources PLC to acquire 100% of the Mankayan copper-gold project located on Luzon Island in the Philippines. The Mankayan project is immediately adjacent to the Far Southeast project and contains a buried gold-copper porphyry deposit located at Guinaoang about four kilometers east of the Far Southeast deposit. Diamond drilling is planned at Mankayan in 2012.

In Peru, Gold Fields is exploring the Moquegua and Tacna projects located in the southern Altiplano region. Initial reverse circulation drilling partially tested the Ichocollo porphyry gold target at the Tacna Project in September 2011. However, the drilling program was suspended after two holes due to regional social unrest. This program is scheduled to resume in early 2012 followed by initial reverse circulation drilling programs on two other target areas. At the Moquegua Project, an initial drilling program of six diamond drill holes was completed between August and November 2011 (on the Pacosani breccia target). Final assay results were disappointing and no further work is planned at the Pacosani target. In December 2011, initial diamond drilling commenced on the Chapi Chiara epithermal gold target, which is part of the Amantina joint venture signed with Vena Resources Inc., to earn up to a 70% interest. The Amantina joint venture property is contiguous with the Moquegua project.

In Chile, Gold Fields has an option agreement with SBX Asesorias e Inversiones, a private Chilean company, which grants Gold Fields the option to acquire 100% of two properties, Salares Norte and Piedra. At

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Salares Norte, Gold Fields completed an initial reverse circulation drilling program in April 2011. The 933 meter program consisted of three widely-spaced holes which tested combined geophysical and soil geochemical anomalies considered prospective for epithermal gold-silver mineralization. Results were encouraging and follow-up diamond drilling commenced in December 2011. On February 7, 2012, Gold Fields notified SBX that it would exercise its option. On February 15, 2012, the concessions were registered under the name Minera Gold Fields Salares Norte Limitada, a wholly owned subsidiary of Gold Fields.

In May 2011, an option agreement was signed with S.L.M. Rio Baker, a private Chilean company, which grants Gold Fields the option to acquire 100% of the Rio Baker property, which is adjacent to Salares Norte. Target definition work consisting of geological mapping, soil sampling and geophysical surveys is in progress and initial drilling is scheduled for early 2012.

Gold Fields also has an option to acquire 100% of the nearby Pircas gold property held by S.C.M. Aguas Heladas, a private Chilean company. In May 2011, a follow-up reverse circulation drilling program on the main breccia target was suspended by early winter snowstorms. This drilling program will resume in 2012.

In Argentina, Gold Fields signed a joint venture agreement in October 2011 to earn up to a 70% interest of the Taguas gold-silver project from Minera S.A., a private company. The project is located in the El Indio gold belt in San Juan province. Diamond drilling commenced in December 2011 and will continue into 2012.

In northern British Columbia, Gold Fields is earning up to a 75% interest in Cascadero Copper Corp.'s Toodoggone copper and gold property. The initial diamond drilling program concluded in October 2009. In June 2011, a helicopter-supported initial drilling program was completed on the Mex porphyry copper-gold target which was not drilled in the 2009 campaign. Logging and assay results confirmed the presence of a porphyry system and additional work will be completed in 2012 aiming to identify higher grade zones within the complex.

In Ghana, Gold Fields conducted exploration work over the Wenchi, Asheba, Edwenase and Boako licenses. Gold Fields concluded a joint venture agreement with Pramere Resources on their exploration license located north of the Ayanfuri deposit along the Asankrangwa belt. At Wenchi, results warrant no further work by Gold Fields. At the Asheba Project, assays were received from initial drilling completed in early 2011, which confirmed mineralization in two prospect areas consistent with expectations. Follow-up drilling is expected to be completed by mid-2012. At the Edwenase Project, soil sampling and trenching has defined several new targets which warrant drill testing. Drilling commenced in December 2011 and will continue into the first quarter of 2012. At the Boako Project, infill soil sampling has defined three priority zones which will be followed up with a combination of trenching, air-core and reverse circulation drilling.

At the Telikan gold project in Guinea, Gold Fields completed follow-up soil sampling and trenching on two targets which warrant drilling. A 5,000 meter reverse circulation drilling program commenced in December 2011.

*Advanced Drilling Projects*

In central British Columbia, Canada, Gold Fields is exploring the Woodjam project for copper-gold porphyry deposits. The project comprises two separate joint venture agreements which were signed in July 2009 and May 2010 with Fjordland Exploration Inc. and Cariboo Rose Resources, respectively, to earn up to a 70% interest. In November 2011, Fjordland Exploration and Cariboo Rose completed a plan of arrangement which spun out the Woodjam project into Consolidated Woodjam Copper Corp., a separate company now listed on the TSX Venture Exchange. The property comprises some 56,800 hectares covering several known porphyry copper and gold targets including the SE Zone, Takom, Megabuck and Deerhorn zones. Additional prospective third party concessions totaling 2,150 hectares within the project area were optioned during 2011 and have been incorporated into the joint venture. In July 2011, Gold Fields also signed a joint venture agreement to earn up to a 70% interest of the nearby 8,902 hectare Redgold copper-gold property which is owned by two private individuals.

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In January 2011, the Woodjam project was promoted to the advanced drilling stage based on positive results of the initial drilling programs. As of November 2011, Gold Fields has completed a total of 53,534 meters of diamond drilling and 173 meters of reverse circulation drilling on multiple targets within the Woodjam project and completed the expenditure requirements to earn an initial 51% interest in the property by the end of December 2011. It has also completed 1,751 meters of diamond drilling on the adjacent Rand option and 2,174 meters of diamond drilling on the Redgold property. Gold Fields completed a conceptual mining study for the project and the maiden copper-gold resource for the South East zone as first reported in February 2012.

In southwestern Mali, Gold Fields is exploring the Yanfolila and adjacent Kangare gold projects. Yanfolila is an advanced drilling stage project which comprises 97,600 hectares of concessions covering several mineralized areas including the Komana East, Komana West, Kabaya South and Solona targets. Gold Fields owns an effective 85% interest of the Yanfolila properties (assuming a 10% interest will go to the Mali government upon granting of the mining license). Kangare is located north of Yanfolila and comprises 118,900 hectares of granted concessions and applications at the target definition and initial drilling stage. Gold Fields owns an effective 90% interest of the Kangare properties (assuming a 10% interest will go to the Mali government upon granting of the mining license). Additional drilling is in progress on several other targets and will continue into the second quarter of 2012. On the Kangare project, Gold Fields has completed extensive geophysical and geochemical surveys and aircore drilling to define several gold targets. Initial bedrock drilling using combined reverse circulation and diamond drilling at the Tinguele target in August 2011 defined a large gold-bearing alteration system. Follow-up drilling is in progress.

In northwestern Kyrgyzstan, Gold Fields owns a 60% interest in the Talas joint venture with partner Orsu Metals Corporation. The Talas joint venture covers four exploration licenses which are prospective for copper-gold porphyry deposits. Most of the exploration work completed has focused on the Taldybulak copper-gold deposit. Due to ongoing social and political unrest in Kyrgyzstan, field work has been suspended. In October 2011, a new President was elected and he is in the process of consolidating his new government. Gold Fields and its partner will continue to monitor the situation and make a decision on the way forward by the end of the first quarter of 2012.

### ***International Projects***

#### ***Chucapaca Feasibility Study***

In February 2010, Gold Fields, through its exploration subsidiary, Minera Gold Fields Peru S.A., completed its back-in right to earn a 51% interest in the Chucapaca joint venture project with Compania de Minas Buenaventura S.A., or Buenaventura, in southern Peru. Gold Fields and Buenaventura have registered Canteras del Hallazgo S.A.C., or CDH, as the joint venture company to hold, explore, and potentially develop the Chucapaca gold-copper property. Following completion of a scoping study in 2010, Gold Fields, through CDH, commenced a feasibility study for the Canahuire deposit on the Chucapaca Project.

Gold Fields is making progress towards completion of the Canahuire feasibility study and the submission of an environmental impact assessment, or EIA. A total of 12 drill rigs have been on site during 2011 working on infill and geotechnical drilling within the Canahuire resource area. Results were consistent with expectations and a feasibility study is planned for completion in the second half of fiscal 2012. The additional completed drilling included sterilization drilling and additional holes for the collection of metallurgical samples. Metallurgical variability tests have been completed and a metallurgical optimization study is in progress. The results of this work will feed into the plant throughput and process design for the EIA and the feasibility study. Baseline work for the EIA is expected to be completed in the second half of 2012. However, recent legislation like the Law of Previous Consultation requiring the government to consult with indigenous or tribal communities on legislative or administrative measures that may directly affect their collective rights could delay the process of governmental approval. In this case, governmental approval of the EIA and the social license might take longer than Gold Fields initially projected, therefore resulting in delays to the development of the project. As part of Gold Fields' formal agreements with the communities, a significant effort has been made to hire and train local employees as well as establish sustainable development programs within the communities impacted by the project.

During fiscal 2011, Gold Fields announced that it expects the initial investment at Chucapaca to be increased to \$1.2 billion from \$750 million on a 100% basis.

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*Greater Damang Project Pre-feasibility Study*

The Greater Damang Project comprises a pre-feasibility study aiming to develop large cutback on the existing Huni-Damang-Juno deposits at the Damang mine in southwest Ghana. A potential Superpit with a length of nearly 3.5 kilometers was identified in 2010 following conceptual modeling of the deposit, and confirmed as potentially viable by a 25,000 meter proof-of-concept drilling program completed in May 2011.

Pre-feasibility studies commenced in June 2011. A further 38,000 metres of drilling was completed to provide drilling suitable for declaration of an Indicated Resource. Additional work includes detailed evaluation of the open pit cutback potential, geotechnical drilling of the deposit, design and financial evaluation of new processing facilities capable of supporting increased production rates, and a full environmental assessment. The project is progressing to schedule to be completed in the first half of 2012 and to potentially move into feasibility, assuming a positive result.

*Arctic Platinum Project Scoping Study*

The Arctic Platinum Project is located approximately 60 kilometers south of the city of Rovaniemi in northern Finland. APP is assessing a number of potential surface mineable platinum group elements plus copper and nickel deposits located within the Portimo and Narkaus mafic layered intrusions.

From 2009, Gold Fields has investigated the potential of applying the hydrometallurgical process, Platsol<sup>®</sup>, instead of off-site smelting options to recover copper, nickel, gold and the platinum group elements (platinum, palladium and rhodium) from flotation concentrates, which would be produced in an on-site facility. Initial metallurgical testwork returned positive results and further engineering work was conducted to provide initial operating and capital cost estimates to use hydrometallurgical recovery on a commercial scale at APP.

Gold Fields proceeded to full scale Platsol<sup>®</sup> pilot plant testwork in 2011. All testwork demonstrated that the process can provide a viable option for the Suhanko Project ores. Optimization of the process and trade-off studies concerning processing options and product marketing remained ongoing at the end of 2011 and will continue into 2012.

