

TORONTO, Feb. 2, 2017 /CNW/ - [Guyana Goldfields Inc.](#) (TSX: GUY) ("the Company") is pleased to report the key findings from its updated feasibility study on its 100% owned Aurora Gold Mine. The updated study assumes a gold price of US\$1,200 per ounce resulting in increased reserves by 15% despite net depletion of 15 months of operations and reflects an expansion of the current processing facility from 5,600 tonnes per day ("tpd") to 8,000 tpd. The proposed expansion of the mill will be completed in two phases and will increase annual production to above 200,000 ounces beginning in 2018 for the life of the mine with gold production expected to peak at 303,000 ounces in 2021. All amounts are expressed in US dollars. A conference call will be held later this morning to summarize the results of the study.

#### Feasibility Study Highlights

- Mineral reserves increased to 3.5 Moz, up 15% from the previous reserve estimate with a higher assumed gold price more than offsetting depletion from 15 months of operations
- Average annual production of 220,000 ounces over a 15-year mine life at an average cash cost of \$612 per ounce (including royalties)
- Average head grade of 3.02 g/t Au over the life of the mine
- NPV5% of \$850 million ("M")
- Open pit mining ongoing through to 2024. Development of the underground operation is scheduled to commence in 2022 with first production expected in 2024.
- Mill Expansion Phase 1:
  - Debottlenecking of the back end of the circuit
  - Expected to increase throughput from 5,600 tpd to 8,000 tpd based on a saprolite/hard rock blend with a concurrent improvement in recoveries of ~1%
  - Expected completion by end of the first quarter of 2018 at a capital cost of \$21
- Mill Expansion Phase 2:
  - Addition of a ball mill resulting in increased recoveries of a further 1% to 2%
  - Expected to allow the processing of 8,000 tpd of hard rock
  - Expected completion by mid-2019 at a capital cost of \$27
- Both phases are fully permitted and are expected to be funded internally

Scott A. Caldwell, President & CEO states, "The expansion of the Aurora Gold Mine is a phased approach that effectively manages both development and capital risk while still delivering an attractive near-term growth profile. The first phase of the expansion takes advantage of the significant amount of saprolite ore available in the mine plan over the next two years while the second phase of the expansion is expected to deliver a further improvement in recoveries while maintaining throughput levels as the mine moves into predominantly hard rock. The company is moving forward on the plan and has commenced engineering and long lead time purchases to secure prices and deliveries. Having demonstrated a successful ramp up and with operations now reaching steady state levels, the Company is in an excellent position both operationally and financially to push forward with this mill expansion to grow its annual production profile to above 200,000 ounces".

#### Economic & Operational Highlights

Gold Price (base case)		\$1,200/oz
Total Gold Production (Recovered Gold)		3.3 Moz
15 Year Mine Life		OP 2017-2024
		UG 2024 &ndash; 2031
Average Annual Production (LOM)		220,000 oz Au
Average Gold Grade (mill head)		3.02 g/t Au
Mill Throughput	2017 + 1Q18	5,600 tpd
	2Q18 onwards	8,000 tpd
Gold Recovery	2017	91.3%
	2018 (post Phase 1)	92.5%
	2H19 onwards (post Phase 2)	94.0%
Strip Ratio (waste to ore)		8.4:1
LOM Cash Costs (with royalty)		\$612/oz
LOM AISC		\$747/oz
Expansion Capital Cost	Mill Phase 1 (2017 + 1Q18)	\$21 M
	Mill Phase 2 (2018 + 1H19)	\$27 M
	Mine Fleet (2018)	\$24 M
Underground Development Cost (Year 2022 &ndash; 2024)		\$129 M
Pre-Tax NPV (5% Discount Rate)		\$1,054 M
After-Tax NPV (5% Discount Rate)		\$850 M

The full feasibility study is being filed today on SEDAR at [www.sedar.com](http://www.sedar.com) and is available on the Company's website at [www.guygold.com](http://www.guygold.com). The feasibility study report has been prepared by SRK Consulting (Canada) Inc. with contributions from Tetra Tech and JDS Energy & Mining and is entitled "Independent Technical Report Updated Feasibility Study, Aurora Gold Mine Project" with an effective date of December 31, 2016.

