



Quarterly Activities Report for the period ending 30 September 2023

Key Highlights

- **Encouraging Metallurgical results¹**
 - Preliminary testing of the upper seam yields 1.5% V₂O₅ leach feed grade and 85% leach extraction of vanadium with potential for further improvement.
 - Potential for profitable secondary product material–HPA (High Purity Alumina) product grading 4N (99.99%Al₂O₃) produced from first tests on material from the Lindfield Project mineralised samples.
- **Bulk sample completion for Pilot Study²**
 - Core drilling program completed at flagship Lindfield Vanadium Project.
 - Core samples to be used for metallurgical studies and pilot plant testing.
 - The 14x4C and 2x8C core holes expected to further increase the geological confidence of the deposit.
- **Environmental Studies planning**
 - Water monitoring continues at Lindfield project with background ecology studies being planned for Q4
- **Scoping Study**
 - Encouraging metallurgical results greatly assist in refining the initial mining areas and process flow sheet.
 - Study report in final review phase.

Critical Minerals Group Limited (**ASX:CMG**), (**Critical Minerals Group, CMG** or the **Company**) is pleased to provide shareholders with the following update in relation to the Company's activities for the quarter ended 30 September 2023 (**Quarter**).

¹ Please refer to CMG's ASX announcement dated 22 August 23

² Please refer to CMG's ASX announcement dated 20 September 23



Company Projects

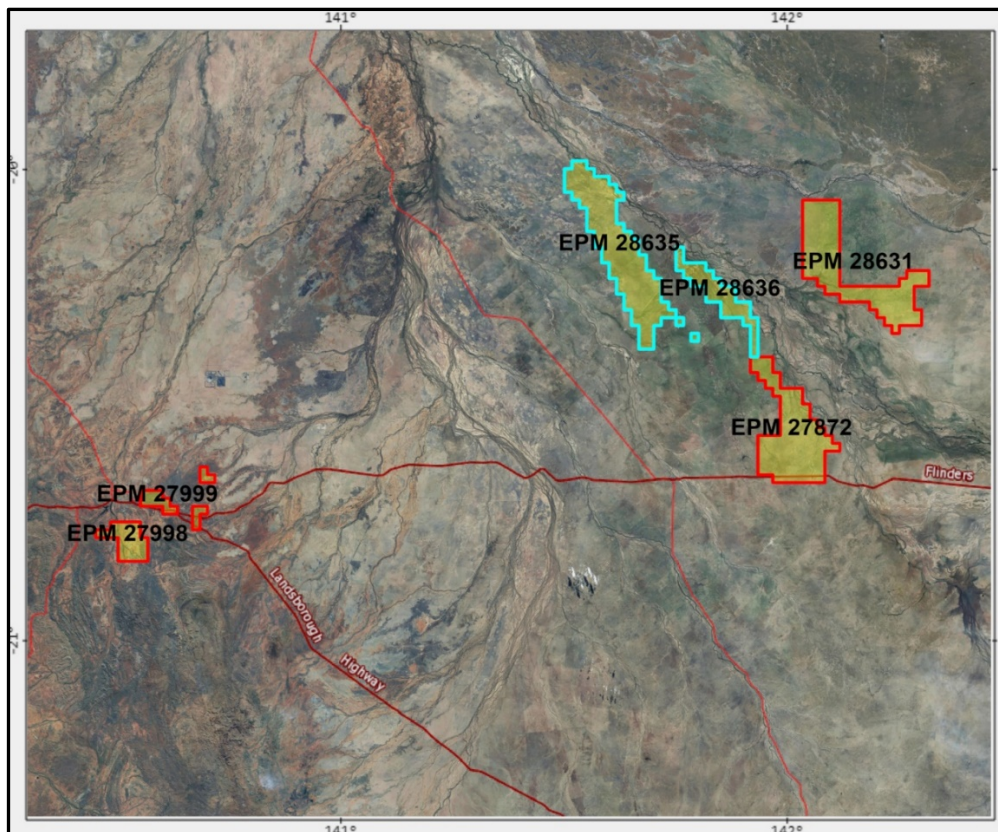


Image 1: Map of CMG's projects.