Additional work completed in 2011 included updating of the environmental permitting requirements for the Suhanko Project and potential extensions, and drilling of additional prospects in the immediate Suhanko area to scope the potential for additional material for the project. Drilling, additional metallurgical testwork, and ongoing mining and project pre-feasibility studies will continue through 2012 with an aim to complete a pre-feasibility study by the end of 2012.

*Far Southeast Scoping Study*

On September 20, 2010 Gold Fields entered into two option agreements with Lepanto, the 60% owner, and Liberty, the 40% owner of the gold-copper FSE, in the Philippines granting Gold Fields an option to acquire a 60% interest in FSE for a total consideration of \$340 million. After paying option fees of \$10.0 million and making two down-payments of \$44 million and \$66 million in September 2010 and September 2011 respectively, Gold Fields decided to bring forward half of the remaining \$220 million payment to acquire Liberty's 40% interest in FSE. Gold Fields continues to hold its option to acquire an additional 20% stake in FSE from Lepanto for a further \$110 million, which, if exercised, would increase its total interest in FSE to 60%.

The Liberty and Lepanto options were initially granted to Gold Fields for the later of 18 months from signature in September 2010 or the date of receiving a FTAA for the project. A FTAA licence allows a foreign corporation to control a majority interest in a Philippine mining project. Notwithstanding this provision, Gold Fields had the discretion to exercise either option prior to the FTAA being granted and decided to exercise the Liberty option earlier than originally planned due to the fact that: due diligence results to date

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demonstrate significant upside to the resource potential; by acquiring ownership of 40% Gold Fields was able to demonstrate its commitment to the project and formalize its partnership with Lepanto; and the early exercise of the Liberty option does not affect the remaining 20% Lepanto option, which continues to be exercisable in accordance with the terms of the agreement.

The FTAA application for the FSE project was filed in November 2011 and based on the date of the filing Gold Fields expects it could be granted in the second half of 2012. Gold Fields also expects to have a maiden resource statement for FSE and commence a pre-feasibility study later this year.

During 2011, eight underground diamond drill rigs operated from an underground drilling platform on the 700 meter level of the existing Lepanto Mine. Activities were suspended in October 2011 following a rush of water from historic mine workings which flooded pumping facilities and subsequently the drilling platforms. Drilling is scheduled to recommence beginning in the first quarter of 2012 and ramping up to full production by mid 2012. Nearly 31,000 meters of drilling had been completed by December 31, 2011. Early drill results support the existence and extent of the known core of mineralization and identified further extensions, both laterally and at depth, outside of the main central zone of higher grade mineralization. Drilling will continue to scope the system and infill. In addition to the drilling and as part of the due diligence studies of Gold Fields, a comprehensive geotechnical program is underway as well as studies on hydrogeology, mining methods and potential sites for tailings disposal and infrastructure. Approval for surface drilling was obtained during the third quarter of 2011, and ground preparation and drilling has commenced. The community relations team has ramped up its activities in the district and initiated sustainable development programs in partnership with the local communities

### ***Near Mine Exploration***

The St. Ives mine in Australia is in the process of building up the Athena-Hamlet complex within the highly prospective Argo-Athena camp. The camp is situated within the St. Ives lease area, five kilometers from the Lefroy Plant CIL processing facility. After its initial discovery in 2006, the Athena mine development commenced in 2009. Construction at the Athena mine was completed during fiscal 2010 and the mine reached commercial levels of production during fiscal 2011. Development of the Hamlet mine commenced in calendar 2010 utilizing the same Athena portal site and infrastructure, and first ore development commenced in late fiscal 2011.

Framework diamond drilling has been completed around the Victory complex. Prospective new mineralization has been identified to the west of the current Leviathan pit which will require follow up. Additional mineralization was also identified in the vicinity of the Britannia Footwall, Sirius and Paddy's resources.

Target generation drilling was carried out at several other targets and reserve conversion and extensional drilling is in progress at Athena, Hamlet and Cave rocks.

At the Agnew gold mine in Australia, recent drilling has identified three high grade ore-shoots developing at depth on the Waroonga Main Lode North; the Fitzroy, the Bengal and the Hastings shoots. The Fitzroy and Bengal shoots plunge steeply to the northwest and may intersect with the Porphyry Link Zone which was previously identified between the Main North and Kim Lodes. Results of drilling have been positive and an initial surface deep drilling program remained in progress through the end of 2011 aiming to define inferred resources on high grade shoots (termed Fitzroy, Bengal and Hastings) in this area. Additional follow-up drilling will be completed in 2012.

Assay results from two new holes into the Porphyry Link Zone suggest that the extensions to the shallow plunging, moderate grade mineralization situated on the southern edge of the Kim South Lode extends to the south and may potentially join up with the high grade mineralization in the Fitzroy and Bengal Shoots. Although the immediate focus at Waroonga will be on confirming grade and continuity of the high grade shoots, this mineralized trend between Kim Lode and the Fitzroy Shoot requires follow-up which will also be scheduled for the 2012 work program.

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Recent reconnaissance aircore drilling was completed to the north of the Cinderella deposit. Two zones of shallow mineralization were delineated, approximately 200 meter and one kilometer respectively north of the potential Cinderella pit position. A follow-up drilling program is planned.

At the Damang gold mine in Ghana, the Greater Damang Project described under International Projects forms the main site project for 2011 and 2012. To accompany this initiative, additional near mine activities will focus on the definition of potential extensions to the Rex and Amoanda deposits to the south of the Greater Damang Project area. Considerable depth and strike potential exists on both project areas as highlighted in the full geological review completed in 2011 by external consulting specialists. Drilling late in 2011 has tested the immediate strike extent of Amoanda and activities will continue into 2012.

Early stage exploration activity has been limited at Damang in recent history. Recent re-interpretation work over the entire tenement holding has highlighted a number of conceptually prospective target areas. Target definition and initial drilling activities are planned for 2012 to test the highest ranking prospects including the Bonsa Forest Hydrothermal and the Central Anticline prospect.

At the Cerro Corona copper-gold mine in Peru, initial assay results of the recently completed Phase 2 infill and extensional drilling program appear to generally confirm the existing resource model, with local areas of either higher or lower grade than modeled. The data will be used to develop a revised litho-structural-alteration model and resource update to better define the Life of Mine reserves.

Exploration framework drilling commenced in June 2011 on the adjacent Sylvita Project. Of the five holes completed, three have successfully intersected altered porphyry and two intersected limestone with narrower dykes intruding the sequence. Skarn and sulphide manto mineralization has been observed in the limestone close to dykes and the porphyry, with some indications of localized strong copper mineralization.

The Oxide Stockpile Drilling project was completed in June 2011. Assays received confirmed the estimated grade of the stockpile, as well as distribution and levels of soluble copper (which were very low) within the stockpile stack. Full analysis and modeling of the stockpiles was completed in July 2011.

## **Insurance**

Gold Fields' insurance policies provide coverage for general liability, accidental loss or damage to its property, business interruption in the form of fixed operating costs or standing charges, material damage and other losses. While the bulk of these are insured through a captive insurance company domiciled in Gibraltar, not all potential losses are covered. Gold Fields does not insure all potential losses associated with its operations as some insurance premiums are considered to be too high, some risks are considered too remote to insure and some types of insurance cover are not available. Should an event occur for which there is no or limited insurance cover, this could affect Gold Fields' cash flows and profitability.

Management believes that the scope and amount of insurance coverage is adequate, taking into account the probability and potential severity of each identified risk. Gold Fields' insurance coverage is consistent with customary practice for a gold mining company of its size with multinational operations. See Risk Factors Gold Fields' insurance coverage may prove inadequate to satisfy potential claims .

## **Environmental and Regulatory Matters**

### ***South Africa***

#### *Environmental*

Gold Fields' South African operations are subject to various laws relating to the protection of the environment. South Africa's Constitution grants the people of South Africa the right to an environment that is not harmful to human health or well-being and to protection of that environment for the benefit of present and future



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generations through reasonable legislative and other measures. The Constitution and the National Environmental Management Act 107 of 1998, or NEMA, as well as various other related pieces of legislation grant legal standing to a wide range of people and interest groups to bring legal proceedings to enforce their environmental rights, which are enforceable against private entities as well as the South African government.

South African environmental legislation commonly requires businesses whose operations may have an impact on the environment to obtain permits and authorizations for those operations. The applicable environmental legislation also imposes general compliance requirements and incorporates the polluter pays principle. Under the terms of the 2002 Minerals and Petroleum Resources Development Act, or the MPRDA, all prospecting and mining operations are to be conducted according to an environmental management plan/program which must be approved by the DMR. Directors will be held liable under provisions of the MPRDA and NEMA for any environmental degradation. See Mineral Rights .

South African mining companies are required by law to undertake rehabilitation works as part of their ongoing operations in accordance with an approved environmental management plan/program, which supports a mine closure plan. In addition, during the operational life of the mine they must provide for the cost of premature mine closure rehabilitation and post-closure maintenance and monitoring once mining operations cease. Gold Fields funds these environmental rehabilitation costs by making contributions into an environmental trust fund. The current estimated cost for rehabilitation associated with premature closure is fully funded in the form of cash in DMR-controlled trust funds and insurance guarantees. The trust fund system enables annual revisions and associated payments to be made in a tax-efficient way, while providing comfort to the regulators that the operator has the means to rehabilitate any mine after operations have ceased. As of December 31, 2011, Gold Fields had contributed more than Rand 1,313.3 million, including accrued interest, to the fund and has obtained insurance guarantees for the remaining environmental liability. Gold Fields has implemented environmental management systems in compliance with ISO 14001 throughout its operations in South Africa, and has received full certification under ISO 14001 for all surface portions of its South African operations including the shafts. South Deep is now aligned with the other operations in terms of its environmental management system which was successfully certified in fiscal 2009.

In addition, Gold Fields became a signatory to the International Cyanide Management Code, or Cyanide Code, on November 3, 2005, along with nine gold companies and five cyanide manufacturers. All of Gold Fields operations are committed to ongoing compliance with the Cyanide Code. The implementation structure of the Cyanide Code allows the operations up to three years from the date of becoming a signatory to have independent, third-party audits conducted to evaluate compliance status. As of March 2010, all of Gold Fields operations had obtained full compliance under the Cyanide Code.

Under the National Water Act, all water in the hydrological cycle is under the custodianship of the State held in trust for the people of South Africa and water users have been required to re-register their water uses. In addition, the National Water Act governs waste water and waste water discharge into water resources. Gold Fields continues to use all reasonable and practical measures to remove underground water to permit the routine safe functioning of its South African mines by means of pumping in order to preserve the quality and quantity of natural water. The pumping and discharging of water (or the dewatering process) for safe mining purposes preserves the quality of naturally occurring water because the water is captured at points in the mine where it has not come into contact with mined out areas where it could be exposed to pollution sources like pyrite. The Kloof operation was issued a water use license in December 2008 that expired in December 2011. The Group has applied for a renewal and amendment to this license. Pending approval of the Kloof water use license, the Group has obtained a regulatory directive from the DWA, that permits the continuation of water uses at its Kloof operations while its application is being processed. Historically, the Group has been in compliance with the license granted to the Kloof operation in 2008. However, since February 2011, the water discharged from one of the shafts of the KDC operation covered by the Kloof license has exceeded the discharge parameters specified by the license. The Group has informed the DWA and has investigated the cause of the exceedance. One of the key findings of the investigation was that the increased discharge was most likely due to external variables beyond the control of Gold Fields. Based on this information, Gold Fields was granted a concession that included

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a correction to the discharge limit, which now accounts for the change and renders Kloof compliant. The Driefontien operation was also recently issued a water use license. However, due to certain discrepancies in the information provided for the water use license, the group has been in discussions, with the DWA to revise the license and, in addition, will be applying for an amendment to the water use license to include certain water uses previously not required and therefore not previously applied for. The Group believes that it is discharging water within the parameters of the license but there can be no assurance that a revised license will be issued or that the DWA will not determine that the Group is not in compliance with its requirements.