#### Production & Cost Profile

Forecast annual production in 2017 of 171,000 ounces is expected to grow to 254,000 ounces in 2018. Production is expected to peak in 2021 at 303,000 ounces. Annual production over the 15-year mine life is 220,000 ounces. Of the total 3.3 Moz ounces recovered over the life of the mine, 1.7 Moz are sourced from the open pit operations and 1.6 Moz are sourced from the underground operations.

Operating cash costs (including the royalty expense) average \$612 per ounce over the life of the mine. AISC over the life of the mine, assuming an annual corporate G&A expense and stock based compensation of \$8 M and annual exploration expenses of \$5 M, are expected to average \$747 per ounce.

#### Open Pit Mining

The open pit has a mine life of 8 years based on a total of 19.6 Mt tonnes of ore mined at an average grade of 2.87 g/t Au. Average annual gold production over this period is approximately 230,000 oz. Saprolite ore makes up 2.9 Mt or ~15% of total open pit ore tonnes and is expected to be largely mined out by the middle of 2019. Approximately 60% of the ore tonnes are sourced from Rory's Knoll, 30% from Aleck Hill, with the remainder coming from the Walcott Hill, Mad Kiss and North Aleck Hill

satellite deposits. Mining activity over the near term will be focused on fresh rock ore at Rory's Knoll and saprolitic ore at Aleck Hill.

The average strip ratio over the life of mine is 8.4 to 1. The strip ratio peaks in 2019 and 2020, averaging 14.6 over these two years. As a result of the increasing strip ratio during these years the mining rate is expected to increase from ~35,000 tpd in 2017 to ~95,000 tpd in 2019 and 2020. To accommodate this increase and reduce overall mining costs, the Company plans to transition to a mining fleet with larger equipment in 2018 consisting of 90-tonne haul trucks. The larger equipment will primarily be used for pre-stripping activities and mining activity higher in the pit. 41-tonne haul trucks will continue to be used deeper in the pit to reduce the overall strip ratio. The estimated capital cost to expand the mining fleet is \$24 M and is expected to be incurred during 2018.

## Underground Mining

### Rory's Knoll

Following a two-year pre-production period, underground mining at Rory's Knoll commences in year 2024 as open pit mining operations wind down. The mining rate averages 5,500 tpd at an average grade of 3.02 g/t Au over an 8-year mine life for a total of 1.4 Moz. Vertical development is assumed to be completed by an underground contractor while all lateral development will be completed by the Company. Rory's Knoll underground will be mined utilizing the open benching and sublevel retreat mining methods via a decline access with truck haulage from a depth of -330 mRL down to -770 mRL. Below the open pit, the Rory's Knoll ore body approximates a sub-vertical pipe with >100 m diameter which, along with results from a detailed hydrogeological and geotechnical model, support the open benching and sublevel retreat mining method approach. The study results show underground mining creates minimal surface subsidence and indicate water inflows are manageable, as has been proven by existing open pit mining activities.

### Satellite Deposits – Mad Kiss & Aleck Hill

The Aleck Hill underground is expected to contribute 153,000 ounces (1.1 Mt at an average grade of 4.28 g/t Au) to the overall mine plan beginning in 2025 and continuing through to 2030. Aleck Hill will be mined through a combination of transverse and longitudinal long hole open stoping ("LHOS") from a depth of about -160 mRL to about -500 mRL.

The Mad Kiss underground contributes 104,000 ounces (0.6 Mt at an average grade of 5.45g/t Au) to the overall mine plan. Mad Kiss will be developed concurrently with the Rory's Knoll underground with initial production expected in 2024 and continuing through to 2027. Mad Kiss will be mined via longitudinal LHOS from a depth of about -40 mRL to about -380 mRL.

## Processing

The existing process circuit has a capacity for 5,600 tpd and includes a cyanide leach and carbon adsorption process comprising crushing, single-stage grinding, gravity, cyanide leaching, carbon adsorption, carbon elution and regeneration, gold refining, cyanide destruction and tailings disposal.

The proposed plant expansion will be completed in two phases. The first phase will increase the throughput rate from 5,600 tpd to 8,000 tpd incorporating a saprolite portion of the mill feed of between 25% and 50%. The ordering of long lead-time items for the Phase 1 expansion has already commenced and detailed engineering is expected to commence in February 2017. The first phase of the expansion is expected to be completed by the end of the first quarter of 2018. The second phase of the expansion will allow the processing of 8,000 tpd hard rock and is expected to commence in mid-2018 and be completed by mid-2019 when the majority of saprolitic ore has been exhausted.