Source: Queensland Government, GeoResGlobe, Available at: <https://georesglobe.information.qld.gov.au/>

Lindfield Project (EPM 27872)

The “**Lindfield Project**” comprises Queensland exploration permit for mining (EPM) 27872 and consists of 92 sub-blocks, covering 295km². The Lindfield Project is located approximately 30km north-east of the township of Julia Creek. The project area lies close to main infrastructure facilities and is intersected by the Flinders Highway and the Great Northern Railway Line at the southern end of the tenement.

The Lindfield Project is considered highly prospective for Vanadium and High Purity Alumina (HPA). The Lindfield Project area is characterised by the presence of the Toolebuc Formation, Allaru Mudstone and quaternary sediments.

A work programme had been established for drilling and development of the Lindfield Project (see the Company's prospectus released 26 September 2022 (**Prospectus**) for further details).

Metallurgical test work

During the Quarter, the Company announced on 22 August 2023 that encouraging results were received from early stage metallurgical test work for the flagship Lindfield Project (EPM 27872) located 30km from Julia Creek in North-West Queensland.

The early-stage testing of vanadium material and alumina mineralized samples at the Lindfield Project yielded promising results. The results were particularly exciting as they pertain to a seam not previously included in the resource. The successful production of a high-purity alumina product (99.99% Al₂O₃) via a simple refinement process is also a significant achievement with potential for future production.

These findings underscore the high quality of the resource at the Lindfield Project and enhance confidence in the upcoming pilot scale testing. The results have led to a revaluation and refinement of resource modelling, indicating potential upside from the previously announced resource estimate.

These results were integrated into the ongoing Scoping Study and helped to better define the areas of target for initial mining within the resource. In particular, the results achieved from the TLB-A seam have indicated a likelihood to include the seam within the economical mining sequence hence reducing the overall mining strip ratio.

Drilling commences for Pilot Scale Test work

During the Quarter, the Company announced on 20 September 2023 that a targeted drill program to source ore samples for pilot scale testing commenced at the flagship Lindfield Vanadium Project, located in Northwest Queensland 30km from the town of Julia Creek.

A drilling program involving 14 x 4C and 2 x 8C core holes was planned to gather ore samples for a Pilot Scale testing program in a Vanadium Processing Pilot Plant (VPPP). Two 8C core holes were successfully drilled to provide more sample material options for the orebody and a more efficient recovery of the core.



Figure 1: 8C core from 8C core trial on LIND016_B1 (twin hole)



The promising results from recent test work have advanced the project to the next stage of metallurgical testing in a pilot-scale test plant. The pilot-scale testing is currently in the planning phase, with the expectation of utilizing the material in the VPPP in H1 2024 after assay results are finalized.

Further metallurgical test work is scheduled for the December Quarter, which will help set the parameters for the VPPP testing in H1 2024. The drilling program will also enhance the geological understanding of the orebody at the Lindfield Vanadium Project, especially in the initial mining area.

Scoping Study Finalisation

The Company announced the commencement of the Scoping Study on 31 May 2023. As released, the Company appointed Wave International to undertake a Scoping Study at the Lindfield Project with further assistance from leading consultants Stantec and Measured Group, in order to determine initial pit designs, project economics and overall commercial viability. Epic Environmental assisted in the report with an initial project description and environmental assessment.

The scope of work for Wave International was to manage the delivery of the Scoping Study for the Lindfield Project and to deliver to the Company a Scoping Study report by the end of Q3 2023 calendar year. The encouraging findings in the recent test work prompted a review and enhancement of the mining modelling and process flow sheet, which resulted in the Scoping Study being finalised in October 2023. A detailed review of the Scoping Study outcomes will be separately released.

Figtree Creek Project (EPM 27998)

The “**Figtree Creek Project**” consists of 22 sub-blocks covering 70km². The Figtree Creek Project is located approximately 10 km south southeast of the township of Cloncurry and is 5km from the main infrastructure corridor of the Flinders Highway and the Great Northern Railway line.

The Figtree Creek Project is considered prospective for iron oxide copper and gold mineralization based on historical surface sampling, local structural geology with similar rock types and structures present in the Figtree Creek Project area to that of the Great Australian Mine style of copper-gold mineralisation (which is just 3km north of the project) and electromagnetic anomalies identified.

The project area has several rock chip samples, soil samples and stream sediment samples showing anomalous copper and gold assays.

The Company has completed sufficient work to establish a work programme to systematically explore the tenement and identify potential mineralisation and drill targets (see the Prospectus for further details).