While there was a delay in processing the water use license application at South Deep, which was submitted within the applicable time limits, Gold Fields was issued a new water use license for South Deep in December 2011. The DWA has advised Beatrix, which had pre-existing water permits of indefinite length, that its current water usage remains authorized and it need not apply for a new license. However, Beatrix has nevertheless submitted a water use license application process which is currently being processed. Therefore, management believes that the South African operations now have all required authorizations to undertake regulated water uses for purposes of carrying out its mining operations.

The Atmospheric Pollution Prevention Act 45 of 1965, or APPA, has been repealed and while some of the regulations promulgated under APPA remain in force, air pollution is now regulated under The National Environmental Management Air Quality Act, 2004, or Air Quality Act. Scheduled processes are now listed under the Section 21 Notice, and minimum emission standards have been set for each listed activity. If a process is listed, it will be necessary to convert existing APPA registration certificates to Atmospheric Emission Licenses under the Air Quality Act, or to apply for such a license under the Air Quality Act. Gold Fields believes it is on schedule to obtain Atmospheric Emission Licenses under the Air Quality Act in relation to its South African operations, where applicable. Monitoring of stack emissions in accordance with the concentration limits set out in the Notice will also be required. To the extent that more stringent requirements may be introduced regarding dust, Gold Fields is positioning itself operationally over the near to medium term.

The National Environmental Management Amendment Act 62 of 2008, or NEMAA, was promulgated on January 9, 2009 and came into effect on May 1, 2009. The Minerals and Petroleum Resources Development Amendment Act 49 of 2008, or MPRDAA, was promulgated on April 21, 2009, although a commencement date has not been proclaimed by the President. The 2010 Environmental Impact Assessment Regulations, or EIA Regulations, as contained in Government Notices 543-546 of June 18, 2010, commenced on August 2, 2010. These replace the 2006 EIA Regulations. The effect of the amendments as contained in the NEMAA and the MPRDAA will ultimately mean that NEMA will be responsible for all environmental authorizations for and relating to mining and the Minister of Water and Environmental Affairs will be the relevant authority. There are three relevant periods or phases that will take place before the ultimate position is achieved. Until the MPRDAA comes into effect, as well as during the first 18 month period after such effect, the MPRDA is the applicable legislation and the Minister of Mineral Resources is the responsible authority for all environmentally related mining activities. Once the first 18 month period has elapsed, the provisions relating to the environment will be excised from the MPRDA and included in NEMA. NEMA will contain all the environmental provisions relating to mining, therefore environmental authorizations will be applied for in terms of NEMA. The Minister of Mineral Resources will remain the responsible authority and appeals may be directed to the Minister of Water and Environmental Affairs. Upon completion of the second 18 month period, that is three years after the commencement of the MPRDAA, NEMA will be the applicable legislation for all environmental provisions relating to mining and the Minister of Water and Environmental Affairs will then be the responsible authority. In the interim and in anticipation of these changes, Gold Fields encourages co-operative governance between the two departments by ensuring that all EIA applications are channeled through both.

The South African government is considering the introduction of a carbon tax in 2013 to reduce greenhouse gas emissions. The proposed carbon tax is Rand 120 per ton CO<sub>2</sub>-e, however, 60% of emissions would initially be tax exempt. The 60% discount will continue to apply until 2020. The net carbon tax will therefore only be R48 per ton CO<sub>2</sub>-e. The R48 per ton will be escalated by 10% per annum until 2020. The 60% discount will be scaled back gradually from 2020 until 2025 and may be replaced by absolute emissions thresholds thereafter.

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emissions thresholds thereafter. A revised policy paper which discusses the proposed carbon tax and the possibility of introducing a trading scheme for greenhouse gases is expected to be released by the South African government for public comment later this year.

Although South Africa has a comprehensive environmental regulatory framework, enforcement of environmental law has traditionally been poor. The DWEA has indicated that enforcement will improve and Environmental Management Inspectors have been appointed under NEMA. The Environmental Management Inspectors have commenced with environmental inspections and investigations at some of the major industrial facilities. The focus to date has been on those industries that impact heavily on air quality, such as platinum mines and the steel industry.

The National Environmental Management Waste Act, 2008, or the Waste Act, commenced on July 1, 2009 (with the exception of certain sections relating to contaminated land). The Waste Act does not apply to residue deposits and residue stockpiles (which are regulated by the MPRDA). The application of the Waste Act to mining operations is minimal, an example of which would be the establishment of a waste storage facility on the mine.

Gold Fields undertakes activities which are regulated by the National Nuclear Regulator Act 47 of 1999, or the NNR Act. The NNR Act requires Gold Fields to obtain authorization from the National Nuclear Regulator, or NNR, and undertake activities in accordance with the conditions of such authorizations. The NNR has alleged certain non-compliance issues relating to radiation levels in water running adjacent to certain of Gold Fields' properties. Gold Fields does not concede the accuracy of the NNR samples and has taken its own samples, which have proven to be acceptable. Despite this and Gold Fields' belief that it has not breached compliance with the NNR Act, it is in regular ongoing discussions with the NNR regarding the possible remediation of these areas as part of an industry initiative. All of the Group's South African mining operations possess and maintain Certificates of Registration issued by the NNR.

It has been publicly indicated by various individuals purporting to represent certain non-governmental organizations and other interested parties that they believe that Gold Fields, together with various other mining companies in South Africa, have polluted the water in and around the Wonderfontein spruit, which is a catchment area in the West Wits Basin. This may lead to action being taken against Gold Fields, individually or collectively with other mining companies, and/or against the regulator. In March 2008, Gold Fields and two other mining companies received letters of demand from attorneys representing Duffuel (Pty) Ltd, or Duffuel, claiming substantial damages in the sum of R50 million based on this alleged pollution. In April 2009, Duffuel instituted action for damages of approximately R100 million against one of the other mining companies, but as yet no such action has been instituted against Gold Fields.

During fiscal 2008, a decision was taken by the Executive Committee to consolidate and contextualize the environmental and associated legal risks at the South African operations. This was done through a due diligence exercise conducted by two external firms that specialize in environmental risk and environmental law, respectively. The reason for selecting these firms was to ensure objectivity and to maintain an irreproachable level of credibility. The exercise was expected to fully identify the South African operation's current risk profile in terms of environmental and associated legal risks. The results of this exercise have been finalized and has formed the basis upon which existing strategies were reviewed and modified so as to reduce any risks that have been identified. The implementation of this process is ongoing and is being monitored as part of the current systems and processes at each of the operations.

### *Health and Safety*

The principal objective of the South African Mine Health and Safety Act No. 29 of 1996, or the Mine Health and Safety Act, is to protect the health and safety of persons at mines. The Mine Health and Safety Act requires that employers and others ensure their operating and non-operating mines provide a safe and healthy working environment, determines penalties and a system of administrative fines for non-compliance and gives

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the Minister of Mineral Resources the right to restrict or stop work at any mine and require an employer to take steps to minimize health and safety risks at any mine. The Mine Health and Safety Act further provides for employee participation through the establishment of health and safety committees and by requiring the appointment of health and safety representatives. It also gives employees the right to refuse dangerous work. Finally, it describes the powers and functions of the MHSI (which inspectorate is part of the DMR and the process of enforcement).

Under the Mine Health and Safety Act, an employer is obligated, among other things, to ensure, as far as reasonably practicable, that its mines are designed, constructed and equipped to provide conditions for safe operation and a healthy working environment and the mines are commissioned, operated, maintained and decommissioned in such a way that employees can perform their work without endangering their health and safety or that of any other person. Every employer must ensure, as far as reasonably practicable, that persons who are not employees, but who may be directly affected by the activities at a mine, are not exposed to any hazards to their health and safety.

The Mine Health and Safety Amendment Act came into operation on May 30, 2009. It criminalizes violations of the Mine Health and Safety Act and increases the maximum fines. Any owner convicted in terms of the above offenses may have its mining licenses withdrawn or suspended, be fined up to R3 million and/or be imprisoned for a period not exceeding five years, while the maximum fine for other offenses and administrative fines are increased, with the highest fine being R1 million per occurrence. Two sections of the Mine Health and Safety Amendment Act, which create new offenses of contravening or failing to implement provisions of the Mine Health and Safety Act resulting in a person's death and vicarious liability for an employer where certain persons commit an offense and the employer permitted or did not take all reasonable steps to prevent the person's actions, have not yet come into effect. Several mining companies objected to them on constitutional grounds and the government agreed that they would not come into effect pending further discussion with the industry. In fiscal 2011, the DMR increased enforcement of certain provisions of the Mine Health and Safety Act with respect to compliance with, and adoption of, leading practice at all mines. In response, Gold Fields' senior leadership engaged with the DMR to ensure that Gold Fields is taking appropriate proactive steps to enhance safety and minimize risk.

In December 2011, the DMR commenced an audit campaign for all mines in South Africa to inspect mine health and safety systems and verify compliance with regulations. The DMR intends to complete the nation-wide audits by May 2012 and formal audit reports will be available at that time.

The principal health risks associated with Gold Fields' mining operations in South Africa arise from occupational exposure to silica dust, noise, heat and certain hazardous chemicals. The most significant occupational diseases affecting Gold Fields' workforce include lung diseases (such as silicosis, tuberculosis, a combination of the two and COAD) as well as NIHL. The ODMWA governs the payment of compensation and medical costs related to certain illnesses, such as silicosis, contracted by persons employed in mines or at sites where activities ancillary to mining are conducted. Occupational healthcare services are made available by Gold Fields to employees from its existing facilities. Pursuant to proposed changes in the ODMWA, Gold Fields may experience an increase in the cost of these services. See Risk Factors Gold Fields' operations in South Africa are subject to environmental and health and safety regulations, which could impose significant costs and burdens. This increased cost, should it transpire, is currently indeterminate.

