30 October 2020

ASX:TLG

QUARTERLY ACTIVITIES REVIEW

FOR THE PERIOD ENDING 30 SEPTEMBER 2020

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Corporate Information

ASX Codes **TLG**
Shares on issue **264.1m**
Options (unlisted) **8.0m**

Company Directors

Terry Stinson
Non-Executive Chairman

Mark Thompson
Managing Director

Grant Mooney
Non-Executive Director

Stephen Lowe
Non-Executive Director

Ola Mørkved Rinnan
Non-Executive Director

Battery anode and graphene additives company Talga Resources Ltd (**ASX:TLG**)("**Talga**" or "**the Company**") is pleased to report its activities for the quarter ending 30 September 2020.

September 2020 quarter activities included:

COMMERCIAL & PRODUCT DEVELOPMENT

- Vittangi Anode Project development to proceed directly to commercial phase following positive outcomes from completed detailed feasibility work
- Fast-tracking decision for Talga's mass-producible silicon anode product, Talnode®-Si, announced subsequent to the quarter
- US patent granted for Talga's electrochemical exfoliation process

MINERAL PROJECT DEVELOPMENT & EXPLORATION

- 15% increase in the total natural graphite resources at Vittangi as a result of an updated Mineral Resource Estimate for Talga's Nunasvaara South deposit
- Scoping study for Vittangi's Niska deposits to now include Talnode®-Si graphite-graphene material production

CORPORATE & INVESTOR RELATIONS

- Board and Executive changes included appointment of Mr Martin Phillips as European Chief Executive Officer subsequent to the quarter
- Completion of strongly supported institutional placement
- Sale of Western Australian gold royalties to Trident
- Cash balance of A$12.6 million as at 30 September 2020

Managing Director, Mr Mark Thompson: *"The first half of the new financial year continues to see significant behind-the-scenes progress made towards executing our vertically integrated Vittangi Anode Project and setting up future growth stages. While engagement with potential customers, financiers and project partners suffered some slowdown due to COVID-19 travel restrictions, we have made up lost ground and are well placed for negotiations heading into the completion of the DFS.*

The Niska scoping study is progressing well, benefitting from the expanded product profile, and set to show the first of expansions needed for forecast global battery demand. The schedule for these outcomes dovetails neatly into European government policies supporting local battery material supply chains and the parallel lift in demand from automotive conglomerates. Talga is geared to be a significant entrant and deliver world-class, sustainable battery products into this booming market."

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COMMERCIAL AND PRODUCT DEVELOPMENT

Vittangi Anode Project

Talga is building a fully integrated battery anode operation, running on 100% renewable electricity and using unique natural flake graphite from the Company's high-grade deposits in northern Sweden, to produce ultra-low emission coated anode for greener lithium-ion ("Li-ion") batteries.

During the quarter the decision was made to progress development of Talga's Vittangi Anode Project, the Company's first planned operation with a commercial anode production capacity of 19,000 tonnes per annum ("tpa") of Talnode®-C*, as one single commercial step (**ASX:TLG 5 August 2020**). Whilst the overall economic and financial parameters outlined in the Vittangi Anode Project Pre-feasibility Study ("PFS") remain materially unchanged (**ASX:TLG 23 May 2019**), it is believed the amalgamation of the two previously outlined development stages will simplify the project's pathway to production.

The decision reflected operational impacts attributable to COVID-19 delays and was underpinned by positive outcomes from detailed feasibility work completed across Talga's graphite mining and process flowsheet, Talnode®-C production and marketing.

Highlights of the outcomes from completed work included:

- Yield increase for Talnode®-C (from graphite concentrate) to 99%, up from 88% in the PFS, and higher total recoveries of Talnode®-C (from graphite ore) of 90%, up from 80% in the PFS
- Energy savings of 30% in graphite concentrate production and the successful piloting of proprietary sustainable purification processes to produce battery-grade graphite concentrate
- Significant positive feedback on Talnode®-C during qualification tests conducted by major battery manufacturers and further refinement of anode coating treatment following input from automotive OEM customers
- The ability to produce Talphene® graphene products for battery and polymer composite applications from Talnode®-C anode refinery streams
- Further cost optimisations and growth opportunities identified including potential resource expansion and underground mining options

Talga will look to further refine these outcomes in the upcoming commercial Detailed Feasibility Study ("DFS") planned for completion in Q1 2021.