As the focus of the Company has been on the Lindfield Project during this Quarter, no substantive exploration activities and no field work has been undertaken at the Figtree Creek Project during the Quarter.



Lorena Surrounds Project (EPM 27999)

The “**Lorena Surrounds Project**” consists of 16 sub-blocks covering 51km². The Lorena Surrounds Project is located 15km east of Cloncurry and intersects main infrastructure of the Flinders Highway and Great Northern Rail Line at the southern end of the tenement.

The Lorena Surrounds Project is considered prospective for iron oxide copper and gold mineralization based on historical drilling, local structural geology and electromagnetic anomalies identified.

It is anticipated that the Company will focus on areas of the tenement where magnetic anomalies are similar to geochemical and geophysical anomalies present in adjacent historical and operating mines.

The Company has completed sufficient work to establish a work programme to systematically explore the tenement and identify potential mineralisation and drill targets (see the Prospectus for further details).

As the focus of the Company has been on the Lindfield Project during this Quarter, no substantive exploration activities and no field work has been undertaken at the Lorena Surrounds Project during the Quarter.

Whinmoor Project (EPM 28631)

The “**Whinmoor Project**” consists of 100 sub-blocks covering 320 km². The Whinmoor Project is located 60km north of Julia Creek.

The Whinmoor Project intends to extend on exploration by previous explorers and known extensions to Vanadium mineralisation in the Company’s Lindfield Project.

As the focus of the Company has been on the Lindfield Project during this Quarter, no substantive exploration activities and no field work has been undertaken at the Whinmoor Project during the Quarter.

Lara Downs Project (EPM 28635 Application)

The Company has applied for EPM 28635 in relation to the “**Lara Downs Project**”. As at the end of the Quarter, this application was still in progress and had not yet been granted.

The Lara Downs Project consists of 118 sub-blocks covering 378 km². The Lara Downs Project is located 60km northwest of Julia Creek.

The Lara Downs Project intends to extend on exploration by previous explorers and known extensions to Vanadium mineralisation in the Company’s Lindfield Project.

As the Lara Downs Project tenement is only at the application stage, the Company has not yet performed significant and detailed geological analysis, interpretation and exploration targeting.

No substantive exploration activities were undertaken during the Quarter and no field work has been undertaken as the Lara Downs Project is still in the application phase.



Lindfield North Project (EPM 28636 Application)

The Company has applied for EPM 28636 in relation to the “**Lindfield North Project**”. As at the end of the Quarter, this application was still in progress and had not yet been granted.

The Lindfield North Project consists of 36 sub-blocks covering 115 km². The Lindfield North Project is located 65km north of Julia Creek.

The Lindfield North Project intends to extend on exploration by previous explorers and known extensions to Vanadium mineralisation in the Company’s Lindfield Project.

As the Lindfield North Project tenement is only at the application stage, the Company has not yet performed significant and detailed geological analysis, interpretation and exploration targeting.

No substantive exploration activities were undertaken during the Quarter, and no field work has been undertaken as the Lindfield North Project is still in the application phase.

December Quarter Work Programme

The Company is planning the following exploration and work activities during the quarter ending 31 December 2023.

Lindfield Project:

During the December quarter, the Company plans to carry out the following work:

- Finalise the Scoping Study findings and review the recommendations.
- Metallurgical works including:
 - Additional flotation aiming at decreasing vanadium losses,
 - Solvent extraction, stripping and precipitation tests,
 - Locked cycle testing in flotation and SX/AMV to model the streams so as to optimise ahead of the pilot plant testing.
- Planning and scoping of the next phase of project study work (Pre-Feasibility Study)
- Continue sample preparation and assaying of the recently completed drill program in readiness for pilot plant testing.
- Planning and preparation for a pilot plant metallurgical test program that will incorporate each aspect of the process flow sheet. Include determination of the composition of samples for pilot testing and variability testing.
- Commencement of environmental background studies.

Figtree Creek Project

During the December quarter, the Company plans to continue the desktop review of the tenement to incorporate historical data to design the exploration program for MMI field sampling and mapping.

Lorena Surrounds Project

During the December quarter, the Company plans to continue the desktop review of the tenement to incorporate historical data to design the exploration program for MMI field sampling and mapping.



Whinmoor Project

During the December quarter, the Company plans to carry out further review of the historical drilling and geological data within the tenement. The scoping study has provided guidance on the characteristics of the orebody and how it can be processed successfully. A particular focus will be to assess and correlate the orebody with Lindfield to determine priority areas for further drilling and beneficiation.