Until recently, the mining industry believed, as previous cases had indicated that a provision in the Compensation for Occupational Injuries and Diseases Act, or the COIDA, precluded an employee from recovering any damages from the employer for an occupational injury or disease resulting in his disablement or death, if compensation had been paid to the employee either under COIDA or under the ODMWA. Under ODMWA employees are entitled to compensation arising from their employment in mines in respect of such diseases as, pneumoconiosis, tuberculosis, permanent diseases of cardio-respiratory organs and the like. The Constitutional Court, being the highest court in the land on the issue in question, has now ruled that a claim for compensation under ODMWA does not prevent the employee from seeking to recover compensation from the employer concerned in a civil action under common law (either as individuals or as a

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class). While issues, such as negligence and causation, need to be proved on a case by case basis, it is nevertheless possible that such ruling could expose Gold Fields to claims related to occupational hazards and diseases (including silicosis), which may be in the form of a class action or similar group claim. If Gold Fields were to face a significant number of such claims and the claims were suitably established against the Group, the payment of compensation for the claims could have a material adverse effect on the Group's results of operations and financial condition. In addition, Gold Fields may incur significant additional costs arising out of these issues, including costs relating to the payment of fees, increased levies or other contributions in respect of compensatory or other funds established (if any) and expenditures arising out of its efforts to resolve any outstanding claims or other potential action.

### *Mineral Rights*

#### *The MPRDA*

The MPRDA came into effect on May 1, 2004. The MPRDA vests the right to prospect and mine in the state (which includes the rights to grant prospecting and mining rights on behalf of the nation) to be administered by the government of South Africa in order to, among other things, promote equitable access to the nation's mineral resources by South Africans, expand opportunities for historically disadvantaged persons who wish to participate in the South African mining industry, advance social and economic development, and create an internationally competitive and efficient administrative and regulatory regime, based on the universally accepted principle, and consistent with common international practice, that mineral resources are part of a nation's patrimony. In accordance with the MPRDA, the DMR on April 29, 2009 published a Code of Good Practice for the Minerals Industry and the Housing and Living Conditions Standard for the Minerals Industry relating to the socio-economic transformation of the mining industry. However, certain provisions of the Code appeared to be inconsistent with the Mining Charter, or to go beyond the scope envisaged by the MPRDA. Various industry participants have been in discussions with the DMR regarding the scope and applicability of the Code, the operation of which appears to be in abeyance.

Under the MPRDA, prospecting rights are initially granted for a maximum period of five years and can be renewed once upon application for a further period not exceeding three years. Mining rights are valid for a maximum period of 30 years, and can be renewed upon application for further periods, each of which may not exceed 30 years. Provision is made for the grant of retention permits, which would have a maximum term of three years and could be renewed once upon application for a further two years. A retention permit suspends the terms and conditions of a prospecting right under certain conditions if the mining of the mineral in question would be uneconomical due to prevailing market conditions. A wide range of factors and principles, including proposals relating to black economic empowerment and social responsibility, will be considered by the Minister of Minerals Resources when exercising her discretion whether to grant these applications. A mining right can be canceled if the mineral to which such mining right relates is not mined at an optimal rate. In November 2006, the DMR approved the conversion of Gold Fields' mining licenses under the old regulatory regime at Kloof, Driefontein and Beatrix into rights under the new regime. During May 2010, the DMR approved the conversion of the South Deep old order mining rights into a new-order mining right. Included in this approval was an additional portion of ground known as Uncle Harry's, which is contiguous to South Deep. The durations of the South Deep mining right and the Uncle Harry's mining right are both 30 years. The cumulative effect of this approval, together with the previous conversions for the Driefontein, Kloof and Beatrix gold mines granted in January 2007, is that all of Gold Fields' South African mines have now received their new-order mining rights. See Additional Information Material Contracts Black Economic Empowerment Transactions. Pursuant to the terms of the MPRDA, a Mining Charter for effecting entry of HDSAs into the mining industry became effective on May 1, 2004. The Mining Charter's stated objectives are to:

promote equitable access to South Africa's mineral resources for all the people of South Africa;

substantially and meaningfully expand opportunities for HDSAs, including women, to enter the mining and minerals industry and to benefit from the exploitation of South Africa's mineral resources;

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utilize the existing skills base for the empowerment of HDSAs;

expand the skills base of HDSAs in order to serve the community;

promote employment and advance the social and economic welfare of mining communities and areas supplying mining labor; and

promote beneficiation of South Africa's mineral commodities beyond mining and processing, including the production of consumer products.

To achieve these objectives, the charter requires that, within five years of its May 1, 2004 effective date, each mining company achieve a 15% HDSA ownership of mining assets and, within ten years of that date, a 26% HDSA ownership of mining assets. Ownership can comprise active involvement, through HDSA-controlled companies (where HDSAs own at least 50% plus one share of the company and have management control), strategic joint ventures or partnerships (where HDSAs own at least 25% plus one vote of the joint venture or partnership interest and there is joint management and control) or collective investment vehicles, the majority ownership of which is HDSA based, or passive involvement, particularly through broad-based vehicles such as employee stock option plans. The charter envisages measuring progress on transformation of ownership by:

taking into account, among other things, attributable units of production controlled by HDSAs;

allowing flexibility by credits or offsets, so that, for example, where HDSA participation exceeds any set target in a particular operation, the excess may be offset against shortfalls in another operation;

taking into account previous empowerment deals in determining credits and offsets; and

considering special incentives to encourage the retention by HDSAs of newly acquired equity for a reasonable period.

It is envisaged that transactions will take place in a transparent manner and for fair market value with stakeholders meeting after five years to review progress in achieving the 26% target. This review occurred in 2010 and particulars of the outcome and revisions to the Mining Charter are addressed below. Under the charter, the mining industry as a whole agreed to assist HDSA companies in securing finance to fund participation in an amount of Rand 100 billion over the first five years. Beyond the Rand 100 billion commitment, HDSA participation will be increased on a willing seller-willing buyer basis, at fair market value, where the mining companies are not at risk.

In addition, the charter requires, among other things, that mining companies:

spell out plans for achieving employment equity at management level with a view to achieving a baseline of 40% HDSA participation in management and achieving a baseline of 10% participation by women in the mining industry, in each case within five years;

give HDSAs preferred supplier status, where possible, in the procurement of capital goods, services and consumables; and

identify current levels of beneficiation and indicate opportunities for growth.

The charter also requires mining companies to submit annual, audited reports on progress toward their commitments, as part of an ongoing review process.

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Following a review, the DMR released the Amended Mining Charter on September 13, 2010. The requirement under the Mining Charter for mining entities to achieve a 26% HDSA ownership of mining assets by the year 2014 has been retained. Amendments to the Mining Charter in the Amended Mining Charter include, inter alia, the requirement by mining companies to (i) facilitate local beneficiation of mineral commodities; (ii) procure a minimum of 40% of capital goods, 70% of services and 50% of consumer goods from HDSA suppliers (i.e. suppliers of which a minimum of 25% + 1 vote of their share capital must be owned by HDSAs) by 2014. These targets will however be exclusive of non-discretionary procurement expenditure; (iii) ensure that multinational suppliers of capital goods contribute a minimum of 0.5% of their annual income generated from

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South African mining companies towards the socio-economic development of South African communities into a social development fund from 2010; (iv) achieve a minimum of 40% HDSA demographic representation by 2014 at executive management (board) level, senior management (EXCO) level, core and critical skills, middle management level and junior management level; (v) invest up to 5% of annual payroll in essential skills development activities; and (vi) implement measures to improve the standards of housing and living conditions for mineworkers by converting or upgrading mineworkers' hostels into family units, attaining an occupancy rate of one person per room and facilitating home ownership options for all mineworkers in consultation with organized labor, all of which must be achieved by 2014. In addition, mining companies are required to monitor and evaluate their compliance to the Amended Mining Charter, and must submit annual compliance reports to the DMR. The Scorecard for the Broad-Based Socio-Economic Empowerment Charter for the South African Mining Industry attached to the Amended Mining Charter, or the Scorecard, makes provision for a phased-in approach for compliance with the above targets over the five year period ending in 2014. For measurement purposes, the Scorecard allocates various weightings to the different elements of the Amended Mining Charter. Failure to comply with the provisions of the Amended Mining Charter will amount to a breach of the MPRDA and may result in the cancellation or suspension of a mining company's existing mining rights. For further information, please refer to Risk Factors Gold Fields' mineral rights in South Africa are subject to legislation, which could impose costs and burdens.

The charter clarifies that it is not the government's intention to nationalize the mining industry. However, the ANC is considering a report which, among other things, imposes greater state intervention in the mining industry, including the imposition of new taxes and increasing the State's holdings in mining companies.

### *The Broad-Based Black Economic Empowerment Amendment Bill*

The BBBEE Act established a national policy on broad-based black economic empowerment with the objective of increasing the participation of black South Africans in the economy. The BBBEE Act provides for various measures to promote black economic empowerment, including empowering the Minister of Trade and Industry to issue the Codes with which organs of state and public entities and parties interacting with them or obtaining rights and licenses from them would be required to comply. There has been some debate as to whether or to what extent the mining industry was subject to the BBBEE Act and the policies and codes provided for thereunder. In December 2011, the Minister of Trade and Industry, published for public comment by the 9th of February 2012 a draft BBBEE Amendment bill, which has the effect of expanding and strengthening the black economic empowerment provisions of the BBBEE Act. It was expected that the draft bill would have clarified the extent, if any, of the application of the BBBEE Act to the mining industry, but such clarification has not been provided for in the draft bill. While it is anticipated that the draft bill will undergo various amendments before it becomes law, it should be appreciated that a risk exists that the companies in the mining industry may become subject to another layer of black economic empowerment regulation.

### *The Royalty Act*

The Mineral and Petroleum Resources Royalty Act, 2008, or the Royalty Act, was promulgated on November 24, 2008 and came into operation on March 1, 2010. The Royalty Act imposes a royalty on refined and unrefined minerals payable to the State.

The royalty in respect of refined minerals (which include gold and platinum) is calculated by dividing earnings before interest and taxes, or EBIT, by the product of 12.5 times gross revenue calculated as a percentage, plus an additional 0.5%. EBIT refers to taxable mining income (with certain exceptions such as no deduction for interest payable and foreign exchange losses) before assessed losses but after capital expenditure. A maximum royalty of 5% of revenue has been introduced for refined minerals.

The royalty in respect of unrefined minerals (which include uranium) is calculated by dividing EBIT by the product of nine times gross revenue calculated as a percentage, plus an additional 0.5%. Where unrefined mineral resources (such as uranium) constitute less than 10% in value of the total composite mineral resources, the



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royalty rate in respect of refined mineral resources may be used for all gross sales and a separate calculation of EBIT for each class of mineral resources is not required. For Gold Fields, this means that currently it will pay a royalty based on the refined minerals royalty calculation as applied to its gross revenue. The rate of royalty tax payable for fiscal 2011 was 1.54% of revenue. See Risk Factors Gold Fields mineral rights in South Africa are subject to new legislation, which could impose significant costs and burdens The Royalty Act .

*Exchange Controls*

South African law provides for exchange control regulations which, among other things, restrict the outward flow of capital from the CMA. The Exchange Control Regulations, which are administered by the South African Reserve Bank, or the SARB, are applied throughout the CMA and regulate transactions involving South African residents, including companies. The basic purpose of the Exchange Control Regulations is to mitigate the negative effects caused by a decline of foreign capital reserves in South Africa, which may result in the devaluation of the Rand against other currencies. It is anticipated that the Exchange Control Regulations will remain in place for the foreseeable future. The South African government has, however, committed itself to gradually relaxing exchange controls and various relaxations have occurred in recent years. It is the stated objective of the authorities to achieve equality of treatment between residents and non-residents in relation to inflows and outflows of capital. The gradual approach to the abolition of exchange controls is designed to allow the economy to adjust more smoothly to the removal of controls that have been in place for a considerable period of time.