Figure 1. *Visualisation of Talga's planned 19,000 tonnes per annum battery anode refinery.*



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Electric Vehicle Anode Plant

During the quarter, Talga continued to conduct concurrent market and product qualification programs of its Talnode® anode products with a number of Li-ion battery and anode producers, targeting markets for batteries for automotive applications, energy storage systems and computers, communications and consumer electronics.

Talga continued to refine its fully coated Talnode®-C product, with optimised coating treatments for Electric Vehicle ("EV") battery cells based on feedback from automotive original equipment manufacturers ("OEM").

Against this background, Talga is assessing options to build a larger commercial-sample electric vehicle anode sample facility ("EVA") for pre-production Talnode®-C samples. The samples would be earmarked for the Company's large customer qualification processes already progressed with automotive OEMs, and their battery manufacturing partners, towards purchase agreements for the 19,000tpa commercial anode production planned to commence in 2023.

The permitting and consultation process to construct the EVA plant is planned to commence during the current quarter, Q4 2020. Reviews towards potential site selection has begun, including consideration of Swedish port cities amongst several potential European locations.

Expansion Strategy

The DFS underway for the Vittangi Anode Project is based solely on the open-pit development of the Company's Nunasvaara South graphite deposit and integrated anode refinery to produce 19,000tpa of Talga's flagship Li-ion battery graphite anode product Talnode®-C.

To deliver into the increasing demand for anode materials the Company is accelerating its growth strategy starting with a scoping study on the remaining deposits within Talga's Vittangi graphite project, Nunasvaara North, Niska South and Niska North ("Niska Scoping Study"), which is currently underway and due for completion in November 2020.

Figure 2. *Vittangi Graphite Project showing parallel stages of permitting and development underway.*