Lara Downs Project

During the December quarter, the Company plans to continue to progress the tenement application.

Lindfield North Project

During the December quarter, the Company plans to continue to progress the tenement application.

ASX Announcements during the Quarter

This quarterly report contains information extracted from ASX market announcements reported in accordance with the JORC Code. Further details of exploration results (including the JORC Code reporting tables where applicable) referred to in this quarterly report can be found in the announcements lodged with the ASX during the Quarter, which are also made on the Company's website at <https://www.criticalmineralsgroup.com.au/asx-announcements> and are listed below:

27 July 2023	Quarterly Activities/Appendix 5B Cash Flow Report
22 August 2023	Encouraging Metallurgy Results
11 September 2023	Investor Presentation
20 September 2023	Drilling Commences at Lindfield Vanadium Project
25 September 2023	Annual Report

Financial Commentary

The Quarterly Cashflow Report (Appendix 5B) for the Quarter provides an overview of the Company's financial activities.

Exploration expenditure for the current period was \$293,782. Corporate and other expenditures amounted to \$545,621.

In line with its obligations under ASX listings rule 5.3.5, the total amount paid to directors and their associates in the period (item 6.1 of the Appendix 5B) was \$168,332 and includes the Managing Director's salary as well as the final cash remuneration payments to the former Managing Director (totalling \$139,108 for the period including superannuation and novated lease).



Quarterly Expenditure Review Compared with Prospectus Use of Funds

Exploration expenditure for the Quarter was \$293,782. These activities are in line with the use of funds disclosed in the Prospectus.

Use of Funds	As per the Prospectus (for the 2-year period post Listing)	Actual expenditure for the Quarter	Actual expenditure to date
Lindfield Project (EPM 27872)			
Earthworks (Drill sites and access)	60,000.00		16,732.00
Maiden Drilling *	525,000.00	27,844	477,063.47
Geological Model & JORC Resource update *	85,000.00	7,423.34	74,851.86
Metallurgy Test Work *	300,000.00	27,437.50	122,202.25
Lab Pilot Plant Test Work	590,000.00	-	-
Infill Drilling	265,000.00	-	-
Hydrogeological Survey	160,000.00	-	-
Geo-tech Works	145,000.00	-	-
Baseline Environmental Works	135,000.00	5,000.00	12,074.00
Scoping Study	250,000.00	213,977.50	300,202.50
Project Total	2,515,000.00	281,682.34	1,003,126.08
Figtree Creek Project (EPM 27998)			
Native Title	15,000.00	-	6,648.00
Desktop Studies	40,000.00	-	33,019.73
Project Total	55,000.00	-	39,667.73
Lorena Surrounds Project (EPM 27999)			
Native Title	15,000.00	12,099.54	17,672.54
Desktop Studies	45,000.00	-	-
Project Total	60,000.00	12,099.54	17,672.54
Whinmoor Project (EPM 28631)			
Native Title	-	-	3,723.95
Desktop Studies	-	-	17,189.00
Project Total	-	-	20,912.95
SUB-TOTAL	2,630,000.00	293,781.88	1,081,379.30
Expenses of the offer outstanding at date of Prospectus	643,022.60	-	335,328.00
Working Capital	1,909,047.67	545,620.53	1,770,540.19
Total	5,182,070.27	839,402.41	3,187,247.49

* includes expenses incorrectly classified as maiden drilling now reclassified to the correct nature of work

The Company is adequately funded to meet the next quarter's exploration commitments and planned work programs with \$1,866,262 cash in the bank as of 30 September 2023.

Competent Person Statements

The information in this announcement that relates to the exploration results, exploration targets and mineral resources for the Company's Lindfield Project was first reported by the Company in the Company's Prospectus dated 25 May 2022 and released to the ASX on 26 September 2022, and ASX announcements dated 27 July 2023, 22 August 2023, 11 September 2023, 20 September 2023 and 25 September 2023. The Company confirms that it is not aware of any new information or data that materially affects the exploration results, exploration targets and mineral resources, and that all material assumptions and technical parameters underpinning these continue to apply and have not materially changed.

Previously Reported Information

Any information in this announcement that references previous exploration results is extracted from previous ASX announcements made by the Company.

