

VITAL METALS' MARCH 2023 QUARTERLY REPORT

HIGHLIGHTS

- Updated Mineral Resource Estimate (“MRE”) for the Tardiff Upper Zone (“Tardiff”) at Nechalacho achieves a **26% increase** in Mineral Resource tonnes and a **20% increase** in total rare earth oxides (“TREO”) tonnes
- Tardiff is estimated to contain **1.67 million tonnes of TREO** within a total mineral resource of 119.0 million tonnes at 1.4% TREO, containing **416,000 tonnes of neodymium and praseodymium (NdPr)**, a **19% increase** over the previous MRE estimate dated 13 December 2019
- Updated MRE confirms Tardiff as **one of the largest single REE deposits** in the western world, with potential to be **one of the largest suppliers of permanent magnet motor minerals** in North America
- Vital aims to develop Tardiff to become a large-scale, long-life rare earths producer
- **6,667m drilling program completed at Tardiff** designed to increase the Measured and Indicated component of the MRE (21% increase on 5,500m planned); assays expected over coming months
- A further update to Tardiff Mineral Resource Estimate due in Q4 CY23
- Vital remains sufficiently well-funded (A\$18.85m at end of the Quarter) to advance the development of Tardiff through 2023.

CORPORATE

- **Richard Crookes** appointed interim Non-Executive Chairman following Evan Cranston stepping down from the role;
- Appointment of **Steven Woolfenden** as Vice President, Sustainability;
- Vital has commenced an international search for a new CEO with experience to drive its Tardiff development strategy following John Dorward’s resignation.

Vital Metals Limited (ASX: **VML** | OTCQB: **VTMXF**) (“**Vital**”, “**Vital Metals**” or “the **Company**”) is pleased to report on its activities during the March 2023 quarter, including at its 100%-owned Nechalacho Rare Earth Project in Yellowknife, Northwest Territories, Canada.

NECHALACHO RARE EARTHS PROJECT, NORTHWEST TERRITORIES, CANADA

Vital updated the Mineral Resource Estimate (“MRE”) for the Tardiff Upper Zone (“Tardiff”) at Nechalacho in February, achieving a 26% increase in Mineral Resource tonnes and a 20% increase in total rare earth oxides (“TREO”) tonnes. Tardiff is estimated to contain 1.67 million tonnes of TREO within a total mineral resource of 119.0 million tonnes at 1.4% TREO, including 416,000 tonnes of neodymium



and praseodymium (NdPr), a 19% increase over the previous MRE estimate dated 13 December 2019. This updated MRE confirms Tardiff as one of the largest single rare earth element deposits in the Western World, with the potential to be one of the largest suppliers of permanent magnet motor minerals in North America.

Table 1: Tardiff Upper Zone Deposit – Mineral Resource Estimate at 1.0% cut-off (31 December 2022)

Cut-off Grade ¹ % TREO	Category	Tonnage (Mt)	TREO Grade (%)	NdPrO:TREO Ratio	Nd ₂ O ₃ (%)	Pr ₆ O ₁₁ (%)
1.0	Inferred	108.1	1.39	25.1%	0.28	0.07
1.0	Indicated	6.3	1.45	24.8%	0.28	0.08
1.0	Measured	4.6	1.59	24.6%	0.31	0.08
1.0	Total	119.0	1.40	25.1%	0.28	0.07

TREO = Total Rare Earth Oxides – La₂O₃, CeO₂, Pr₆O₁₁, Nd₂O₃, Sm₂O₃, Eu₂O₃, Gd₂O₃, Tb₄O₇, Dy₂O₃, Ho₂O₃, Er₂O₃, Tm₂O₃, Yb₂O₃, Lu₂O₃, Y₂O₃
 NdPrO = Neodymium oxide and Praseodymium oxide: Nd₂O₃+Pr₆O₁₁

Total MRE tonnage (across all classifications) has increased by approximately 26%, with a modest 4% decrease in TREO grade. Vital achieved the MRE increase by re-interpreting cut-off grades and including the Tardiff Zone 2 area in the resource, as well as including an additional 4,483 metres of drilling from the 2021 and 2022 campaigns. Vital chose a cut-off grade percentage of the entire suite of rare earth oxides rather than the previous practice of using a Nd₂O₃-based cut-off grade value. The MRE was interpolated using Ordinary Kriging. The TREO mineralisation at Tardiff is hosted by hydrothermally altered eudialyte syenite and is predominantly composed of bastnaesite, synchysite, parisite, fergusonite, samarskite, allanite, and monazite. Tardiff is approximately 2km long, and the highest limit of the MRE is covered with glacial till that ranges in depth from the surface to 10 metres.