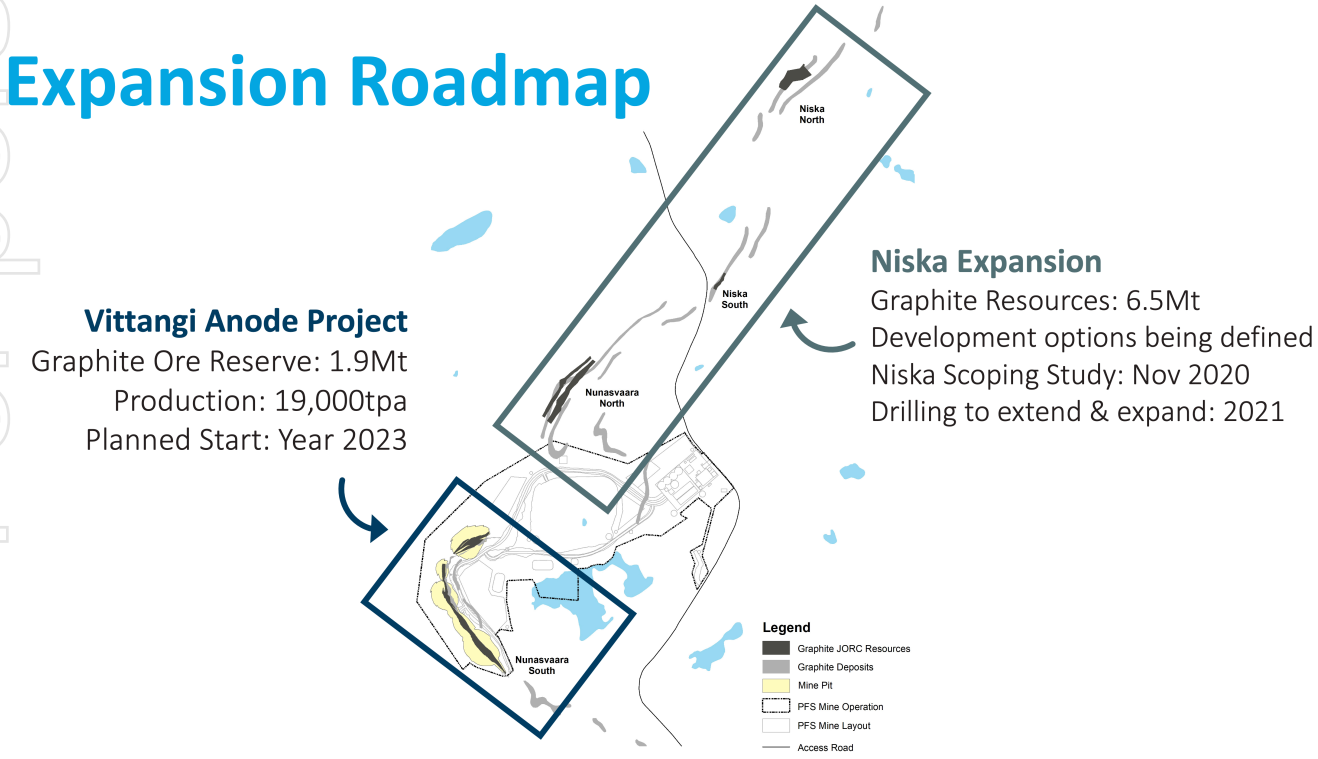


Figure 3. *Talga's supply of metallurgical grade silicon used to produce Talnode®-Si.*



Figure 4. *Talga senior scientist Dr Fengming Liu developing Talnode®-Si at Talga's Cambridge (UK) facility.*



Fast-tracking of Silicon Anode

During the quarter, Talga continued to progress and optimise its silicon anode Li-ion battery product, Talnode®-Si at the Company's facilities in Europe. Work focussed on consolidating Talga's approach, that started in 2018, using lower-cost metallurgical-grade silicon for a high-energy density anode with mass-producibility potential. Full-cell customer testing has been progressing under confidentiality and material transfer agreements with multiple battery manufacturers and auto OEMs in Europe and the United States. Positive results from initial tests in unoptimised (commercial electrolyte and non pre-litheated) Li-ion battery cells have been received and are sufficiently encouraging to now fast-track further development and potential commercialisation.

Granting of Founding US Patent

The September quarter was marked by the granting of a United States Patent for Talga's integrated mining method and electrochemical exfoliation process for graphene production. This welcome outcome is part of the Company's Intellectual Property ("IP") strategy to protect Talga's expanding product, technology and processing portfolio to support its vertically integrated mine-to-product battery anode and graphene additives business.

The Company's current IP portfolio includes multiple international patents pending on battery products, production processes and graphene related materials, with a suite of other patents in progress.

In addition, Talga's IP strategy has included successfully securing and registering key product trademarks in preparation for sales across significant global markets for Talnode®, Talphite®, Talphene®, Talcoat® and Talcrete®.

Figure 5. *Managing Director Mr Mark Thompson with Talga's founding United States Patent.*



Talga Managing Director Mark Thompson commented: *"The continuous identification and development of proprietary product technology and manufacturing processes demands careful management of IP. The Company has a great team and system in place to develop and lodge patents to protect Talga's assets where appropriate and commercially beneficial – with some existing and developing 'know how' remaining confidential to guard unique competitive advantages. The granting of our founding patent for the integrated method of graphite mining and process to make graphene and graphitic materials is of course a significant milestone, but more than that it represents our core skill and passion for engineering minerals into innovative technology products that enable sustainability."*

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MINERAL PROJECT DEVELOPMENT & EXPLORATION

Significant Increase in Graphite Mineral Resources

The September quarter saw Talga boost the amount of natural graphite defined to JORC (2012) standards at its wholly-owned Vittangi project - the world's highest grade graphite mineral resource – as a result of updating and standardising cut-off grade and other parameters across the project.

The update took Vittangi's total graphite Indicated and Inferred mineral resource JORC (2012) estimate to 19.5 million tonnes at 24.0% graphite, representing a 15% increase over previous estimates, and boosted Talga's total Swedish inventory to 55.3 million tonnes of JORC (2012) resources containing 9.7 million tonnes of graphite (**ASX:TLG 17 September 2020**).

The update also defined Exploration Targets totalling 26–46 million tonnes at 20–30% graphite immediately along strike and at depth from the current Vittangi resources. These are planned to be drill tested early in 2021 for potential conversion to further mineral resources.

Note that the potential quantity and grade of the Exploration Targets are conceptual in nature, there has been insufficient exploration to estimate a Mineral Resource and it is uncertain if further exploration will result in the estimation of a Mineral Resource.