Forward-Looking Statement

This document may include forward-looking statements. Forward-looking statements include, but are not limited to, statements concerning planned exploration program and other statements that are not historical facts. When used in this document, the words such as "could", "plan", "estimate", "expect", "intend", "may", "potential", "should" and similar expressions are forward-looking statements. Although the Company believes that its expectations reflected in these forward-looking statements are reasonable, such statements involve risks and uncertainties and no assurance can be given that actual results will be consistent with these forward-looking statements.

This announcement was approved by the board.

For more information:

Scott Winter

CEO and Managing Director

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(07) 5555 5055



Schedule 1 – Tenement Schedule as at 30 September 2023

Project Name	Location	Tenement	Status	Equity at 30 June 2023	Equity at 30 September 2023	Changes during Quarter
Lindfield Project	Julia Creek	EPM 27872	Granted	100%	100%	-
Figtree Creek Project	Cloncurry	EPM 27998	Granted	100%	100%	-
Lorena Surrounds Project	Cloncurry	EPM 27999	Granted	100%	100%	-
Whinmoor Project	Julia Creek	EPM 28631	Granted	100%	100%	-
Lara Downs Project	Julia Creek	EPM 28635 (application)	Application	100%	100%	-
Lindfield North Project	Julia Creek	EPM 28636 (application)	Application	100%	100%	-

Appendix 5B

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

Name of entity

CRITICAL MINERALS GROUP LIMITED

ABN

91 652 994 726

Quarter ended ("current quarter")

30 SEPTEMBER 2023

Consolidated statement of cash flows		Current quarter \$A'000	Year to date (12 months) \$A'000
1.	Cash flows from operating activities		
1.1	Receipts from customers	-	-
1.2	Payments for		
	(a) exploration & evaluation	(2)	(62)
	(b) development		
	(c) production		
	(d) staff costs	(335)	(700)
	(e) administration and corporate costs	(220)	(685)
1.3	Dividends received		
1.4	Interest received	12	66
1.5	Interest and other costs of finance paid		
1.6	Income taxes paid		
1.7	Government grants and tax incentives		
1.8	Other (provide details if material)	-	-
1.9	Net cash from / (used in) operating activities	(546)	(1,382)
2.	Cash flows from investing activities		
2.1	Payments to acquire or for:		
	(a) entities		
	(b) tenements		
	(c) property, plant and equipment		
	(d) exploration & evaluation	(294)	(1,071)
	(e) investments		
	(f) other non-current assets		

Consolidated statement of cash flows	Current quarter \$A'000	Year to date (12 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		
2.5 Other (provide details if material)		
2.6 Net cash from / (used in) investing activities	(294)	(1,071)

3. Cash flows from financing activities		
3.1 Proceeds from issues of equity securities (excluding convertible debt securities)	-	-
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 (i)	-	(61)
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	-	(61)

(i) Payments of \$61,328 reclassified from administration and corporate costs to transaction costs related to issue of equity securities during the December 2022 quarter

4. Net increase / (decrease) in cash and cash equivalents for the period		
4.1 Cash and cash equivalents at beginning of period	2,706	4,380
4.2 Net cash from / (used in) operating activities (item 1.9 above)	(546)	(1,382)
4.3 Net cash from / (used in) investing activities (item 2.6 above)	(294)	(1,071)
4.4 Net cash from / (used in) financing activities (item 3.10 above)	-	(61)

Consolidated statement of cash flows		Current quarter \$A'000	Year to date (12 months) \$A'000
4.5	Effect of movement in exchange rates on cash held	-	-
4.6	Cash and cash equivalents at end of period	1,866	1,866

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	1,866	2,706
5.2	Call deposits		
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)	1,866	2,706

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	168
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.

7. Financing facilities <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>	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.		

8. Estimated cash available for future operating activities	\$A'000
8.1 Net cash from / (used in) operating activities (item 1.9)	(546)
8.2 (Payments for exploration & evaluation classified as investing activities) (item 2.1(d))	(294)
8.3 Total relevant outgoings (item 8.1 + item 8.2)	(839)
8.4 Cash and cash equivalents at quarter end (item 4.6)	1,866
8.5 Unused finance facilities available at quarter end (item 7.5)	-
8.6 Total available funding (item 8.4 + item 8.5)	1,866
8.7 Estimated quarters of funding available (item 8.6 divided by item 8.3)	2
<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: N/A	
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: N/A	

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: N/A

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: 31 October 2023

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.