

Form 51-102F3

**MATERIAL CHANGE REPORT**

**Item 1 Name and Address of Company**

Orezone Gold Corporation  
1111 Melville Street, Suite 910  
Vancouver, BC V6E 3V6

**Item 2 Date of Material Change**

July 9, 2018

**Item 3 News Release**

A press release with respect to the material change referred to in this report was issued by the Company on July 9, 2018 through the facilities of Globenewswire and filed on the System of Electronic Document Analysis and Retrieval (SEDAR). The statements in the press release under the headings “Qualified Persons” and “Forward-Looking Statements and Forward-Looking Information” are incorporated into this report.

**Item 4 Summary of Material Change**

The Company announced the positive results from an independent Feasibility Study (“FS”) on its 90%-owned Bomboré project in Burkina Faso, West Africa, which provided the following key results (*base Case parameters assume a gold price of \$1,275/oz and presented in US dollars*):

- Pre-tax NPV<sub>5%</sub> of \$315.3 million and IRR of 59.4% with a 1.3 year payback
- After-tax NPV<sub>5%</sub> of \$224.5 million and IRR of 42.6% with a 1.7 year payback
- Mine life of 13 years with LOM gold production of 1,024,239 ounces and an average annual production of 102,613 ounces in the first 7 years
- The mineral reserves used in the FS are limited to the Measured and Indicated near-surface saprolite and upper transitional resources to an average depth of 45 metres only
- Initial project construction costs estimated at \$143.7 million with a 24-month construction period (includes six months allotted for resettlement activities that will allow the commencement of main construction activities) with first gold pour targeted by Q4 2020
- Life of Mine (“LOM”) sustaining capital costs of \$58.9 million
- LOM cash costs of \$677/oz with cash costs of \$445/oz in the first 3 years
- LOM AISC<sup>1</sup> of \$746/oz with AISC of \$485/oz in the first 3 years

**Item 5 Full Description of Material Change**

The updated independent FS on the Bomboré project in Burkina Faso, West Africa envisions a shallow, free-dig open pit mining operation with a simple processing circuit consisting of a single stage grinding ball mill followed by a seven-stage carbon-in-leach (“CIL”) and standard Zadra gold recovery circuit. Tailings will be stored in a HDPE-lined facility that will be constructed in several stages over LOM from compacted mine

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<sup>1</sup> All-in sustaining costs (“AISC”) do not have any standardized meaning under IFRS. AISC include mining, processing, site G&A, refining & transportation, government royalties, sustaining capital and closure costs.

waste. The assumptions include mineral reserves determined using an average gold price of \$1,250/oz and revenues based on \$1,275/oz. The thirteen-year operational plan is designed to bring forward higher grade ore in the early years with lower grade ore stockpiled and processed in the final two years of operations. The current design has a mill throughput of 4.5M tonnes per annum (“tpa”) and the mill is sized for expansion. The financial model with revenues based on a US\$1,275 gold price, yields a 42.6% after tax internal rate of return with a net present value of US\$224.5 M at a 5% discount rate. Project payback is estimated at 1.7 years with AISC averaging \$746/oz. Initial capital is estimated at \$154.7 M including contingencies, all working capital and a \$31.2 M credit for gold revenues generated during the pre-production period. Pre-production capital costs include the construction of a large water storage system and completion of all RAP activities. Capital estimates are based on quotes including taxes and freight received up to Q2 2018 from potential equipment and service providers. Sustaining capital is estimated at \$58.9 million consisting mainly of tailings dam construction. Replacement of process plant equipment will be minimal due to the projected low abrasion by the oxide material and all mining fleet replacement will be undertaken by the mining contractor. Reclamation and closure costs are estimated at \$14.5 million.

The FS was completed by Lycopodium Minerals Canada Ltd. (“Lycopodium”) of Toronto, Canada (Process Engineering and Overall Study Manager), Knight Piésold and Co. of Denver, USA (Tailings and Water Storage Systems), AMC Consultants (“AMC”) of Vancouver, Canada and Maidenhead, United Kingdom (Reserves and Mining) and WSP Canada Inc. (“WSP”) of Montreal, Canada in conjunction with SOCREGE and BEGE of Burkina Faso (Social & Environmental).