The Tardiff MRE was developed and reported in accordance with the Australasian Code of Reporting Exploration Results, Mineral Resources, and Ore Reserves (the JORC 2012 edition) and Chapter 5 of the ASX Listing Rules.

¹ The cut-off grade for this resource estimate is preliminary, at pre-scoping study level, as no detailed market, metallurgical or engineering studies have been performed. Details of the Sampling Techniques, Data, Reporting of Exploration Results and Estimation and Reporting of Mineral Resources can be found in Appendix 1 of the Company’s announcement dated 14 February 2023 “Vital achieves 26% increase in Tardiff Mineral Resource tonnes and 19% increase in contained NdPr”.

Nechalacho drilling Q1 2023

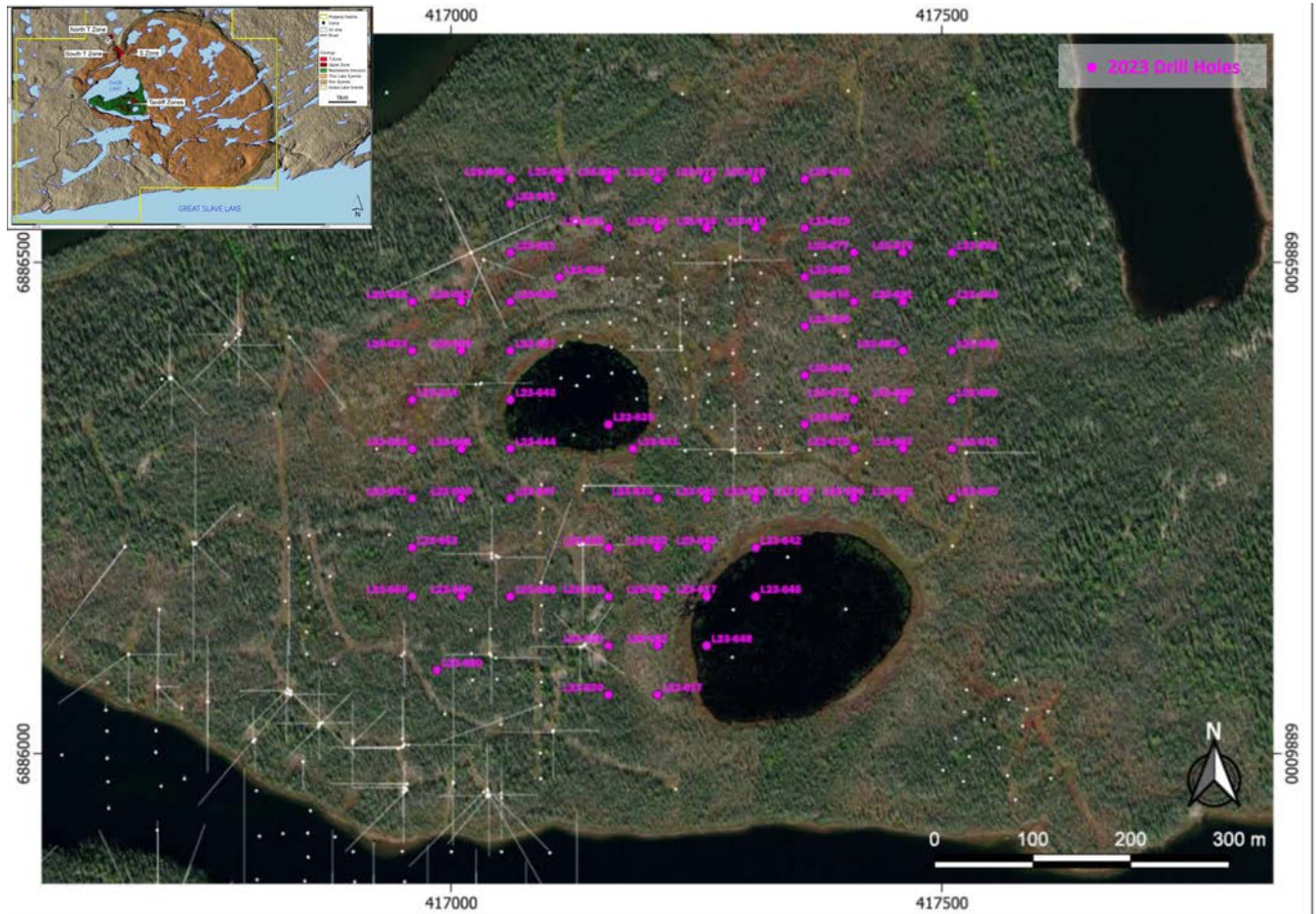
Vital planned a 5,500-metre drilling campaign on the Tardiff Deposit during the current winter drilling season at Nechalacho to increase the measured and indicated component of the recently released Mineral Resource Estimate (“MRE”) (see ASX announcement dated 14 February 2023).