The first phase of the expansion consists of debottlenecking the back end of the circuit and includes the addition of three leach tanks, a pre-leach thickener, carbon management systems and the expansion of the elution circuit. Due to additional retention time within the leaching circuit, the phase one mill expansion is expected to increase recoveries by approximately 1% to an estimated average recovery of 92.5%.

The second phase of the expansion will include the addition of a ball mill, an expansion of the existing gravity circuit, the addition of one new cyanide detoxification tank and the installation of four new generators with total capacity of 6.0MW. The overall gold recovery is expected to increase to 94.0% post completion of phase two of the expansion based on these upgrades to the mill.

## Opportunities

### Open Pit Mining

There is a steep increase in the mining rate in 2018 and 2019. This study assumes the use of larger mining equipment (both new and used) to accommodate this increase. Internal trade-off studies will be completed to ensure optimal equipment selection as well as ongoing assessment of new versus used prices for such equipment.

This study assumes the use of 10 metre benches in the rock slopes at Aleck Hill and the other satellite deposits. Together these

deposits make up approximately 40% of the ore sourced from open pit mining and have an overall strip ratio of 8.4:1. There is limited geotechnical information available for these deposits. Additional geotechnical work will be completed to assess the potential to move to 20 metre benches in these deposits to reduce the overall strip ratio.

### Underground Mining

This current feasibility study assumes that underground mining at Rory's Knoll will utilise open benching and sublevel retreat mining methods with mining concluding at a depth of -770 metres below sea level (mRL). The Company will evaluate the economic potential of utilising more selective mining methods at Rory's Knoll. Such mining methods could result in a higher grade profile through lower dilution and may result in additional ounces being included in the mine at depth at Rory's Knoll.

This feasibility study assumes that underground mining at the Mad Kiss and Aleck Hill satellite deposits will utilise LHOS methods. Given some of the higher grade zones within these deposits, especially at Mad Kiss, the Company is evaluating bringing forward underground production from these zones as well as using more selective mining methods. One mining method being considered is Alimak mining which typically requires less upfront capital when compared to LHOS.

### Exploration

Exploration in 2017 and 2018 will be focused on both brownfield and greenfield targets. Brownfield targets include Powis Hill and Gold Creek, both proximal to the Aurora processing facility. Exploration success in finding saprolitic ore on these targets has the potential to extend open pit production and defer the second phase of the mill expansion. Greenfield targets located on the north side of the Cuyuni River include Wynamu, Sulphur Rose and Iroma. Drilling is expected to begin on Wynamu in the first quarter of this year.

### Aurora Gold Mine Mineral Reserves

The Company has updated its Mineral Reserves for its Aurora Gold Mine utilizing a gold price of \$1,200 per ounce and an effective date of December 31, 2016. Overall reserves increased by 15% to 3.5 Moz compared to the most recent reserve estimate which had an effective date of September 30, 2015 and utilized a gold price of \$1,000 per ounce.

### Aurora Gold Mine Mineral Reserves

Effective December 31, 2016 (\$1,200/oz Au)

Category	Quantity	Grade	Contained Metal
	('000 t)	(g/t Au)	('000 oz)

#### Proven

OP Saprolite	336	1.60	17
OP Rock	4,864	2.99	468
Total Proven	5,200	2.90	485

#### Probable

OP Saprolite	2,934	1.91	180
OP Rock	12,128	3.02	1,178
UG Rock	16,519	3.19	1,694
Total Probable	31,580	3.01	3,052
Total P&P	36,781	2.99	3,537

Notes:

1. Mineral Reserves are based on a gold price of US\$1,200 per ounce, 8% royalty and an average metallurgical recovery of 96.0% for saprolite and 94.0% for fresh rock material.
2. Open pit saprolite and rock reserves are reported at a cut-off grade of 0.44 g/t Au and 0.42 g/t Au for vein and upper saprolite material respectively. Open pit rock reserves are reported at a cut-off grade of 0.76 g/t Au and 0.64 g/t Au for vein and Rory's Knoll rock material respectively.
3. Underground fresh rock reserves are reported at a cut-off grade of 1.5 g/t Au.
4. Mineral Reserves are contained within Mineral Resources.
5. SRK is not aware of mining, metallurgical, infrastructure, permitting, or other factors that could materially affect the mineral reserve estimates.