### Summary of Financials

The Base Case assumptions include mineral reserves using an average gold price of \$1,250/oz and revenues based on \$1,275/oz. The financial highlights are as follows:

#### Base Case Highlights

Description	Years 1 to 3	LOM
Base Case Gold Price (\$/oz)		1,275
Mine Life (years)		12.3
Total Waste Tonnes Mined (Mt)	25.2	93.8
Total Ore Tonnes Mined (Mt)	17.7	56.0
Strip Ratio	1.42	1.68
<b>Production</b>		
Processing Annual Throughput (Mt)	4.5	4.5
Diluted Head Grade (g/t)	1.00	0.64
Gold Recovery Rate (%)	93.1%	89.1%
Total Gold Ounces Recovered (ounces)	405,578	1,024,239

Average Annual Gold Production (ounces)	135,193	83,271
<b>Operating Costs</b>		
Unit Operating Costs (\$ per tonne processed)	13.36	12.38
Cash Costs (\$/ounce)	445	677
AISC (\$/ounce)	485	746
<b>Capital Costs</b>		
Initial Construction Costs (\$M)		143.7
Sustaining Capital Costs (\$M)		58.9
Closure Costs (\$M)		14.5
<b>Financials</b>		
100% Project Basis <sup>1</sup>		
NPV Pre-Tax (5%) (\$M)		315.3
IRR Pre-Tax (%)		59.4%
NPV After-Tax (5%) (\$M)		224.5
IRR After-Tax (%)		42.6%
<p><sup>1</sup> Represents total project cash flows net of government royalties and taxes. The Government of Burkina Faso benefits from a 10% free-carried interest, sales royalties (4% NSR at \$1,275 Au), Local Development Mining Fund tax (1% NSR), corporate income tax (27.5% tax rate), fuel taxes, VAT and withholding taxes on services.  Exchange rate assumptions: XOF:USD = 550; USD:EURO = 1.19; XOF:EURO = 655.957  Fuel price delivered to site: Diesel = \$1.05/litre; Heavy-Fuel Oil = \$0.62/litre</p>		

### Mineral Resource and Mineral Reserve

The Mineral Reserve estimate for the FS was prepared by AMC and is based on the January 5, 2017 Mineral Resource estimate prepared by RPA Inc. ("RPA") of Toronto, Canada which includes 218.1 Mt of Measured and Indicated resources grading 0.68 g/t for 4.8 Moz plus 48.2 Mt of Inferred resources grading 0.64 g/t for 1.0 Moz. The mineral reserves used in the FS are limited to the Measured and Indicated near-surface saprolite and upper transitional resources to an average depth of 45 metres.

The Mineral Resource estimate consists of three separate block models:

- The North model, which consists of the Maga, CFU, OCR, and P8P9 zones.
- The South model, which consists of the P11, Siga E, and Siga W zones.
- The Southeast model, which is to the south and southeast of the South model and consists of the P16 and P17 zones.

## 2017 Mineral Resources Statement – RPA, Inclusive of Mineral Reserves, January 5, 2017

Material Type	Cutoff gpt	Measured Mineral Resource			Indicated Mineral Resource			Measured and Indicated Mineral Resource			Inferred Mineral Resource		
		Tonnes Mt	Grade gpt	Gold koz	Tonnes Mt	Grade gpt	Gold koz	Tonnes Mt	Grade Gpt	Gold koz	Tonnes Mt	Grade gpt	Gold koz
Oxide+Tran HG	0.45	16.9	0.94	513	36.5	0.83	974	53.4	0.87	1,487	4.8	0.77	117
Oxide+Tran LG	0.2 to 0.45	18.5	0.33	196	50.1	0.33	531	68.6	0.33	727	16.4	0.29	151
<b>Total Ox+Tr</b>	<b>0.20</b>	<b>35.4</b>	<b>0.62</b>	<b>709</b>	<b>86.7</b>	<b>0.54</b>	<b>1,505</b>	<b>122.0</b>	<b>0.56</b>	<b>2,214</b>	<b>21.2</b>	<b>0.39</b>	<b>268</b>
Fresh HG	0.50	2.3	1.18	87	68.7	0.96	2,121	71.0	0.97	2,208	20.1	0.97	630
Fresh LG	0.38 to 0.50	0.8	0.43	11	24.2	0.43	337	25.0	0.43	348	6.9	0.43	96
<b>Total Fresh</b>	<b>0.38</b>	<b>3.1</b>	<b>0.99</b>	<b>97</b>	<b>93.0</b>	<b>0.82</b>	<b>2,458</b>	<b>96.0</b>	<b>0.83</b>	<b>2,556</b>	<b>27.0</b>	<b>0.84</b>	<b>726</b>
<b>Total HG</b>		<b>19.2</b>	<b>0.97</b>	<b>600</b>	<b>105.3</b>	<b>0.91</b>	<b>3,095</b>	<b>124.5</b>	<b>0.92</b>	<b>3,695</b>	<b>24.9</b>	<b>0.93</b>	<b>747</b>
Total LG		19.2	0.33	206	74.4	0.36	868	93.6	0.36	1,075	23.3	0.33	246
<b>Total HG + LG</b>		<b>38.4</b>	<b>0.65</b>	<b>806</b>	<b>179.6</b>	<b>0.69</b>	<b>3,964</b>	<b>218.1</b>	<b>0.68</b>	<b>4,770</b>	<b>48.2</b>	<b>0.64</b>	<b>994</b>