This continued growth in graphite resources positions Talga for an increasingly significant role in battery anode production for the booming electric vehicle markets. As an approximate guide there is ~1 million tonnes of graphite anode per 20 million electric vehicles, and the European Commission has classified graphite a Critical Raw Material necessary for the transition to a more sustainable society.

Figure 6. *Vittangi graphite drillcore with size 2170 (L) and 18650 (R) Li-ion batteries (cut to expose the anode).*



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CORPORATE AND INVESTOR RELATIONS

Board and Executive Changes

Effective 17 July 2020 Non-Executive Director, Mr Andrew Willis, resigned from the Talga Board in consideration of his increased corporate requirements as Co-Managing Partner of The Pallinghurst Group.

Subsequent to the quarter Talga Chief Operating Officer, Mr Martin Phillips, was appointed Chief Executive Officer of the Company's European operations, reflecting Talga's significant progress in building an ultra-low emission anode supply chain in Europe for greener Li-ion batteries.

As Talga moves towards construction of its initial Swedish battery anode refinery operation and reviews opportunities for further expansions, Mr Phillips will focus on delivering on Talga's technical and commercial initiatives and will remain based in Europe, dividing his time between the Company's UK and Swedish office locations.

Placement

During the September quarter Talga completed a A$10.0 million placement to a select group of institutional, sophisticated and professional investors. The strongly supported placement received applications well in excess of the amount sought to be raised, reflecting significant ongoing investor interest in the Company, and priced at a premium to the 2019 Shareholder Purchase Plan.

The proceeds will enable Talga to execute the next steps in building its Li-ion anode production facilities in Europe. This includes scaling up of Talnode®-C commercial sample manufacturing to satisfy larger automotive OEM customer qualification processes already underway, resource and geotechnical drilling, and progressing the commercial DFS to support design, engineering and project finance options for the Vittangi Anode Project.

Sale of Gold Royalties

During the quarter, Talga conditionally divested its remaining gold royalty entitlements in Western Australia to AIM-listed Trident Royalties Plc for a total consideration of A$800,000. Talga held the royalties pursuant to sale agreements for its former four WA gold projects; Warrawoona, Talga Talga, Mosquito Creek and Bullfinch, sold to various parties in 2016 and 2018.

The consideration comprises a cash payment of A$250,000 and the equivalent of A$550,000 in Trident shares with completion of the sale remaining subject to the receipt of Foreign Investment Review Board approval, if required.

Financial

Talga closed out the 2020 September quarter with A$12.6 million cash-in-bank and was capitalised at ~A$304 million based on closing price on 29 October 2020. The Company has 264.1 million quoted ordinary shares and 8 million unlisted options on issue.

During the quarter, as per Note 6 of the ASX Appendix 5b, there were $180,000 of payments made to related parties or their associates including directors' fees, salaries and superannuation.

This announcement has been authorised by the Board of Directors of Talga Resources Ltd.

For further information, visit www.talgagroup.com or contact:

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** Talga confirms all material assumptions underpinning the production target and corresponding financial information continue to apply and have not materially changed as per Listing Rule 5.19.2*

About Talga

Talga Resources Ltd (ASX:TLG) is building a European source of battery anode and graphene additives, to offer graphitic products critical to its customers' innovation and the shift towards a more sustainable world. Vertical integration, including ownership of several high-grade Swedish graphite projects, provides security of supply and creates long-lasting value for stakeholders. Joint development programs are underway with a range of international corporations.

Company website: **www.talgagroup.com**

No New Information

To the extent that announcement contains references to prior technical information, exploration results and mineral resources; these have been cross referenced to previous market announcements made by the Company. These had been disclosed to JORC 2012 standard. Unless explicitly stated, no new information is contained. The Company confirms that it is not aware of any new information or data that materially affects the information included in the relevant market announcements that assumptions and technical parameters underpinning the relevant market announcement continue to apply and have not materially changed.