Figure 1: Mobilisation of Drill Rigs (February 2023)



This program concluded in mid-April and the target was substantially exceeded with a total of 6,667 metres completed (21% above plan).

Figure 2: Drill Hole Collar Location Plan



The Company expects to start receiving assays from this program in the coming months and looks forward to sharing them with stakeholders. A similar scale project is anticipated for winter 2024 which will continue to target infill drilling in an effort to raise the classification and confidence in the large Tardiff Deposit.

In addition to the recently completed 2023 drilling program work, Vital has continued to advance the Tardiff Project on a number of fronts, including:

- Integration of the historic Avalon Advanced Materials historic data with Vital’s 2021 and 2022 drilling data into one unified geological database;
- A verification and validation review of the historic data by a leading Canadian mining consulting group;
- Continued metallurgical testwork to support a preliminary processing flowsheet design selection.



Vital aims to complete an economic study on the Tardiff Project in the coming months. The study will examine the possibility to develop additional downstream processing steps in Canada, to a stage which maximises the economic returns to the Company.

SASKATOON RARE EARTH PROCESSING FACILITY, CANADA

Vital's increased focus on advancing the Tardiff Project accompanied a review of its Saskatoon Rare Earth Processing Facility. Construction of the full Saskatoon processing facility, including calcine, hydrometallurgical leaching, purification and rare earth precipitation circuits, is approximately 50% complete.

The Company planned to complete the initial calcine circuit and defer the calcine leaching, purification and rare earth carbonate precipitation circuits of the facility to better align its completion with the readiness of its offtake partner to receive the final mixed rare earth carbonate product produced, from mid-2024. Completion of the calcine circuit would enable the Company to investigate the sale of an intermediate product to generate revenue ahead of completing the balance of the facility.

However, to date, the Company has been unable to secure intermediate product sales on commercially satisfactory terms and a subsequent review of the economic viability of mining and beneficiating ore at North T has indicated that the scale of operations and associated unit operating costs will not achieve positive cashflow from the project. Therefore, the Company has paused all construction-related activities at Saskatoon to conserve cash while it seeks alternative funding sources and partners. It aims to build a sustainable business model for the Saskatoon business, and a strategic review of the Saskatoon Project will be completed in the current quarter.

Vital will retain its Saskatoon-based workforce to allow for a quick re-start of construction and commissioning activities when the foundations for a long-term, sustainable business model are put in place. The workforce will focus on Operational Readiness preparation and activities during the current quarter.

The Company's Saskatoon warehouse currently holds approximately 1,041 tonnes of beneficiated rare earth concentrates along with 898 tonnes of fines material. The combined concentrate and fines are estimated to contain approximately 73,000 kg of NdPr which is available for commissioning and initial processing in a completed facility.

The Company has refined a business case for the Saskatoon Project over recent months in light of the increased cost profile, lack of an immediate market for our products and lower rare earth prices, leading to a renewed focus on Tardiff development.



Upcoming Catalysts

Further update on Saskatoon Project	Q3 CY2023
Assay results from the 2023 drilling campaign	Q3/4 CY2023
Update to Tardiff Mineral Resource Estimate	Q4 CY2023

Vital Metals interim Chairman Richard Crookes said: *“We are focused on developing the Tardiff deposit at Nechalacho, in the Northwest Territories, Canada and it was pleasing to confirm its world-class status with the delivery of an updated Mineral Resource Estimate. We achieved a 26% increase in Mineral Resource tonnes and a 20% increase in total rare earth oxide tonnes, underlining the global significance of this deposit at a time when there is growing awareness of securing stable and sustainably mined supplies of these critical minerals. This deposit compares very favourably with other exploration and development projects in terms of size, grade and contained NdPr and we intend to demonstrate the significant value and highly strategic nature of this potential future mine.”*

“Regrettably, following the quarter end, we decided to pause all construction-related activities at our Saskatoon processing facility, which is approximately 50% complete. Pausing activity allows us to conserve cash and seek alternative funding sources and third-party partners to allow us to build a sustainable business model for the Saskatoon business. We will complete a strategic review of the project over the current quarter and are retaining our Saskatoon workforce to allow for a rapid restart of construction and commissioning activities, once we have a foundation for a long-term, sustainable business in place.”