Notes: 1. CIM definitions were followed for Mineral Resources. 2. HG indicates material above the higher-grade cutoffs, LG indicates low grade material between the high grade and breakeven cutoff grades. 3. Mineral Resources are estimated at variable cutoff grades depending on weathering layer and location. 4. Mineral Resources are estimated using a long-term gold price of US\$1,400 per ounce. 5. A minimum mining width of approximately 3 m was used. 6. Bulk densities vary by material type. 7. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability. 8. Mineral Resources are reported inclusive of Mineral Reserves. 9. Numbers may not add due to rounding. 10. The effective date of this Mineral Resource statement is January 5, 2017.

For the Mineral Reserve estimate, AMC developed new reserve block models, for each of the three resource block models, by applying the modifying factors necessary for conversion of Mineral Resources to Mineral Reserves. Those factors included amongst others, weathering profiles, mine cost centers, mining dilution and extraction factors, and pit slope angles. Cut-off grade (“CoG”) determinations for block assignments (ore versus waste) were based on a gold price of \$1,250/oz.

### Mineral Reserve Estimate – AMC, July 9, 2018

Category	Proven			Probable			Proven & Probable		
	Tonnes	Gold Grade	Gold Ounces	Tonnes	Gold Grade	Gold Ounces	Tonnes	Gold Grade	Gold Ounces
	Mt	g/t Au	Koz Au	Mt	g/t Au	Koz Au	Mt	g/t Au	Koz Au
North	21.35	0.68	466	19.54	0.57	356	40.89	0.63	823
South				14.92	0.67	322	14.92	0.67	322
Southeast	0.19	0.85	5				0.19	0.85	5
<b>Total</b>	<b>21.54</b>	<b>0.68</b>	<b>472</b>	<b>34.47</b>	<b>0.61</b>	<b>678</b>	<b>56.00</b>	<b>0.64</b>	<b>1,149</b>

1. Mineral Reserves have been estimated in accordance with the CIM Definition Standards.
2. Mineral Resources which are not Mineral Reserves do not have demonstrated economic viability.
3. Mineral Reserves are estimated at an average long-term gold price of US\$1,250.
4. Mineral Reserves are reported effective July 9, 2018.

### Mine Plan and Processing Summary

The FS mine plan is based on an annual feed rate to the plant of 4.5M tpa of ore and delivering relatively higher-grade ore in the early years of the project. This results in building 6.1Mt of low grade stockpiles prior to Year 1 with further stockpile additions in Years 1 through 3 and subsequent drawdowns in the later years of operations. Over 80% of mine waste will be utilized as construction material for the tailings storage facility, thereby reducing water management costs and closure costs associated with waste dumps. The ore is free-digging with the oxides composed of over 70% passing 150 micron material that

requires minimal grinding before leaching. The upper transition, although relatively soft, will require some grinding to achieve expected recoveries. The ball mill is sized to take a blend of 70% oxide/30% upper transition material. The current mine plan does not anticipate such a high percentage of transition material in the mill feed thus providing extra grinding capacity should a plant expansion be considered. Estimated gold ounces produced and diluted head grades for each year are summarized in the table below. An estimated 24,526 ounces of gold are recovered during the planned two-month commissioning period. During years 12 to 13, only lower-grade stockpiles are processed.