SARB approval is required for Gold Fields and its South African subsidiaries to receive and/or repay loans to non-residents of the CMA. Repayment of principal and interest on such loans will usually be approved where the payment is limited to the amount borrowed and a market-related rate of interest.

Funds raised outside of the CMA by Gold Fields non-South African resident subsidiaries (whether through debt or equity) can be used for overseas expansion, subject to any conditions imposed by the SARB. Gold Fields and its South African subsidiaries would, however, require SARB approval in order to provide guarantees for the obligations of any of Gold Fields subsidiaries with regard to funds obtained from non-residents of the CMA. Debt raised outside the CMA by Gold Fields non-South African subsidiaries must be repaid or serviced by those foreign subsidiaries. Absent SARB approval, income earned in South Africa by Gold Fields and its South African subsidiaries cannot be used to repay or service such foreign debts. Unless specific SARB approval has been obtained, income earned by one of Gold Fields foreign subsidiaries cannot be used to finance the operations of another foreign subsidiary.

Exchange Control Circulars No. 14/2011 and No. 19/2011 address foreign direct investments outside the CMA by South African companies. Transfers of funds from South Africa for the purchase of shares in offshore entities or for the creation or expansion of business ventures offshore require exchange control approval. However, if the investment is a new outward foreign direct investment where the total cost does not exceed R500 million per company per calendar year, the investment application may, without specific SARB approval, be processed by an authorized dealer, subject to all existing criteria and reporting obligations. In determining whether Gold Fields and its South African subsidiaries can invest overseas, the SARB will consider whether the investment meets certain requirements, including the benefit of the investment to South Africa. Gold Fields applies annually to the SARB for blanket approval for a specified amount for offshore exploration expenditure and to make exploration related foreign investments. The current approval allows for annual expenditure of up to U.S.\$159 million per year. Gold Fields is required to provide the SARB with an annual update on the Group's activities, including any such exploration investments.

Prior to October 2009, South African entities operating Customer Foreign Currency accounts, or CFC Accounts, were obliged to convert foreign currency proceeds and repatriate to South Africa within 180 days. Under Exchange Control Circular No. 19/2009 issued in October 2009, the above restrictions have been abolished and South African entities are not required to convert and repatriate funds.

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A listing by a South African company on any stock exchange other than the JSE for the purpose of raising capital needs permission from the SARB. Any such listing which would result in a South African company being redomiciled also needs approval from the Minister of Finance.

Gold Fields must obtain approval from the SARB regarding any capital raising involving a currency other than the Rand. In connection with its approval, it is possible that the SARB may impose conditions on Gold Fields' use of the proceeds of any such capital raising, such as limits on Gold Fields' ability to retain the proceeds of the capital raising outside South Africa or requirements that Gold Fields seeks further SARB approval prior to applying any such funds to a specific use. Any limitations imposed by the SARB on Gold Fields' use of the proceeds of a capital raising could adversely affect Gold Fields' financial and strategic flexibility. See Risk Factors Gold Fields' financial flexibility could be materially constrained by South African exchange control regulations.

The current requirements for South African companies to obtain a significant equity interest in investments outside the CMA include the requirement that at least 10% of the foreign target entity's voting rights must be acquired. In addition, to further enable South African companies, trusts, partnerships and banks to manage their foreign exposure, they are to be permitted to participate without restriction in the Rand futures market on the JSE. This dispensation was also extended to investment in inward-listed (foreign) instruments on the JSE and the Bond Exchange of South Africa. In his budget speech of February 17, 2010, the Minister of Finance reaffirmed that his department was continuing its work on reforming the exchange control legislation and in the Medium Term Budget Policy Statement of October 25, 2011, he announced steps to streamline the procedure to enable corporates to invest in their foreign businesses.

### *New Companies Act and Business Rescue Proceedings*

The Group's South African companies are subject to the applicable provisions of the South African Companies Act, 2008 which came into force on May 1, 2011. The new Companies Act modernizes and makes for a more flexible company law regime in South Africa, though in doing so, it has created various areas of uncertainty. Other than with respect to Schedule 5 as set out below, the Companies Act replaces the previous Companies Act, 1973, or the Old Companies Act, in its entirety.

In terms of the Companies Act, subject to certain provisions set out in the transitional arrangements, every pre-existing company that was, immediately before May 1, 2011, incorporated or registered in terms of the Old Companies Act continues to exist as a company as if it had been incorporated and registered in terms of the Companies Act, with the same name and registration number previously assigned to it.

The Companies Act extends shareholders' rights against companies and directors, and directors, prescribed officers and committee members will now face more extensive and stricter grounds for personal liability for their actions in the company than they did under the Old Companies Act. The Companies Act introduces class action suits against companies, directors and company officers by persons whose rights are affected by the company. Companies will thus face a greater risk of litigation and the costs thereof.

Schedule 5 to the Companies Act provides that, until a date to be determined by the Minister of Trade and Industry, the Old Companies Act will continue to apply with respect to the winding up and liquidation of companies under the Companies Act as if the Old Companies Act had not been repealed, subject to certain provisions set out in Schedule 5. Accordingly, the winding-up of companies continues to be regulated by both the Old Companies Act and the Insolvency Act, 1936.

The Companies Act provides for business rescue, a substantively non-judicial, commercial process that, in the first instance, aims to rescue a financially distressed company and maximize the likelihood of the company's continued existence on a solvent basis. If business rescue is not possible, the aim is to ensure an outcome which provides a better return for the creditors or shareholders of a financially distressed company than would result

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from the immediate liquidation of the company. Once appointed, a business rescue practitioner is given significant powers (subject to certain exceptions) to either cancel or suspend entirely, partially or conditionally any provision of an agreement to which a company is a party at the commencement of the business rescue period (other than an agreement of employment), notwithstanding any contrary provision contained in the agreement itself. Judicial management has been replaced in its entirety by the business rescue proceedings of the Companies Act.

***Ghana***

***Environmental***

The laws and regulations relating to the environment in Ghana have their roots in the 1992 Constitution which charges both the state and individuals with a duty to take appropriate measures to protect and safeguard the natural environment. Mining companies are also required, under the Minerals and Mining Act, Environmental Assessment Regulations 1999 (LI 1652) and Water Use Regulations 2001 (LI 1692), to obtain all necessary approvals from the Environmental Protection Agency, or EPA, and the Forestry Commission before undertaking mining operations. The Minerals and Mining Act also requires the Ghanaian mines to comply with all laws for the protection of the environment.

Under the relevant environmental laws and regulations, mining operations are required to undergo an environmental impact assessment process and obtain approval for an environmental permit prior to commencing operations. Within 24 months of the date upon which operations commence, Ghanaian mining operations must submit an environmental management plan, or EMP, for the operations to obtain an environmental certificate. EMPs are submitted every three years and include details regarding the likely impact of the operation on the environment, including local communities, as well as a comprehensive plan and timetable for actions to lessen and remediate adverse impacts.

The laws also require mining operations to rehabilitate land disturbed as a result of mining operations pursuant to an environmental reclamation plan agreed with the Ghanaian environmental authorities. The reclamation plan provides an estimate of the costs to rehabilitate the mining area for the life of the mine, or the life of mine rehabilitation estimate, and an estimate of the costs to rehabilitate the mine as at the date of the reclamation plan, or the current estimated rehabilitation costs. These estimates are adjusted every two years, taking into account any new disturbance or rehabilitation undertaken during the two year period from the date of the previous estimate. The obligations to rehabilitate the mining area and to provide security for the rehabilitation costs is included in a reclamation security agreement negotiated with the Ghanaian EPA and signed by the mining company. Each mining company is required to secure a percentage (typically between 50% and 100%) of the current estimated rehabilitation costs by posting a reclamation bond and a cash deposit, which serve as a security deposit against default.

Updated reclamation plans are submitted to the Ghanaian EPA every two years with a readjustment of the calculated bond based on the current estimated rehabilitation costs. Gold Fields Ghana's current reclamation bond secures an amount of U.S.\$7.4 million which is 50% of the rehabilitation costs estimated as at December 2005. The amount secured will be revised based on adjusted current estimated rehabilitation costs as at the date a new reclamation security agreement is signed. Upon submission of a Notice of Intent for the Tarkwa expansion project in 2006, Gold Fields Ghana was advised by the Ghanaian EPA to submit a new environmental impact statement, or EIS, and the EPA further advised Gold Fields Ghana to submit an updated reclamation plan and revised security bond agreement after the approval of the new EIS document. Gold Fields Ghana submitted a new EIS in February 2007 which was approved by the Ghanaian EPA in May 2007. A new environmental permit was issued in May 2007 allowing Gold Fields Ghana to continue operations subject to submission of a revised EMP for the site within 18 months. Gold Fields Ghana submitted a revised EMP to the Ghanaian EPA in November 2008 and the Ghanaian EPA responded in January 2009 that it was reviewing the document. In late June 2009, Gold Fields was advised by African Environmental Research Consultants to reformat the document and to address issues raised by consultants engaged by the Ghanaian EPA. The Ghanaian EPA has also asked that recommendations made in the Akoben inspection, a mine-wide audit conducted by consultants engaged by the Ghanaian EPA in July 2009, be incorporated in the EMP before the certificate is issued.

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Gold Fields submitted a revised EMP, including the Akoben recommendations, in July 2010 to the EPA, covering the period 2010 to 2013. In June 2011, the Ghanaian EPA requested, and Gold Fields provided, an update of the reclamation bond. The update to the Ghanaian EPA covered additional disturbances not previously projected and changes in the rates for equipment hire which resulted in a current estimated liability of U.S.\$47.9 million. This figure will be referenced in the certificate to be issued to the mine in due course and it is expected that the mine will renew its agreement based on this figure.

Abosso has submitted the required EMP and reclamation plans and is in compliance with all permit, certificate and reclamation requirements. Following submission of Damang's Environmental Management Plan 2005 to 2008 in August 2005, on January 23, 2006, Damang's environmental certificate was renewed for a further three years. A revised Environmental Management Plan for the period from 2008 to 2011 was submitted to the Ghanaian EPA in November 2008. The Ghanaian EPA has indicated that the new environmental certificate, which covers a three year period, will be issued after concerns raised in the Akoben inspection have been addressed. In October 2010, a revised EMP covering the period from 2010 to 2013 was submitted to the Ghanaian EPA and the certificate is currently pending. In March 2011, a letter was received from the EPA requesting for a payment of U.S.\$60,000 before issuing the certificate. Abosso has since made the payment and is awaiting issuance. Under Ghanaian law, a mining company may continue operations while its application is being considered as long as all necessary filings have been made.