Aurora Gold Mine Mineral Resources

Aurora Gold Mineral Resources			
Effective December 31, 2016 (\$1,300/oz Au)			
Category	Quantity (000's t)	Grade (g/t Au)	Contained Metal (000's oz)
Open Pit			
Measured	5,230	3.17	500
Indicated	24,440	2.51	1,970
Measured and Indicated	29,670	2.62	2,440
Inferred	4,770	1.57	230
Underground			
Indicated	30,060	3.91	3,780
Measured and Indicated	30,060	3.91	3,780
Inferred	11,810	4.12	1,570
Combined Mining			
Measured	5,230	2.97	500
Indicated	54,500	3.28	5,750
Measured and Indicated	59,730	3.25	6,250
Inferred	16,580	3.79	1,790

## Notes:

1. Mineral resources are inclusive of mineral reserves. Mineral resources are not mineral reserves and do not have demonstrated economic viability. All figures have been rounded to reflect the relative accuracy of the estimates.
2. Open pit mineral resources are reported at a cut-off grade of 0.30 g/t for Saprolite and 0.40 g/t for Fresh rock respectively, and underground mineral resources are reported at a cut-off grade of 1.8 g/t. Cut-off grades are based on a price of US\$1,300 per ounce of gold and a gold recoveries of 97 percent for saprolite and 94.5 percent for fresh material.
3. Mineral resources have been adjusted using the 2016 EOY topography, to account for open pit mining to date, and include open stockpile inventories as of EOY 2016.

## Qualified Persons

The compilation of the technical report in support of the feasibility study was completed by Tim Carew, PGeo, Robert McCarthy, PEng, and Christopher Elliott, FAusImm. By virtue of their education, membership to a recognized professional association and relevant work experience, Tim Carew, Robert McCarthy and Christopher Elliott are independent Qualified Persons as defined by National Instrument 43-101. Tim Carew, Robert McCarthy and Christopher Elliott have reviewed, approved and verified the technical content of this news release.

## Detailed Report

For readers to fully understand the information in this news release, they should read the technical report in its entirety which is being filed today on SEDAR at [www.sedar.com](http://www.sedar.com) and on the Company's website at [www.guygold.com](http://www.guygold.com), including all qualifications, assumptions and exclusions that relate to the feasibility study. The technical report is intended to be read as a whole, and sections should not be read or relied upon out of context.

## Conference Call

The Company will hold a conference call today at 10:00am EST where senior management will discuss the key findings of the FS and respond to any questions.

A webcast will be available on the Company's website following the call or through the following link at:  
<http://event.on24.com/r.htm?e=1360464&s=1&k=A50A8BF4ABCD4D4DFB290F597C0D43F3>

To join the call:

### Conference Call Details:

Date of Call: Thursday, February 2, 2017

Time of Call: 10:00am EST

Conference ID: 65048034

### Dial-In Numbers:

North America Toll-Free: (888) 231-8191

International: (647) 427-7450

### About Guyana Goldfields Inc.:

[Guyana Goldfields Inc.](#) is a Canadian based mid-tier gold producer primarily focused on the exploration, development and operation of gold deposits in Guyana, South America. The 100%-owned Aurora Gold Mine achieved commercial production January 1, 2016 and has a total gold resource of 6.25 million ounces in the measured and indicated categories (59.73 million tonnes at 3.25 g/t Au) as well as an additional 1.79 million ounces in the inferred category (16.58 million tonnes at 3.79 g/t Au). For further details, please refer to the report entitled "Independent technical Report Updated Feasibility Study, Aurora Gold Mine Project, Republic of Guyana" dated February 2, 2017 available on SEDAR at [www.sedar.com](http://www.sedar.com).