### Gold Production

Year	Ore tonnes processed (Mt)	Gold grade (g/t)	Recoveries (%)	Gold Production ('000 ounces)
Pre-prod.	0.68	1.20	94.2%	24.5
1	4.50	1.14	93.9%	155.4
2	4.50	0.95	92.6%	126.7
3	4.50	0.92	92.5%	123.5
4	4.50	0.71	90.2%	92.0
5	4.50	0.60	88.5%	77.3
6	4.50	0.59	88.1%	74.7
7	4.50	0.54	87.2%	68.7
8	4.50	0.53	86.8%	66.1
9	4.50	0.47	85.1%	57.7
10	4.50	0.46	84.9%	56.7
11	4.50	0.44	84.3%	54.2
12	4.50	0.32	78.3%	36.2
13	1.32	0.32	78.3%	10.6
<b>Life of Mine</b>	<b>56.0</b>	<b>0.64</b>	<b>89.1%</b>	<b>1024.2</b>

### Mine Plan

The Company worked with AMC to develop a mine plan and production schedule (based on the January 5, 2017 resource model) which have been optimized to maximize project returns by processing the higher

grade ore in the early years and stockpiling the lower grade ore for processing after mining is completed in Year 11. Initial head grades for Years 1 through 3 average 1.00 g/t, with Years 1 through 7 averaging 0.78 g/t. Mining will be by local contractor(s) using a conventional diesel-hydraulic excavator fleet, and small 30t and 50t road type rear-dump units as the ore and waste are all free-dig with little or no oversize material expected. This type of load and haul fleet is common in Burkina Faso and West Africa for similar free-dig material and will provide increased versatility as the mine plan consists of a large number of shallow pits of varying tonnage.

Total ore processed, including the lower grade stockpiles, will be 56.0 Mt grading an average of 0.64 g/t. The LOM strip ratio is approximately 1.68:1.

## **Mineral Processing**

Significant metallurgical testing has been completed over several years which formed the basis of the Bomboré Project Study, with the most recent grinding and reagent optimization work completed at SGS in Quebec in Q4 2017. Lycopodium have reviewed the historical and recent test work data and based the process flowsheet on this work.

The flowsheet and plant have been designed to process the soft fine-grained ore which eliminated the need for a crushing plant ahead of the grinding circuit. The ore is direct dumped across a static grizzly into a large hopper and on to a variable speed apron feeder. The system is designed to break any sticky, lumpy product that may be expected in the rainy season. From the apron feeder, the ore is transferred to a conveyor that feeds directly to the ball mill. The plant is designed with two ore transfer points and one conveyor, thereby eliminating potential issues associated with wet sticky ore in the rainy season. The ball mill is equipped with a variable speed drive sized to accommodate a wide range of ore types and hardness.

Ball mill discharge is pumped to a set of cyclones with the oversize reporting back to the mill and the undersize fed to a seven-stage CIL circuit for gold recovery. The CIL tails are thickened to recover process water and then pumped to a HDPE-lined tailings facility. The tailings facility is designed to be zero discharge, with water recovered in a decant tower and returned to the process water tank at the plant. Gold is recovered in a standard carbon desorption plant, finishing with electrowinning and smelting to produce gold doré bars.

## **Project Infrastructure**

The project benefits from a mining-friendly jurisdiction, a strong mining culture, and excellent local infrastructure. Burkina Faso has experienced rapid development of its mining sector over the past decade which has contributed to the growth of available mining contractors, suppliers, and skilled labour. In addition, the project is favourably situated only 85 kilometres from the capital city of Ouagadougou, accessed off a 5 kilometre dirt road via the main sealed highway (RN4) that runs between the capital and the coast.

### Offices and Accommodation

Orezone have already constructed a 76-bed camp which will be augmented by a new 18-bed private room accommodation block for senior staff. A fully functioning kitchen and dining facility are in place operated by a catering and accommodation service provider. A camp contractor will continue to be responsible for all operations at the accommodation camp including catering, cleaning and maintenance activities.

All offices and communication systems are in place and will require minimal upgrading.