WIGU HILL PROJECT, TANZANIA

No activities completed during the quarter.

NAHOURI GOLD PROJECT, BURKINA FASO

Vital Metals has suspended all exploration activity in Burkina Faso.

AUE COBALT PROJECT, GERMANY

There were no exploration activities on the Aue project during the quarter.

CORPORATE

Board and Management Changes

During the quarter, Vital announced the resignation of Non-Executive Chairman Evan Cranston to focus on other personal business interests.



Richard Crookes, a current Non-Executive Director of the Company was appointed interim Chairman, until Vital appoints a permanent replacement to the role.

Additionally, John Dorward resigned as a Director of the Company and CEO, immediately and with three months’ notice respectively. Vital has commenced an international search for a new CEO.

Vital appointed Steven Woolfenden as Vice President, Sustainability to support its long-term development of the Tardiff deposit. Mr Woolfenden brings more than 25 years of mining industry experience and a history of leading environmental, community, governance and regulatory processes.

Previously, he held positions as Vice President of Environment and Community Affairs for McEwen Mining and IAMGOLD’s corporate Environment Director where he was responsible for environmental, regulatory and community engagement teams to develop major resource projects and large-scale infrastructure works. He also has more than 10 years of experience in the public sector, with Fisheries and Oceans Canada and the Canadian Environmental Assessment Agency (CEAA).

Cash position

As of 31 March 2023, the Company held approximately \$18.851m in cash.

During the quarter, the Company made payments of \$193k to related parties and their associates. These payments relate to existing remuneration agreements for the Managing Director and Non-Executive Directors as well as consulting services.

During the quarter, Vital spent \$2.112 million on exploration and evaluation expenditure and mine under development costs. Details of activities carried out during the quarter are set out in this report.

TENEMENT SCHEDULE

Location	Tenement	Status	Interest at beginning of quarter	Interest acquired or disposed	Interest at end of quarter
Canada	Nechalacho	100%*	100%	0%	100%
Burkina Faso	Nahouri	100%	100%	0%	100%
	Kampala	100%	100%	0%	100%
	Zeko	100%	100%	0%	100%
Germany	Aue	100%	100%	0%	100%
Tanzania	Wigu Hill	0%**	0%	0%	0%

* Vital owns 100% of the mineral rights of the Nechalacho Project above the 150 m elevation level.

** Vital has entered into an agreement to acquire this licence. The Company is awaiting the issuance of the licence by the Tanzanian Government.



- ENDS-

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This announcement has been authorised for release by the Board of Vital Metals.

ABOUT VITAL METALS

Vital Metals Limited (ASX: VML) is developing the large Nechalacho Rare Earth Project in Canada's Northwest Territories. Nechalacho has the potential to underpin a significant rare earths supply chain for North America and Europe with responsibly sourced critical minerals for the green economy transformation.

Compliance Statement

This announcement contains information relating to Mineral Resource Estimates in respect of the Nechalacho Project extracted from an ASX market announcement reported previously and published on the ASX platform on 14 February 2023 "Vital achieves 26% increase in Tardiff Mineral Resource tonnes and 19% increase in contained NdPr". The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement and that all material assumptions and technical parameters underpinning the estimates in the original market announcement continue to apply and have not materially changed. The Mineral Resource Estimate of 119.0 million tonnes at 1.4% TREO is comprised 4.6 million tonnes at 1.6% TREO Measured, 6.3 million tonnes at 1.5% TREO Indicated and 108.1 million tonnes at 1.4% TREO Inferred.