### About Our NI 43-101 Technical Report, Updated Feasibility Study Contributors:

#### About SRK Consulting (Canada) Inc.

SRK is an independent, international consulting practice that provides focused advice and solutions to clients, mainly from earth

and water resource industries. The SRK Group comprises over 1,400 professionals in 45 offices worldwide, offering expertise in a wide range of resource engineering disciplines. The SRK Group's independence is ensured by the fact that it holds no equity in any project and that its ownership rests solely with its staff. This permits SRK to provide its clients with conflict-free and objective recommendations on crucial judgment issues. SRK has a demonstrated track record in undertaking independent assessments of Mineral Resources and Mineral Reserves, project evaluations and audits, technical reports and independent feasibility evaluations to bankable standards on behalf of exploration and mining companies and financial institutions worldwide.

#### About JDS Energy & Mining Inc.

JDS was founded in 2004 and is composed of a diverse set of skilled and highly experienced mining and construction professionals. With a proven record providing clients with fit-for-purpose solutions and value delivery, JDS has acquired a reputation for delivering and executing project plans on budget, on time, and most importantly, safely. The JDS team prides itself on delivering project concepts from inception to full operations &ndash; a process it has executed seamlessly for operations throughout Canada and worldwide.

#### About Tetra Tech

Tetra Tech is a leading provider of consulting, engineering, program management, construction management, and technical services. Tetra Tech provides innovative solutions focused on natural resources, water, environment, energy, and infrastructure. Employing more than 14,000 people world-wide, Tetra Tech's mining study group comprises qualified geologists, mining engineers, metallurgical engineers, environmental scientists, and other disciplines who understand the realities of project economics and the importance of constructability in preliminary design concepts.

#### Information Concerning Estimates of Mineral Reserves and Resources

The Mineral Reserve and Resource estimates reported in this press release were prepared in accordance with National Instrument 43-101 ("NI 43-101"), as required by Canadian securities regulatory authorities. For United States reporting purposes, the United States Securities and Exchange Commission ("SEC") applies different standards in order to classify mineralization as a reserve. In particular, while the terms "measured," "indicated" and "inferred" Mineral Resources are required pursuant to NI 43-101, the SEC does not recognize such terms. Canadian standards differ significantly from the requirements of the SEC. Investors are cautioned not to assume that any part or all of the mineral deposits in these categories constitute or will ever be converted into reserves. In addition, "inferred" Mineral Resources have a great amount of uncertainty as to their existence and great uncertainty as to their economic and legal feasibility. It cannot be assumed that all or any part of an inferred Mineral Resource will ever be upgraded to a higher category. Under Canadian securities laws, issuers must not make any disclosure of results of an economic analysis that includes inferred Mineral Resources, except in rare cases.

#### Non-GAAP Performance Measures

The Company has included certain non-GAAP performance measures in this document including total cash costs per ounce and all-in sustaining cost per ounce. These measures are not defined under IFRS and should not be considered in isolation. The Company believes that these measures, together with measures determined in accordance with IFRS, provide investors with an improved ability to evaluate the underlying performance of the Company. The inclusion of these measures is meant to provide additional information and should not be used as a substitute for performance measures prepared in accordance with IFRS. These measures are not necessarily standard and therefore may not be comparable to similar measures presented by other issuers.

The Company has applied the World Gold Council's June 2013 published guidance in reporting cash costs and all-in sustaining costs to its mining operations. Adoption of cash costs and all-in sustaining cost metrics is voluntary and not necessarily standard, and therefore, these measures presented by the Company may not be comparable to similar measures presented by other issuers. The Company believes that the cash costs and all-in sustaining cost measures complement existing IFRS measures reported by the Company.

#### Total cash costs per ounce

Total cash costs is a common financial performance measure in the gold mining industry but with no standard meaning under IFRS. The Company reports total cash costs on a sales basis. The Company believes that, in addition to conventional measures prepared in accordance with IFRS, such as sales, certain investors use this information to evaluate the Company's performance and ability to generate operating earnings and cash flow from its mining operations. Management uses this metric as an important tool to monitor operating cost performance.

Total cash costs include production and royalty costs. Production costs include mining, processing, refining and transportation, and site administration, and in total are then divided by gold ounces sold to arrive at total cash costs per gold ounce sold. This measure also includes other mine related costs incurred such as mine standby costs and any current inventory write downs. Production costs are exclusive of depreciation. Royalty costs are excluded from the above total cash costs figure to arrive at

total cash costs per ounce &ndash; before royalty. Other companies may calculate these measures differently.

