

Gemfields plc

("Gemfields" or the "Company")

Market Update – Quarter ending 31 December 2011

01 March 2012

Gemfields plc (AIM: GEM) presents an operational update for the three month period ending 31 December 2011. All figures are approximate, unaudited and, unless otherwise stated, the phrase "carats" includes both emerald and beryl.

Highlights

- Substantial waste moving programme at the Kagem mine underway to open new areas for future ore production. As a result, improved medium-term operating performance is expected.
- Due to the focus on waste moving, ore mining has been significantly reduced with a commensurate impact on the quarter's production:
 - Gemstone production was 3.9 million carats in the quarter ending 31 December 2011 (versus 4.9 million carats in the prior quarter)
 - Grade for the quarter was 222 carats per tonne (versus 205 carats per tonne in the prior quarter)
 - Production costs for the quarter of USD 0.87 per carat (versus USD 0.79 per carat in the prior quarter, with both figures excluding capitalised waste stripping costs)
 - Unit rock handling costs (on a cash cost basis) were USD 3.21 per tonne (versus USD 3.28 per tonne in the prior quarter).
- A graphical production update is available at www.gemfields.co.uk.
- As of 31 December 2011, Gemfields had USD 32 million in cash.

Production Update

The Kagem mine, of which Gemfields owns 75%, is presently Gemfields' only operating emerald mine. Kagem 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-09	Sep-09	Dec-09	Mar-10	Jun-10	Sep-10	Dec-10	Mar-11	Jun-11	Sep-11	Dec-11	TOTAL
Gemstone Production (Emerald+Beryl)	million carats	6.0	2.9	4.9	3.4	6.1	12.8	5.9	3.5	10.8	4.9	3.9	65.2
Ore Production (Reaction Zone)	'k tonnes	22.3	16.0	13.5	12.5	18.9	19.5	16.0	12.0	21.7	24.0	17.5	193.7
Grade (Emerald+Beryl/Reaction Zone)	Carats /tonne	268	182	365	277	323	658	369	290	500	205	222	337
Waste Mined (including TMS)	million tonnes	0.5	0.5	0.7	0.6	0.7	0.9	0.8	0.8	1.4	2.2	2.2	11.4
Stripping Ratio		22	33	49	51	38	48	48	66	67	92	125	59
Cash Operating Cost	USD million	3.5	3.3	3.1	3.0	3.4	3.5	3.6	3.6	3.5	7.2	7.1	44.6
Cash Operating Cost per of rock moved	USD /tonne	6.8	6.1	4.6	4.7	4.6	3.6	4.6	4.4	2.4	3.3	3.2	3.9

Financial Performance*

Quarterly Summary to Sep-11	Quarter End:	Jun-09	Sep-09	Dec-09	Mar-10	Jun-10	Sep-10	Dec-10	Mar-11	Jun-11	Sep-11	Dec-11	TOTAL
Total Operating cost	USD million	3.5	3.3	3.1	3.0	3.4	3.5	3.6	3.6	3.5	3.9	3.4	37.7
Unit Production cost per carat	USD /carat	0.59	1.13	0.63	0.87	0.55	0.27	0.62	1.03	0.32	0.79	0.87	0.58
Unit Production cost per tonne of ore	USD /tonne	159	205	230	241	179	178	227	298	160	162	193	194

*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 December 2011, approximately USD 6.9 million of waste moving costs have been capitalised and will be amortised later when the associated ore is mined.

The quarter ending 31 December 2011 produced 3.9 million carats at a grade of 222 carats per tonne of ore and a unit cost of USD 0.87 per carat (excluding capitalised waste moving costs).

As previously announced, Kagem has initiated a large-scale waste moving programme with a view to opening new areas for future ore production. This programme has gained paced with over 4.4 million tonnes of rock having been moved in the last two quarters. While the stripping ratio will continue to increase in the near term as areas of overburden are mined in order to expand the levels of ore available for future mining, management expects an overall increase in operating efficiencies and performance in the medium term as Kagem is able to mine both waste and ore more efficiently.

This focus on moving waste, combined with various external factors (including delays experienced by the contractor and heavier than anticipated rains) have had a negative impact on gemstone production on the quarter under review. Production is, however, expected to increase considerably in the coming months.

Approximately 1.1 million tonnes of waste was moved by the contractor during the quarter (compared to 1.0 million tonnes in the previous quarter) with cash rock handling costs decreasing to USD 3.21 per tonne in the current quarter (compared to USD 3.28 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 Dec 2011
Gemstone Production (Emerald+Beryl)	million carats	10.2	9.4	9.9	28	17.4	33.0	8.8
Ore Production (Reaction Zone)	'000 tonnes	22	29	42	80	61	69	42
Grade (Emerald+Beryl/Reaction Zone)	carats/ tonne	462	325	233	349	286	478	212
Waste Mined (incl. TMS)	million tonnes	1.8	2.8	5.1	4.0	2.5	3.9	4.3
Waste+ TMS: Reaction Zone	stripping ratio	83	96	120	50	42	54	105
Total Rock Handling	million tonnes	1.8	2.8	5.1	4.1	2.6	3.9	4.4

Gemfields' underground mining project achieved 73.8 metres of horizontal advance during the quarter ending 31 December 2011 from 79 blasts (versus 43.3 metres in the quarter ending September 2011). With four production drives accessing ore bearing contact areas, the quarter has seen an increase in both ore mined and carats produced within this zone. Some 61,077 carats were produced in the quarter ending 31 December 2011, improving the underground project's grade to 61 carats per tonne.

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 December 2011, Gemfields had USD 32 million in cash, and Kagem, in which Gemfields has a 75% interest, is debt free.

Ian Harebottle, CEO of Gemfields, commented:

“Demand for coloured gemstones from both developed and emerging markets alike remains firm and 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. Operational performance will continue to improve post the current high-wall pushback project with significantly increased production outputs anticipated in the last two quarters of this financial year.”

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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 eight auctions which have generated revenues totalling USD 98.5 million.