### Power Supply

A heavy-fuel oil (“HFO”) power station will be constructed at the process plant by an independent power provider (“IPP”) under a build-own-operate (“BOO”) agreement. The power station will be fitted with 7 x 1.6MW heavy duty HFO generator engines (or similar) with five operating and two standby units.

11 kV aerial transmission lines will be constructed from the power station to the tailings storage facility, waste storage facility, accommodation camp, and the mining contractor’s area.

The power station will utilize a dedicated bulk HFO storage facility located adjacent to the power house.

### Water Supply

Raw water will be sourced from the seasonal Nobsin River and diverted by a permanent weir into an off-channel reservoir (“OCR”). The OCR is essentially one of the mine pits excavated early and designed to hold sufficient water for the project on an annual basis.

Pumps will transfer water from the OCR to the raw and process water tanks by HDPE pipeline.

### **Initial Project Capital Costs**

<b>Project Capital Area</b>	<b>US\$ M</b>
Process Plant	45.3
Infrastructure	16.2
Mining	1.1
Construction Indirects	13.2
EPCM	11.6
Resettlement Action Plan	24.3
Owner’s Costs	21.5
<b>Subtotal</b>	<b>133.2</b>
Contingency	10.5
<b>Total Initial Construction Costs</b>	<b>143.7</b>
Working Capital (ore stockpiles)	33.7
Pre-production Operating Costs	8.5
Pre-production Gold Sales	-31.2
<b>Total Upfront Costs</b>	<b>154.7</b>

### **Sustaining Capital & Closure Costs**

<b>Area</b>	<b>US\$ M</b>
Tailings and Water Management	57.8
Mining	1.1
<b>Total Sustaining Capital Costs</b>	<b>58.9</b>
Reclamation and Closure	14.5
Salvage Value	-2.3
<b>Total Sustaining Capital and Closure Costs</b>	<b>71.1</b>

Sustaining capital costs were estimated on the basis of quotes from potential providers. The closure and reclamation plan includes work to be conducted from the closure of the mine at the end of operating activities. The goal is to return the site to a satisfactory state as quickly as possible in terms of reducing the risks for health and safety, controlling erosion and developing a profile compatible with the future uses of the site.

### Operating Costs

Description	Total Costs (\$M)	\$/tonne processed	\$/ounce
Mining	257.0	4.59	251
Processing	275.3	4.92	269
Site G&A	94.2	1.68	92
Refining and transport	1.5	0.03	2
Government royalties	65.2	1.17	64
<b>Total Cash Cost</b>	<b>693.3</b>	<b>12.38</b>	<b>677</b>
Sustaining capital	58.9	1.05	57
Rehabilitation and closure (net of salvage)	12.2	0.22	12
<b>All-in Sustaining Cost<sup>1</sup></b>	<b>764.4</b>	<b>13.65</b>	<b>746</b>
<i><sup>1</sup> AISC excludes corporate G&amp;A expenses</i>			

### Project Sensitivities

The project is sensitive to gold price as demonstrated in the following table:

Gold Price (\$/oz)	1,100	1,200	Base Case 1,275	1,300	1,400
NPV After-Tax (5%) (\$M)	127.0	181.8	224.5	231.0	287.0
IRR After-Tax	28.6%	36.5%	42.6%	43.5%	51.7%

### Development Timetable

Estimated time to construct the Bomboré operation (pre-production) is 24 months, including time to excavate the OCR, complete the RAP, and commission the process plant equipment. The critical path items are the RAP and OCR excavation. Timely completion of the RAP will allow early commencement of the OCR excavation which will meet the water needs for commissioning, start-up and subsequent operations as the OCR is filled during the rainy season each year from May through October.

### Permitting

The Bomboré project is fully permitted and ready for construction and operation. All necessary Environmental Baseline Studies were completed prior to submission of the Mining Permit application in 2015. The Mining Permit was granted on December 30, 2016 and remains in full force and effect.

**Item 6 Reliance on subsection 7.1(2) or (3) of National Instrument 51-102**

Not Applicable

**Item 7 Omitted Information**

No confidential information has been omitted from this report.

**Item 8 Executive Officer**

Patrick Downey  
President and CEO  
(778) 945-8977

**Item 9 Date of Report**

July 17, 2018