Abosso was the first mining company in Ghana to sign a reclamation security agreement, in May 2001. Following various intermediate amendments to the agreement, in April 2006, Abosso provided the Ghanaian EPA with a revised draft reclamation security agreement. Meetings with the Ghanaian EPA were held during 2007 and a further draft agreement was submitted to the Ghanaian EPA in November 2007. Abosso was asked to make certain amendments to this draft and submitted a final draft to the Ghanaian EPA in November 2008. A reclamation bond (in the form of an irrevocable letter of credit of U.S.\$2.0 million) and a U.S.\$200,000 cash deposit were provided as security. The bond expired in June 2011, but has been renewed, and is valid until December 31, 2012. The bond is expected to continue to be renewed until the amount required to be secured is revised by the Ghanaian EPA and a new reclamation security agreement can be signed with the Ghanaian EPA. In December 2011, Abosso submitted an updated life of mine Costed Reclamation Plan to the EPA and is awaiting a response. The current reclamation liability for Abosso is approximately U.S.\$10.3 million (base case only) excluding local tax, preliminary and general.

Gold Fields has implemented environmental management systems in compliance with ISO 14001 throughout its operations in Ghana. Gold Fields' operations in Ghana were re-certified under ISO 14001 (2007) during fiscal 2009 for a further three years.

Following Gold Fields becoming a signatory to the Cyanide Code on November 3, 2005, all its operations, including the Ghanaian operations, are committed to complying with the code. Certification under the code at both Ghana operations was achieved in May 2008. As of October 2009, all of Gold Fields' eligible operations had obtained accreditation under the International Cyanide Management Code and were successfully re-accredited in fiscal 2011.

### *Health and Safety*

A mine owner is statutorily obligated to, among other things, take steps to ensure that the mine is managed and worked in accordance with the regulations that provide for the safety and proper discipline of the mine workers. The regulations prescribe the measures to be taken at every mining operation to ensure the safety and health of mine workers. Additionally, Gold Fields is required, under the terms of its mining leases, to comply with the reasonable instructions of the Chief Inspector of Mines regarding health and safety in the mine. A violation of the provisions of the health and safety regulations or failure to comply with the reasonable instructions of the Chief Inspector of Mines could lead to, among other things, a shutdown of all or a portion of the mine or the imposition of costly compliance procedures, and, in the case of a violation of the regulations

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relating to health and safety, constitutes an offense. Gold Fields, as the holder of the mining lease, has potential liability arising from injuries to, or deaths of, workers, including, in some cases, workers employed by its contractors. Although Ghanaian law provides statutory workers compensation for injuries or fatalities to workers, it is not the exclusive means for workers to claim compensation. Gold Fields' insurance for health and safety claims or the relevant workers' compensation may not be adequate to meet the costs which may arise upon any future health and safety claims. As a result, Gold Fields may suffer adverse consequences. See Risk Factors. Gold Fields' operations in Ghana are subject to environmental and health and safety regulations which could impose significant costs and burdens.

Every person resident in Ghana is required to belong to either a public or private health insurance scheme. Since August 1, 2004, to fund the National Health Insurance Fund, a levy of 2.5% has been imposed on goods and services produced or provided in, or imported into, Ghana, although certain types of machinery used in mining, as well as water and certain types of fuel, are exempt from the levy. Employers who establish or contribute to a private health insurance scheme are not exempt from payment of the levy.

### *Mineral Rights*

Gold Fields Ghana holds five mining leases in respect of its operations at the Tarkwa property, each dated April 18, 1997, and two mining leases dated February 2, 1988 and June 18, 1992, respectively, for its operations at the former Teberebie property. The Tarkwa property mining leases all expire in 2027 and the Teberebie property mining leases both expire in 2018. Under the provisions of the Minerals and Mining Law, 1986 (PNDCL 153), or the Minerals and Mining Law, and the terms of the mining leases, all of the Tarkwa property and Teberebie property mining leases are renewable by agreement between Gold Fields Ghana and the government of Ghana.

Abosso holds a mining lease in respect of the Damang mine dated April 19, 1995, as amended by an agreement dated April 4, 1996. This lease expires in 2025. Abosso also holds a mining lease in respect of Lima South, dated March 22, 2006, which expires in 2017. As with the Tarkwa and Teberebie mining leases, these leases are renewable under their terms and the provisions of the Minerals and Mining Law by agreement between Abosso and the government of Ghana.

In addition, under Ghanaian law, the Tarkwa property mining leases are subject to the ratification of parliament. The Minerals Commission, the statutory corporation overseeing the mining operations on behalf of the government of Ghana, has confirmed that the Tarkwa property leases have been ratified by parliament.

A license is required for the export, sale or other disposal of minerals and the permission of the Chief Inspector of Mines is required to remove minerals obtained by the holder of a mineral right. Under Ghanaian law, the government has the right to compel the sale to it of all mineral rights obtained in Ghana and all products derived from the refining or treatment of minerals. However, the current project development agreement entitles Gold Fields to export and sell its entire production of gold and by-products. In respect of Abosso, the government has agreed not to exercise these pre-emption rights for as long as Abosso follows such procedure for marketing its products as may be approved by the Bank of Ghana acting on the advice of the Minerals Commission.

The Minerals and Mining Act came into force on March 31, 2006. Although the Minerals and Mining Act repealed the Minerals and Mining Law, and the amendments to it, the Minerals and Mining Act provides that leases, permits and licenses granted or issued under the repealed laws will continue under those laws unless the Minister responsible for minerals provides otherwise by regulation. Therefore, unless and until such regulations are passed in respect of Gold Fields' mineral rights, the Minerals and Mining Law will continue to apply to Gold Fields' current operations in Ghana.

The major provisions of the Minerals and Mining Act include:

the government of Ghana's right to a free carried interest in mineral operations is restricted to 10%. The government may participate further in mineral operations upon agreement with the holder;

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mineral rights in land over which mineral rights have been granted may not be granted to any other person in respect of the same minerals;

introduction of a new system for demarcating the land, referred to as the cadastral system, whereby land is demarcated in blocks. Under the new system, a mining lease area may not be less than one block or more than 300 contiguous blocks. A block is defined as 21 hectares;

mining companies which have invested or intend to invest at least \$500 million (as Gold Fields has) may benefit from stability and development agreements, relating to both existing and new operations, which will serve to protect holders of current and future mining leases for a period not exceeding 15 years against changes in laws and regulations generally and in particular relating to customs and other duties, levels of payment of taxes, royalties and exchange control provisions, transfer of capital and dividend remittances. A development agreement may contain further provisions relating to the mineral operations and environmental issues. Each stability and development agreement is subject to the ratification of parliament;

provisions requiring the renewal of a mining lease for a further period of up to 30 years once the holder has made an application for renewal pursuant to the terms of the lease if the holder is in material compliance with its obligations under law and under the lease;

provisions restricting royalty rates to not more than 6% or less than 3% of the total revenue of minerals; and

changes to the definition of a mining company. Under the Minerals and Mining Law, a mining company is defined as a company which or whose subsidiary is the holder of a mining lease. The Minerals and Mining Act defines a mining company as a company which or whose subsidiary is the holder of a mineral right (holders of mineral rights include prospecting and reconnaissance license holders) and excludes companies listed on a stock exchange and companies whose holding in mining companies or whose subsidiary's assets are less than 50% of the market value of their total assets. The effect of this re-definition is that persons seeking to become controllers of prospecting or reconnaissance license holders as well as mining lease holders are required to seek the approval of the Minister responsible for mines. Further, mineral rights holders are required to notify the Minister of changes in control.

Additionally, similar to its rights currently in respect of companies holding mining leases, the government of Ghana is entitled to a special share in prospecting or reconnaissance license holders. See Government Option to Acquire Shares of Mining Companies. Under the Minerals and Mining Act, neither a landowner nor any other person may search for minerals or mine on any land without having been granted a mineral right by the Minister responsible for mines. Additionally, even if a mineral right granted under the Minerals and Mining Law is made subject to the Minerals and Mining Act, the Act provides that this shall not have the effect of increasing the holder's costs, or financial burden, for a period of five years.

In 2010, the Minerals and Mining Act was amended to provide for a fixed royalty rate of 5% of the total revenue earned from minerals obtained, with effect from March 17, 2010. Although payment of the royalty rate became effective in March 2010, Gold Fields did not begin submitting the required payment until April 1, 2011 due to a moratorium on the tax burden for mining leases in place prior to commencement of the Act, which ended on March 31, 2011.

The Ghanaian parliament has passed a bill that, effective March 9, 2012, increases taxes on mining companies in order to benefit from the movement in gold prices. These changes included introducing a separate tax category for companies engaged in mining which would raise the applicable corporate tax rate from 25% to 35% as well introducing a much less favorable capital allowance regime. Further, a draft bill is being prepared proposing a windfall tax on mining activities but it has not yet been released for comment.

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### *Government Option to Acquire Shares of Mining Companies*

Under Ghanaian law, the government is entitled to a 10% interest in any Ghanaian company which holds a mining lease in Ghana, without the payment of compensation. The government of Ghana has already received this 10% interest in each of Gold Fields Ghana and Abosso. The government also has the option, under the Minerals and Mining Law, of acquiring an additional 20% interest in the share capital of mining companies whose rights were granted under the Minerals and Mining Law at a price agreed upon by the parties, at the fair market value at the time the option is exercised, or as may be determined by international arbitration. The government of Ghana exercised this option in respect of Gold Fields Ghana and subsequently transferred the interest. The government of Ghana retains this option to purchase an additional 20% of the share capital of Abosso. As far as management is aware, the government of Ghana has not exercised this option for any other gold mining company in the past, other than Gold Fields Ghana.

Under the Minerals and Mining Law, which continues to apply to Gold Fields Ghana's operations, and under the Minerals and Mining Act, the government has a further option to acquire a special share in a mining company for no consideration or in exchange for such consideration as the government and that company shall agree. This interest, when acquired, constitutes a special share which gives the government the right to attend and speak at any general meeting of shareholders, but does not entitle the government to any voting rights. The special share does not entitle the government to distributions of profits of the company which issues it to the government. The written consent of the government is required to make any amendment to a company's articles of incorporation relating to the government's option to acquire a special share. Although the government of Ghana has agreed not to exercise this option in respect of Gold Fields Ghana, it has retained this option for Abosso.

### *Exchange Controls*

Under Ghana's mining laws, the Bank of Ghana or the Minister for Finance may permit the holder of a mining lease to retain a percentage of its foreign exchange earnings for certain expenses in bank accounts in Ghana. Under a foreign exchange retention account agreement with the government of Ghana, Gold Fields Ghana is required to repatriate 20% of its revenues derived from the Tarkwa mine to Ghana and use the repatriated revenues in Ghana or maintain them in a Ghanaian bank account. Management believes that Gold Fields Ghana is entitled to rely on the provisions of the foreign exchange retention account agreement for the duration of the Tarkwa mining leases. Abosso is currently obligated to repatriate 25% of its revenue to Ghana, although the level of repatriation under the deed of warranty between Abosso and the government of Ghana is subject to renegotiation every two years. The most recent negotiations were concluded in February 2003. Since then there have been no requests for negotiations by either side and Abosso's obligations remain the same. Until Abosso's repatriation level is renegotiated, it will remain the same. While management has no reason to believe that the repatriation level will increase as a result of the next set of negotiations, there is no agreed ceiling on the repatriation level, and it could be increased. Any increase could adversely affect Gold Fields' ability to use the cash flow from the Damang mine outside Ghana, including to fund working costs and capital expenditures at other operations, to provide funds for acquisitions and to repay principal and interest on indebtedness. Gold Fields currently repatriates on average approximately 40% of revenues from the Ghana operations to Ghana, annually.

