

Gemfields plc

(“Gemfields” or the “Company”)

Market Update – Quarter ending 31 March 2012

23 May 2012

Gemfields plc (AIM: GEM) presents an operational update for the three month period ending 31 March 2012. All figures are approximate, unaudited and, unless otherwise stated, the phrase “carats” includes both emerald and beryl.

Highlights

- Waste moving programme continued at the 75% owned Kagem mine to open new areas for future ore production
- Production summary:
 - Gemstone production of 4.9 million carats in the quarter ending 31 March 2012 (versus 3.9 million carats in the prior quarter)
 - Grade for the quarter of 236 carats per tonne (versus 222 carats per tonne in the prior quarter)
 - Production costs for the quarter of USD 0.85 per carat (versus USD 0.87 per carat in the prior quarter, with both figures excluding capitalised waste stripping costs)
 - Unit rock handling costs for the quarter (on a cash cost basis) of USD 3.73 per tonne (versus USD 3.21 per tonne in the prior quarter)
- Signing of a USD 9.3 million debt facility with Barclays Bank Zambia plc to part-finance the waste removal programme in the Chama section of the Kagem mine
- USD 21.4 million proceeds from March 2012 Singapore auction received in full
- USD 46.6 million in cash and receivables as of 31 March 2012
- Demand for ethical coloured gemstones continues to increase across all markets. Next lower quality rough emerald auction scheduled to take place in Jaipur in June 2012
- A graphical production update is available at www.gemfields.co.uk

Production Update

The Kagem mine, of which Gemfields owns 75% and is presently Gemfields’ only operating emerald mine, is the single largest emerald mine in the world and its key production parameters by quarter are summarised below:

Production Performance

Quarterly Summary	Quarter End:	Jun-10	Sep-10	Dec-10	Mar-11	Jun-11	Sep-11	Dec-11	Mar-12	TOTAL
Gemstone Production (Emerald+Beryl)	million carats	6.1	12.8	5.9	3.5	10.8	4.9	3.9	4.9	52.8
Ore Production (Reaction Zone)	'k tonnes	18.9	19.5	16.0	12.0	21.7	24.0	17.5	20.8	150.3
Grade (Emerald+Beryl/Reaction Zone)	Carats /tonne	323	658	369	290	500	205	222	236	352
Waste Mined (including TMS)	million tonnes	0.7	0.9	0.8	0.8	1.4	2.2	2.2	1.6	10.7
Stripping Ratio		38	48	48	66	67	92	125	78	71
Cash Operating Cost	USD million	3.4	3.5	3.6	3.6	3.5	7.2	7.0	6.0	37.8
Cash Rock Handling Unit Cost	USD / tonne	4.6	3.6	4.6	4.4	2.4	3.3	3.2	3.7	3.5

Financial Performance*

Quarterly Summary	Quarter End:	Jun-10	Sep-10	Dec-10	Mar-11	Jun-11	Sep-11	Dec-11	Mar-12	TOTAL
Total Operating cost	USD million	3.4	3.5	3.6	3.6	3.5	3.9	3.4	4.2	28.9
Unit Production cost per carat	USD /carats	0.55	0.27	0.62	1.03	0.32	0.79	0.87	0.85	0.55
Unit Production cost per tonne of ore	USD /tonne	179	178	227	298	160	162	193	200	192

*Note: With effect from July 2011, Gemfields adopted a new accounting policy whereby all waste moving costs are capitalised and are then subsequently amortised when the ore corresponding to that waste is mined. As of 31 March 2012, approximately USD 8.8 million of waste moving costs have been capitalised and will be amortised later when the associated ore is mined.

The quarter ending 31 March 2012 produced 4.9 million carats at a grade of 236 carats per tonne of ore and a unit cost of USD 0.85 per carat (excluding capitalised waste moving costs).

Kagem's previously announced large-scale waste mining programme to open new areas for future ore production is ongoing, with over 5.9 million tonnes of rock having been moved in the last three quarters. While the stripping ratio will continue to increase in the near term as areas of overburden and waste are mined, management expects an overall increase in operating efficiencies and performance in the medium to longer term as Kagem is able to mine both waste and ore more efficiently.

This present focus on waste mining, combined with external factors, has had a negative impact on gemstone production in the short term, however, production is improving quarter by quarter and is expected to continue to increase in the coming months.