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APPENDIX 1

Tenement Holdings

Project/Location	Tenements	Interest at end of quarter	Acquired during quarter	Disposed during quarter
Ahmavuoma Project Norrbotten County, Sweden	Ahmavuoma nr 5	0%		100%
Aitik East Project Norrbotten County, Sweden	Suorravaara 2 Suorravaara 3 Suorravaara 4	100% 100% 100%		
Jalkunen Project Norrbotten County, Sweden	Jalkunen nr 1 Kursuvaara	100% 0%		100%
Kiskama Project Norrbotten County, Sweden	Kiskama nr 1	100%		
Masugnsbyn Project Norrbotten County, Sweden	Masugnsbyn nr 101 Masugnsbyn nr 102	100% 100%		
Piteå Project Norrbotten County, Sweden	Gråliden nr 2	0%		100%
Raitajärvi Project Norrbotten County, Sweden	Raitajärvi nr 5	100%		
Vittangi Project Norrbotten County, Sweden	Maltosrova nr 3 Nunasvaara nr 2 Vathanvaara nr 101 Vathanvaara nr 102 Vittangi nr 2 Vittangi nr 4	0% 100% 100% 100% 100% 100%		100%

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Appendix 5B

Mining exploration entity or oil and gas exploration entity quarterly cash flow report

Name of entity

Talga Resources Ltd

ABN	Quarter ended ("current quarter")
32 138 405 419	30 September 2020

Consolidated statement of cash flows		Current quarter $A'000	Year to date (3 months) $A'000
1.	**Cash flows from operating activities**		
1.1	Receipts from customers	-	-
1.2	Payments for		
	(a) exploration & evaluation (if expensed)[(i)]	(411)	(411)
	(b) development[(ii)]	(1,179)	(1,179)
	(c) production	-	-
	(d) staff costs - corporate	(355)	(355)
	(e) administration and corporate costs[(iii)]	(300)	(300)
1.3	Dividends received (see note 3)	-	-
1.4	Interest received	3	3
1.5	Interest and other costs of finance paid	-	-
1.6	Income taxes paid	-	-
1.7	Government grants and tax incentives	103	103
1.8	Other (provide details if material)	-	-
1.9	**Net cash from / (used in) operating activities**	**(2,139)**	**(2,139)**

2.	**Cash flows from investing activities**		
2.1	Payments to acquire:		
	(a) entities	-	-
	(b) tenements	-	-
	(c) property, plant and equipment	(8)	(8)
	(d) exploration & evaluation (if capitalised)	-	-
	(e) investments	-	-
	(f) other non-current assets	-	-

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Consolidated statement of cash flows		Current quarter $A'000	Year to date (3 months) $A'000
2.2	Proceeds from the disposal of:		
	(a) entities	-	-
	(b) tenements	-	-
	(c) property, plant and equipment	-	-
	(d) investments	-	-
	(e) other non-current assets	125	125
2.3	Cash flows from loans to other entities	-	-
2.4	Dividends received (see note 3)	-	-
2.5	Other (provide details if material)	-	-
2.6	**Net cash from / (used in) investing activities**	**117**	**117**

3.	**Cash flows from financing activities**		
3.1	Proceeds from issues of equity securities (excluding convertible debt securities)	10,000	10,000
3.2	Proceeds from issue of convertible debt securities	-	-
3.3	Proceeds from exercise of options	-	-
3.4	Transaction costs related to issues of equity securities or convertible debt securities	(418)	(418)
3.5	Proceeds from borrowings	-	-
3.6	Repayment of borrowings	-	-
3.7	Transaction costs related to loans and borrowings	-	-
3.8	Dividends paid	-	-
3.9	Other (provide details if material)	-	-
3.10	**Net cash from / (used in) financing activities**	**9,582**	**9,582**

4.	**Net increase / (decrease) in cash and cash equivalents for the period**		
4.1	Cash and cash equivalents at beginning of period	5,075	5,075
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(2,139)	(2,139)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	117	117
4.4	Net cash from / (used in) financing activities (item 3.10 above)	9,582	9,582

Consolidated statement of cash flows		Current quarter $A'000	Year to date (3 months) $A'000
4.5	Effect of movement in exchange rates on cash held	-	-
4.6	**Cash and cash equivalents at end of period**	**12,635**	**12,635**

5.	Reconciliation of cash and cash equivalents at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts	Current quarter $A'000	Previous quarter $A'000
5.1	Bank balances	691	688
5.2	Call deposits	11,944	4,387
5.3	Bank overdrafts	-	-
5.4	Other (provide details)	-	-
5.5	**Cash and cash equivalents at end of quarter (should equal item 4.6 above)**	**12,635**	**5,075**