### *Australia*

#### *Environmental*

While Australia's federal government retains the power to regulate activities which impact matters of national environmental significance, the Constitution vests the power to legislate environmental matters principally in the states. Gold Fields' gold operations in Australia are primarily subject to the environmental laws and regulations of the State of Western Australia which require, among other things, that Gold Fields obtains necessary environmental approvals, environmental licenses, work approvals and mining licenses to begin mining

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operations. However, under the Environmental Protection and Biodiversity Act 1999 (Cth), it may be necessary to obtain separate approval from the federal government if the project is considered of national significance in relation to environmental, cultural or biodiversity criteria.

During the operational life of its mines, Gold Fields is required by law to make provisions for the ongoing rehabilitation of its mines and to provide for the cost of post-closure rehabilitation and monitoring once mining operations cease. Gold Fields guarantees its environmental obligations by providing the Western Australian government with unconditional bank-guaranteed performance bonds. However, the value of these bonds would not necessarily cover the actual costs of rehabilitation or any environmental events requiring remediation that were unforeseen at the time the bonds were issued or which occur as a result of a breach of Gold Fields' environmental license conditions. Gold Fields is also required to prepare and submit Annual Environmental Reports to the Department of Environment and Conservation, or the DEC, in accordance with the published guidance materials.

Gold Fields is subject to the Environmental Protection Act 1986 (Western Australia) (EP Act) under which, it is obliged to prevent and abate pollution and environmental harm. The EP Act also prescribes sanctions and penalties for a range of environmental offenses, including orders which may effectively suspend certain operations or activities. In late 2010, the Australian EPA released new impact assessment procedures which took effect from November 26, 2010. These procedures will impact the assessment and appeal process of environmental proposals under the Environmental Protection Act 1986, but will only impact Gold Fields should we determine that a referral is necessary.

On June 22, 2011, the Department of Minerals and Petroleum and the Australian EPA released their Guidelines for Preparing Mine Closure Plans. The purpose of these guidelines is to set out the minimum standards for how mine closure plans are structured, the type of information required, and how mine closure management will be assessed. The regulations relating to these guidelines commenced on July 1, 2011. It is not yet clear how this will effect the Group.

Under the Contaminated Sites Act 2003 (Western Australia), Gold Fields is required to report known or suspected contaminated sites to the DEC. The DEC then classifies the site based on the risk posed to human health and the environment. Gold Fields may be required to investigate and/or remediate the reported site(s) and any other affected site(s) if it is determined by DEC that there is contamination that is or is likely to cause harm to human health or the environment. If that happens, Gold Fields' environmental duties and responsibilities will be increased.

Gold Fields is required to publicly report energy use and efficiency measures under the Energy Efficiency Opportunities (EEO) Act 2006. Annual public reports are required by December 31 following the end of each financial year, with an additional more detailed government report, which is submitted every five years.

Gold Fields reports through the National Pollutants Inventory, or NPI, on an annual basis. The NPI reports must be submitted by September 30 following the end of each financial year. The reports detail Gold Fields' interaction with 93 identified substances as determined by the Department of Sustainability, Environment, Water, Population and Communities which considers the potential impacts to health and the environment.

Under the National Greenhouse and Energy Reporting Act 2007, Gold Fields is required to submit yearly reports to the federal government in relation to the energy use, energy production and greenhouse gas emissions associated with its Australian mining operations. These reports must be submitted by October 31 following the end of each financial year. The scheme, which commenced on July 1, 2008, also requires regulated companies to retain energy and emissions data for seven years for audit. Gold Fields Australia, which includes St. Ives, Agnew, the Australian division of the Exploration group and associated offices continues to meet these reporting obligations.



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The Australian Clean Energy Act 2011 (Cth) and associated legislation establishing a national carbon pricing scheme, or Scheme, passed into law in November 2011. Under the Scheme, entities that have operational control over facilities (i.e. activities) that emit more than 25,000 tons CO<sub>2</sub>-e per annum in greenhouse gas emissions covered by the Scheme, will be directly regulated and will be required to acquire and surrender carbon units to cover those emissions.

The Scheme will operate in two phases: a fixed price phase commencing July 1, 2012, followed by a floating price phase commencing on July 1, 2015. In the fixed price phase liable entities will be able to acquire an uncapped number of carbon units at the applicable fixed price, which will be automatically surrendered by those entities to meet their liability and cannot be traded or banked for future use. The fixed carbon price will commence at \$23 per ton CO<sub>2</sub>-e (for 2012-13), increasing to \$24.15 per ton CO<sub>2</sub>-e (for 2013-14) and \$25.40 per ton CO<sub>2</sub>-e (for 2014-15). In the floating price phase, the carbon price per ton of CO<sub>2</sub>-e will cease to be prescribed and the Australian government will instead set annual caps on the number of carbon units to be issued in each year and carbon units will be made available for purchase through an auction process thereby allowing the price of those carbon units to be determined by the market.

Emissions from the combustion of certain liquid fossil fuels (including petroleum, diesel, liquefied natural gas and liquefied petroleum gas) are excluded from the Scheme and entities are not required to acquire and surrender carbon units to cover emissions resulting from the combustion of those types of fuels.

However, whilst entities which consume these types of liquid fossil fuels in their operations will not be directly regulated by the Scheme, they will nonetheless be indirectly regulated through the imposition, by the Australian government, of an effective carbon price on those fuels. The effective carbon price will be applied by the Australian government making periodic changes to the system of fuel tax credits and fuel excise/customs duties in respect of:

liquid fuels used for business transport (other than in the agriculture, forestry and fisheries industries), including liquid fuels used in the domestic aviation, shipping and rail sectors;

liquid fuels used for non-transport purposes (e.g. diesel used for power generation); and

compressed natural gas, liquefied natural gas and liquefied petroleum gas used for off-road transport and non-transport uses.

These changes will become effective from July 1, 2012 and will be made annually during the fixed price phase of the Scheme and bi-annually during the floating price phase.

Emissions from Gold Fields Australian operations predominantly arise from the combustion of liquid fossil fuels and as such Gold Fields Australian operations are not likely to be directly regulated by the Scheme and Gold Fields Australian operations will not be required to acquire and surrender carbon units to cover those emissions. However, the effective price of diesel fuel paid by Gold Fields Australian operations is likely to rise due to the Government's periodic reduction in diesel fuel rebates and subsidy levels thereby imposing an effective carbon price on diesel fuel consumption. This will result in members of Gold Fields Australian group being indirectly regulated by the Scheme.

In addition, operational expenditures will also be affected by the pass-through of compliance costs under contracts with regulated suppliers.

Following Gold Fields becoming a signatory to the International Cyanide Management Code, or the Code, on November 3, 2005, all its operations, including its Australian operations, are committed to complying with the Code. The Code requires signatories to have their compliance audited by independent, third-party auditors every three years. As of October 2009, all of Gold Fields eligible operations had obtained accreditation under the International Cyanide Management Code. St. Ives achieved full compliance with the Code on August 5, 2009 and Agnew achieved full compliance in January 2010.

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### *Health and Safety*

The Mines Safety and Inspection Act 1994 (Western Australia), or the Safety and Inspection Act and the Mines Safety and Inspection Regulations 1995 (Western Australia) together regulate the duties of employers and employees in the mining industry with regard to occupational health and safety and outline offenses and penalties for breach. Resources Safety, a division of the Department of Mines and Petroleum, administers this legislation, which defines standards of safety. Each relevant employer is then required to develop safety systems that meet these standards of safety, and implement these systems as part of its day-to-day work practices. Under the approach utilized by Resources Safety, it is the responsibility of each employer to manage safety (i.e. a general duty of care exists in mines located in Western Australia). A violation of the safety laws or failure to comply with the instructions of the relevant health and safety authorities could lead to, among other things, a temporary shutdown of all or a portion of the mine, a loss of the right to mine or the imposition of costly compliance procedures. However, mine owner liability for contractors' employees and labor hire employees under the Safety and Inspection Act extends only to matters over which the Company has the capacity to exercise control. See Risk Factors Gold Fields' operations in Australia are subject to environmental and health and safety regulations, which could impose significant costs and burdens.

A statutory review of the operation and effectiveness of the Safety and Inspection Act was conducted by Commissioner S J Kenner of the Industrial Relations Commission of Western Australia and tabled in April 2009. The Western Australian State Government response was announced in September 2009, which effectively increased Resources Safety's ability to monitor safety issues at mines located in Western Australia, and introduced an industry cost recovery model in order to fund the regulation of mine safety.

There has also been substantial work performed at a federal level to harmonize Australia's workplace health and safety laws nationally. The Work Health and Safety Bill 2011 (Western Australia) (which is a significantly amended version of the federal Model Work Health and Safety Act) has been drafted in respect of general industry and it is expected that, subject to progress in finalizing the drafting of a corresponding bill for the mining industry, this bill will be introduced to the Western Australian parliament in 2012. In July 2011, in response to concerns raised by employer groups, the Western Australian Commerce Minister wrote to State and Federal Ministers seeking delay of the Occupational Health and Safety harmonization implementation date. Once responses have been received, a decision regarding the implementation date in Western Australia will be made.

The effect of the amendments is that the cost of health and safety compliance at Gold Fields' mining operations in Australia has increased, as may its exposure to prosecution.

### *Mineral Rights*

In Australia, the ownership of land is separate from the ownership of most minerals, which are the property of the states and are thus regulated by the state governments. The Western Australian Mining Act 1978 (Western Australia), or the Mining Act, is the principal piece of legislation governing exploration and mining on land in Western Australia. Licenses and leases for, among other things, prospecting, exploration and mining must be obtained pursuant to the requirements of the Mining Act before the relevant activity can begin. Application fees and rental payments are payable in respect of each mining tenement.

Prospecting licenses, exploration licenses and mining leases are subject to prescribed minimum annual expenditure commitments. Royalties are payable to the state based on the amount of ore produced or obtained from a mining tenement. A quarterly production report must be filed and royalties are calculated accordingly at a fixed rate of 2.5% of royalty value in respect of gold, and at other rates in respect of ore produced or obtained from a mining tenement. The royalty value of gold is the amount of gold produced during each month in a relevant quarter multiplied by the average gold spot price for that month. Despite the discussion above, no royalty is payable in respect of the first 2,500 ounces of gold metal produced during a financial year from gold bearing material produced or obtained from the same gold royalty project.

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Ministerial consent is required with respect to assignment or sale of a mining lease and certain other leases and tenements. Gold Fields has obtained ministerial consent for the transfer of all material mining leases and other tenements acquired from WMC.