The harder rock types currently being mined resulted in approximately 0.7 million tonnes of waste being mined by the contractor during the quarter (compared to 1.1 million tonnes in the previous quarter) with cash rock handling costs increasing to USD 3.73 per tonne (compared to USD 3.21 in prior quarter).

Kagem's key annual production parameters are summarised below:

Kagem Annual Production Summary	UNITS	YEAR	YEAR	YEAR	YEAR	YEAR	YEAR	YTD
		to 30 Jun 2006	to 30 Jun 2007	to 30 Jun 2008	to 30 Jun 2009	to 30 Jun 2010	to 30 Jun 2011	to 31 Mar 2012
Gemstone Production (Emerald+Beryl)	million carats	10.2	9.4	9.9	28.0	17.4	33.0	13.7
Ore Production (Reaction Zone)	'000 tonnes	22	29	42	80	61	69	62
Grade (Emerald+Beryl/Reaction Zone)	carats/tonne	462	325	233	349	286	478	220
Waste Mined (incl. TMS)	million tonnes	1.8	2.8	5.1	4.0	2.5	3.9	5.9
Waste+ TMS: Reaction Zone	stripping ratio	83	96	120	50	42	54	95
Total Rock Handling	million tonnes	1.8	2.8	5.1	4.1	2.6	3.9	6.0

Gemfields' underground mining project achieved 73.9 metres of horizontal advance from 77 blasts (versus 73.8 metres in the quarter ending December 2011). A focus on production mining has seen an increase in the number of carats produced from the same contact areas. Some 141,315 carats were produced in the quarter ending 31 March 2012 (versus 61,077 carats in the prior quarter), improving the underground project's overall grade to 77.9 carats per tonne.

Kagem has entered into a USD 9.3 million debt facility at an interest rate of 3 month LIBOR plus 4.75% with Barclays Bank Zambia plc. The loan will be drawn down within one year and is repayable over a period of 36 months in monthly instalments from the date of first drawdown. Security for this loan comprises a corporate guarantee from Gemfields plc, a charge over the assets of Kagem Mining Limited (excluding the mining licences) and a cash deposit pledge. The facility will be used to pay the contractor undertaking the removal of waste in the Chama section of the Kagem mine and is an initial step towards Kagem Mining Ltd becoming a fully independent and self-funding operation. The initial drawdown of USD 3.0 million will take place in May 2012 and is in part designed to strengthen Kagem's credit rating for future growth.

Illegal mining activity within the boundaries of the Kagem mining licence is not yet fully resolved and Gemfields continues to work with key ministries to alleviate this challenge.

Cash Balances

As of 31 March 2012, Gemfields had USD 46.6 million in cash and receivables.

Ian Harebottle, CEO of Gemfields, commented:

“As demand for ethical coloured gemstones continues to increase across all markets we look forward to our next emerald auction, of lower quality rough, which takes place in Jaipur in June 2012. Gemfields’ healthy cash position has supported the Company’s decision to actively pursue the development of other assets in its portfolio and to increase the scale of operations at its Kagem mine. The recently finalised loan facility will further support Kagem’s ability to operate as a stand-alone company where operational performance will continue to improve post the current high-wall pushback with increased production output anticipated in the last quarter of this financial year and well into the next financial year.”

Enquiries:

Gemfields Dev Shetty, CFO	dev.shetty@gemfields.co.uk +44 (0)20 7518 3402
Canaccord Genuity Limited Nominated Adviser and Joint Broker to Gemfields Tarica Mpinga/Andrew Chubb	+44 (0)20 7523 8000
Neil Passmore JP Morgan Cazenove	+44 (0)20 7155 8630
Jos Simson/Lydia Eades Tavistock Communications	+44 (0)20 7920 3150

Notes to Editors:

Gemfields plc is a leading gemstone miner listed on the AIM market of the London Stock Exchange (ticker: ‘GEM’). The Company’s principal asset is the 75% owned Kagem emerald mine in Zambia, the world’s single largest emerald mine. In addition to the Kagem emerald mine, Gemfields has a 50% interest in the Kariba amethyst mine in Zambia.

The Company also owns controlling stakes in a highly prospective ruby deposit in Mozambique and licences in Madagascar including ruby, emerald and sapphires deposits.

In July 2009 Gemfields commenced a formal auction programme for its Zambian emeralds. To date, the Company has held nine auctions which have generated revenues totalling USD 124.7 million.