6.	Payments to related parties of the entity and their associates	Current quarter $A'000
6.1	Aggregate amount of payments to related parties and their associates included in item 1	180
6.2	Aggregate amount of payments to related parties and their associates included in item 2	-

Note: if any amounts are shown in items 6.1 or 6.2, your quarterly activity report must include a description of, and an explanation for, such payments

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7.	**Financing facilities** *Note: the term "facility' includes all forms of financing arrangements available to the entity.* *Add notes as necessary for an understanding of the sources of finance available to the entity.*	**Total facility amount at quarter end $A'000**	**Amount drawn at quarter end $A'000**
7.1	Loan facilities	-	-
7.2	Credit standby arrangements	-	-
7.3	Other (please specify)	-	-
7.4	**Total financing facilities**	-	-

7.5	**Unused financing facilities available at quarter end**	-
7.6	Include in the box below a description of each facility above, including the lender, interest rate, maturity date and whether it is secured or unsecured. If any additional financing facilities have been entered into or are proposed to be entered into after quarter end, include a note providing details of those facilities as well.	

Notes

(i) Exploration and evaluation includes Sweden tenement renewal and exploitation permitting costs (ii) Development includes feasibility studies, UK product development and German test facility operations and (iii) Administration includes Sweden

8.	**Estimated cash available for future operating activities**	**$A'000**
8.1	Net cash from / (used in) operating activities (Item 1.9)	2,139
8.2	Capitalised exploration & evaluation (Item 2.1(d))	-
8.3	Total relevant outgoings (Item 8.1 + Item 8.2)	2,139
8.4	Cash and cash equivalents at quarter end (Item 4.6)	12,635
8.5	Unused finance facilities available at quarter end (Item 7.5)	-
8.6	Total available funding (Item 8.4 + Item 8.5)	12,635
8.7	**Estimated quarters of funding available (Item 8.6 divided by Item 8.3)**	5.91

8.8 If Item 8.7 is less than 2 quarters, please provide answers to the following questions:

1. Does the entity expect that it will continue to have the current level of net operating cash flows for the time being and, if not, why not?

Answer: NA

2. Has the entity taken any steps, or does it propose to take any steps, to raise further cash to fund its operations and, if so, what are those steps and how likely does it believe that they will be successful?

Answer: NA

3. Does the entity expect to be able to continue its operations and to meet its business objectives and, if so, on what basis?

Answer: NA

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Compliance statement

1 This statement has been prepared in accordance with accounting standards and policies which comply with Listing Rule 19.11A.

2 This statement gives a true and fair view of the matters disclosed.

Date: 30 October 2020

Authorised by: By the Board
(Name of body or officer authorising release – see note 4)

Notes

1. This quarterly cash flow report and the accompanying activity report provide a basis for informing the market about the entity's activities for the past quarter, how they have been financed and the effect this has had on its cash position. An entity that wishes to disclose additional information over and above the minimum required under the Listing Rules is encouraged to do so.

2. If this quarterly cash flow report has been prepared in accordance with Australian Accounting Standards, the definitions in, and provisions of, *AASB 6: Exploration for and Evaluation of Mineral Resources* and *AASB 107: Statement of Cash Flows* apply to this report. If this quarterly cash flow report has been prepared in accordance with other accounting standards agreed by ASX pursuant to Listing Rule 19.11A, the corresponding equivalent standards apply to this report.

3. Dividends received may be classified either as cash flows from operating activities or cash flows from investing activities, depending on the accounting policy of the entity.

4. If this report has been authorised for release to the market by your board of directors, you can insert here: "By the board". If it has been authorised for release to the market by a committee of your board of directors, you can insert here: "By the [*name of board committee – eg Audit and Risk Committee*]". If it has been authorised for release to the market by a disclosure committee, you can insert here: "By the Disclosure Committee".

5. If this report has been authorised for release to the market by your board of directors and you wish to hold yourself out as complying with recommendation 4.2 of the ASX Corporate Governance Council's *Corporate Governance Principles and Recommendations*, the board should have received a declaration from its CEO and CFO that, in their opinion, the financial records of the entity have been properly maintained, that this report complies with the appropriate accounting standards and gives a true and fair view of the cash flows of the entity, and that their opinion has been formed on the basis of a sound system of risk management and internal control which is operating effectively.

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