#### All-in sustaining cost per ounce

"All-in sustaining cost per ounce" is also a non-GAAP performance measure. The Company believes this measure more fully defines the total costs associated with producing gold; however, this performance measure has no standardized meaning. Accordingly, there may be some variation in the method of computation of "all-in sustaining cost per ounce" as determined by the Company compared with other mining companies. In this context, the Company calculates AISC as the sum of total cash costs (as described above), share-based compensation, corporate general and administrative expense, exploration and evaluation expenditures that are sustaining in nature, reclamation cost accretion, sustaining capital including deferred stripping, and realized gains and losses on diesel derivative contracts, all divided by the gold ounces sold to arrive at a per ounce figure.

Sustaining capital expenditures are expenditures that do not increase annual gold ounce production at a mine site and excludes expenditures at the Company's development projects as well as expenditures that are deemed expansionary in nature.

#### Forwarding-Looking Information

This news release contains "forward-looking information" which may include, but is not limited to, statements with respect to (i) the estimation of Mineral Reserves and Mineral Resources including, without limitation, statements with respect to the potential increase in production from the existing model, and the possible integration of additional ounces into the existing mine plan; (ii) exploration and development activities; and (iii) the feasibility study including, without limitation, statements about projected future production, mining methods, mine plans, cost estimates and potential production increases as a result of increased commodity pricing. Often, but not always, forward-looking statements can be identified by the use of words and phrases such as "plans," "expects," "is expected," "budget," "scheduled," "estimates," "forecasts," "intends," "anticipates," or "believes" or variations (including negative variations) of such words and phrases, or state that certain actions, events or results "may," "could," "would," "might" or "will" be taken, occur or be achieved.

Forward-looking statements are based on the opinions and estimates of management as of the date such statements are made and are based on various assumptions regarding, among other things, the estimation of Mineral Resources and Mineral Reserves (and potential establishment and increases in respect thereof), the realization of Mineral Resource and Reserve estimates, currency fluctuations, gold metal prices, the timing and amount of future exploration and development expenditures, the estimation of initial and sustaining capital requirements, the estimation of labour and operating costs, the availability of necessary financing and materials to continue to explore and develop the Project and surrounding areas in the short and long-term, the progress of exploration and development activities, the receipt of necessary regulatory approvals, and assumptions with respect to environmental risks, title disputes or claims, and other similar matters.

Forward-looking statements involve known and unknown risks, uncertainties and other factors which may cause the actual results, performance or achievements of the Company to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements. Such factors include, among others, the final findings set forth in the feasibility study, risks relating to variations in Mineral Resources and Mineral Reserves, grade or recovery rates resulting from current exploration and development activities (including risks that new Mineral Resources may not be established, or the anticipated expansion potential of existing Mineral Resources/Reserves may not be realized), risks relating to changes in gold prices and the worldwide demand for and supply of gold, risks related to increased competition in the mining industry generally, risks related to current global financial conditions, access and supply risks, reliance on key personnel, operational risks inherent in the conduct of mining activities, increases in capital and operating costs and the risk of delays or increased costs that might be encountered during the development process, capitalization and liquidity risks, risks related to disputes concerning property titles and interest, environmental risks, general business, economic, competitive, political and social uncertainties; the actual results of exploration and development activities; available cash and the actual rate of debt repayment; changes in project parameters as plans continue to be refined; accidents, labour disputes and other risks of the mining industry; political instability; delays in obtaining governmental approvals or financing or in the completion of development or construction activities, as well as those factors discussed in the section entitled "Risk Factors" in the Company's annual information form. Although the Company has attempted to identify important factors that could cause actual actions, events or results to differ materially from those described in forward looking statements, there may be other factors that cause actions, events or results to differ from those anticipated, estimated or intended. Forward-looking statements contained herein are made as of the date of this news release and the Company disclaims any obligation to update any forward-looking statements, whether as a result of new information, future events or results, except as may be required by applicable securities laws. There can be no assurance that forward-looking statements will prove to be accurate, as actual results and future events could differ materially from those anticipated in such statements. Accordingly, readers should not place undue reliance on forward looking statements.

SOURCE [Guyana Goldfields Inc.](#)

#### Contact

[Guyana Goldfields Inc.](#), Scott A. Caldwell, President and Chief Executive Officer; Jacqueline Wagenaar, Vice President,