### *Land Claims*

In 1992, the High Court of Australia recognized a form of native title which protects the rights of indigenous people in relation to land in certain circumstances. As a result of this decision, the Native Title Act 1993 (Cth), or Native Title Act, was enacted to recognize and protect existing native title by providing a mechanism for the determination of native title claims and a statutory right for Aboriginal groups or persons to negotiate, object, and/or be consulted when, among other things, there is an expansion of, or change to, the rights and interests in the land which affects native title and constitutes a future act under the Native Title Act. The existence of these claims does not necessarily prevent continued mining under existing tenements. Tenements granted prior to January 1, 1994 are not future acts and do not need to comply with the aforementioned consultation or negotiation procedures. As a general rule, tenements granted after January 1, 1994 need to comply with this process. However, in Western Australia, some tenements were granted without complying with this consultation or negotiation process on the basis of then prevailing Western Australian legislation. This legislation was subsequently found to be invalid as it conflicted with the Native Title Act which is Commonwealth legislation. Subsequent legislation was passed validating the grant of tenements between January 1, 1994 and December 23, 1996, provided certain conditions were met.

Certain of Gold Fields' tenements are currently subject to native title claims. However, most of Gold Fields' tenements were granted prior to January 1, 1994. Where tenements were granted between January 1, 1994 and December 23, 1996, Gold Fields believes it complies with the conditions set out by the Native Title Act for those tenements to be validly granted. On those tenements not granted before December 1996, Gold Fields has entered into agreements with the claimant parties which provides the Company with security of tenure. Therefore, the granting of native title over any of these tenements (if ever it occurs) will not have a material effect on Gold Fields' tenure.

Mining leases do not necessarily extinguish all native title rights, but do extinguish, or at least prevail over, the native title rights with which they conflict. The right of native title holders to control access to land is extinguished by a mining lease in Western Australia. However, mining leases may not extinguish other native title rights. Therefore, some native title rights may co-exist with the rights granted under a mining lease. Compensation could be payable for rights lost by native title holders on the grant of a mining lease. In addition, negotiations with native title applicants are generally necessary before a new mining lease will be granted by the state and these can be time consuming and costly. Although not common, it is also possible that the National Native Title Tribunal will refuse to allow the grant of a mining lease where negotiations break down, and determine the impact of mining on native title rights to be unacceptable.

It is possible that land comprised in seven of Gold Fields' existing tenements could be at risk due to native title claims, because those particular tenements may have been granted by the State of Western Australia in a manner contrary to the Native Title Act. Although the validity of those seven tenements is in question, Gold Fields' management does not believe those tenements are material to its Australian operation.

The State and Commonwealth Aboriginal heritage laws protect sites of significance to Aboriginal people which have ongoing ethnographic, archaeological or historic significance. Gold Fields is aware of several Aboriginal heritage sites on its tenements. However, it does not believe that the protected status of these sites will materially affect its current operations in Australia. See Risk Factors Gold Fields' tenements in Australia are subject to native title claims and include Aboriginal heritage sites, which could impose significant costs and burdens.

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### ***Peru***

#### ***Regulatory***

The regulatory framework governing the development of mining activities in Peru mainly consists of the General Mining Act (*Ley General de Minería*), or the LGM, and regulations relating to mining procedures, health and safety, environmental protection, and mining investment and guarantees. Other laws, such as those relating to the granting of mining concessions in urban areas and urban expansion areas, the closing of mines, and liabilities for environmental damage, also affect mining companies. In addition to general taxation, mining companies are also subject to a special tax regime established in 2011 through the amendment of the Mining Royalty Law and enactment of the Special Mining Tax Law and the Special Mining Charge Law.

The exploration and exploitation of mineral substances from the soil or subsoil is governed by the LGM. Mining activities as defined by the LGM include surveying, prospecting, exploration, exploitation, general workings, beneficiation, trading and transportation of ore.

#### ***Regulatory and Supervisory Entities***

In general terms, the principal regulator of mining activities in Peru is the MEM, through its General Bureau of Mining (*Dirección General de Minería*), or DGM, and its General Bureau of Mining and Environmental Affairs (*Dirección General de Asuntos Ambientales Mineros*), or DGAAM. Other regulatory institutions are the INGEMMET; the Labor Ministry; the Supervisory Body of Investment in Energy and Mining (*Organismo Supervisor de la Inversión en Energía y Minería*), or the OSINERGMIN, and the Assessment and Environment Supervising Agency (*Organismo de Evaluación y Fiscalización Ambiental*), or the OEFA.

The DGM is the senior body of the MEM overseeing the mining industry. It reports directly to the Office of the Vice-Minister of Mining and is responsible for, among other things, the promotion of mining activities, the granting of beneficiation, ore transportation and general working concessions, the proposal of welfare, health and safety regulations.

The DGAAM has the following duties, among others: (i) propose policy and legal provisions for environmental conservation and protection in the mining sector; (ii) approve technical standards for the appropriate application of regulations on environmental conservation and protection to apply to activities of the mining sector; and (iii) assess environmental and social impacts derived from activities of the mining sector, establishing the preventive and corrective measures necessary to control such impacts.

The INGEMMET has the following duties, among others: (i) process mining claims, grant titles to mining concessions and act on applications relating to mining rights pursuant to law; (ii) keep the National Mining Land Register (*Catastro Minero*); administer and distribute the Annual Concession Fee, or ACF, and collect any penalties for failure to meet minimum annual production targets; and (iii) cancel mining claims or mining concessions pursuant to applicable laws.

As of August 2011, the Labor Ministry supervises and inspects mining activities for all labor matters related to mine safety and health. According to supplementary regulations enacted in February 2012, OSINERGMIN retains responsibility for supervising and inspecting mine safety and health matters which are not specifically related to labor rights and obligations.

Since March 2011, all supervising, inspecting and sanctioning duties regarding mining environmental matters have been undertaken by the OEFA. The OEFA is also responsible for proposing to the Ministry of Environment the scale of penalties applicable to each type of infringement pursuant to the Environmental Act.

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### *Concessions*

In accordance with the LGM, mining activities (except surveying, prospecting and trading) must be performed exclusively under the concession system. A concession confers upon its holder the exclusive right to develop a specific mining activity within a defined area. The LGM establishes four types of concessions:

#### *Mining Concessions*

Mining concessions confer the right to explore and exploit the mineralization granted which is within a solid of undefined depth, limited by vertical planes corresponding to the sides of a square, rectangle or closed polygon, the vertices of which refer to Universal Transversal Mercator, or UTM, coordinates. A mining concession is a real property interest independent and separate from surface land located within the UTM coordinates of the concession. It is granted by the INGEMMET. Once the claimed area is subject to a mining concession, the titleholder must register its title with the Public Mining Registry (*Registro de Derechos Mineros*) administered by the National Superintendent of Public Registers (*Superintendencia Nacional de Registros Públicos*) where all the agreements, resolutions and acts thereto must also be registered.

Holders of mining concessions or of any pending claims for mining concessions must comply with payment of the ACF. The ACF is equivalent to U.S.\$3.00 per hectare per year. Default in payment of the ACF for two consecutive or non consecutive years may result in the cancellation of the respective concession or claim.

Holders of mining concessions are also required to meet minimum annual production targets prescribed by law. Titleholders are entitled to group multiple concessions into Administrative Economic Units to comply with the minimum production requirement, provided certain conditions are met. In the case of mining concessions obtained prior to October 2008, the minimum annual production target for concessions to mine metals is equivalent to U.S.\$100.00 per hectare per year. If the titleholder has not met the minimum annual production target by the end of the sixth year of the concession having been granted, the titleholder is required to pay from the seventh year a penalty equal to U.S.\$6.00 per year per hectare until the year in which the minimum annual production target is achieved. The penalty increases to U.S.\$20.00 per year per hectare if the minimum production target is not met by the end of the twelfth year of the concession having been granted. Failure to pay this penalty for two consecutive years may lead to the cancellation of the mining concession, although titleholders may be able to avoid paying the penalty if they can prove to the mining authorities that they have invested an amount equivalent to at least ten times the amount of the penalty in the concession or Administrative Economic Unit during the previous year.

In the case of mining concessions obtained starting in October 2008, the minimum annual production target for metallic concessions is equivalent to one Fiscal Payment Unit, or UIT, per hectare per year. The UIT is fixed on a yearly basis and is set to equal approximately U.S.\$1,351.00 in 2012. If the titleholder has not met the minimum annual production target by the end of the tenth year of the mining concession having been granted, the titleholder is required to pay as of the eleventh year an annual penalty equal to 10% of the minimum annual production target until the target is fulfilled. This regime also applies to mining concessions acquired prior to October 2008, if the titleholder does not achieve the minimum annual production target by January 2, 2019.

Pursuant to the new regulations, mining concessions obtained after October 2008 may be canceled if the titleholder (i) does not meet the minimum annual production target for two consecutive years between the eleventh and fifteenth year of the concession having been granted or (ii) does not meet, after the fifteenth year, the minimum annual production target, unless the corresponding penalty has been paid and the titleholder has evidenced investments in mining activities or in public infrastructure for an amount equivalent to ten times the penalty. Finally, if the non-fulfillment of the minimum annual production target remains until the end of the twentieth year, the mining concession will be canceled. These requirements will also apply to mining concessions obtained prior to October 2008, in case they do not meet the minimum annual production target established by the new regulations by January 2, 2019.

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### *Beneficiation Concessions*

Beneficiation or process concessions confer the right to extract or concentrate the valuable substances of an aggregate of minerals and/or to smelt, purify or refine metals through a set of physical, chemical and/or physicochemical processes. This concession is granted by the DGM.

As with mining concessions, holders of beneficiation concessions are required to pay the ACF, which is calculated on the basis of the production capacity of the processing plant. Default in payment of the ACF for two consecutive or non-consecutive years may result in cancellation of the concession.

### *General Working Concessions*

General workings concessions confer the right to render ancillary services to two or more mining concession holders. The following are considered ancillary services: ventilation, drainage, hoisting or extraction in favor of two or more concessions of different concessionaires. This concession is granted by the DGM.

### *Ore Transportation Concessions*

Ore transportation concessions confer the right to install and operate a system for the continuous massive transportation of mineral products between one or more mining centers and a port or beneficiation plant, or a refinery, or along one or more stretches of these routes. The ore transportation system must be non-conventional, such as conveyor belts, pipelines or cable cars, among others. This concession is granted by the DGM. Conventional transportation systems are authorized by the Ministry of Transport and Communications.

All the concessions regulated by the LGM must be registered with the Public Mining Registry. In addition, all concessions in force must be registered with the National Mining Land Register, administered by the INGEMMET, including the UTM coordinates of the vertices of each mining concession.

In order to fulfill the production obligations established by Peruvian law, the holder of more than one mining concession of the same class and nature may group them in Administrative Economic Units, provided that the concessions are located within a radius of five kilometers in the case of non-ferrous metallic minerals or primary auriferous metallic minerals such as gold, silver and copper; 20 kilometers in the case of ferrous, coal or non-metallic minerals; and 10 kilometers in the case of auriferous detritus or heavy minerals detritus. Creation of an Administrative Economic Unit requires an approval resolution issued by the DGM.