Appendix 5B

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

Name of entity

VITAL METALS LIMITED

ABN

32 112 032 596

Quarter ended ("current quarter")

31 MARCH 2023

Consolidated statement of cash flows	Current quarter \$A'000	Year to date (9 months) \$A'000
1. Cash flows from operating activities		
1.1 Receipts from customers	-	-
1.2 Payments for		
(a) exploration & evaluation	(11)	(151)
(b) development	-	-
(c) production / inventory	(3)	(126)
(d) staff costs	(407)	(1,315)
(e) administration and corporate costs	(1,217)	(2,520)
1.3 Dividends received (see note 3)	-	-
1.4 Interest received	68	167
1.5 Interest and other costs of finance paid	-	(7)
1.6 Income taxes paid	-	-
1.7 Government grants and tax incentives	10	26
1.8 Other (provide details if material)	-	-
1.9 Net cash from / (used in) operating activities	(1,560)	(3,926)

2. Cash flows from investing activities		
2.1 Payments to acquire or for:		
(a) entities	-	-
(b) tenements	-	-
(c) property, plant and equipment	(7,235)	(21,621)
(d) exploration & evaluation, mine properties	(2,112)	(8,891)
(e) investments	-	-
(f) other non-current assets	-	(1)

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

Consolidated statement of cash flows		Current quarter \$A'000	Year to date (9 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	-	-
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	(9,347)	(30,513)
3.	Cash flows from financing activities		
3.1	Proceeds from issues of equity securities (excluding convertible debt securities)	-	45,000
3.2	Proceeds from issue of convertible debt securities	-	-
3.3	Proceeds from exercise of options	-	160
3.4	Transaction costs related to issues of equity securities or convertible debt securities	-	(2,319)
3.5	Proceeds from borrowings	-	5,868
3.6	Repayment of borrowings	-	-
3.7	Transaction costs related to loans and borrowings	-	-
3.8	Dividends paid	-	-
3.9	Other (repayment of lease liabilities)	(222)	(557)
3.10	Net cash from / (used in) financing activities	(222)	48,152
4.	Net increase / (decrease) in cash and cash equivalents for the period		
4.1	Cash and cash equivalents at beginning of period	29,973	5,158
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(1,560)	(3,926)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	(9,347)	(30,513)
4.4	Net cash from / (used in) financing activities (item 3.10 above)	(222)	48,152

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

Consolidated statement of cash flows		Current quarter \$A'000	Year to date (9 months) \$A'000
4.5	Effect of movement in exchange rates on cash held	7	(20)
4.6	Cash and cash equivalents at end of period	18,851	18,851

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	17,750	28,879
5.2	Call deposits	1,101	1,094
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)	18,851	29,973

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	193
6.2	Aggregate amount of payments to related parties and their associates included in item 2	-
<i>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.</i>		

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

7. Financing facilities	Total facility amount at quarter end \$A'000	Amount drawn at quarter end \$A'000
<i>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.</i>		
7.1 Loan facilities	6,898	6,898
7.2 Credit standby arrangements	-	-
7.3 Other (please specify)	-	-
7.4 Total financing facilities	6,898	6,898
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.		
<p>The Group has received the full unsecured loan with the Canadian Economic Development Agency ("CanNor"), with no interest payable. The repayment period is over 10 years, commencing 1 April 2023.</p> <p>Vital Metals Canada Limited has signed a funding agreement with PrairiesCan for C\$5m. The first C\$3m tranche was received in November and the balance of C\$2m was received in December. The interest rate is nil and repayment will occur monthly over 5 years from 1 April 2024.</p>		

8. Estimated cash available for future operating activities	\$A'000
8.1 Net cash from / (used in) operating activities (item 1.9)	(1,560)
8.2 (Payments for exploration & evaluation classified as investing activities) (item 2.1(d))	(2,112)
8.3 Total relevant outgoings (item 8.1 + item 8.2)	(3,672)
8.4 Cash and cash equivalents at quarter end (item 4.6)	18,851
8.5 Unused finance facilities available at quarter end (item 7.5)	-
8.6 Total available funding (item 8.4 + item 8.5)	18,851
8.7 Estimated quarters of funding available (item 8.6 divided by item 8.3)	5.1
<i>Note: if the entity has reported positive relevant outgoings (ie a net cash inflow) in item 8.3, answer item 8.7 as "N/A". Otherwise, a figure for the estimated quarters of funding available must be included in item 8.7.</i>	
8.8 If item 8.7 is less than 2 quarters, please provide answers to the following questions:	
8.8.1 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:	
8.8.2 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:	

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

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

Answer:

Note: where item 8.7 is less than 2 quarters, all of questions 8.8.1, 8.8.2 and 8.8.3 above must be answered.

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: 28 April 2023

Authorised 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.